Programs

Click on any of the following programs for more information:

Undergraduate Areas of Study

3D Graphics and Animation Emphasis, Fine Arts BFA

Introduction

Please click here to see general Visual Arts information.

The 3D graphics and animation emphasis at the University of Colorado Denver is a competitive and rigorous four-year curriculum focused on preparing students to work in a wide variety of fields that use animated digital computer graphics (CG), including entertainment, film and television, gaming, medicine, and science. The 3D graphics and animation emphasis courses (FINE 1810-4820 below) are billed at a different rate than the standard course tuition due to the state-of-the-art technology used in the program. For more information regarding this rate, contact Digital Animation Center (DAC) Director Howard Cook at howard.cook@ucdenver.edu or the College of Arts & Media Advising Office at CAMadvising@ucdenver.edu.

Program Delivery

- This is an on-campus program.

Declaring This Major

- Click here to go to information about declaring a major.
- In order to maintain the highest standards of excellence, acceptance into the 3D graphics and animation emphasis happens at the end of the first year (during the spring term) and is competitive by portfolio review. To be considered, students are required to take the first two courses in the 3D graphics and animation curriculum, FINE 1810 - Digital Animation Foundations: Producing Animation (offered fall only) and FINE 1820 - Digital Animation Foundations: Introduction to Digital 3D (offered spring only). These two courses are open to all College of Arts & Media and CU Denver students. Students wishing to enroll in these entry-level courses must contact DAC Director Howard Cook at howard.cook@ucdenver.edu or the College of Arts & Media Advising Office at CAMadvising@ucdenver.edu before registering.

Selection for entrance into the 3D graphics and animation emphasis occurs at the end of the first year of the program and is a competitive process (by faculty review) that includes:

- Submission by the candidate of a "Portfolio Demo Reel". The reel must include original works from FINE 1810 - Digital Animation Foundations: Producing Animation and FINE 1820 - Digital Animation Foundations: Introduction to Digital 3D as well as representative works created in other Visual Arts courses completed during the first year of the program. The Portfolio Demo Reel must be turned in as a .mov (Quicktime, H.264, 720x404 minimum frame size, 16:9 aspect ratio). Still work should be a component of the reel and should be on screen for at least 3 seconds but no more than 10 seconds. Name and contact information should appear at the beginning and end of the reel. The reel should not be greater in length than 3.5 minutes.
- A "breakdown sheet": the run time at which the work occurs and which describes what work is included on the submission reel, and, if collaborative in nature, what aspect of the work shown was created by the applicant. Turn in .pdf only please.
• A one page double-spaced written statement regarding the applicant's aspirations as a productive and contributing member of the 3D graphics and animation cohort and the CG community as a whole. Turn in .pdf only please.
• A minimum of a 2.8 GPA in the CU Denver 3D graphics and animation courses.

The student's application must be submitted electronically (instructions will be provided in FINE 1820 - Digital Animation Foundations: Introduction to Digital 3D) - no later than the first Friday after the spring semester has ended. Notification is by e-mail and/or letter and occurs on or before the first Monday of June of the application year. Upon acceptance, students will be able to enroll in advanced digital animation classes.

Students should show only their best work and show the very best work first. Students should be selective since reels may only be 3.5 minutes long. Music is not recommended for professional reels, but if music is used, students should choose wisely.

Please see http://www.cu3d.org or http://www.ucdenver.edu/academics/colleges/CAM/programs/va/Pages/3danimation.aspx for more emphasis and portfolio information, or contact DAC Director Howard Cook at howard.cook@ucdenver.edu.

**General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

• CU Denver General Graduation Requirements
• CU Denver Core Curriculum
• College of Arts & Media Graduation Requirements
• Click here for information about Academic Policies

**Program Requirements**

1. A minimum of C (2.0) is required for each course applied toward a CAM major, minor or certificate requirement. A grade of C- (1.7) or lower will not fulfill a major, minor or certificate requirement. A grade of P is acceptable for courses in which the only grade available is Pass or Fail.
2. All upper-division visual arts courses must be taken at CU Denver unless otherwise approved by Visual Arts faculty.
3. At least 27 semester hours of visual arts credits (at any level) must be taken at CU Denver.
4. At least 24 semester hours of total visual arts courses must be upper-division.

• Take all of the following Visual Arts Foundation courses:
  • FINE 1100 - Drawing I
  • FINE 1400 - Two Dimensional Design
  • FINE 1500 - Three-Dimensional Design
  • FINE 2600 - Art History Survey I
  • FINE 2610 - Art History Survey II

Take all of the following 3D Graphics/Animation Emphasis courses (entry level):

• FINE 1810 - Digital Animation Foundations: Producing Animation
• FINE 1820 - Digital Animation Foundations: Introduction to Digital 3D

Take all of the following 3D Graphics and Animation Emphasis courses (available only to students accepted to emphasis via portfolio review):
• FINE 2810 - Digital Animation Techniques: Surface Modeling
• FINE 2820 - Digital Animation Techniques: Surface Properties
• FINE 2830 - Digital Animation Techniques: Lighting
• FINE 2850 - Digital Animation Techniques: 3D Character Creation
• FINE 3810 - Digital Animation Studio: Set/Environment Design
• FINE 3820 - Digital Animation Technique: Char. Rigging Animation I
• FINE 3830 - Digital Animation Technique: Char Rigging & Animation II
• FINE 3850 - Digital Animation Techniques: Dynamic Simulation
• FINE 4810 - Digital Animation Studio: Animation Production I
• FINE 4820 - Digital Animation: Production II

Take **one** of the following 3D Graphics and Animation Emphasis courses (available only to students accepted to emphasis via portfolio review):

• FINE 3845 - Digital Animation: Short Film Preproduction, Story
• FINE 3846 - Digital Animation: Short Film Preproduction: Look Dev

Take **all** of the following courses:

• ENGL 2250 - Introduction to Film
• FINE 2155 - Introduction to Digital Photography
• FINE 4990 - Contemporary Art: 1960 to Present

Take **one** of the following courses:

• FINE 2010 - The Graphic Novel Workshop
• FINE 2030 - Life Drawing
• FINE 3414 - Motion Design I
• FINE 3815 - Storyboarding for Cinema and Game Previsualization

Take **three** semester hours of Pre-20th Century Art History elective. Consult a CAM advisor for approved options.

Take **twelve** semester hours of Visual Arts electives. These may include studio, lecture, internship or art history courses.

**Accounting Emphasis - BS in Business Administration**

**Introduction**

Please click here to see Business School information.

Accounting courses are offered in several fields of professional accountancy at the intermediate, advanced and graduate levels. They provide preparation for practice in one or more of the following fields:

• Public Accounting: auditing, consulting, and tax compliance and planning
• Accounting in Industry: all industries, including energy, financial, manufacturing, retail
• Accounting in Government and Nonprofits
• Academics: teaching and research in accounting areas of financial reporting, managerial accounting, auditing, accounting information systems, and taxation

In all of these fields a thorough knowledge of the social, legal, economic and political environment is needed. A high degree of analytical ability and communication skill is indispensable.

Courses in English composition, speech, ethics and logic are desirable. Courses in statistics and information systems, beyond the required business core courses, are highly recommended.

Program Delivery

• This is an on-campus program.

Declaring This Major

• Click here to go to information about declaring a major

General Requirements

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

• CU Denver General Graduation Requirements
• CU Denver Core Curriculum
• Business School Graduation Requirements
• Click here for information about Academic Policies

Program Requirements

1. A grade of C or higher must be earned in all courses that are used as prerequisites. These are noted with an asterisk.

• Take all of the following required courses:
  • ACCT 3220 - Intermediate Financial Accounting I *
  • ACCT 3230 - Intermediate Financial Accounting II *
  • ACCT 3320 - Intermediate Cost Accounting *
  • ACCT 4054 - Accounting Systems and Data Processing *
  • (Replaces ISMG 3000 in Business Core)
  • ACCT 4410 - Income Tax Accounting
  • ACCT 4620 - Auditing Theory

Take one of the following courses:

• ACCT 4240 - Advanced Financial Accounting
• ACCT 4520 - Oil and Gas Accounting
• ACCT 4800 - Accounting for Government and Nonprofit Organizations
• ACCT 4840 - Independent Study
  o Or any other 4000-level ACCT course

Note
Students also have the option to complete an Accounting emphasis with a specialization in Information Systems. Click here to view this option.

**Accounting Emphasis - BS in Business Administration with specialization in Information Systems**

**Introduction**

Please click [here](#) to see Business School information.

Accounting courses are offered in several fields of professional accountancy at the intermediate, advanced and graduate levels. They provide preparation for practice in one or more of the following fields:

- Public Accounting: auditing, consulting, and tax compliance and planning
- Accounting in Industry: all industries, including energy, financial, manufacturing, retail
- Accounting in Government and Nonprofits
- Academics: teaching and research in accounting areas of financial reporting, managerial accounting, auditing, accounting information systems, and taxation

In all of these fields a thorough knowledge of the social, legal, economic and political environment is needed. A high degree of analytical ability and communication skill is indispensable.

Courses in English composition, speech, ethics and logic are desirable. Courses in statistics and information systems, beyond the required business core courses, are highly recommended.

Within the Accounting curriculum students can specialize in Information Systems to compliment their individual interest.

**Program Delivery**

- This is an on-campus program.

**Declaring This Major**

- Click [here](#) to go to information about declaring a major

**General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- [CU Denver General Graduation Requirements](#)
- [CU Denver Core Requirements](#)
- [Business School Graduation Requirements](#)
- Click [here](#) for information about Academic Policies

**Program Requirements**
1. A grade of C must be earned in all accounting courses that are used as prerequisites. These are noted with an asterisk.

- Take all of the following courses:
  - ACCT 3220 - Intermediate Financial Accounting I *
  - ACCT 3230 - Intermediate Financial Accounting II *
  - ACCT 3320 - Intermediate Cost Accounting *
  - ACCT 4054 - Accounting Systems and Data Processing *
  - (Replaces ISMG 3000 in Business Core)
  - ACCT 4410 - Income Tax Accounting
  - ACCT 4620 - Auditing Theory
  - ISMG 4780 - Accounting and Information Systems Processes and Controls
    - and choose two upper division ISMG electives

**Anthropology BA**

**Introduction**

Please click here to see Anthropology department information.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

**Program Delivery**

- This is an on-campus program.

**Declaring This Major**

- Click here to go to information about declaring a major.

**General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

**Program Requirements**

1. Majors must complete a minimum of 40 semester hours in Anthropology with a grade of C (2.0) or better in each course.
2. At least 24 hours must be at the upper-division level.
3. A minimum of 21 semester hours must be taken from CU Denver faculty.
4. All upper division Anthropology courses must be taken from CU Denver faculty in order to count for specific majors requirements. Upper division courses from other institutions will only count as electives.

- Take all of the following required courses:
  - ANTH 1302 - Introduction to Archaeology
  - ANTH 1303 - Introduction to Biological Anthropology
  - ANTH 2102 - Culture and the Human Experience

Take three of the following courses:

- ANTH 3101 - Foundations of Cultural Anthropology
- ANTH 3121 - Language, Culture, and Communication
- ANTH 3301 - World Prehistory
- ANTH 3512 - Human Evolution

Take 20 elective credit hours from the Anthropology Department.

Architecture BS

Introduction

Please click here to see Architecture department information.

The College of Architecture and Planning offers a Bachelor of Science in Architecture degree exclusively on the downtown Denver campus. The city of Denver provides a rich environment to explore a diverse historic and cultural world that includes multiple approaches to solving urban and building problems. The degree is a "pre-professional" degree, which will provide fast track entry into the accredited Master of Architecture degree that is required for licensure in the profession. This degree provides an education in the sciences and humanities in design theory of the built world and its practice. Our graduates will have significant grounding in the science of building and the practice of architecture in a rapidly evolving profession. Our educational goal is to engender active and creative making of architecture along with critical thinking skills. Our graduates will have employment options in entry level architectural practices or related fields of urban design, historic preservation, design-build, construction, and even urban planning; or the opportunity to enter any accredited graduate program in the country.

Program Delivery

- This is an on-campus program.

Declaring This Major

- Click here to go to information about declaring a major

General Requirements

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
Program Requirements

1. Students must earn at least a C- grade in required architecture and math courses. Architecture and math courses must be repeated if the student earns less than a C- grade.

- Take all of the following required Design Studies courses:
  - ARCH 2110 - Design Studio I
  - ARCH 3110 - Design Studio II
  - ARCH 3120 - Design Studio III
  - ARCH 4110 - Design Studio IV
  - ARCH 4120 - Design Studio V

- Take all of the following Cultural Studies courses:
  - ARCH 1110 - Introduction to Architecture
  - ARCH 2230 - Architectural History I
  - ARCH 3230 - Architectural History II

- Take all of the following Technical Studies courses:
  - ARCH 3130 - Construction Practices I
  - ARCH 3430 - Construction Practices II
  - ARCH 3330 - Building Systems I
  - ARCH 4440 - Building Systems II
  - ARCH 3340 - Theory of Structures I
  - ARCH 4340 - Theory of Structures II

- Take one of the following Math courses/sets:
  - MATH 1110 - College Algebra and
  - MATH 1120 - College Trigonometry
  - or
  - MATH 1130 - Precalculus Mathematics
  - MATH 1401 - Calculus I
  - MATH 2411 - Calculus II
  - MATH 2421 - Calculus III
  - Note: also applies to the Core Math requirement

- Take both of the following Physics courses:
  - PHYS 2010 - College Physics I
  - PHYS 2030 - College Physics Lab I
  - Note: also applies to the Core Biological and Physical Sciences requirement

Take seventeen hours of Architecture electives.
Additional General elective hours may be needed to reach the required 120 hours for the BS Architecture degree.

**Note:** Required math and physics courses may apply toward General electives if not already applied toward Core Math and Biological and Physical Sciences requirements.

**Art History Emphasis, Fine Arts BA**

**Introduction**

Please click here to see general Visual Arts information.

The art history emphasis familiarizes students with a range of developments in the history of art while developing skills in critical thinking, writing, research and the study of artworks. After an introduction to the canonical traditions of art and architecture, students take advanced lecture courses on specific subjects. This curriculum concludes with capstone seminars on the methods of art historical scholarship as well as a thesis project.

**Program Delivery**

- This is an on-campus program.

**Declaring This Major**

- Click here to go to information about declaring a major.
- Consult an advisor in the College of Arts & Media at CAMadvising@ucdenver.edu for information about this emphasis.

**General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Arts & Media Graduation Requirements
- Click here for information about Academic Policies

**Program Requirements**

1. A minimum grade of C (2.0) is required for each course applied toward a CAM major, minor or certificate requirement. A grade of C- (1.7) or lower will not fulfill a major, minor or certificate requirement. A grade of P is acceptable for courses in which the only grade available is Pass or Fail.
2. All upper-division visual arts courses must be taken at CU Denver unless approved otherwise by visual arts faculty.
3. At least 21 semester hours of all visual arts credits (at any level) must be taken at CU Denver.
4. At least 18 semester hours of total visual arts courses must be upper-division.
Take **all** of the following Studio Arts & English Rhetoric courses:

- FINE ___ 2-dimensional Studio Arts course (3 semester hours) - *consult a CAM advisor for approved options*
- FINE ___ 3-dimensional Studio Arts course (3 semester hours) - *consult a CAM advisor for approved options*
- FINE ___ Studio Arts Elective (3 semester hours)
- ENGL 2070 - Grammar, Rhetoric and Style

Take **all** of the following Art History courses:

- FINE 2600 - Art History Survey I
- FINE 2610 - Art History Survey II
- FINE 4790 - Methods in Art History
- FINE 4951 - Bachelor of Art Thesis

Take a minimum of **three** semester hours of Pre-20th Century Art History elective. Consult a CAM advisor for approved options.

Take **eighteen** semester hours of upper-division (3000/4000) Art History electives (six courses). Contact an advisor in the College of Arts & Media at CAMadvising@ucdenver.edu for a complete list of options.

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**Bioengineering BS**

**Introduction**

Please click here to see Bioengineering department information.

The undergraduate program at CU Denver is a highly rigorous program that instills competencies in biomedical science, engineering and mathematics and biomedical design, while emphasizing the professional competencies of leadership, communication, presentation and critical problem solving. Our mission is to improve human health through the application of engineering principles, ideas, methods and inventions to solve important clinical problems. Bioengineering is a highly interdisciplinary field that brings together: (1) biological, chemical and physical sciences; (2) engineering and mathematics; and (3) clinical medicine. The undergraduate bioengineering program provides training at both the Denver campus and the Anschutz Medical Campus.

Graduates will be well-prepared for further education in graduate school, medical school or other advanced professional preparation. The department also offers Master of Science (MS) and Doctor of Philosophy (PhD) degrees in bioengineering.

**Program Delivery**

- This is an on-campus program.
- Upper-division major courses will be taught at the Anschutz Medical Campus.

**Declaring This Major**
• Click here to go to information about declaring a major.
• Students applying to the program must select bioengineering (pre-major) as their "Field of Study" in the online application. If you are admitted to the pre-major program you will enroll in pre-major courses, which are offered at the Denver campus. Students in the pre-major must apply to advance to major status in bioengineering. Admittance to the major in bioengineering will be granted to students who have successfully completed all pre-major courses and who meet the program's selection criteria. Upper-division courses will be taught at the Anschutz Medical Campus.

General Requirements

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

• CU Denver General Graduation Requirements
• CU Denver Core Curriculum
• College of Engineering & Applied Science Graduation Requirements
• Click here for information about Academic Policies

Program Requirements

The bioengineering major requirements include three different types of courses: pre-major courses, upper-division bioengineering courses and track electives.

Pre-Major Courses

Students must complete all of these courses before they may apply for bioengineering major status. Credit for some of these courses may be achieved through high school Advanced Placement (AP) course work and exams.

Take all of the following Mathematics courses:

• MATH 1401 - Calculus I
• MATH 2411 - Calculus II
• MATH 2421 - Calculus III
• MATH 3195 - Linear Algebra and Differential Equations

Take all of the following Biology courses:

• BIOL 2051 - General Biology I
• BIOL 2071 - General Biology Laboratory I
• BIOL 2061 - General Biology II
• BIOL 2081 - General Biology Laboratory II

Take all of the following Chemistry courses:

• CHEM 2031 - General Chemistry I
• CHEM 2038 - General Chemistry Laboratory I
• CHEM 2061 - General Chemistry II
• CHEM 2068 - General Chemistry Laboratory II
• CHEM 3411 - Organic Chemistry I
• CHEM 3418 - Organic Chemistry Laboratory I
Take all of the following Physics courses:

- PHYS 2311 - General Physics I: Calculus-Based
- PHYS 2321 - General Physics Lab I
- PHYS 2331 - General Physics II: Calculus-Based
- PHYS 2341 - General Physics Lab II

Take all of the following Bioengineering courses:

- BIOE 1010 - Bioengineering Design and Prototyping I
- BIOE 1020 - Bioengineering Design and Prototyping II
- BIOE 2010 - Introduction to Programming for Bioengineers
- BIOE 2020 - Introduction to Computational Methods for Bioengineers

Upper-division Bioengineering Courses

Students admitted into the Bioengineering major will undertake the upper-division major bioengineering courses regardless of the track they choose. Upper-division major classes will be taught at the Anschutz Medical Campus. These classes build upon pre-major courses and provide the next level of instruction in bioengineering. This instruction includes:

- BIOE 3010 - Bioinstrumentation
- BIOE 3020 - Introduction to Biomechanical Analysis
- BIOE 3030 - Introduction to Biomaterials
- BIOE 3040 - Physiology for Bioengineering
- BIOE 3050 - Cell & Molecular Bioengineering
- BIOE 3051 - Cell & Molecular Bioengineering Lab
- BIOE 3060 - Biostatistics, Measurement and Analysis
- BIOE 3071 - Bioengineering Lab II
- BIOE 3090 - Introduction to BioDesign
- And additional coursework as outlined by the department. Information regarding these additional requirements will be available in the 2016-2017 catalog.

Track Electives

The goal of the track electives requirement is to provide students with more advanced understanding of specialized areas in Bioengineering. Students must take a minimum of twelve semester hours to meet Bioengineering track elective requirements. Of these twelve semester hours, a minimum of six semester hours must be upper-division (3000- or 4000-level) and taught within the Department of Bioengineering.

Bioengineering track options and course offerings are under development and subject to change, however, the Department of Bioengineering anticipates offering the following tracks:

- Biomedical Devices and Biomechanics
- Imaging Instrumentation and Diagnostics

Biology BS

Introduction

Please click here to see Integrative Biology department information.
These degree requirements are subject to periodic revision by the academic department, and the College of Liberal Arts and Sciences reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

Program Delivery

- This is an on-campus program.

Declaring This Major

- Click here to go to information about declaring a major

General Requirements

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

Program Requirements

1. To ensure a proper background for the study of biology, majors are required to pass 31-33 hours of course work in ancillary disciplines.
2. A minimum of 36 hours of biology must be completed, of which 18 hours are at the upper-division level and taken in residence with CU Denver downtown campus Biology faculty.
3. All biology courses applied to the undergraduate biology major must be completed within 10 years of graduation.
4. A minimum GPA of 2.0 is required for all BIOL courses applying to Biology requirements. Note: If CHEM 3421 is taken, CHEM 3810 or CHEM 4820 will apply.
5. Biology and ancillary courses must be completed with a letter grade of C- (1.7) or higher.

Take all of the following Biology core courses:

- BIOL 2051 - General Biology I or
- BIOL 2095 - Honors General Biology I
- BIOL 2071 - General Biology Laboratory I or
- BIOL 2096 - Honors General Biology Lab I
- BIOL 2061 - General Biology II or
- BIOL 2097 - Honors General Biology II
- BIOL 2081 - General Biology Laboratory II or
- BIOL 2098 - Honors General Biology Lab II
- BIOL 3411 - Principles of Ecology
- BIOL 3611 - General Cell Biology
• BIOL 3832 - General Genetics
• BIOL 3445 - Introduction to Evolution

Take an additional **15** semester hours of upper-division biology, including:

1. At least one upper division biology lab course
2. At least one 3 credit hour 4000+ biology course - taken in residence from CU Denver Biology faculty (BIOL 4840, 4880 and 4990 do not satisfy this requirement, but can apply as biology electives).

*Note:* Biochemistry (CHEM 3810-4 or 4820-3) may be counted as biology elective hours, if taken in addition to second semester organic chemistry (CHEM 3421) with a minimum grade of C-.

*Note:* A maximum of six hours of Independent Study or Directed Research (BIOL 3840, 4840 or 4880) or a combination of 3 credits Independent Study/Directed Research and 3 credits of Internship (BIOL 3939) may be counted toward the upper-division biology electives.

Take **all** of the following Ancillary Core courses:

• CHEM 2031 - General Chemistry I or
• CHEM 2081 - Honors General Chemistry I

• CHEM 2038 - General Chemistry Laboratory I or
• CHEM 2088 - Honors General Chemistry I Laboratory

• CHEM 2061 - General Chemistry II or
• CHEM 2091 - Honors General Chemistry II Lecture

• CHEM 2068 - General Chemistry Laboratory II or
• CHEM 2098 - Honors General Chemistry II Laboratory

• CHEM 3411 - Organic Chemistry I or
• CHEM 3481 - Honors Organic Chemistry I

• CHEM 3421 - Organic Chemistry II or
• CHEM 3810 - Biochemistry or
• CHEM 4820 - General Biochemistry II

• PHYS 2010 - College Physics I or
• PHYS 2311 - General Physics I: Calculus-Based

• PHYS 2030 - College Physics Lab I or
• PHYS 2321 - General Physics Lab I

• PHYS 2020 - College Physics II or
• PHYS 2331 - General Physics II: Calculus-Based

• PHYS 2040 - College Physics Lab II or
• PHYS 2341 - General Physics Lab II

• MATH 1401 - Calculus I or
• MATH 1110 - College Algebra

* and BIOL 3763 or
MATH 1110 - College Algebra

*and MATH 4830

*Note: MATH 1120 or MATH 1130 may substitute for MATH 1110

Chemistry BS

Introduction

Please click here to see Chemistry department information.

Students interested in the chemistry major should consult regularly with a chemistry advisor. A complete description of the chemistry major’s program may be obtained in the Department of Chemistry office or department website.

Qualified majors are strongly urged to participate in independent study, American Chemical Society (ACS) certification and departmental honors programs.

Students planning chemistry as a career should be familiar with the recommendations of the American Chemical Society for the professional training of chemists. For ACS certification, students following the BS program of study are required to take inorganic laboratory (CHEM 3018), at least one semester of biochemistry (CHEM 3810 or CHEM 4810), and one additional 3- or 4-credit upper-division chemistry course in addition to the curriculum outlined below. No course with a grade of less than C (2.0) can be applied toward ACS certification. Students should check with a chemistry advisor for details. CU Denver maintains an ACS chapter of student affiliates.

These degree requirements are subject to periodic revision by the academic department, and the College of Liberal Arts and Sciences reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

Program Delivery

- This is an on-campus program.

Declaring This Major

- Click here to go to information about declaring a major

General Requirements

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

Program Requirements
The Chemistry major requires 45 semester hours in chemistry.

Students must take at least 14 upper-division chemistry hours, including CHEM 4128, 4518 or 4538, in residency at CU Denver.

The minimum grade in Chemistry courses and ancillary courses is C- (1.7).

A minimum chemistry GPA of 2.0 is required in chemistry and ancillary required courses.

A student who has declared a chemistry major at CU Denver may not take additional chemistry courses outside of the department for the purpose of applying those credits toward meeting the requirements of the major without prior written approval of the undergraduate advisor. No more than 3 additional hours of such pre-approved transfer credits will be allowed.

Take all of the following required courses:

- CHEM 2031 - General Chemistry I or
- CHEM 2081 - Honors General Chemistry I

- CHEM 2038 - General Chemistry Laboratory I or
- CHEM 2088 - Honors General Chemistry I Laboratory

- CHEM 2061 - General Chemistry II or
- CHEM 2091 - Honors General Chemistry II Lecture

- CHEM 2068 - General Chemistry Laboratory II or
- CHEM 2098 - Honors General Chemistry II Laboratory

- CHEM 3111 - Analytical Chemistry
- CHEM 3118 - Analytical Chemistry Laboratory

- CHEM 3411 - Organic Chemistry I or
- CHEM 3481 - Honors Organic Chemistry I

- CHEM 3418 - Organic Chemistry Laboratory I or
- CHEM 3488 - Honors Organic Chemistry Laboratory I

- CHEM 3421 - Organic Chemistry II or
- CHEM 3491 - Honors Organic Chemistry II

- CHEM 3498 - Honors Organic Chemistry Laboratory II
- CHEM 4511 - Physical Chemistry: Thermodynamics and Kinetics
- CHEM 4518 - Physical Chemistry Laboratory: Reaction Analysis
- CHEM 4521 - Physical Chemistry: Quantum and Spectroscopy
- CHEM 4538 - Physical Chemistry Laboratory: Molecular Structure
- CHEM 3011 - Inorganic Chemistry
- CHEM 4121 - Instrumental Analysis
- CHEM 4128 - Instrumental Analysis Laboratory

Take one of the following courses:

- CHEM 3018 - Inorganic Chemistry Laboratory
- CHEM 4828 - Biochemistry Lab

Note: CHEM 4828 requires additional prerequisites other than the courses listed above.

Take all of the following Ancillary courses:
• MATH 1401 - Calculus I
• MATH 2411 - Calculus II
• MATH 3511 - Mathematics of Chemistry
• PHYS 2311 - General Physics I: Calculus-Based
• PHYS 2321 - General Physics Lab I
• PHYS 2331 - General Physics II: Calculus-Based
• PHYS 2341 - General Physics Lab II

Chemistry BS, Biochemistry Emphasis

Introduction

Please click here to see Chemistry department information.

Students interested in the chemistry major with the biochemistry emphasis should consult regularly with a chemistry advisor. A complete description of the program may be obtained in the Department of Chemistry office or department website.

Qualified majors are strongly urged to participate in independent study, American Chemical Society (ACS) certification, and departmental honors programs.

Students planning chemistry as a career should be familiar with the recommendations of the American Chemical Society for the professional training of chemists. For ACS certification, students following the biochemistry emphasis BS program are required to take inorganic lecture (CHEM 3011), inorganic laboratory (CHEM 3018), and a second semester of physical chemistry II laboratory (CHEM 4518 or 4538) in addition to the curriculum outlined below. No course with a grade of less than C (2.0) can be applied toward ACS certification. Students should check with a chemistry advisor for details. CU Denver maintains an ACS chapter of student affiliates.

These degree requirements are subject to periodic revision by the academic department, and the College of Liberal Arts and Sciences reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

Program Delivery

• This is an on-campus program.

Declaring This Major

• Click here to go to information about declaring a major

General Requirements

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

• CU Denver General Graduation Requirements
• CU Denver Core Curriculum
• College of Liberal Arts & Sciences Graduation Requirements
• Click here for information about Academic Policies
Program Requirements

1. The chemistry major with a biochemistry emphasis requires 44-45 semester hours in Chemistry.
2. Students must take at least 14 upper-division chemistry hours, including CHEM 4518 or CHEM 4538, in residency at CU Denver.
3. The minimum grade in Chemistry courses is C- (1.7).
4. A minimum GPA of 2.0 is required for all courses applying to major requirements.
5. A student who has declared a chemistry major at CU Denver may not take additional chemistry courses outside of the department for the purpose of applying those credits toward meeting the requirements of the major without prior written approval of the undergraduate advisor. No more than 3 hours of such pre-approved transfer credits will be allowed.

Take all of the following required courses:

- CHEM 2031 - General Chemistry I or
- CHEM 2081 - Honors General Chemistry I
- CHEM 2038 - General Chemistry Laboratory I or
- CHEM 2088 - Honors General Chemistry I Laboratory
- CHEM 2061 - General Chemistry II or
- CHEM 2091 - Honors General Chemistry II Lecture
- CHEM 2068 - General Chemistry Laboratory II or
- CHEM 2098 - Honors General Chemistry II Laboratory
- CHEM 3111 - Analytical Chemistry
- CHEM 3118 - Analytical Chemistry Laboratory
- CHEM 3411 - Organic Chemistry I or
- CHEM 3481 - Honors Organic Chemistry I
- CHEM 3418 - Organic Chemistry Laboratory I or
- CHEM 3488 - Honors Organic Chemistry Laboratory I
- CHEM 3421 - Organic Chemistry II or
- CHEM 3491 - Honors Organic Chemistry II
- CHEM 3498 - Honors Organic Chemistry Laboratory II
- CHEM 4511 - Physical Chemistry: Thermodynamics and Kinetics
- CHEM 4521 - Physical Chemistry: Quantum and Spectroscopy
- CHEM 4518 - Physical Chemistry Laboratory: Reaction Analysis or
- CHEM 4538 - Physical Chemistry Laboratory: Molecular Structure
- CHEM 4810 - General Biochemistry I or
- CHEM 5810 - Graduate Biochemistry I
- CHEM 4820 - General Biochemistry II or
- CHEM 5830 - Graduate Biochemistry II
- CHEM 4828 - Biochemistry Lab
Take all of the following Ancillary courses:

- BIOL 2051 - General Biology I
- BIOL 2071 - General Biology Laboratory I
- MATH 1401 - Calculus I
- MATH 2411 - Calculus II
- MATH 3511 - Mathematics of Chemistry
- PHYS 2311 - General Physics I: Calculus-Based
- PHYS 2321 - General Physics Lab I
- PHYS 2331 - General Physics II: Calculus-Based
- PHYS 2341 - General Physics Lab II

Take any 3000-level or higher CHEM course except CHEM 3810 (Biochemistry) or CHEM 3428 (Organic Chemistry II Laboratory). Note: some of these courses may require additional prerequisites.

or

Choose one of the following:

- BIOL 3124 - Introduction to Molecular Biology
- BIOL 3611 - General Cell Biology
- BIOL 3621 - Introduction to Immunology
- BIOL 3654 - General Microbiology

Civil Engineering BS

Introduction

Please click here to see Civil Engineering department information.

The objectives of the bachelor of science in civil engineering program are to produce graduates who:

- are able to perform the technical analyses and design tasks of entry-level civil engineers
- can successfully work toward professional engineering licensure
- communicate effectively, both orally and in writing
- understand the importance of leadership skills, team building and ethical practice
- value lifelong learning and improvement through graduate degrees or professional study
- appreciate the importance of community involvement and social contribution civil engineers are dedicated to improving our living environment

Civil engineering offers an interesting and challenging career in the design, construction, and maintenance of buildings and urban infrastructure; in transportation systems, including highways, airports, rapid transit lines, railroads, and harbor facilities; in the development of water resources, including reservoirs for storage, canals for irrigation, dams for power generation, stormwater management for drainage, groundwater recharge for contamination prevention, wastewater treatment for environmental protection, and water purification for drinking purposes; in the construction industry; including foundations, bridges, concrete and steel structures, in problems concerned with environmental preservation; and in the sustainable development of cities. In preparing for work in such a broad field, the civil engineering student studies mathematics, basic science, communication, social science and humanities, engineering science and civil engineering design. CU Denver's civil engineering graduates usually find their first professional employment with consulting engineering firms, government agencies and various industries.
Program Delivery

- This is an on-campus program.

Declaring This Major

- Click here to go to information about declaring a major

General Requirements

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Engineering and Applied Science Graduation Requirements
- Click here for information about Academic Policies

Program Requirements

1. Students must maintain a minimum 2.0 GPA in all courses applying to major requirements.
2. Students must maintain a minimum 2.0 GPA in all CVEN courses attempted.

Take all of the following Civil Engineering courses:

- CVEN 1025 - Civil Engineering Graphics and Computer Aided Design
- CVEN 2121 - Analytical Mechanics I
- CVEN 2200 - Computing Methods in Civil Engineering
- CVEN 2212 - Plane Surveying
- CVEN 3111 - Analytical Mechanics II
- CVEN 3121 - Mechanics of Materials
- CVEN 3141 - Introduction to Structural Materials
- CVEN 3313 - Fluid Mechanics
- CVEN 3323 - Hydro systems Engineering
- CVEN 3401 - Introduction to Environmental Engineering
- CVEN 3414 - Water Supply and Distribution Systems
- CVEN 3505 - Structural Analysis
- CVEN 3602 - Transportation Engineering
- CVEN 3718 - Geotechnical Engineering I
- CVEN 4000 - Senior Seminar
- CVEN 4067 - Senior Design Projects
- CVEN 4230 - Construction Engineering Systems
- CVEN 4728 - Geotechnical Engineering II

Take four of the following Design Electives courses:

- CVEN 4427 - Storm Water System Design
- CVEN 4565 - Timber Structure Design
- CVEN 4575 - Structural Steel Design
- CVEN 4585 - Reinforced Concrete Design
- CVEN 4602 - Highway Engineering
- CVEN 4738 - Intermediate Foundation Engineering

Take all of the following Mathematics courses:

- MATH 1401 - Calculus I
- MATH 2411 - Calculus II
- MATH 2421 - Calculus III
- MATH 3195 - Linear Algebra and Differential Equations
- MATH 3800 - Probability and Statistics for Engineers

Take one of the following Chemistry courses/sets:

- CHEM 1130 - Engineering General Chemistry or
- CHEM 2031 - General Chemistry I and
- CHEM 2038 - General Chemistry Laboratory I

Take all of the following Physics courses:

- PHYS 2311 - General Physics I: Calculus-Based
- PHYS 2321 - General Physics Lab I
- PHYS 2331 - General Physics II: Calculus-Based

Take one of the following courses:

- CVEN 4780 - Engineering Geology
- GEOL 1072 - Physical Geology: Surface Processes
- CVEN 4077 - Engineering Economy

Any approved 4000-level CVEN courses or 3000-level math, science or engineering courses.

Note: Up to two 5000-level CVEN courses taken at CU Denver for the BSCE can be applied to a CE Masters degree at CU Denver if relevant to the student's Masters degree emphasis as determined by the student's Masters degree advisor.

Take three elective courses: (Listed below are approved electives. For additional approved electives, please see your advisor.)

- CVEN 4077 CVEN 4077 - Engineering Economy
- CVEN 4087 CVEN 4087 - Engineering Contracts
- CVEN 4780 CVEN 4780 - Engineering Geology
- ELEC 3030 ELEC 3030 - Electric Circuits and Systems
- MECH 3012 MECH 3012 - Thermodynamics

Communication BA

Introduction
Please click here to see Communication department information.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

**Program Delivery**

- This program is offered both on-campus and online.

**Declaring This Major**

- Click here to go to information about declaring a major.

**General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

**Program Requirements**

1. The communication major requires that students take a total of 39 hours of course work in communication, 18 of which must be taken in residence at CU Denver.
2. At least 21 of the 39 hours must be upper-division.
3. Communication majors may complete up to 6 hours of internship credit (COMM 3939).

- Take all of the following Communication courses:
  - COMM 1011 - Fundamentals of Communication
  - COMM 1021 - Introduction To Media Studies
  - COMM 2020 - Communication, Citizenship, and Social Justice
  -
- Take one of the following courses:
  - COMM 1001 - Presentational Speaking
  - COMM 2050 - Business and Professional Speaking
  -
- Take eight Communication electives:

*Note:* In addition to the four communication core courses, students are required to complete at least 24 credits from among the department's seven pathways, which include:

- community service and public affairs
- legal communication
- health communication
- media studies
- strategic communication
Take one of the following exit courses:

- COMM 3939 - Internship
- COMM 4040 - Communication, Prisons, and Social Justice
- COMM 4051 - Advanced Strategic Communication
- COMM 4500 - Health Communication
- COMM 4550 - Rhetorics of Medicine & Health
- COMM 4700 - Writing Practicum
- COMM 4995 - Travel Study (options include Guatemala, Italy, China or Rocky Mountain National Park in Maymester, and Spain in Winterim)

Computer Science BS

Introduction

Please click here to see Computer Science department information.

The educational objectives of the computer science undergraduate program are to produce graduates who:

- Advance professionally as productive, practicing professionals in computer science and related careers through the continued development of their expertise and skills.
- Further develop their knowledge, skill set, and career opportunities through graduate education and/or professional studies.
- Function effectively as part of a team to succeed in their professional careers.

Measurable Outcomes

The BS-CS program must enable its students to attain, by the time of graduation:

- An ability to apply knowledge of computing and mathematics appropriate to the discipline
- An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution
- An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs
- An ability to function effectively on teams to accomplish a common goal
- An understanding of professional, ethical, legal, security and social issues and responsibilities
- An ability to communicate effectively with a range of audiences
- An ability to analyze the local and global impact of computing on individuals, organizations, and society
- Recognition of the need for and an ability to engage in continuing professional development
- An ability to use current techniques, skills, and tools necessary for computing practice
- An ability to apply mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computer-based systems in a way that demonstrates comprehension of the trade-offs involved in design choices.
- An ability to apply design and development principles in the construction of software systems of varying complexity.

Program Delivery
• This is an on-campus program.

Declaring This Major

• Click here to go to information about declaring a major

General Requirements

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

• CU Denver General Graduation Requirements
• CU Denver Core Curriculum
• College of Engineering and Applied Science Graduation Requirements
• Click here for information about Academic Policies

Program Requirements

1. Students must maintain a minimum 2.0 GPA in all courses applying to major requirements.
2. Students must maintain a minimum 2.0 GPA in all CSCI courses attempted.

Take all of the following Computer Science courses:

• CSCI 1410 - Fundamentals of Computing
• CSCI 1411 - Fundamentals of Computing Laboratory
• CSCI 1510 - Logic Design
• CSCI 2312 - Intermediate Programming
• CSCI 2421 - Data Structures and Program Design
• CSCI 2511 - Discrete Structures
• CSCI 2525 - Assembly Language and Computer Organization
• CSCI 3287 - Database System Concepts
• CSCI 3320 - Advanced Programming
• CSCI 3412 - Algorithms
• CSCI 3415 - Principles of Programming Languages
• CSCI 3453 - Operating System Concepts
• CSCI 3508 - Introduction to Software Engineering
• CSCI 3511 - Hardware-Software Interface
• CSCI 3560 - Probability and Computing
• CSCI 4034 - Theoretical Foundations of Computer Science
• CSCI 4287 - Embedded Systems Programming
• CSCI 4591 - Computer Architecture
• CSCI 4650 - Numerical Analysis I
• CSCI 4738 - Senior Design I
• CSCI 4739 - Senior Design II
• CSCI 4761 - Introduction to Computer Networks

Take eighteen hours of Technical Electives from CSCI 3000 or 4000-level that are not part of the required Bachelor of Science in Computer Science (BSCS) curriculum ("CSCI 2930 - Practical Systems Administration" counts as well).
Take all of the following Mathematics courses:

- MATH 1401 - Calculus I
- MATH 2411 - Calculus II
- MATH 3195 - Linear Algebra and Differential Equations

Take all of the following Science courses:

- PHYS 2311 - General Physics I: Calculus-Based
- PHYS 2321 - General Physics Lab I
- PHYS 2331 - General Physics II: Calculus-Based
- PHYS 2341 - General Physics Lab II

Criminal Justice BA

Introduction

Please click here to see School of Public Affairs information.

The School of Public Affairs’ Bachelor of Arts program in criminal justice is an interdisciplinary program that combines specific course work in criminology and criminal justice with a liberal arts focus. The criminal justice degree offers training for specific occupations within criminology and criminal justice agencies and provides students with the critical thinking, writing and presentation skills necessary for career advancement and graduate study. The course work explores the complex nature of crime causation, criminal justice organizations and the implications of public policies that allow graduates to adapt to the evolving nature of the field.

As with all undergraduate degrees, students are required to complete the requirements of the CU Denver core curriculum, providing an education that draws heavily on social and natural sciences as well as liberal arts. The program will not only provide a direct line to employment in the growing field of criminology and criminal justice, but will also facilitate the movement of outstanding students into SPA's MCJ and PhD graduate programs. Students will be well prepared to pursue additional advanced degrees in fields where critical thinking and analytical skills are required.

Program Delivery

- This is an on-campus and online program.

Declaring This Major

- Click here to go to information about declaring a major

General Requirements

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- School of Public Affairs Graduation Requirements
- Click here for information about Academic Policies
Program Requirements

1. Students must receive a minimum C- grade in each undergraduate course applied to satisfy major or minor degree requirements and must maintain a 2.0 GPA overall in major or minor courses.

Take all of the following required courses:

- CRJU 1000 - Criminology and Criminal Justice: An Overview
- CRJU 2041 - Crime Theory and Causes
- CRJU 3100 - Criminal Justice Research Methods
- CRJU 3150 - Statistics for Criminal Justice
- CRJU 4042 - Corrections
- CRJU 4043 - Law Enforcement
- CRJU 4044 - Courts and Judicial Process
- SOCY 1001 - Introduction to Sociology *

*This class also fulfills a Social Science requirement of the CU Denver Undergraduate Curriculum

Take fifteen semester hours of electives, nine of which must be Criminal Justice courses offered by the School of Public Affairs, and six of which may be taken from other departments.

School of Public Affairs electives:

- Any 3000 or 4000 level CRJU course not already required for the major may count as a SPA elective
- CRJU 4939 - Internship *
  *The internship course, CRJU 4939, is required as one of the electives for the major unless officially waived by the BACJ Program Director. See SPA Graduation Requirements for more information.

Other electives: **

- COMM 4040 - Communication, Prisons, and Social Justice
- COMM 4265 - Gender and Communication
- ECON 3300 - Economics of Crime and Punishment
- PSCI 3034 - Race, Gender, Law and Public Policy
- PSCI 4124 - Denver Politics
- PSCI 4185 - Corruption in the U.S. and Abroad
- PSCI 4427 - Law, Politics and Justice
- PSCI 4477 - Constitutional Law I
- PSCI 4487 - Constitutional Law II
- PSCI 4545 - Immigration Politics
- PSCI 4837 - Contemporary Issues in Civil Liberties
- PSYC 3205 - Human Development I: Child Psychology
- PSYC 3215 - Human Development II: Adolescence and Adulthood
- PSYC 3265 - Drugs, Brain and Behavior
- PSYC 3305 - Abnormal Psychology
- PSYC 3612 - Domestic Abuse
- SOCY 2462 - Introduction to Social Psychology
- SOCY 3020 - Race and Ethnicity in the U.S.
- SOCY 3040 - Drugs, Alcohol & Society
- SOCY 3700 - Sociology of the Family
- SOCY 4340 - Juvenile Delinquency
- SOCY 4440 - Social Inequality
- SOCY 4460 - Hate Groups and Group Violence
- SOCY 4770 - Advanced Topics in Sociology
  - See advisor for recent additions to the list

**Students must comply with departmental prerequisites.**

**Digital Design Emphasis, Fine Arts BFA**

**Introduction**

Please click here to see general Visual Arts information.

The digital design emphasis integrates aesthetic, creative and critical thought with expertise in advanced electronic media. Configured as an interdisciplinary arts and design laboratory, digital design offers a hands-on education combining new art technologies and design concepts in a concentrated theoretical framework that promotes an understanding of the cultural impact and uses of digital technologies. Through this interdisciplinary approach combining arts and communication, digital design strives to produce artists and designers who will use technology in innovative ways in both commercial and artistic spheres.

**Program Delivery**

- This is an on-campus program.

**Declaring This Major**

- Click here to go to information about declaring a major
- Students who are applying for entrance into the digital design emphasis are required to submit a designed portfolio and unofficial transcript(s) from CU Denver and all previous post-secondary educational institutions. For specific application details, see http://www.designucd.com/portfolio/. The digital design course sequence starts in fall semester. Students who meet the following requirements can apply. Upon acceptance students will be able to register for upper-division digital design courses.

**ELIGIBILITY**

The student has completed, or is in the process of completing, the following foundation studio courses with a grade of C (2.0) or better in each:

- FINE 1400 - Two Dimensional Design
- FINE 2405 - Introduction to Digital Design
- FINE 2415 - Typography Studio

FINE 2405 and 2415 are both offered fall-only at CU Denver.

**APPLICATION PORTFOLIO REQUIREMENTS**

To properly prepare your application, refer to http://www.designucd.com/portfolio/ for detailed instructions. Applications are due by 5 p.m. on December 1 or on the following business day if the deadline falls on a weekend or holiday.
Applications are only accepted online via the portfolio service SlideRoom.com and must be formatted to the specifications listed on http://www.designucd.com/portfolio/. The portfolio samples should consist of images (.jpgs) and embedded video. Written work should be integrated into the submission. It is VERY important for students to visit the submission page early and begin uploads two weeks before the due date. Late submissions due to technical difficulties on the part of the applicant will NOT be accepted.

Portfolio of Images

The portfolio must include 13-17 electronic examples of the student's creative work, consisting of a Design Project (including a writing sample) and works from FINE 1400 Two Dimensional Design, FINE 2405 Introduction to Digital Design and FINE 2415 Typography. Two to five additional creative works may also be included within the maximum of 17 works altogether.

Course Transcripts

These may be official or unofficial transcripts from CU Denver and previous post-secondary institutions.

THE EVALUATION PROCESS

- A committee of design faculty members reviews the portfolio and grades. For acceptance, the committee looks for an understanding of 2D design, writing and presentation skills.
- If not admitted into the digital design emphasis, a student has the choice of attempting the review process again the following year or applying to another emphasis outside of digital design. Students not admitted into the digital design emphasis are encouraged to schedule a meeting with a digital design faculty member to learn of ways to improve portfolios for future submissions.

Broad criteria for the portfolio evaluation are as follows:

- Process Research and Analysis - Does the portfolio demonstrate an ability to compile relevant information by identifying resources necessary to formulate a deeper understanding of context(s)?
- Design Principles - Does the portfolio demonstrate awareness of design principles through various means of technical production and successful color experimentation?
- Visual Literacy - Does the portfolio reflect sensitivity to design concepts and visual logic, and does it demonstrate fundamental understanding of composition? Does the work communicate effectively?
- Use of Imagery - Does the portfolio demonstrate a student's potential ability to create and develop visual form in response to communication problems?
- Expressive Typography - Does the portfolio demonstrate a burgeoning awareness of the importance of risk-taking while solving typographic design problems?
- Generating and Selecting Ideas - Does the portfolio demonstrate the student's ability to generate multiple solutions to artistic problems and utilize process to select the most effective solutions?
- Technical Skill - Does the portfolio reflect a strong knowledge of tools and materials and an aptitude for digital design skills?
- Conceptual Skills - Do the portfolio and writing samples demonstrate analytical thinking as it applies to visual art and design? Is there a developing conceptual exploration of the digital medium?
- Writing Sample - Does the writing demonstrate the student's critical thinking skills regarding the work and ability to address an assignment in a notable way?
- Presentation - Is the portfolio well-crafted and well organized in content and presentation? Are all of the required components included?
- Academic Performance - Do the student's grades reflect a commitment to learning and growth?

QUESTIONS
Please contact CAMadvising@ucdenver.edu for emphasis and portfolio information, or contact the Digital Design area head by calling the Visual Arts Department at (303) 315-1501.

General Requirements

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Arts & Media Graduation Requirements
- Click here for information about Academic Policies

Program Requirements

1. A minimum grade of C (2.0) is required for each course applied toward a CAM major, minor or certificate requirement. A grade of C- (1.7) or lower will not fulfill a major, minor or certificate requirement. A grade of P is acceptable for courses in which the only grade available is Pass or Fail.
2. All upper-division visual arts courses must be taken at CU Denver unless otherwise approved by visual arts faculty.
3. At least 27 semester hours of visual arts credits (at any level) must be taken at CU Denver.
4. At least 24 semester hours of total visual arts courses must be upper-division.

Take all of the following Visual Arts Foundation courses:

- FINE 1100 - Drawing I
- FINE 1400 - Two Dimensional Design
- FINE 1500 - Three-Dimensional Design
- FINE 2600 - Art History Survey I
- FINE 2610 - Art History Survey II

Take all of the following Digital Design Emphasis courses (entry level):

- FINE 2405 - Introduction to Digital Design
- FINE 2415 - Typography Studio

Take all of the following Digital Design Emphasis courses (available only to students accepted to emphasis via portfolio review):

- FINE 3414 - Motion Design I
- FINE 3415 - Design Studio I
- FINE 3417 - Design Research
- FINE 3424 - Interactive Media
- FINE 3434 - 3D Motion Design
- FINE 3444 - Interactive Media II
- FINE 3454 - Motion Design II
- FINE 3464 - Design Studio II
- FINE 3474 - Narrative and Experience
- FINE 4400 - Design Studio III
- FINE 4480 - The Practice of Design
• FINE 4495 - Design Studio IV: Thesis (It is highly suggested that ALL art history courses be completed prior to enrolling in FINE 4495.)

Take all of the following Visual Arts courses:

• FINE 2155 - Introduction to Digital Photography
• FINE 4600 - History of Modern Design: Industrial Revolution-Present
• FINE 4990 - Contemporary Art: 1960 to Present

Take three semester hours of Pre-20th Century Art History elective. Consult a CAM advisor for approved options.

Take six semester hours of Studio Arts electives.

Take six semester hours of Visual Arts electives. These may include studio, lecture, internship or art history courses.

Economics BA

Introduction

Please click here to see Economics department information.

These degree requirements are subject to periodic revision by the academic department, and the College of Liberal Arts and Sciences reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

Program Delivery

• This is an on-campus program.

Declaring This Major

• Click here to go to information about declaring a major.

General Requirements

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

• CU Denver General Graduation Requirements
• CU Denver Core Curriculum
• College of Liberal Arts & Sciences Graduation Requirements
• Click here for information about Academic Policies

Program Requirements
1. Students must complete a minimum of 40 semester hours in Economics.
2. The minimum grade in each CU Denver economics course is a C- (1.7), except that one D- in one economics elective is allowed.
3. A minimum GPA of 2.5 is required for all courses applying to Economics requirements. Note: Only courses taken at CU Denver will apply.
4. No pass/fail grades may count toward a major.
5. All courses other than ECON 2012 and ECON 2022 require written department approval to be transferred in as satisfying major requirements.
6. Graduating seniors must submit the three best papers that the student wrote in any three separate courses taken in the Economics Department for the outcomes assessment of the Economics program. The three papers should be handed in at one time in a folder to the Economics office, before the first day of the month in which the student plans to graduate.

Take all of the following required courses:

- ECON 2012 - Principles of Economics: Macroeconomics
- ECON 2022 - Principles of Economics: Microeconomics
- ECON 3801 - Introduction to Mathematical Economics
- (MATH 2411 - Calculus II or MATH 2421 - Calculus III with a grade of B or higher will satisfy the ECON 3801 requirement)

Note: The requirement of 40 hours of economics remains unchanged.

- ECON 3811 - Statistics with Computer Applications
- ECON 4071 - Intermediate Microeconomic Theory
- ECON 4081 - Intermediate Macroeconomic Theory
- ECON 4811 - Introduction to Econometrics

Take six three-semester hour courses in economics; four of them must be at the 4000-level. Any courses taken in Economics may satisfy this requirement, other than internships and independent studies which require the approval of the department chair.

**Education and Human Development, Early Childhood Education BA**

**Introduction**

Please click here to see School of Education & Human Development information.

The School of Education & Human Development (SEHD) offers a number of exciting and innovative undergraduate programs that prepare professionals to work with children, families and communities. SEHD prepares highly successful teachers within an innovative, rigorous and highly supported teacher education program. CU Denver prepares teachers to have deep content knowledge and a strong sense of connection to children and families in diverse communities; and, we provide our students with teaching tools drawn from cutting-edge research in teaching and learning.

**Program Delivery**

- This is an on-campus program with a variety of delivery options for many of our courses including hybrid, evening, weekend and online courses.

**Declaring This Major**
Click here to go to information about declaring a major
To declare this major, you may choose BA- Education on your application to CU Denver for new freshmen and transfers, or if you are currently a CU Denver student please contact the Undergraduate Advisor to set up an appointment to discuss the process.

General Requirements

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- School of Education and Human Development Graduation Requirements
- Click here for information about Academic Policies

Program Requirements

1. Students must complete a total of 123 semester hours for the EDHD - Early Childhood Education Track
2. Students must take the Praxis II Exam during their Junior year to complete licensure requirements.
3. Application to the Senior professional year is required.
4. A minimum GPA of 3.0 is required for all courses applying to EDHD-Early Childhood Education requirements.
5. Students must complete and maintain a 3.0 minimum grade point average in Licensure coursework to complete licensure requirements. Please see an advisor for more information on this requirement.
6. Transfer courses must be approved by faculty and/or advisor to apply to the major.

Take **thirty-six** semester hours from the following Education and Human Development major courses:

*Note: New courses are being created on an ongoing basis for this major. Please see an advisor for updates to this list.*

- CLDE 4030 - Language Development and Acquisition
- CLDE 4825 - Techniques in Teaching English as a Second Language
- ECED 2931 - ECE Field Experience I
- EDFN 1000 - Equality, Rights & Education
- EPSY 3050 - Children's Thinking and Assessment
- HDFR 2110 - Child Ecology or
- PSYC 3205 - Human Development I: Child Psychology
- LCRT 3720 - Introduction to Writing Development and Teaching
- LCRT 4710 - Primary Literacy: PreK to Third Grade
- MATH 3040 - Mathematics for Elementary Teachers
- SPED 4300 - Collaborating In Schools and Communities
- SPED 4400 - Universal Design for Learning (UDL)
- INTE 2000 - Digital Teaching and Learning
- UEDU 4000 - Elementary Literacy Instruction and Assessment
- UEDU 4010 - Social Foundations and Cultural Diversity in Urban Education
- UEDU 4020 - Co-developing Culturally Responsive Classroom Communities
Take **forty-four** semester hours from the following Early Childhood Education licensure courses (courses marked with an asterisk are ECE Field Experiences):

*Note: New courses are being created on an ongoing basis for this major. Please see an advisor for updates to this list.*

- ECED 2931 - ECE Field Experience I
- ECED 4000 - ECE as a Profession
- ECED 4010 - Social Studies & Creative Arts
- ECED 4020 - Science for P-2 Classrooms
- ECED 4030 - Nutrition, Health, and Safety
- ECED 4060 - Working with Families, Professionals, and Communities
- ECED 4102 - Development and Education of Infant and Toddlers
- ECED 4200 - Developmentally Appropriate Curriculum Methods and Techniques
- ECED 4202 - Assessment for Early Childhood Classrooms
- ECED 4202 - Classroom Management
- ECED 4300 - Exceptional Learners in the Early Childhood Classroom
- ECED 4910 - Student Teaching: Infant Toddler
- ECED 4912 - Student Teaching: Preschool
- ECED 4914 - Student Teaching: Primary K-3

Take **nine** semester hours of Early Childhood Education electives. Please see an advisor from the School of Education and Human Development for a list of pre-approved courses.

**Education and Human Development, Elementary Education BA**

**Introduction**

Please click here to see School of Education & Human Development information.

The School of Education & Human Development (SEHD) offers a number of exciting and innovative undergraduate programs that prepare professionals to work with children, families and communities. SEHD prepares highly successful teachers within an innovative, rigorous and highly supported teacher education program. CU Denver prepares teachers to have deep content knowledge and a strong sense of connection to children and families in diverse communities; and, we provide our students with teaching tools drawn from cutting-edge research in teaching and learning.

**Program Delivery**

- This is an on-campus program with a variety of delivery options for many of our courses including hybrid, evening, weekend, and online courses.

**Declaring This Major**

- Click here to go to information about declaring a major
- To declare this major, you may choose BA- Education on your application to CU Denver for new freshmen and transfers, or if you are currently a CU Denver student please contact the Undergraduate Advisor to set up an appointment to discuss the process.
General Requirements

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- School of Education and Human Development Graduation Requirements
- Click here for information about Academic Policies

Program Requirements

1. Students must complete a total of 123 semester hours for the EDHD - Elementary Education Track
2. Students must take the Praxis II Exam during their Junior year to complete licensure requirements.
3. Application to the Senior professional year is required.
4. A minimum GPA of 3.0 is required for all courses applying to EDHD - Elementary Education requirements.
5. Students must complete and maintain a 3.0 minimum grade point average in Licensure coursework to complete licensure requirements. Please see an advisor for more information on this requirement.
6. Transfer courses must be approved by faculty and/or advisor to apply to the major.

Take thirty-six semester hours from the following Education and Human Development major courses.

Note: New courses are being created on an ongoing basis for this major. Please see an advisor for updates to this list.

- CLDE 4030 - Language Development and Acquisition
- CLDE 4160 - Historical, Legal & Cultural Foundations For The Educator
- CLDE 4825 - Techniques in Teaching English as a Second Language
- EDFN 1000 - Equality, Rights & Education
- EPSY 3050 - Children’s Thinking and Assessment
- LCRT 3720 - Introduction to Writing Development and Teaching
- LCRT 4710 - Primary Literacy: PreK to Third Grade
- MATH 3040 - Mathematics for Elementary Teachers
- SPED 4300 - Collaborating In Schools and Communities
- SPED 4400 - Universal Design for Learning (UDL)
- INTE 2000 - Digital Teaching and Learning
- UEDU 4000 - Elementary Literacy Instruction and Assessment
- UEDU 4010 - Social Foundations and Cultural Diversity in Urban Education
- UEDU 4020 - Co-developing Culturally Responsive Classroom Communities

Take forty-four semester hours from the following Elementary Education licensure courses (courses marked with an asterisk are ELEM Field Experiences):

Note: New courses are being created on an ongoing basis for this major. Please see an advisor for updates to this list.
- CLDE 4160 - Historical, Legal & Cultural Foundations For The Educator
- EPSY 3050 - Children's Thinking and Assessment
- TLED 2050 - Current Topics in Teaching, Learning & Development *
- SPED 4030 - Understanding (dis)Ability in Contemporary Classrooms
- UEDU 4001 - Social Studies through Children's Literature & Writing
- UEDU 4002 - Math Instr & Assmt
- UEDU 4003 - Teaching Elementary Mathematics
- UEDU 4004 - Elementary Science Methods
- UEDU 4040 - Exploring Diversity in Content and Pedagogy I
- UEDU 4050 - Exploring Diversity in Content and Pedagogy II
- UEDU 4930 - Early Internship & Seminar *
- UEDU 4931 - Internship & Lrng Comm I *
- UEDU 4932 - Internship & Lrng Comm II *
- UEDU 4933 - Internship & Lrng Comm III *

Take nine semester hours of Elementary Education electives. Please see an advisor from the School of Education and Human Development for a list of pre-approved courses.

**Education and Human Development, Human Development and Family Relations BA**

**Introduction**

Please click here to see School of Education & Human Development information.

The School of Education & Human Development (SEHD) offers a number of exciting and innovative undergraduate programs that prepare professionals to work with children, families and communities. SEHD prepares highly successful teachers within an innovative, rigorous and highly supported teacher education program. CU Denver prepares teachers to have deep content knowledge and a strong sense of connection to children and families in diverse communities; and, we provide our students with teaching tools drawn from cutting-edge research in teaching and learning.

**Program Delivery**

- This is an on-campus program with a variety of delivery options for many of our courses including hybrid, evening, weekend and online courses.

**Declaring This Major**

- Click here to go to information about declaring a major
- To declare this major, you may choose BA - Education on your application to CU Denver for new freshmen and transfers, or if you are currently a CU Denver student please contact the Undergraduate Advisor to set up an appointment to discuss the process.

**General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
Program Requirements

1. Students must complete a total of 126 semester hours for the EDHD - Human Development and Family Relations Track
2. A minimum GPA of 2.0 is required for all courses applying to EDHD - Human Development and Family Relations requirements.
3. Transfer courses must be approved by faculty and/or advisor to apply to the major.

Take **all** of the following EDHD Human Development and Family Relations major courses:

*Note: New courses are being created on an ongoing basis for this major. Please see an advisor for updates to this list.*

- CLDE 4030 - Language Development and Acquisition
- EDFN 1000 - Equality, Rights & Education
- HDFR 1010 - Life Span Development in Ecological Settings
- HDFR 2000 - Introduction to Family and Community Services
- HDFR 2200 - Love, Family and Human Development
- HDFR 4000 - Human Sexuality
- UEDU 4010 - Social Foundations and Cultural Diversity in Urban Education

Take **one** of the following Human Development and Family Relations courses:

*Note: New courses are being created on an ongoing basis for this major. Please see an advisor for updates to this list.*

- EPSY 3050 - Children's Thinking and Assessment
- HDFR 1000 - Global Human Development & Learning
- HDFR 2110 - Child Ecology
- HDFR 3100 - Adolescent Ecology
- HDFR 3250 - Families in Global Perspectives
- HDFR 4200 - Adult Ecology

Take **thirty** semester hours from at least one of the following Human Development and Family Relations concentration areas:

- Bilingual (Spanish) Family and Community Services
- Ecology of Human Development and Learning
- Educational Foundations and Social Justice
- Leadership and Community Based Organizations
- Pre-Higher Education and Student Affairs
- Pre-Individual, Couple and Family Counseling

Take **three** semester hours of Human Development and Family Relations electives. Please see an advisor from the School of Education and Human Development for a list of pre-approved courses.

Education and Human Development, Special Education BA

Introduction
The School of Education & Human Development (SEHD) offers a number of exciting and innovative undergraduate programs that prepare professionals to work with children, families and communities. SEHD prepares highly successful teachers within an innovative, rigorous and highly supported teacher education program. CU Denver prepares teachers to have deep content knowledge and a strong sense of connection to children and families in diverse communities; and, we provide our students with teaching tools drawn from cutting-edge research in teaching and learning.

Program Delivery

- This is an on-campus program with a variety of delivery options for many of our courses including hybrid, evening, weekend and online courses.

Declaring This Major

- Click here to go to information about declaring a major
- To declare this major, you may choose BA - Education on your application to CU Denver for new freshmen and transfers, or if you are currently a CU Denver student please contact the Undergraduate Advisor to set up an appointment to discuss the process.

General Requirements

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- School of Education and Human Development Graduation Requirements
- Click here for information about Academic Policies

Program Requirements

1. Students must complete a total of 123 semester hours for the EDHD - Special Education Track
2. Students must take the Praxis II Exam during their Junior year to complete licensure requirements.
3. Application to the Senior professional year is required.
4. A minimum GPA of 3.0 is required for all courses applying to EDHD - Special Education requirements.
5. Students must complete and maintain a 3.0 minimum grade point average in Licensure coursework to complete licensure requirements. Please see an advisor for more information on this requirement.
6. Transfer courses must be approved by faculty and/or advisor to apply to the major.

Take thirty-six semester hours from the following Education and Human Development major courses:

Note: New courses are being created on an ongoing basis for this major. Please see an advisor for updates to this list.

- CLDE 4030 - Language Development and Acquisition
- CLDE 4160 - Historical, Legal & Cultural Foundations For The Educator
- CLDE 4825 - Techniques in Teaching English as a Second Language
- EDFN 1000 - Equality, Rights & Education
- EPSY 3050 - Children's Thinking and Assessment
- HDFR 2110 - Child Ecology or
- PSYC 3205 - Human Development I: Child Psychology
- LCRT 3720 - Introduction to Writing Development and Teaching
- LCRT 4710 - Primary Literacy: PreK to Third Grade
- MATH 3040 - Mathematics for Elementary Teachers
- SPED 4300 - Collaborating In Schools and Communities
- SPED 4400 - Universal Design for Learning (UDL)
- INTE 2000 - Digital Teaching and Learning
- TLED 2050 - Current Topics in Teaching, Learning & Development
- UEDU 4000 - Elementary Literacy Instruction and Assessment
- UEDU 4010 - Social Foundations and Cultural Diversity in Urban Education
- UEDU 4020 - Co-developing Culturally Responsive Classroom Communities

Take forty-four semester hours from the following Special Education licensure courses (courses marked with an asterisk are SPED Field Experiences):

- Note: New courses are being created on an ongoing basis for this major. Please see an advisor for updates to this list.

- CLDE 4160 - Historical, Legal & Cultural Foundations For The Educator
- TLED 2050 - Current Topics in Teaching, Learning & Development
- EPSY 3050 - Children's Thinking and Assessment
- SPED 4030 - Understanding (dis)Ability in Contemporary Classrooms
- UEDU 4001 - Social Studies through Childrens' Literature & Writing
- UEDU 4002 - Math Instr & Assmt
- UEDU 4003 - Teaching Elementary Mathematics
- UEDU 4004 - Elementary Science Methods
- UEDU 4040 - Exploring Diversity in Content and Pedagogy I
- UEDU 4050 - Exploring Diversity in Content and Pedagogy II
- UEDU 4930 - Early Internship & Seminar *
- UEDU 4931 - Internship & Lrng Comm I *
- UEDU 4932 - Internship & Lrng Comm II *
- UEDU 4933 - Internship & Lrng Comm III *

Take nine semester hours of Special Education electives. Please see an advisor from the School of Education and Human Development for a list of pre-approved courses.

**Electrical Engineering BS**

**Introduction**

Please click here to see Electrical Engineering department information.

The educational objectives of the Electrical Engineering undergraduate program are to produce graduates who will within a few years of graduation:

- Advance professionally as productive, practicing engineers through the continued development of their technical capabilities and expertise.
Further develop their knowledge, skill set, and career opportunities through graduate education in engineering and other fields such as business, medicine, and law.

These objectives are consistent with the mission of the University of Colorado Denver, congruent with the goals of the College of Engineering and Applied Science and reflective of the mission of the Department of Electrical Engineering.

Program Delivery

- This is an on-campus program.

Declaring This Major

- Click here to go to information about declaring a major

General Requirements

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Engineering and Applied Science Graduation Requirements
- Click here for information about Academic Policies

Program Requirements

1. The particular curriculum to be satisfied by each student is the one published in the catalog current at the time of his/her 30-hour senior checkout.
2. A graduation agreement should be requested by each student before completing registration for his/her last semester.
3. All electrical engineering students must satisfactorily complete ELEC 4309, Senior Design Project I, and ELEC 4319, Senior Design Project II, in consecutive semesters.
4. Students must maintain a minimum 2.0 GPA in all courses applying to major requirements.
5. Students must maintain a minimum 2.0 GPA in all ELEC courses attempted.

Take all of the following Electrical Engineering courses:

- ELEC 1201 - Introduction to Electrical Engineering
- ELEC 1510 - Logic Design
- ELEC 1520 - Embedded Systems Engineering I
- ELEC 2132 - Circuit Analysis I
- ELEC 2142 - Circuit Analysis II
- ELEC 2520 - Embedded Systems Engineering 2
- ELEC 2531 - Logic Laboratory
- ELEC 2552 - Sophomore Circuits Laboratory
- ELEC 3133 - Electromagnetic Fields
- ELEC 3164 - Energy Conversion
- ELEC 3215 - Electronics I
- ELEC 3225 - Electronics II
- ELEC 3316 - Linear Systems Theory
- ELEC 3651 - Digital Hardware Design
- ELEC 3715 - Electronics Laboratory
- ELEC 3724 - Energy Conversion Laboratory
- ELEC 3735 - Junior Laboratory
- ELEC 3817 - Engineering Probability and Statistics
- ELEC 4309 - Senior Design Project I
- ELEC 4319 - Senior Design Project II
- ENGR 3400 - Technology and Culture

Take **two** Professional Elective courses. Professional electives may be selected from an approved list of upper-division or graduate-level courses or cooperative education. The electrical engineering advisor must be consulted prior to the selection of these electives.

Take **one** of the following Engineering Science Elective courses:

- MECH 3012 - Thermodynamics
- ELEC 4678 - Quantum Electronics
- ELEC 4755 - Renewable Energy Systems

Take **seventeen** semester hours from the following lists. At least **two** laboratories with an associated lecture course must be completed.

*Control Systems*

- ELEC 4136 - Control Systems Analysis
- ELEC 4276 - Digital Control Systems
- ELEC 4406 - Control Systems Laboratory

*Micro-electronics*

- ELEC 4025 - Device Electronics
- ELEC 4225 - Advanced Electronics
- ELEC 4435 - Advanced Electronics Laboratory
- ELEC 4555 - VLSI Circuit Simulation

*Communications*

- ELEC 4247 - Communication Theory
- ELEC 4248 - Digital Communication Systems
- ELEC 4467 - Communications Laboratory

*Electromagnetic Fields and Waves*

- ELEC 4133 - Advanced Electromagnetic Fields
- ELEC 4373 - Optical Engineering
- ELEC 4423 - Radio Frequency Laboratory
- ELEC 4678 - Quantum Electronics
Computer Engineering

- ELEC 4501 - Microprocessor Based Design
- ELEC 4511 - Hardware-Software Interface
- ELEC 4521 - Microprocessor Laboratory
- ELEC 4561 - Hardware-Software Lab
- ELEC 4723 - High Performance Computer Architecture

Power Systems

- ELEC 4164 - Electric Drive Systems
- ELEC 4170 - Electric Drive Systems Laboratory
- ELEC 4174 - Power Electronic Systems
- ELEC 4184 - Power Systems Analysis
- ELEC 4444 - Power Systems Laboratory
- ELEC 4474 - Power Electronics Laboratory
- ELEC 4755 - Renewable Energy Systems

Take all of the following Mathematics courses:

- MATH 1401 - Calculus I
- MATH 2411 - Calculus II
- MATH 2421 - Calculus III
- MATH 3195 - Linear Algebra and Differential Equations

Take all of the following Science courses:

- CHEM 1130 - Engineering General Chemistry
- PHYS 2311 - General Physics I: Calculus-Based
- PHYS 2321 - General Physics Lab I
- PHYS 2331 - General Physics II: Calculus-Based
- PHYS 2341 - General Physics Lab II (optional)

English Writing BA

Introduction

Please click here to see English department information.

Especially designed for future writers, the writing major offers a wide range of intensive writing experiences combining such areas as rhetoric, professional, general and creative writing.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

Program Delivery

- This is an on-campus and online program.
Declaring This Major

- Click here to go to information about declaring a major

General Requirements

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

Program Requirements

1. Students majoring in English Writing must present a total of 39 hours in the major (excluding ENGL 1010, 1020 and 2030), of which 27 hours must be earned in upper-division courses.
2. None of the required 39 hours may be taken on a pass/fail basis.
3. Only courses completed with a grade of C (2.0) or above may be counted toward the major.
4. At least 15 upper-division hours of the student's work in writing must be taken from English faculty at CU Denver.
5. Internship/cooperative education courses may be counted toward the major for students who have completed over 60 credit hours (up to 6 hours).

Take all of the following required courses:

- ENGL 2060 - Introduction to Writing Studies
- ENGL 3084 - Multimedia Composition
- ENGL 3160 - Language Theory or
- ENGL 4080 - History of English Language
- ENGL 4190 - Special Topics in Rhetoric and Writing
- ENGL 4830 - Advanced Rhetorical Analysis

Take three of the following courses:

- ENGL 2070 - Grammar, Rhetoric and Style
- ENGL 3154 - Technical Writing
- ENGL 3160 - Language Theory (if not taken above)
- ENGL 3170 - Business Writing
- ENGL 4180 - Argumentation and Logic
- ENGL 4190 - Special Topics in Rhetoric and Writing *
  *repeatable if topics are different
- ENGL 4280 - Proposal and Grant Writing
- ENGL 4601 - Principles and Practices of Second Language Acquisition
- ENGL 4651 - Second Language Writing

Interdisciplinary Language, Literacy and Digital Media
Students may choose any language, literacy and/or digital media course within the English department. With prior approval from an English advisor, students may also choose courses offered by other departments up to 9 hours.

Take five Interdisciplinary Language, Literacy and Digital Media courses at the 3000 or 4000-level.

English, Creative Writing Option BA

Introduction

Please click here to see English department information.

The course of study offered by the Department of English is designed to develop a student's ability to read literature responsibly and imaginatively, to foster an understanding and appreciation of our literary inheritance and to provide the historical perspective from which to evaluate contemporary writing and to produce it. Students who complete the program in English are expected to have mastered the ability to express their ideas in creative work.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

Program Delivery

- This is an on-campus program.

Declaring This Major

- Click here to go to information about declaring a major
- Students planning to major in English must consult with an advisor as soon as possible.
- Students may choose only one of the three options in the English major.

General Requirements

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

Program Requirements

1. Students majoring in English must present a total of 39 hours in the creative writing option (excluding ENGL 1010, 1020 and 2030), of which 27 hours must be earned in upper-division courses.
2. None of the required 39 hours may be taken on a pass/fail basis.
3. Only courses completed with a grade of C (2.0) or above may be counted toward the major.
4. At least 15 upper-division hours of the student's work in English must be taken from English faculty at CU Denver.
5. Internship/cooperative education courses may be counted toward the major for students who have completed over 60 credit hours.
6. Students are not to exceed 56 English credit hours (any level).

Take the following required course:

- ENGL 2450 - Introduction to Literature

Complete the following poetry or fiction section:

**--Poetry Track--**

Take all of the following courses:

- ENGL 3020 - Poetry Workshop
- ENGL 3050 - Fiction Workshop
- ENGL 4025 - Advanced Poetry Workshop
- ENGL 4160 - Poetics
- ENGL 4820 - Senior Poetry Workshop

Take one of the following courses:

- ENGL 4080 - History of English Language
- ENGL 4166 - History of American Poetry
- ENGL 4320 - History of Poetry in English
- ENGL 4800 - Special Topics in Creative Writing

**--Fiction Track--**

Take all of the following courses:

- ENGL 3020 - Poetry Workshop
- ENGL 3050 - Fiction Workshop
- ENGL 4055 - Advanced Fiction Workshop
- ENGL 4610 - Narrative: Form and Theory
- ENGL 4850 - Senior Fiction Workshop

Take one of the following courses:

- ENGL 4200 - History of the English Novel I
- ENGL 4210 - History of the English Novel II
- ENGL 4230 - The American Novel
- ENGL 4236 - The American Short Story
- ENGL 4800 - Special Topics in Creative Writing

Take six upper-division English electives (choose from the following list or other ENGL courses at the 3000 or 4000-level):

- ENGL 3001 - Critical Writing
- ENGL 3106 - Advocate Practicum
- ENGL 3416 - Magazine Writing
- ENGL 4800 - Special Topics in Creative Writing
- ENGL 4810 - Literary Editing Practicum

**English, Film Studies Option BA**

**Introduction**

Please click here to see English department information.

The film studies option within the English major is designed to prepare students for a range of professional careers in areas such as screenwriting, film criticism, video production and the teaching of film, as well as those students who plan to pursue graduate programs in film studies. Required courses give students a strong grounding in film history, verbal and visual narrative, and the critical terms and techniques used in both film and literary analysis. Electives give students the option of emphasizing either the creative approach or the critical approach to moving-image media, or a combination of the two. The film studies option also affords students the opportunity to create video productions using state-of-the-art digital video and editing equipment and the possibility of airing their productions on cable TV. Offered in cooperation with the College of Arts & Media (CAM), the film studies option can be completed entirely on the Auraria Campus.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

**Program Delivery**

- This is an on-campus program.

**Declaring This Major**

- Click here to go to information about declaring a major
- Students planning to major in English must consult with an advisor as soon as possible.
- Students may choose only one of the three options in the English major.

**General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
• Click here for information about Academic Policies

Program Requirements

1. Students majoring in English must present a total of 39 hours in the film studies option (excluding ENGL 1010, 1020 and 2030), of which 27 hours must be earned in upper-division courses.
2. None of the required 39 hours may be taken on a pass/fail basis.
3. Only courses completed with a grade of C (2.0) or above may be counted toward the major.
4. At least 15 upper-division hours of the student's work in English must be taken from English faculty at CU Denver.
5. Internship/cooperative education courses may be counted toward the major for students who have completed over 60 credit hours.
6. Students are not to exceed 56 English credit hours (any level).

Take all of the following courses:

• ENGL 2250 - Introduction to Film
• ENGL 2450 - Introduction to Literature
• ENGL 3070 - Film History I
• ENGL 3080 - Film History II
• ENGL 4420 - Film Theory and Criticism

Take eight of the following courses:

*Students may take courses in all areas. Eighteen of the 24-hour minimum must be at the 3000/4000 level. Production courses must be taken through the College of Arts & Media (CAM). Equivalent screenwriting courses may also be taken through CAM. [Courses marked by an asterisk are repeatable if taken as a different genre/director/topic.]

--Critical Studies--

• ENGL 1601 - Telling Tales: Narrative Art in Literature and Film
• ENGL 3001 - Critical Writing
• * ENGL 3075 - Film Genres
• * ENGL 3085 - Film Directors
• ENGL 3200 - From Literature to Film
• * ENGL 3300 - Topics in Film
• * ENGL 4190 - Special Topics in Rhetoric and Writing
  (film and media-focused only; e.g., Film and Rhetoric)
• * ENGL 4770 - Topics in English: Film and Literature
  (film and media-focused only)
• ENGL 4990 - Senior Writing Project in Creative Writing or Film Studies
• Any 3000- or 4000-level literature course with ENGL prefix

--Screenwriting--

• ENGL 2390 - Writing the Short Script
• ENGL 2415 - Introduction to Movie Writing
• ENGL 3415 - Screenwriting Workshop
• ENGL 4990 - Senior Writing Project in Creative Writing or Film Studies
English, Literature Option BA

Introduction

Please click here to see English department information.

The course of study offered by the Department of English is designed to develop a student's ability to read literature responsibly and imaginatively, to foster an understanding and appreciation of our literary inheritance and to provide the historical perspective from which to evaluate contemporary writing. Careful study of the use of the English language also should help a student to resist the misuse and corruption of language in politics, the media and elsewhere. Students who complete the program in English are expected to have mastered the ability to express their ideas in clear and succinct prose.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

Program Delivery

- This is an on-campus program.

Declaring This Major

- Click here to go to information about declaring a major
- Students planning to major in English must consult with an advisor as soon as possible.
- Students may choose only one of the three options in the English major.

General Requirements

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

Program Requirements

1. Students majoring in English must present a total of 39 hours in the literature option (excluding ENGL 1010, 1020 and 2030), of which 27 hours must be earned in upper-division courses.
2. None of the required 39 hours may be taken on a pass/fail basis.
3. Only courses completed with a grade of C (2.0) or above may be counted toward the major.
4. At least 15 upper-division hours of the student's work in English must be taken from English faculty at CU Denver.
5. Internship/cooperative education courses may be counted toward the major for students who have completed over 60 credit hours.
6. Students are not to exceed 56 English credit hours (any level).

Take all of the following courses:

- ENGL 2450 - Introduction to Literature
- ENGL 3001 - Critical Writing
- ENGL 4999 - Literary Studies Senior Seminar

Take one of the following courses:

- ENGL 4080 - History of English Language
- ENGL 4166 - History of American Poetry
- ENGL 4200 - History of the English Novel I
- ENGL 4210 - History of the English Novel II
- ENGL 4230 - The American Novel
- ENGL 4236 - The American Short Story
- ENGL 4300 - History of British Drama
- ENGL 4320 - History of Poetry in English
- ENGL 4350 - History of American Drama

Take one of the following courses:

- ENGL 4400 - Old English I
- ENGL 4500 - Medieval Literature
- ENGL 4510 - Whores and Saints: Medieval Women
- ENGL 4730 - Chaucer

Take one of the following courses:

- ENGL 3661 - Shakespeare
- ENGL 4520 - English Renaissance
- ENGL 4530 - Milton
- ENGL 4540 - Restoration and the 18th Century

Take one of the following courses:

- ENGL 4200 - History of the English Novel I
- ENGL 4210 - History of the English Novel II
- ENGL 4560 - English Romanticism
- ENGL 4580 - The Victorian Age

Take one of the following courses:

- ENGL 3700 - American Literature to the Civil War
- ENGL 3750 - American Literature after the Civil War
- ENGL 4166 - History of American Poetry
- ENGL 4230 - The American Novel
- ENGL 4236 - The American Short Story
- ENGL 4350 - History of American Drama

Take one of the following courses:

- ENGL 3450 - Twentieth Century Women Writers
- ENGL 3480 - Modern Drama
- ENGL 4250 - Twentieth Century Fiction
- ENGL 4460 - Contemporary World Literature
- ENGL 4600 - Modernism

Take four elective courses with an ENGL prefix. At least two courses must be at the 3000 or 4000-level.

Entrepreneurship Emphasis - BS in Business Administration

Introduction

The Jake Jabs Center's entrepreneurship curriculum incorporates instruction, mentoring, and support from outstanding Business School faculty, as well as from outside professionals with expertise in new business development. This emphasis explores legal issues, social sector initiatives, new venture design, finance structuring, strategic web development, leadership, new product development and business plan creation. Students learn from case studies, classroom instruction, and guest lectures featuring successful entrepreneurs and renowned business leaders.

Program Delivery

- This is an on-campus program.

Declaring This Major

- Click here to go to information about declaring a major

General Requirements

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Requirements
- Business School Graduation Requirements
- Click here for information about Academic Policies

Program Requirements

Take all of the following required courses:

- ENTP 3000 - Principles of Entrepreneurship
- ENTP 3500 - Entrepreneurship Law and Ethics
- ENTP 3780 - Preparing A Business Plan
- ENTP 4720 - Internet Marketing
• ENTP 4730 - New Product Development

Take three courses (9 semester hours) of 3000 or 4000-level business electives.

Ethnic Studies BA

Introduction

Please click here to see Ethnic Studies department information.

The skills and knowledge that students gain while pursuing a BA degree with a Major in Ethnic Studies at CU Denver are transferable to a variety of careers. In common with other liberal arts graduates, those with a degree in ethnic studies will be trained in creative and critical thinking, complex reasoning, and effective communication. In addition, ethnic studies graduates will have cultural competency skills that are highly valued by employers, who serve increasingly diverse clientele. Other occupations that employ many ethnic studies graduates include: law, teaching, journalism, marketing, community organizing and social work. Ethnic studies graduates also find work in non-profit agencies and in federal, state, and local government agencies.

These degree requirements are subject to periodic revision by the academic department, and the College of Liberal Arts and Sciences reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

Advisor: Resa Cooper-Morning

Program Delivery

• This is an on-campus program with some courses offered online.

Declaring This Major

• Click here to go to information about declaring a major.

General Requirements

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

• CU Denver General Graduation Requirements
• CU Denver Core Curriculum
• College of Liberal Arts & Sciences Graduation Requirements
• Click here for information about Academic Policies

Program Requirements

1. All grades in ETST must be a C or above. Grades of C- or below DO NOT APPLY.
2. Students will complete a minimum of 33 credit hours in ethnic studies (21 required credit hours in ethnic studies, 12 elective credit hours in ethnic studies).
3. At least 15 credit hours must be at the 3000 level or above.
Take all of the following required courses:

- ETST 2000 - Introduction to Ethnic Studies
- ETST 2155 - African American History
- ETST 3108 - Chicano/a and Latino/a History
- ETST 3297 - Social History of Asian Americans
- ETST 3396 - History of the American Indian
- ETST 4960 - Senior Seminar in Ethnic Studies

Take one of the following courses:

- COMM 4221 - Research Methods: Qualitative
- ETST 4000 - Research Methods in Ethnic Studies
- PSCI 3011 - Research Methods
- SOCY 3111 - Research Methods

Take four Ethnic Studies Electives, courses include:

- ETST 2024 - Race and Ethnic Relations
- ETST 2036 - American Indian Cultural Images
- ETST 2105 - African American Contemporary Social Issues
- ETST 2115 - Genocide in the 21st Century: Darfur and Beyond
- ETST 2125 - The Bi-Racial Family
- ETST 2145 - The Gullah in Novel and Film
- ETST 2165 - Cultural Diversity Awareness in the Workplace
- ETST 2294 - Race and the Media
- ETST 2400 - Issues in Chicano/a Education
- ETST 2496 - American Indian Literature
- ETST 2606 - The American Indian Experience
- ETST 2840 - Independent Study: ETST
- ETST 2939 - Internship
- ETST 3001 - Urban Sociology
- ETST 3002 - Ethnicity, Health and Social Justice
- ETST 3010 - Conference Participation
- ETST 3110 - Indigenous Studies
- ETST 3129 - Contemporary Latin American Literature
- ETST 3211 - Hip Hop Music & Culture
- ETST 3216 - Federal Law and American Indians
- ETST 3224 - U.S. Middle East Culture and Religion
- ETST 3230 - African American Family
- ETST 3254 - Race and Ethnicity in the Inner City
- ETST 3272 - Global Media
- ETST 3274 - Power, Poverty, Culture
- ETST 3300 - Shamanic Traditions
- ETST 3307 - Selected Topics: Asian Americans
- ETST 3350 - Colonial Latin America
- ETST 3357 - Asian American Literature
- ETST 3365 - Aztlán in the United States: Chicano History from 1821
- ETST 3394 - Literature of Social Protest from an Ethnic Perspective
- ETST 3408 - Social Psychology of Latinos/as
- ETST 3567 - Asian American Women
Film and Television Emphasis, Theatre, Film and Television BFA

Introduction

Please click here to see general Theatre, Film & Video Production information.

The Department of Theatre, Film & Video Production offers a bachelor of fine arts (BFA) in theatre, film and television with an emphasis in film and television. This BFA emphasis provides training at a professional skill level, culminating in a comprehensive review that requires successful completion of numerous film/TV projects, varying in styles from fiction to documentary. The emphasis is designed so that students will progress through the semesters as a cohort group. Students will not only work on their own projects but also will assist on group projects such as our episodic web series, a television studio pilot and our department's sponsored film project (all written by students). Students will graduate with both a theoretical and historical perspective, as well as a hands-on experience in film and television production. This prepares students to begin their careers with entry-level positions in film or television, start their personal creative work or continue their studies in a graduate program. Consult an advisor in the College of Arts & Media at CAMadvising@ucdenver.edu for more information.

Program Delivery

- This is an on-campus program.

Declaring This Major
• Click here to go to information about declaring a major.
• Students seeking this BFA emphasis should apply to the university and be accepted under the Theatre, Film, and Television BFA program. The Department of Theatre, Film & Video Production strongly encourages fall admission and is working to develop a departmental application. Please contact CAMadvising@ucdenver.edu for updates. Given the cohort nature of the program, students should be aware that failing to take courses in order and/or failing to earn the minimum required grade in any course may delay their graduation date.
• Transfer students should contact CAMadvising@ucdenver.edu for information about applying prior semester hours toward the BFA.
• All students in the film and television emphasis are required to know and abide by the policies and procedures regarding the use of departmental equipment and facilities, outlined on the Equipment Checkout Agreement Form, and available by contacting CAMadvising@ucdenver.edu or the department.

General Requirements

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

• CU Denver General Graduation Requirements
• CU Denver Core Curriculum
• College of Arts & Media Graduation Requirements
• Click here for information about Academic Policies

Program Requirements

1. A minimum grade of C (2.0) is required for each course applied toward a CAM major, minor or certificate requirement. A grade of C- (1.7) or lower will not fulfill a major, minor or certificate requirement. A grade of P is acceptable for courses in which the only grade available is Pass or Fail.
2. At least 24 of the major semester hours must be earned at CU Denver.

Take all of the following Film and TV Emphasis courses:

• FITV 1000 - Introduction to Visual Culture
• FITV 1040 - Lighting, Grip, and Sound Introductory Workshop
• FITV 1550 - Scriptwriting I – Fiction
• FITV 1050 - Production I Basics of Film and Television
• FITV 1200 - Aesthetics of Television
• FITV 1600 - Writing Short Film: Non Fiction
• THTR 1110 - Production Design: Theatre, Film and Video
• FITV 2040 - Introduction to Digital Effects
• FITV 2090 - Production Management for Film and Television
• FITV 2220 - Acting for Film and Television
• FITV 2050 - Production II Film and Television Techniques
• FITV 2570 - Directing for Film and Television

• Either FITV 2670 - Cinematography for Directors or
• FITV 2650 - Sound for Film and TV
- FITV 3050 - Production III: Junior Project
- FITV 3500 - Writing for Episodic Television
- FITV 3200 - History of Film to 1937
- FITV 3060 - Editing for Film and Television
- FITV 3300 - History of Film from 1938
- **Either** FITV 3040 - TV Studio Production **or**
- FITV 3090 - Producing Episodic Television
- FITV 4000 - Senior Thesis Production
- FITV 4050 - Shooting Action
- FITV 4010 - Senior Thesis Post-Production
- FITV 4055 - Documentary Production

**Finance Emphasis - BS in Business Administration**

**Introduction**

Please click here to see Business School information.

The principal areas of study in finance are financial management in small and large businesses, investments, financial institutions, and international finance. The study of finance is intended to provide an understanding of fundamental theory and practice pertaining to finance, to make sound financial decisions. Students are taught to think logically about financial problems, so that they can formulate and implement value maximizing decisions and policies for the business. For this purpose, it is necessary to understand the importance of finance in the economy and the functions and purposes of monetary systems, credit, prices, money markets and financial institutions. Emphasis is placed on financial policy, management, control, analysis, and decision making.

The finance emphasis provides the students with the skills to succeed in all areas of finance. Numerous job opportunities exist in the field of business finance and with financial institutions, mutual funds, securities firms, personal wealth management firms, and financial planning firms including positions involving an understanding and sale of securities.

**Program Delivery**

- This is an on-campus program.

**Declaring This Major**

- Click here to go to information about declaring a major

**General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- Business School Graduation Requirements
• Click here for information about Academic Policies

Program Requirements

1. Students following this emphasis must also take FNCE 4370 as their international studies course.
2. A grade of C or higher must be earned in all courses that are used as prerequisites. These are noted with an asterisk.

• Take all of the following required courses:
  • FNCE 3500 - Management of Business Capital *
  • FNCE 3600 - Financial Markets and Institutions
  • FNCE 3700 - Investment and Portfolio Management *
  • FNCE 4500 - Corporate Financial Decisions *
  • Choose four courses (12 semester hours) of 3000 or 4000-level business electives.

Financial Management Emphasis - BS in Business Administration

Introduction

Please click here to see Business School information.

The financial management emphasis provides students with the skills needed to succeed in careers in financial management. The business community has affirmed that students need skills in both the accounting and finance areas. The financial management specialty incorporates knowledge of corporate financial management, financial institutions and markets, investments, financial accounting and managerial accounting, accounting information systems and information technology. Career opportunities include corporate financial management, finance/accounting positions with financial institutions and accounting positions that are not CPA-track. The emphasis provides a solid finance and accounting background for other business positions as well.

Program Delivery

• This is an on-campus program.

Declaring This Major

• Click here to go to information about declaring a major.

General Requirements

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

• CU Denver General Graduation Requirements
• CU Denver Core Curriculum
• Business School Graduation Requirements
• Click here for information about Academic Policies

Program Requirements
2. All courses with an asterisk must be completed with a C or higher.

- ACCT 3220 - Intermediate Financial Accounting I *
- ACCT 3230 - Intermediate Financial Accounting II
- ACCT 4054 - Accounting Systems and Data Processing * (Replaces ISMG 3000 in Business Core)
- ACCT 4410 - Income Tax Accounting
- FNCE 3500 - Management of Business Capital *
- FNCE 3600 - Financial Markets and Institutions
- FNCE 3700 - Investment and Portfolio Management *
- FNCE 4500 - Corporate Financial Decisions *
- RISK 3809 - Introduction to Risk Management

*Note: Students should note that all finance, risk and accounting courses are not offered every semester. Students should take the ACCT 2200 and ACCT 2220 courses as soon as possible to avoid future problems in their schedules, since these are prerequisites for all courses in the specialization.

Note

Students also have the option to complete a Financial Management emphasis with a specialization in Information Systems. Click here to view this option.

**Financial Management Emphasis - BS in Business Administration with Specialization in Information Systems**

**Introduction**

Please click here to see Business School information.

The Financial Management emphasis with a specialization in Information Systems provides students with skills that they need to succeed in careers that bridge the fields of finance and information systems.

This specialty incorporates knowledge of financial management and markets, accounting and information systems and technology. This specialization provides the manager with knowledge of financial information systems, databases, risk management and accounting systems.

Job opportunities include positions that require knowledge of both financial management and business information systems and databases. The specialization provides a solid accounting/finance and information systems background for other finance specialist and business analyst positions as well.

**Program Delivery**

- This is an on-campus program.

**Declaring This Major**

- Click here to go to information about declaring a major.

**General Requirements**
To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- Business School Graduation Requirements
- Click here for information about Academic Policies

**Program Requirements**

1. Students must also complete FNCE 4370 - International Financial Management, to fulfill the International Studies requirement.
2. All courses with an asterisk must be completed with a grade of C or higher.

Finance and Risk Management

Take **all** of the following courses:

- FNCE 3500 - Management of Business Capital *
- FNCE 3600 - Financial Markets and Institutions
- FNCE 3700 - Investment and Portfolio Management *
- FNCE 4500 - Corporate Financial Decisions *
- RISK 3809 - Introduction to Risk Management

Accounting

Take **all** of following courses:

- ACCT 3220 - Intermediate Financial Accounting I *
- ACCT 3230 - Intermediate Financial Accounting II
- ACCT 4054 - Accounting Systems and Data Processing *
- (Replaces ISMG 3000 in Business Core)

Information Systems

Take **all** of the following courses:

- ISMG 3500 - Enterprise Data and Content Management
- ISMG 3600 - System Strategy, Architecture and Design
- ISMG 4780 - Accounting and Information Systems Processes and Controls
- ISMG 4900 - Project Management and Practice (Also fulfills BGEN Experiential Learning requirement)

**Note**
Students should note that all finance, risk and accounting courses are not offered every semester. Students should take the ACCT 2200 and ACCT 2220 courses as soon as possible to avoid future problems in their schedules, since these are prerequisites for all courses in the specialization.

French BA

Introduction

Please click here to see Modern Languages department information.

Students wishing to improve their linguistic skills as well as their knowledge of Francophone literature and culture may choose this major.

The French program offers courses in advanced language, linguistics, literature, civilization, culture and business, all taught exclusively in French. A minor is also offered. All French majors are strongly encouraged to participate in a study abroad program. Please see your French department advisor for information about opportunities to include study abroad as part of your major.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

Program Delivery

- This is an on-campus program.

Declaring This Major

- To be admitted to major status in French, students must have an overall GPA of C+ (2.3).
- Students presenting four years of high school French (Level IV) for admission to CU Denver must see a French advisor before enrolling in courses for the major.
- Click here to go to information about declaring a major

General Requirements

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

Program Requirements

1. The minimum grade acceptable in a French course applied to a French major is C (2.0).
2. The grade point average in all courses applied to a French major at CU Denver must be 2.5.
3. No courses taken on a pass/fail basis may be credited toward a French major.
4. All courses counting toward the French major must be taught in French (FREN 3200 does not count toward the major).
5. All students majoring in French must complete 30 semester hours of upper-division courses taught in French (3000-level or higher). A minimum of 18 of those semester hours must be taken from the faculty in French at CU Denver.
6. Courses taken at other institutions while a student is enrolled at CU Denver may be applied to the major only with departmental approval before enrollment in those courses. Students studying French for the professions must also take courses in other areas.
7. Students with advanced placement credits from high school must see a French advisor about course equivalencies. The Department of Modern Languages does not accept CLEP credits.
8. Upon declaring a major in French, each student will be assigned to a faculty advisor with whom the student should consult at least once per semester thereafter. It is especially important that students have their transcripts reviewed by their advisor before enrolling in their final 30 credit hours at CU Denver. Failure to do so may result in delay of graduation.
9. During their final semester in the language, French major students participate in an oral proficiency interview and take a written outcomes assessment exam to measure their level of proficiency and mastery of key concepts.

Take all of the following required courses:

- FREN 3010 - French Phonetics and Pronunciation
- FREN 3020 - Oral Practice
- FREN 3050 - Advanced Grammar and Composition
- FREN 3060 - Advanced French Language Skills

Take three elective courses at the 4000-level.

Take three elective courses at the 3000 or 4000-level.

**Note:** Students must take at least one literature course and at least one culture or civilization course.

**Geography - BA**

**Introduction**

Please click here to see Geography and Environmental Sciences department information.

The Geography program (within the Department of Geography and Environmental Sciences) offers a BA degree that includes a full range of courses in the fundamentals of geography taught mainly by full-time faculty.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

**Program Delivery**
• This is an on-campus program.

Declaring This Major

• Click here to go to information about declaring a major.

General Requirements

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

• CU Denver General Graduation Requirements
• CU Denver Core Curriculum
• College of Liberal Arts & Sciences Graduation Requirements
• Click here for information about Academic Policies

Program Requirements

1. Students must complete a minimum of 24 hours of upper-division credit.
2. At least 15 semester hours must be taken at CU Denver.

Take all of the following required courses:

• GEOG 1202 - Introduction to Physical Geography
• GEOG 1302 - Introduction to Human Geography
• GEOG 2080 - Introduction to Mapping and Map Analysis
• GEOG 3232 - Weather and Climate
• GEOG 3411 - Globalization and Regional Development
• GEOG 4080 - Introduction to GIS

Choose six additional courses, including at least one course from each of the following subfields:

Physical Geography

• GEOG 3240 - Colorado Climates
• GEOG 3302 - Water Resources
• GEOG 4010 - Landscape Geochemistry
• GEOG 4020 - Earth Environments and Human Impacts
• GEOG 4240 - AppliedGeomorphology
• GEOG 4270 - Glacial Geomorphology
• GEOG 4280 - Environmental Hydrology

Human Geography

• ENVS 1342 - Environment, Society and Sustainability
• GEOG 1602 - Urban Studies and Planning
• GEOG 2202 - Hazards to Disasters: Perception and Management
• GEOG 3300 - Population and Resources in the World Environment
The Geography program (within the Department of Geography and Environmental Sciences) offers a BA degree that includes a full range of courses in the fundamentals of geography taught mainly by full-time faculty.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.
Program Delivery

- This is an on-campus program.

Declaring This Major

- Click here to go to information about declaring a major.

General Requirements

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

Program Requirements

1. Students must complete a minimum of 24 hours of upper-division credit.
2. At least 15 semester hours must be taken at CU Denver.

Take one general biology and one general chemistry course (both with labs), OR a sequence of either (BIOL 2051 and 2061 with labs or CHEM 2031 and 2601 with labs). If applying to the MS in Environmental Sciences program, students must have taken both sequences. Course choices with descriptions are below:

- BIOL 2051 - General Biology I and BIOL 2071 - General Biology Laboratory I
- BIOL 2061 - General Biology II and BIOL 2081 - General Biology Laboratory II
- CHEM 2031 - General Chemistry I and CHEM 2038 - General Chemistry Laboratory I
- CHEM 2061 - General Chemistry II and CHEM 2068 - General Chemistry Laboratory II

Take all of the following required courses:

- ENVS 1042 - Introduction to Environmental Sciences
- GEOG 1202 - Introduction to Physical Geography
- GEOG 1302 - Introduction to Human Geography or
- ENVS 1342 - Environment, Society and Sustainability
- GEOG 2080 - Introduction to Mapping and Map Analysis
- GEOG 3232 - Weather and Climate
- GEOG 3411 - Globalization and Regional Development or GEOG 4335 - Contemporary Environmental Issues
- GEOG 4080 - Introduction to GIS

Take both of the following Environmental Science courses:
- GEOG 4020 - Earth Environments and Human Impacts
- GEOG 4265 - Sustainability in Resources Management

Take one from the following courses:
- ENVS 3082 - Energy and the Environment
- GEOG 3240 - Colorado Climates
- GEOG 4010 - Landscape Geochemistry
- GEOG 4240 - Applied Geomorphology
- GEOG 4270 - Glacial Geomorphology
- GEOG 4280 - Environmental Hydrology
- GEOL 4030 - Environmental Geology

Take one upper-division Biology or Chemistry course related to the student's Environmental Science interest.

Take one of the following Quantitative Methods courses:
- ANTH 4050 - Quantitative Methods in Anthropology
- GEOG 4770 - Applied Statistics for the Natural Sciences
- GEOL 4770 - Applied Statistics for the Natural Sciences
- MATH 2830 - Introductory Statistics
- PSYC 2090 - Statistics and Research Methods
- SOCY 3121 - Statistics

Take one of the following Geo-Spatial Analysis courses:
- GEOG 4060 - Remote Sensing I: Introduction to Environmental Remote Sensing
- GEOG 4085 - GIS Applications for the Urban Environment
- GEOG 4090 - Environmental Modeling with Geographic Information Systems
- GEOG 4230 - Hazard Mitigation and Vulnerability Assessment
- GEOG 4235 - GIS Applications in the Health Sciences

**Geography - Environmental Studies Option BA**

**Introduction**

Please click here to see Geography and Environmental Sciences department information.

The Geography program (within the Department of Geography and Environmental Sciences) offers a BA degree that includes a full range of courses in the fundamentals of geography taught mainly by full-time faculty.
These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

**Program Delivery**

- This is an on-campus program.

**Declaring This Major**

- Click here to go to information about declaring a major.

**General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

**Program Requirements**

1. Students must complete a minimum of 24 hours of upper-division credit.
2. At least 15 semester hours must be taken at CU Denver.
3. Up to 4 semester hours of honors thesis course work or up to 3 semester hours of internships may be counted toward the 18 hours of additional requirements. Such substitutions must be approved by a program option advisor.

Take all of the following required courses:

- ENVS 1042 - Introduction to Environmental Sciences
- ENVS 1342 - Environment, Society and Sustainability
- GEOG 1302 - Introduction to Human Geography
- GEOG 2080 - Introduction to Mapping and Map Analysis
- GEOG 3232 - Weather and Climate
- GEOG 3411 - Globalization and Regional Development
- GEOG 4080 - Introduction to GIS

Take three of the following Environmental Studies courses:

- GEOG 3300 - Population and Resources in the World Environment
- GEOG 3302 - Water Resources
- GEOG 3401 - Geography of Food and Agriculture
- GEOG 3440 - Ecotourism
- GEOG 3501 - Geography of Health
- GEOG 4335 - Contemporary Environmental Issues
- GEOG 4350 - Environment and Society in the American Past
- GEOG 4420 - The Politics of Nature
- GEOG 4450 - Urban Food and Agriculture: Perspectives and Research
- GEOG 4680 - Urban Sustainability: Perspectives and Practice

Take two of the following Environmental Policy and Planning courses:

- GEOG 4220 - Environmental Impact Assessment
- GEOG 4230 - Hazard Mitigation and Vulnerability Assessment
- GEOG 4260 - Energy and Natural Resource Planning
- GEOG 4265 - Sustainability in Resources Management
- GEOG 4440 - Science, Policy and the Environment
- GEOG 4710 - Disasters, Climate Change, and Health

Take one of the following Techniques for Environmental Analysis courses:

- GEOG 4060 - Remote Sensing I: Introduction to Environmental Remote Sensing
- GEOG 4070 - Remote Sensing II: Advanced Remote Sensing
- GEOG 4081 - Cartography and Computer Mapping
- GEOG 4085 - GIS Applications for the Urban Environment
- GEOG 4090 - Environmental Modeling with Geographic Information Systems
- GEOG 4095 - Deploying GIS Functionality on the Web
- GEOG 4235 - GIS Applications in the Health Sciences
- GEOG 4770 - Applied Statistics for the Natural Sciences

Geography - Urban Studies and Planning BA

Introduction

Please click here to see Geography and Environmental Sciences department information.

The Geography program (within the Department of Geography and Environmental Sciences) offers a BA degree that includes a full range of courses in the fundamentals of geography taught mainly by full-time faculty.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

Program Delivery

- This is an on-campus program.

Declaring This Major

- Click here to go to information about declaring a major.

General Requirements
To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

**Program Requirements**

1. Students must complete a minimum of 24 hours of upper-division credit.
2. At least 15 semester hours must be taken at CU Denver.

Take **all** of the following required courses:

- GEOG 1202 - Introduction to Physical Geography
- GEOG 1302 - Introduction to Human Geography
- GEOG 1602 - Urban Studies and Planning
- GEOG 2080 - Introduction to Mapping and Map Analysis
- GEOG 3232 - Weather and Climate
- GEOG 3411 - Globalization and Regional Development
- GEOG 4080 - Introduction to GIS

Take **both** of the following upper-division Urban Studies courses:

- GEOG 4640 - Urban Geography: Denver and the U.S.
- GEOG 4680 - Urban Sustainability: Perspectives and Practice

Take **three** of the following Urban Planning courses:

- GEOG 4000 - Planning Methods
- GEOG 4220 - Environmental Impact Assessment
- GEOG 4230 - Hazard Mitigation and Vulnerability Assessment
- GEOG 4260 - Energy and Natural Resource Planning
- GEOG 4265 - Sustainability in Resources Management
- GEOG 4400 - Regional Economic Systems
- GEOG 4450 - Urban Food and Agriculture: Perspectives and Research
- GEOG 4630 - Transportation and Land Use
- GEOG 4670 - Transportation Planning and Policy
- GEOG 4710 - Disasters, Climate Change, and Health

Take **one** of the following Techniques for Urban Analysis courses:

- GEOG 4060 - Remote Sensing I: Introduction to Environmental Remote Sensing
- GEOG 4070 - Remote Sensing II: Advanced Remote Sensing
- GEOG 4081 - Cartography and Computer Mapping
- GEOG 4085 - GIS Applications for the Urban Environment
- GEOG 4090 - Environmental Modeling with Geographic Information Systems
- GEOG 4095 - Deploying GIS Functionality on the Web
- GEOG 4235 - GIS Applications in the Health Sciences
History BA

Introduction

Please click here to see History department information.

The bachelor's degree in history provides students with firm grounding for advanced studies in education, librarianship, law, business and public service, as well as graduate work in the humanities and social sciences broadly. History is an all-inclusive discipline, making it an excellent choice for students with a wide variety of career goals.

These degree requirements are subject to periodic revision by the academic department, and the College of Liberal Arts and Sciences reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

Program Delivery

- This is an on-campus program.

Declaring This Major

- Click here to go to information about declaring a major.

General Requirements

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

Program Requirements

1. Students must complete a minimum of 36 credit hours of history course work, with at least 18 history hours taken at the University of Colorado Denver.
2. Majors must have at least 18 upper division (3000 and 4000) history credit hours, of which 15 must be taken at the 4000 level, including HIST 4839 - History Seminar or the equivalent as determined by the department.
3. Not more than 56 hours of history will be counted toward graduation requirements.
4. A student needs a cumulative grade point average of 2.5 or better in the major to graduate.
5. No courses with a grade below a C (2.0) will apply toward History major requirements.

Take all of the following required courses:

- HIST 3031 - Theory and Practice of History: An Introduction to the Major
- HIST 4839 - History Seminar
- Students must complete HIST 3031 with a grade of C (2.0) or better before enrolling in HIST 4839.
Take a minimum of six semester hours in each of the following areas: United States, Europe and world (Africa, Asia, Latin America). At least three semester hours in each area must be upper-division (3000- and 4000-level).

Note: Please see your advisor for a list of acceptable elective courses.

Human Resources Management Emphasis - BS in Business Administration

Introduction

Please click here to see Business School information.

Human Resources Management offers opportunities for students to develop professional competence in the areas of personnel administration and development. Students acquire an understanding of, and skills in, developing and implementing human resources systems, including recruitment, selection, evaluation, training, motivation and compensation.

Program Delivery

- This is an on-campus program.

Declaring This Major

- Click here to go to information about declaring a major.

General Requirements

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- Business School Graduation Requirements
- Click here for information about Academic Policies

Program Requirements

Take the following required course:

- MGMT 3010 - Managing People for a Competitive Advantage

Take two of the following courses:

- MGMT 4420 - Human Resources Management: Staffing
- MGMT 4430 - Human Resources Management: Training
Take **three** of the following courses (choose any combination of the following):

- ENTP 3000 - Principles of Entrepreneurship
- ENTP 3500 - Entrepreneurship Law and Ethics
- MKTG 4050 - Applied Marketing Management
- 4000-Level MGMT courses

**Illustration Emphasis, Fine Arts BFA**

**Introduction**

Please click here to see general Visual Arts information.

Illustration is the art of making ideas communicate through visual art. The profession spans a wide range of applications, encompassing graphic novels, scientific illustration, visual development for animation and games, children's books, interactive illustration and anything an illustrator can bring to life. The field includes editorial, advertising and product illustration. Given the vast array of opportunities, today's illustrators must understand how to communicate effectively with a chosen medium and situate their work professionally within a particular market.

Students in the illustration emphasis receive instruction in conceptual illustration, digital illustration, rendering, perspective, painting, exhibition preparation, professional practices and the use of various artistic and illustration techniques. In preparation for a professional illustration career, the course work allows students to master numerous essential digital and traditional tools.

**Program Delivery**

- This is an on-campus program.

**Declaring This Major**

- Click here to go to information about declaring a major.
- Students who are applying for entrance into the illustration emphasis are required to submit a portfolio of 10 images in digital format, a written statement and unofficial transcript(s) from CU Denver and all previous post-secondary educational institutions. The illustration emphasis accepts applications only once a year. Students who meet the following requirements can apply. Upon acceptance students will be able to register for upper-division courses in illustration.

**ELIGIBILITY**

**University of Colorado Denver Students**

The student has completed, or is in the process of completing, the following courses:

- FINE 1100 - Drawing I
• FINE 1400 - Two Dimensional Design
• FINE 1500 - Three-Dimensional Design
• FINE 2030 - Life Drawing
• FINE 2155 - Introduction to Digital Photography
• FINE 2600 - Art History Survey I
• FINE 2610 - Art History Survey II

A minimum cumulative fine arts/art history GPA of 2.75

Transfer Students

The student has completed and is transferring a minimum of 24 credit hours from a previous institution.

Student has completed, or is in the process of completing, the equivalents of the following courses:

• FINE 1100 - Drawing I
• FINE 1400 - Two Dimensional Design
• FINE 1500 - Three-Dimensional Design
• FINE 2030 - Life Drawing
• FINE 2600 - Art History Survey I

A minimum cumulative fine arts/art history GPA of 2.75

APPLICATION PORTFOLIO REQUIREMENTS

Students applying to the illustration emphasis submit a portfolio of 10 images in digital format, a written statement and unofficial transcript(s) from CU Denver and all previous post-secondary educational institutions. Application materials must be uploaded to SlideRoom.com by November 1 at 5:00 pm (Mountain Time). Applications are only accepted online and must be formatted to the specifications listed below. There is a $25 fee to apply.

Portfolio of Images

• The portfolio must include a minimum of 10 digital images of creative work (but no more than 15). Submit six or more images of artworks done in foundation courses and from FINE 2030 Life Drawing that visually demonstrate an understanding of design principles and perspective. Additional examples (up to five) may be in the form of design, drawing, painting, mixed media and/or printmaking.
• All images should be formatted as JPEGs. Limit file size to 1 megabyte. File names must be numbered, include the student's last name, and then an underscore, and a brief title.

File Name Examples:

• 1_lastname_figuredrawing.jpeg
• 2_lastname_still-lifedrawing.jpeg

Note: For each image uploaded to SlideRoom, the applicant must provide the following information: title, year, media and size, and a brief explanation of the artwork.

Written Statement
A written statement must be uploaded as a PDF file with the portfolio on SlideRoom. In the essay, the student should address the following in no more than one page in length (400-500 words).

- Why do you want to study illustration and what goals and expectations do you have regarding a career as an illustrator?
- What are your creative strengths, and what areas need further development?
- What other accomplishments would you like the committee to know about, such as Dean’s List, GPA, internships, art-related extracurricular activities or relevant professional experience?

Course Transcripts

These may be official or unofficial transcripts from CU Denver and previous post-secondary institutions.

THE EVALUATION PROCESS

- A committee of painting, drawing and illustration faculty members reviews the application materials. Acceptance into the illustration emphasis is based on the portfolio images, written statement and GPA.
- If not admitted into the illustration emphasis, a student has the choice of attempting the review process again the following year or applying to another emphasis. Students are encouraged to schedule a meeting with the area head of illustration to learn ways to improve their portfolios for future submissions.

The application is evaluated on the following criteria:

- **Presentation** - The portfolio should be well crafted and well organized in content and presentation.
- **Technical Skill** - The portfolio should demonstrate strong proficiency in drawing, composition, design and color.
- **Creativity** - The portfolio should demonstrate creative choices in content and aesthetics.
- **Conceptual Skills** - The portfolio and written statements should reflect analytical thinking and conceptual exploration of the foundations of drawing and design.
- **Written Statement** - The statement should outline academic and artistic goals, addressing any potential strengths and weaknesses.
- **Academic Performance** - The grades must reflect a commitment to learning and growth.
- **Completeness of Application** - All required documentation must be submitted (images, written statement and transcripts).

QUESTIONS

Please contact CAMadvising@ucdenver.edu for emphasis and portfolio information, or contact Illustration area head Mary K. Connelly at 303-315-1508 or mary.connelly@ucdenver.edu.

General Requirements

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Arts & Media Graduation Requirements
- Click here for information about Academic Policies
Program Requirements

1. A minimum grade of C (2.0) is required for each course applied toward a CAM major, minor or certificate requirement. A grade of C- (1.7) or lower will not fulfill a major, minor or certificate requirement. A grade of P is acceptable for courses in which the only grade available is Pass or Fail.
2. All upper-division visual arts courses must be taken at CU Denver unless otherwise approved by visual arts faculty.
3. At least 27 semester hours of visual arts credits (at any level) must be taken at CU Denver.
4. At least 24 semester hours of total visual arts courses must be upper-division.

Take all of the following Visual Arts Foundation courses:

- FINE 1100 - Drawing I
- FINE 1400 - Two Dimensional Design
- FINE 1500 - Three-Dimensional Design
- FINE 2155 - Introduction to Digital Photography
- FINE 2600 - Art History Survey I
- FINE 2610 - Art History Survey II

Take all of the following Illustration Emphasis courses (entry level):

- FINE 2010 - The Graphic Novel Workshop
- FINE 2030 - Life Drawing
- FINE 2200 - Painting I
- FINE 2405 - Introduction to Digital Design
- FINE 2415 - Typography Studio

Take one of the following Illustration Emphasis courses (entry level):

- FINE 3300 - Painting, Drawing and the Printed Image
- FINE 3030 - The Media of Drawing

Take all of the following Illustration Emphasis courses (most are available only to students accepted to emphasis via portfolio review):

- FINE 3001 - Illustration I: Digital Media
- FINE 3002 - Illustration II: Spatial Thinking
- FINE 3260 - Portraiture
- FINE 4020 - Anatomy for the Artist
- FINE 4001 - Illustration III: Conceptual Methods
- FINE 4002 - Illustration IV: Professional Practice
- FINE 4003 - Illustration V: BFA Thesis

Take the following Visual Arts course:

- FINE 4990 - Contemporary Art: 1960 to Present

Take three semester hours of Pre-20th Century Art History elective. Consult a CAM advisor for approved options.

Take three semester hours of upper-division Art History elective.
Take three semester hours of Studio Arts elective in an area outside of painting, drawing or illustration.

Take six semester hours of Studio Arts electives.

Take six semester hours of Visual Arts electives. These may include studio, lecture, internship or art history courses.

Individually Structured Major BA

Introduction

Please click here to see Individually Structured Major department information.

The College of Liberal Arts and Sciences Interdisciplinary Studies Major (ISM) provides students with the opportunity to construct an individualized major that meets their unique needs and interests, and which results in a B.A.. This flexible program allows students to follow academic pursuits that transcend traditional department or college boundaries, combining coursework from two, three, or even more academic units to explore a particular theme. An ISM tends to be more focused than traditional majors and should not be considered a default major for students uncertain about their course of study.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

Program Delivery

- This is an on-campus program.

Declaring This Major

- Click here to go to general information about declaring a major
- In order to declare an Interdisciplinary Studies Major, students are required to submit a program plan that includes a proposal and a course contract. Students should aim to complete a program plan before the end of the sophomore year. The proposal should be approved before students have taken one-third of the classes listed in their course contracts. Copies of your completed ISM proposal and course contract must be filed with the Associate Dean for Planning, Initiatives, and Diversity and with your CLAS Academic Advisor.
- The ISM proposal must include
  - A description of your chosen theme (see below for sample themes).
  - An explanation of why the theme requires coursework that integrates multiple disciplines. You can choose a theme within interdisciplinary frameworks already established in CLAS but which do not offer BA degrees. These frameworks include Chinese Studies, Health Humanities, Law Studies, Religious Studies, Social Justice, Sustainability, and Women's and Gender Studies. You are also encouraged to create your own frameworks.
  - An outline of specific learning objectives for the ISM (see below for sample learning objectives).
  - Approval from the Associate Dean for Planning, Initiatives and Diversity.
• Your ISM course contract must include
  o A list of the courses in your chosen disciplines and the optional "grab bag" of courses that you intend to apply to your ISM, as well as potential alternate courses. You should work closely with the Associate Dean for Planning, Initiatives, and Diversity and faculty advisors in your chosen disciplines to create your course contract.
  o Signatures from your chosen Primary Faculty Advisor from one of your main disciplines and signatures from Faculty Advisors from your other main disciplines. You do not need a faculty advisor for grab bag courses.
  o Signature from your Academic Advisor.
  o Signature from the Associate Dean for Planning, Initiatives, and Diversity.

General Requirements

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

• CU Denver General Graduation Requirements
• CU Denver Core Requirements
• College of Liberal Arts & Sciences Graduation Requirements
• Click here for information about Academic Policies

Program Requirements

The ISM program plan requires course work over two or three disciplines. A discipline is defined as a single department or program such as biology, ethnic studies or math. The ISM program plan must comply with the following policies:

1. ISM students must be in good academic standing, with a GPA of 2.0 or greater overall.
2. Students must achieve a minimum grade of C in all courses to be counted for an ISM.
3. The ISM proposal should be approved before students have taken one-third of the classes listed in their course contracts.
4. Once the ISM course contract is filed, any changes to coursework must be approved by the student’s Primary Faculty Advisor and resubmitted to the Associate Dean for Planning, Initiatives, and Diversity and to the student's CLAS Academic Advisor.
5. In addition to ISMA 3100 and ISMA 4900 (or pre-approved alternatives), students must take at least 18 upper division credit hours (9 each in Discipline 1 and Discipline II).
6. A minimum of 24 ISM credit hours must be completed with CU Denver faculty (at least 9 credits in each of your main disciplines).
7. Between 48 and 54 semester hours are allowed for the program plan.
8. A minimum of 30 semester hours must be completed in liberal arts and sciences course work.
9. A maximum of one discipline (15 credits) may be outside CLAS.
10. A third optional discipline may be a mixture of course work, excluding courses from the first and second disciplines.
11. An ISM title must be consistent with the academic theme and disciplines in the program plan.
12. Students may petition the Associate Dean for Planning, Initiatives, and Diversity to fulfill their introduction and capstone outside of ISMA 3100 and ISMA 4900.

Roles and Responsibilities

Student

• creates the ISM proposal and course contract (in collaboration with faculty advisors)
• meets regularly with ISM Primary Advisor to assess progress through ISM
- fulfills requirements of ISM course contract

**Associate Dean for Planning, Initiatives, and Diversity**

- approves student proposals for ISM
- signs off on ISM course contracts
- maintains records of ISM applications
- certifies graduation

**Primary Faculty Advisor**

- approves ISM course contract
- meets with ISM advisees to monitor progress
- oversees advisees' capstone projects

**Other Faculty Advisors**

- approve course contract
- help with capstone projects when needed

**CLAS Academic Advisor**

- reviews overall course contract
- approves exempt core area

**ISM Coursework Requirements**

Students must complete a total of between 48 and 54 credit hours towards their ISM.

**ISMA 3100 - Learning Across Disciplines (3 credit hours)**

This course introduces students to interdisciplinary thinking, methods, and writing. Examining a compelling issue chosen by the instructor (for example, hunger, human trafficking, healthcare reform, or war and PTSD), students will learn what kinds of questions require thinking beyond a single discipline, how interdisciplinary scholars combine the theories and methods of a variety of fields, and how to approach the challenges of interdisciplinary writing. The final project for INST 3100 requires students to combine the thinking, methods, and writing at least two disciplines in an interdisciplinary project. Prerequisite: approval of ISM application (permission number).

**Interdisciplinary Coursework (42-48 credit hours)**

While the ISM requires students to take a minimum of 15 credit hours in each of two disciplines, students can fulfill the remainder of their credit hours by contracting with additional disciplines or by creating a "grab bag": choosing courses from a variety of disciplines that suit their ISM plan. Up to 15 credit hours for an ISM can come from outside of CLAS.

Sample breakdowns of what ISM coursework might look like:

**Discipline I: 15 hours**

**Discipline II: 15 hours**

**Discipline III: 9 hours**

**Discipline IV: 9 hours**

**Total: 48 credit hours**

**Discipline I: 18 hours**

**Discipline II: 15 hours**
"Grab Bag" from four disciplines: 12 hours

**Total: 45 credit hours**

Discipline I: 24 hours
Discipline II: 18 hours

**Total: 42 credit hours**

ISMA 4900: Interdisciplinary Studies Capstone (3 credit hours)
INST 4900 brings together students who have been working on their individualized majors to share a capstone experience. The goal of the ISM capstone is for students to put their interdisciplinary learning into action - whether through a traditional research project or an experiential learning project. All ISM students must produce a final project that demonstrates their abilities to pose an interdisciplinary question and synthesize the theories, methods, and analytical perspectives of their chosen disciplines to answer that question. While working with their Primary Faculty Advisors on their capstone projects, students meet to discuss their experiences and to get feedback from each other as their projects develop. Grades will be determined by the instructor of record in consultation with each student's Primary Faculty Advisor. Prerequisite: INST 3100 and Capstone proposal approved by faculty advisor. Students may petition the Associate Dean for Planning, Initiatives, and Diversity to fulfill their capstones outside of INST 4900.

**Examples**

Examples of Interdisciplinary Studies Major themes could include:

- Global Health
- Victorian Studies
- Gender and Media
- Applied Sciences
- Urban Studies
- Consumers and Consumption
- Disability Studies
- Health and Sexuality
- Human Rights
- Food Studies
- Science, Technology, and Society
- Latin American Studies

An example course contract for Global Health could look like:

**Discipline I: Anthropology**
ANTH 1000 Anthropology: Past and Present OR ANTH 2102: Culture and the Human Experience
ANTH 3032 Anthropology of Health Care Policy
ANTH 3210 Urban Food Systems and Sustainability
ANTH 4080 Global Health Practice (Travel Study Course)
ANTH 4300 Migrant Health

**Discipline II: Public Health**
PBLH 2001 Introduction to Public Health
PBLH 3041 Health, Culture, and Society
PBLH 3070 Perspectives in Global Health
PBLH 3071 Global Topics in Sexual and Reproductive Health
PBLH 4020 Global Health: Comparative Public Health Systems
Example of learning objectives for the ISM in Global Health:

Develop knowledge of current global health issues.

- Identify the theories, methods, and analytical perspectives of anthropology and public health to understand global health systems.
- Synthesize the theories, methods, and analytical perspectives of anthropology and public health, with input from other disciplines, to answer interdisciplinary questions.
- Communicate ideas effectively in writing and through speaking.
- Critically evaluate a variety of textual and statistical evidence.
- Demonstrate ethical approaches to studying a variety of cultural perspectives.

Information Systems Emphasis - BS in Business Administration (specializations available in Accounting, Finance, Human Resource Management, Management and Marketing)

Introduction

Please click here to see Business School information.

The information systems program at the University of Colorado Denver is a nationally accredited program for students who want to design and implement effective solutions to meet organizational and management needs for information, control and decision making.

An information systems (ISMG) emphasis draws on a diverse set of skills and strengths requiring creative and innovative thinking at the intersections of disciplinary knowledge and practice. Information systems students learn how information technology, effective teamwork and leadership and sound project management combine to enable innovation and change, to improve organizational agility and to add compete value. Courses require extensive hands-on projects, teamwork and use of high-end technology. A combination of technical skills gained in class work with broad based business process knowledge enables our graduates to be ideally situated to take leading roles in shaping the technology-based future of employers in the Rocky Mountain region and the nation.

Undergraduate Options

The Business School at the University of Colorado Denver offers a bachelor of science in business administration where you may choose information systems as your primary core specialty:

- Information Systems, Bachelor of Science in Business Administration degree

Or you may choose to add an information systems specialization to another business discipline:

- Accounting with an Information Systems specialization
- Financial Management with an Information Systems specialization
- Management with an Information Systems specialization
- Marketing with an Information Systems specialization
Career Opportunities

Careers in information systems continue to be one of the highest growth markets in the business world. A student completing the information systems program curriculum will be prepared for challenging careers as a business analyst, database analyst, Web content manager, project manager, IT consultant, and information auditing and compliance specialist. Employment possibilities include financial operations, health care, management consulting, service operations, transportation, and logistics and government.

Information systems is becoming the foundation of all business activities, and a solid understanding of the role of information systems in business and in the national and global economy is now critical for every business student. The information systems emphasis focuses on effective use of information technology in business. You are equipped with logical and analytical thinking in all areas of business and a strong basis for continued career growth in a variety of growing professions. You will develop the technical skills, business know-how and administrative insights required for acquisition, deployment and management of IT resources and services development, operation and evolution of IS infrastructure for use in accounting, finance, marketing, management and other business processes.

Program Delivery

- This is an on-campus program.

Declaring This Major

- Click here to go to information about declaring a major.

General Requirements

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- Business School Graduation Requirements
- Click here for information about Academic Policies

Program Requirements

1. The courses emphasize both team and individual work, allowing students to gain critical thinking skills, knowledge and experience to analyze, design, program, implement and use information.

   Take all of the following courses:

- ISMG 2800 - Designing for the Web
- ISMG 3500 - Enterprise Data and Content Management
- ISMG 3600 - System Strategy, Architecture and Design
- ISMG 4200 - Building Business Applications
- ISMG 4700 - Business Data Communications and Networking
- ISMG 4900 - Project Management and Practice (also fulfills BGEN Experiential Learning requirement)

   Take two of the following courses or, if following a specialization, select 2 courses from one of the specializations listed below:
Accounting Specialization

Take two of the following courses:

- ACCT 3220 - Intermediate Financial Accounting I
- ACCT 3230 - Intermediate Financial Accounting II
- ACCT 4054 - Accounting Systems and Data Processing
- ACCT 4780 - Accounting and Information Systems Processes and Controls

Finance Specialization

Take two of the following courses:

- FNCE 3500 - Management of Business Capital
- FNCE 3600 - Financial Markets and Institutions
- FNCE 3700 - Investment and Portfolio Management
- FNCE 4750 - Business Intelligence and Financial Modeling

Human Resource Management Specialization

Take two of the following courses:

- MGMT 3010 - Managing People for a Competitive Advantage
- MGMT 4420 - Human Resources Management: Staffing
- MGMT 4430 - Human Resources Management: Training
- MGMT 4450 - Human Resources Management: Compensation
- MGMT 4770 - Human Resource Information Systems

Management Specialization

Take two of the following courses:

- MGMT 4350 - Leading Organizational Change
- MGMT 4370 - Organization Design
- MGMT 4400 - Environments of International Business

Marketing Specialization

Take two of the following courses:

- MKTG 3100 - Marketing Research
International Business Emphasis - BS in Business Administration

Introduction

Please click here to see Business School information.

Increasingly, businesses are reorienting their thinking, planning and operations to capitalize on opportunities that exist in the world marketplace. Every phase of business is affected by this reorientation. For individuals with the appropriate skills, training and interest, international business provides excellent career opportunities.

The international business curriculum is designed to enhance and build on thorough training in basic business skills and to provide students with additional skills and knowledge appropriate to international business.

Program Delivery

- This is an on-campus program.

Declaring This Major

- Click here to go to information about declaring a major.

General Requirements

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- Business School Graduation Requirements
- Click here for information about Academic Policies

Program Requirements

Take all of the following Foundation courses:

- MGMT 4370 - Organization Design
- MKTG 4050 - Applied Marketing Management

Take all of the following Emphasis courses:

- FNCE 4370 - International Financial Management
- INTB 4400 - Environments of International Business
- *Note: an international field of study course (approved by petition) may substitute for INTB4400.
• INTB 4410 - Operations of International Business
• MKTG 4200 - International Marketing
• A second area of emphasis in Business is highly recommended. In addition, serious consideration should be given to advanced study of a foreign language and a minor in International Studies, offered by College of Liberal Arts and Sciences.

International Studies BA

Introduction

Please click here to see International Studies department information.

The major is interdisciplinary, and students must take classes in at least three different disciplines (anthropology, economics, geography, history, international commerce/business, modern languages, political science or religious studies). These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

Students are expected to develop a regional specialization. They should choose courses from the introductory and thematic concentration lists that contribute to an understanding of a world region.

Program Delivery

• This is an on-campus program.

Declaring This Major

• Click here to go to information about declaring a major

General Requirements

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

• CU Denver General Graduation Requirements
• CU Denver Core Curriculum
• College of Liberal Arts & Sciences Graduation Requirements
• Click here for information about Academic Policies

Program Requirements

1. All International Studies majors must demonstrate a proficiency in a language other than English. This may be fulfilled with the fourth semester of a foreign language course sequence.
2. No more than 18 hours in any one discipline will be accepted toward a major.
3. Students must receive a grade of C (2.0) or better in all language courses; they also have the option of testing out of this requirement by taking a language proficiency exam.
4. Majors must complete at least half (24 hours) of the semester hours at CU Denver.
5. A cumulative GPA of 2.5 or better is required, with a minimum grade of C- (1.7) earned in all major courses to graduate.
6. No more than 18 semester hours from a study abroad program can apply to the major. The courses applied to the major must also be approved by their respective disciplines.

7. Students may use up to 6 internship semester hours toward international studies graduation requirements. The internship must have a CLAS faculty sponsor who teaches courses applicable to the international studies degree. The internship must have an international element to count toward the degree.

8. Students may apply up to 6 semester hours of independent study toward international studies graduation requirements.

Take one of the following introductory courses:

- ECON 2012 - Principles of Economics: Macroeconomics
- GEOG 1102 - World Regions Global Context

Take one of the following introductory courses:

- INTB 3000 - Global Perspectives
- PSCI 3022 - Introduction to Comparative Politics
- PSCI 3042 - Introduction to International Relations

Take one of the following introductory courses:

- ANTH 2102 - Culture and the Human Experience
- HIST 3451 - Introduction to African History
- HIST 3460 - Modern Latin American History
- HIST 3470 - Intro to East Asia: Since 1800
- HIST 3480 - Introduction to European History
- HIST 3483 - Gandhi's India and Modern South Asia
- RLST 2660 - World Religions

**Thematic Concentrations**

Students must take a minimum of four upper-division courses in each of three of the following five concentrations, for a total of 36 semester hours (12 hours in each concentration). Please note that the concentration in international commerce requires five courses rather than four, for a total of 39 semester hours. The list below does not include all the international courses applicable to the major, only the ones frequently taught. It is expected to change as departments develop new courses and hire new faculty in different areas.

**Language, Culture and Literature**

Modern languages: any upper-division courses in the Department of Modern Languages except Methods of Teaching French/German/Spanish. We have not listed the courses individually because there are so many upper-division courses on world literature and culture available in modern languages.

- ANTH 3121 - Language, Culture, and Communication
- PHIL 4650 - Differing Concepts of God
- RLST 4010 - Comparative Religious Systems

**International Relations and Comparative Politics**
• ANTH 4180 - The Nature of Power
• HIST 3121 - The World at War, 1914-1945
• HIST 4032 - Globalization in World History Since 1945
• HIST 4220 - U.S. Foreign Policy Since 1912
• HIST 4412 - Mexico and the United States: People and Politics on the Border
• HIST 4471 - The Second World War
• HIST 4475 - The Vietnam War
• *PSCI 3022 - Introduction to Comparative Politics
• *PSCI 3042 - Introduction to International Relations
• PSCI 4057 - Religion and Politics
• PSCI 4105 - Comparative Politics: Europe
• PSCI 4146 - Indigenous Politics
• PSCI 4156 - The Arab-Israeli Peace Process
• PSCI 4185 - Corruption in the U.S. and Abroad
• PSCI 4216 - International Politics: Human Rights
• PSCI 4225 - Democracy and Democratization
• PSCI 4226 - The United Nations in World Affairs
• PSCI 4236 - American Foreign Policy
• PSCI 4266 - International Law
• PSCI 4286 - International Relations: War or Peace?
• PSCI 4726 - Russian and Chinese Foreign Policy
• PSCI 4736 - The Middle East in World Affairs
• PSCI 4807 - Political Violence
• PSCI 4995 - Travel Study

*If not taken to fulfill the introductory major requirements.

**Economics, Development and Environment**

*Note:* Students in this concentration must take the following course as one of their three Introductory courses.

• ECON 2012 - Principles of Economics: Macroeconomics

Students in this concentration must take the following Economics, Development and Environment course:

• ECON 2022 - Principles of Economics: Microeconomics

Students in this concentration must take three of the following Economics, Development and Environment courses:

• ANTH 4010 - Medical Anthropology: Global Health
• ANTH 4070 - Culture of Development and Globalization
• ANTH 4170 - Culture and the Environment
• ANTH 4390 - Laboratory Methods in Archaeology
• ECON 4081 - Intermediate Macroeconomic Theory
• ECON 4230 - Law and Economics
• ECON 4410 - International Trade
• ECON 4420 - International Finance
• ECON 4540 - Environmental Economics
• ECON 4770 - Economic Development--Theory and Problems
• GEOG 3300 - Population and Resources in the World Environment
• GEOG 3411 - Globalization and Regional Development
• GEOG 3430 - Geography of Tourism
• GEOG 4265 - Sustainability in Resources Management
• INTB 3000 - Global Perspectives
• PSCI 4085 - Comparative Governance: Environment and Society
• PSCI 4126 - Introduction to International Political Economy
• PSCI 4235 - Politics and Markets in Latin America
• PSCI 4248 - Gender, Globalization and Development
• PSCI 4326 - Advanced International Political Economy: Globalization
• PSCI 4365 - Global Ecological Crises
• PSCI 4555 - International Women's Resistance

International Commerce

Students must meet Business School entrance requirements for the International Commerce concentration, with a 3.0 GPA overall or in the last 24 hours. ECON 2012 and ECON 2022 are prerequisites for most of these courses.

Note: The first three courses are prerequisites for MGMT 4400 and MKTG 4200. Also, this concentration requires 15 hours and not 12.

• ACCT 2220 - Managerial Accounting and Professional Issues (Prerequisite: MATH 1070 or MATH 1110 and sophomore standing)
• *MGMT 3000 - Managing Individuals and Teams
• *MKTG 3000 - Principles of Marketing
• *MGMT 4400 - Environments of International Business
• *MKTG 4200 - International Marketing

*Students must have junior standing to take the 3000-level courses and must be formally admitted to the international studies program to take the 4000-level courses.

Regional Societies and History

• ANTH 4995 - Travel Study
• GEOG 3120 - Geography of Europe
• GEOG 3130 - Central America and the Caribbean
• GEOG 3140 - Geography of South America
• GEOG 3150 - Middle East
• HIST 3350 - Colonial Latin America
• HIST 3500 - African History in Novels and Films
• HIST 3995 - Travel Study
• HIST 4027 - Enlightenment and Revolution
• HIST 4028 - Nations and Classes: 19th Century Europe
• HIST 4029 - Age of Anxiety in Europe
• HIST 4046 - Victorians and Victorianism
• HIST 4051 - Britain and the Empire
• HIST 4062 - Modern France, 1789 to the Present
• HIST 4071 - Modern Germany
• HIST 4074 - Post-War Germany
• HIST 4082 - Reform and Revolution in Russia: The 1860s to 1917
• HIST 4083 - Russia Since 1917
• HIST 4086 - Eastern Europe
• HIST 4303 - Sex and Gender in Modern Britain
• HIST 4411 - Modern Mexico
• HIST 4414 - Nationalism and State Building in Latin America, 1750-1850
• HIST 4415 - Social Revolutions in Latin America
• HIST 4421 - Modern China
• HIST 4451 - Southern Africa
• HIST 4455 - African Struggle for Independence
• HIST 4460 - The Islamic World's Golden Age
• HIST 4461 - The Modern Middle East
• HIST 4621 - Explorers and Exploration
• PSCI 4155 - Political Systems of the Middle East and North Africa.

• PSCI 4165 - Islamic Politics and Culture or
• RLST 3100 - Islamic Politics and Culture

• PSCI 4505 - Political System of Russia and Its Neighbors
• PSCI 4554 - Chicano and Latino Politics
• PSCI 4615 - Politics and Government of China

• RLST 3400 - Asian Philosophies and Religions or
• PHIL 3666 - Asian Philosophies and Religions

• RLST 3500 - Religions of India
• RLST 3660 - Chinese Philosophy and Culture or
• PHIL 3981 - Chinese Philosophy and Culture

International Studies Capstone Course

All majors must take a three semester hour seminar focusing on a global issue. The designated capstone courses are:

• HIST 4417 - Commodities and Globalization: Dessert in World History
• PSCI 4126 - Introduction to International Political Economy

Management Emphasis - BS in Business Administration

Introduction

Please click here to see Business School information.

The management curriculum provides the foundation for careers in supervision and general management in a wide variety of organizations. It develops skills in management practice through an understanding of general management principles, individual and group behavior, organizational change and design and human resources management.

Program Delivery

• This is an on-campus program.

Declaring This Major

• Click here to go to information about declaring a major.
General Requirements

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Requirements
- Business School Graduation Requirements
- Click here for information about Academic Policies

Program Requirements

Take all of the following required courses:

- MGMT 3010 - Managing People for a Competitive Advantage
- MGMT 4330 - Mastering Management
- MGMT 4350 - Leading Organizational Change
- MGMT 4370 - Organization Design
- MKTG 4050 - Applied Marketing Management

Take two of the following courses:

- ENTP 3000 - Principles of Entrepreneurship
- ENTP 3500 - Entrepreneurship Law and Ethics
- Or select any two 3000 or 4000-level MGMT electives

Note

Students also have the option to complete a management emphasis with a specialization in Information Systems. Click here to view this option.

Management Emphasis - BS in Business Administration with specialization in Information Systems

Introduction

Please click here to see Business School information.

The management curriculum provides the foundation for careers in supervision and general management in a wide variety of organizations. It develops skills in management practice through an understanding of general management principles, individual and group behavior, organizational change and design and human resources management. Information technology is the prime driver of business strategy. This specialization focuses on the strategic, technological, financial, and organizational issues involved with the effective management of information technology.

Program Delivery

- This is an on-campus program.
Declaring This Major

- Click here to go to information about declaring a major.

General Requirements

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- Business School Graduation Requirements
- Click here for information about Academic Policies

Program Requirements

Take all of the following required courses:

- MGMT 3010 - Managing People for a Competitive Advantage
- MGMT 4330 - Mastering Management
- MGMT 4350 - Leading Organizational Change
- MGMT 4370 - Organization Design
- MKTG 4050 - Applied Marketing Management
- ISMG 3500 - Enterprise Data and Content Management
- ISMG 3600 - System Strategy, Architecture and Design
- ISMG 4900 - Project Management and Practice (also fulfills BGEN Experiential Learning requirement)

Take two of the following courses:

- ENTP 3000 - Principles of Entrepreneurship
- ENTP 3500 - Entrepreneurship Law and Ethics
- Or select any two 3000 or 4000-level MGMT electives

Marketing Emphasis - BS in Business Administration

Introduction

Please click here to see Business School information.

Marketing is concerned with directing the activities of the organization toward the satisfaction of customer wants and needs. This involves understanding customers, identifying those wants and needs that the organization can best serve, guiding the development of specific products or services, planning and implementing ways to take products or services to the market, securing the customer's order and finally, monitoring customer response in order to guide future activities.

In most organizations, marketing is a major functional area that provides a wide variety of career opportunities in such fields as personal selling and sales management, advertising and sales promotion, public relations, marketing research, physical distribution, product management, market management, marketing information systems and retail management. Increasingly, career opportunities exist in service businesses and nonprofit organizations.
Program Delivery

- This is an on-campus program.

Declaring This Major

- Click here to go to information about declaring a major.

General Requirements

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- Business School Graduation Requirements
- Click here for information about Academic Policies

Program Requirements

- Take all of the following required courses:
  - MKTG 3100 - Marketing Research
  - MKTG 4050 - Applied Marketing Management
  - Elective Business course: One 3000 or 4000-level or above Business course.

  Take any four 3000 or 4000-level and above MKTG prefixed courses:

  - MKTG 3200 - Buyer Behavior
  - MKTG 3300 - Social Media in Business
  - MKTG 4000 - Advertising
  - MKTG 4200 - International Marketing
  - MKTG 4220 - Asian Business Development and Marketing
  - MKTG 4250 - Sports Marketing
  - MKTG 4580 - International Transportation
  - MKTG 4700 - Personal Selling and Sales Management
  - MKTG 4720 - Internet Marketing
  - MKTG 4760 - Customer Relationship Management
  - MKTG 4950 - Special Topics
  - Note: Marketing courses that were used to satisfy the International Business requirement cannot be applied to the Marketing area of emphasis. Students are encouraged to meet with their advisor to discuss which electives can best help them meet their career goals.

Note

Students also have the option to complete a Marketing emphasis with a specialization in Information Systems. Click here to view this option.
Marketing Emphasis - BS in Business Administration with specialization in Information Systems

Introduction

Please here here to see Business School information.

Marketing is concerned with directing the activities of the organization toward the satisfaction of customer wants and needs. This involves understanding customers, identifying those wants and needs that the organization can best serve, guiding the development of specific products or services, planning and implementing ways to take products or services to the market, securing the customer's order and finally, monitoring customer response in order to guide future activities.

In most organizations, marketing is a major functional area that provides a wide variety of career opportunities in such fields as personal selling and sales management, advertising and sales promotion, public relations, marketing research, physical distribution, product management, market management, marketing information systems and retail management. Increasingly, career opportunities exist in service businesses and nonprofit organizations.

Within a specialization in Information Systems students can complement their individual interests as well as prior education and work experiences.

Program Delivery

- This is an on-campus program.

Declaring This Major

- Click here to go to information about declaring a major.

General Requirements

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Requirements
- Business School Graduation Requirements
- Click here for information about Academic Policies

Program Requirements

Take all of the following required courses:

- MKTG 3100 - Marketing Research
- MKTG 4050 - Applied Marketing Management
- ISMG 3500 - Enterprise Data and Content Management
- ISMG 3600 - System Strategy, Architecture and Design
• ISMG 4760 - Customer Relationship Management
• ISMG 4900 - Project Management and Practice (also fulfills the BGEN Experiential Learning requirement)

Take any two 3000 or 4000-level and above MKTG prefixed courses:

• MKTG 3200 - Buyer Behavior
• MKTG 3300 - Social Media in Business
• MKTG 4000 - Advertising
• MKTG 4200 - International Marketing
• MKTG 4220 - Asian Business Development and Marketing
• MKTG 4250 - Advertising
• MKTG 4260 - International Transportation
• MKTG 4700 - Personal Selling and Sales Management
• MKTG 4720 - Internet Marketing
• MKTG 4760 - Customer Relationship Management
• MKTG 4950 - Special Topics
• Note: Marketing courses that were used to satisfy the International Business requirement cannot be applied to the Marketing area of emphasis.

Mathematics - Actuarial Science Option BS

Introduction

Please click here to see Mathematical and Statistical Sciences department information.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

Program Delivery

• This is an on-campus program.

Declaring This Major

• Click here to go to information about declaring a major.

General Requirements

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

• CU Denver General Graduation Requirements
• CU Denver Core Curriculum
• College of Liberal Arts & Sciences Graduation Requirements
• Click here for information about Academic Policies

Program Requirements
1. Students must complete a total of at least 36 upper-division MATH semester hours (typically 12 courses).
2. Students must complete at least 15 upper-division semester hours in MATH in residence at CU Denver.
3. A grade C- or better is needed in each class counted toward the MATH major.
4. A minimum GPA of 2.25 is required for all MATH courses applying to MATH requirements.

Take all of the following Mathematics courses:

- MATH 1401 - Calculus I
- MATH 2411 - Calculus II
- MATH 2421 - Calculus III
- MATH 3000 - Introduction to Abstract Mathematics
- MATH 3191 - Applied Linear Algebra
- MATH 4310 - Introduction to Real Analysis I

Take all of the following Actuarial Science courses:

- MATH 3200 - Elementary Differential Equations
- MATH 4650 - Numerical Analysis I
- MATH 4779 - Math Clinic
- MATH 4810 - Probability
- MATH 4820 - Introduction to Mathematical Statistics

Take one of the following courses:

- MATH 3301 - Introduction to Optimization in Operations Research
- MATH 3302 - Simulation in Operations Research
- MATH 4387 - Applied Regression Analysis
- MATH 4409 - Applied Combinatorics
- MATH 4733 - Partial Differential Equations
- MATH 4791 - Continuous Modeling
- MATH 4793 - Discrete Math Modeling
- MATH 4794 - Optimization Modeling

Take one of the following courses:

- MATH 4110 - Theory of Numbers
- MATH 4140 - Introduction to Modern Algebra
- MATH 4201 - Topology
- MATH 4220 - Higher Geometry II
- MATH 4320 - Introduction to Real Analysis II
- MATH 4408 - Applied Graph Theory

Take one of the following courses:

- MATH 4792 - Probabilistic Modeling
- MATH 5350 - Mathematical Theory of Interest

Take one approved Mathematics elective (at least three semester hours) above 3000, excluding 3040, 3511, 4012, 4013, 4014 and 4015. Note: Students looking to use MATH 3195 to satisfy this requirement should consult their advisor.

Mathematics - Applied Mathematics Option BS
Introduction

Please click here to see Mathematical and Statistical Sciences department information.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

Program Delivery

- This is an on-campus program.

Declaring This Major

- Click here to go to information about declaring a major.

General Requirements

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

Program Requirements

1. Students must complete a total of at least 36 upper-division MATH semester hours (typically 12 courses).
2. Students must complete at least 15 upper-division semester hours in MATH in residence at CU Denver.
3. A grade C- or better is needed in each class counted toward the MATH major.
4. A minimum GPA of 2.25 is required for all MATH courses applying to MATH requirements.

Take all of the following Mathematics courses:

- MATH 1401 - Calculus I
- MATH 2411 - Calculus II
- MATH 2421 - Calculus III
- MATH 3000 - Introduction to Abstract Mathematics
- MATH 3191 - Applied Linear Algebra
- MATH 4310 - Introduction to Real Analysis I

Take all of the following Applied Mathematics courses:

- MATH 3200 - Elementary Differential Equations
- MATH 4650 - Numerical Analysis I
- MATH 4779 - Math Clinic

Take one of the following courses:
- MATH 3800 - Probability and Statistics for Engineers
- MATH 4820 - Introduction to Mathematical Statistics

Take one of the following courses:

- MATH 4110 - Theory of Numbers
- MATH 4140 - Introduction to Modern Algebra
- MATH 4201 - Topology
- MATH 4220 - Higher Geometry II
- MATH 4320 - Introduction to Real Analysis II
- MATH 4408 - Applied Graph Theory

Take two of the following courses:

- MATH 3301 - Introduction to Optimization in Operations Research
- MATH 3302 - Simulation in Operations Research
- MATH 4387 - Applied Regression Analysis
- MATH 4733 - Partial Differential Equations
- MATH 4791 - Continuous Modeling
- MATH 4792 - Probabilistic Modeling
- MATH 4793 - Discrete Math Modeling
- MATH 4794 - Optimization Modeling

Take two approved Mathematics electives (at least six semester hours) above 3000, excluding 3040, 3511, 4012, 4013, 4014 and 4015. Note: Students looking to use MATH 3195 to satisfy this requirement should consult their advisor.

Mathematics - Education Option BS

Introduction

Please click here to see Mathematical and Statistical Sciences department information.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

Program Delivery

- This is an on-campus program.

Declaring This Major

- Click here to go to information about declaring a major.

General Requirements

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.
Program Requirements

1. Students must complete a total of at least 36 upper-division MATH semester hours (typically 12 courses).
2. Students must complete at least 15 upper-division semester hours in MATH in residence at CU Denver.
3. A grade C- or better is needed in each class counted toward the MATH major.
4. A minimum GPA of 2.25 is required for all MATH courses applying to MATH requirements.

Note: Certification by the School of Education & Human Development (SEHD) is required for public school teaching. See the description of Undergraduate Teacher Licensure on the School of Education & Human Development (SEHD) Urban Community Teacher Education program page for more information.

Take all of the following Mathematics courses:

- MATH 1401 - Calculus I
- MATH 2411 - Calculus II
- MATH 2421 - Calculus III
- MATH 3000 - Introduction to Abstract Mathematics
- MATH 3191 - Applied Linear Algebra
- MATH 4310 - Introduction to Real Analysis I

Take all of the following Mathematics courses:

- MATH 3210 - Higher Geometry I
- MATH 3800 - Probability and Statistics for Engineers
- MATH 4010 - History of Mathematics
- MATH 4012 - An Advanced Perspective on Number and Operation
- MATH 4013 - An Inquiry-Based Approach to Geometry
- MATH 4014 - Statistical Knowledge for Teaching
- MATH 4015 - Capstone Course for Secondary Teachers
- MATH 4110 - Theory of Numbers
- MATH 4140 - Introduction to Modern Algebra
- MATH 4409 - Applied Combinatorics

Take one of the following courses:

- MATH 3250 - Problem Solving Tools
- MATH 4650 - Numerical Analysis I

Mathematics - Probability and Statistics Option BS

Introduction

Please click here to see Mathematical and Statistical Sciences department information.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly
urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

**Program Delivery**

- This is an on-campus program.

**Declaring This Major**

- Click here to go to information about declaring a major.

**General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

**Program Requirements**

1. Students must complete a total of at least 36 upper-division MATH semester hours (typically 12 courses).
2. Students must complete at least 15 upper-division semester hours in MATH in residence at CU Denver.
3. A grade C- or better is needed in each class counted toward the MATH major.
4. A minimum GPA of 2.25 is required for all MATH courses applying to MATH requirements.

Take all of the following Mathematics courses:

- MATH 1401 - Calculus I
- MATH 2411 - Calculus II
- MATH 2421 - Calculus III
- MATH 3000 - Introduction to Abstract Mathematics
- MATH 3191 - Applied Linear Algebra
- MATH 4310 - Introduction to Real Analysis I

Take all of the following Probability and Statistics courses:

- MATH 3200 - Elementary Differential Equations
- MATH 4650 - Numerical Analysis I
- MATH 4779 - Math Clinic
- MATH 4810 - Probability
- MATH 4820 - Introduction to Mathematical Statistics

Take one of the following courses:

- MATH 4387 - Applied Regression Analysis
- MATH 4792 - Probabilistic Modeling
Take one of the following courses:

- MATH 4110 - Theory of Numbers
- MATH 4140 - Introduction to Modern Algebra
- MATH 4201 - Topology
- MATH 4220 - Higher Geometry II
- MATH 4320 - Introduction to Real Analysis II
- MATH 4408 - Applied Graph Theory

Take two approved Mathematics electives (at least six semester hours) above 3000, excluding 3040, 3511, 4012, 4013, 4014 and 4015. Note: Students looking to use MATH 3195 to satisfy this requirement should consult their advisor.

Mathematics BS

Introduction

Please click here to see Mathematical and Statistical Sciences department information.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

Program Delivery

- This is an on-campus program.

Declaring This Major

- Click here to go to information about declaring a major.

General Requirements

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

Program Requirements

1. Students must complete a total of at least 36 upper-division MATH semester hours (typically 12 courses).
2. Students must complete at least 15 upper-division semester hours in MATH in residence at CU Denver.
3. A grade C- or better is needed in each class counted toward the MATH major.
4. A minimum GPA of 2.25 is required for all MATH courses applying to MATH requirements.

Take all of the following Mathematics courses:
- MATH 1401 - Calculus I
- MATH 2411 - Calculus II
- MATH 2421 - Calculus III
- MATH 3000 - Introduction to Abstract Mathematics
- MATH 3191 - Applied Linear Algebra
- MATH 4310 - Introduction to Real Analysis I
- MATH 4779 - Math Clinic

Take one of the following courses:

- MATH 3250 - Problem Solving Tools
- MATH 4650 - Numerical Analysis I

Take one of the following courses:

- MATH 3800 - Probability and Statistics for Engineers
- MATH 4820 - Introduction to Mathematical Statistics

Take one of the following courses:

- MATH 4110 - Theory of Numbers
- MATH 4140 - Introduction to Modern Algebra
- MATH 4201 - Topology
- MATH 4220 - Higher Geometry II
- MATH 4320 - Introduction to Real Analysis II
- MATH 4408 - Applied Graph Theory

Take one of the following courses:

- MATH 3301 - Introduction to Optimization in Operations Research
- MATH 3302 - Simulation in Operations Research
- MATH 4387 - Applied Regression Analysis
- MATH 4409 - Applied Combinatorics
- MATH 4733 - Partial Differential Equations
- MATH 4791 - Continuous Modeling
- MATH 4792 - Probabilistic Modeling
- MATH 4793 - Discrete Math Modeling
- MATH 4794 - Optimization Modeling

Take four approved Mathematics electives (at least twelve semester hours) above 3000, excluding 3040, 3511, 4012, 4013, 4014 and 4015. Note: Students looking to use MATH 3195 to satisfy this requirement should consult their advisor.

**Mechanical Engineering BS**

**Introduction**

Please click here to see Mechanical Engineering department information.

The mechanical engineer is concerned with satisfying the needs of society using a combination of material, human and economic resources. Mechanical engineering covers a wide spectrum of activities in the
engineering profession. These activities include the conversion and transmission of energy and associated power processes; the kinematic, dynamic, strength and wear considerations, as well as economic aspects of the development, design and use of materials, machines and processes; and the analysis, synthesis and control of entire engineering systems.

The mechanical engineering department seeks to graduate a diverse population of students with bachelor's and master's degrees, enabling them to:

- be employed by a diverse group of industries, research laboratories and educational institutions
- pursue careers in traditional engineering, interdisciplinary areas, research and education
- pursue postgraduate education and advanced degrees

The mechanical engineering curriculum begins with a strong emphasis on mathematics, physics and chemistry. It continues with a concentration in engineering sciences, including solid and fluid mechanics; thermodynamics, heat and mass transport; materials; and systems analysis and control. It concludes with laboratory and design courses that demonstrate the ways in which scientific knowledge is applied in the design and development of useful devices and manufacturing processes.

The mechanical engineering program may be roughly subdivided into two-year groupings. In the first two years, the program emphasizes the fundamentals of mathematics and basic science that are essential for an understanding of most branches of engineering. In the last two years of the program, the curriculum emphasizes engineering science and design and provides technical electives in the following areas:

- thermodynamics
- heat transfer
- fluid mechanics
- solid mechanics
- motorsports engineering
- power
- bioengineering
- dynamics and controls
- computer-aided design and manufacturing
- thermomechanical systems
- composite materials

**Program Delivery**

- This is an on-campus program.

**Declaring This Major**

- Click here to go to information about declaring a major

**General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
Program Requirements

1. Students enrolled prior to fall 2006 may choose either the new core curriculum or the old core curriculum.
2. CVEN 2121 and CVEN 3111 may be substituted for MECH 2023 and MECH 2033 respectively.
3. Not all courses may be offered every semester.
4. Students must maintain a minimum 2.0 GPA in all courses applying to major requirements.
5. Students must maintain a minimum 2.0 GPA in all MECH courses attempted.
6. Students must complete a minimum of 128 semester hours of course work.
7. The last 30 hours must be earned as a degree-seeking student in the College of Engineering and Applied Science at CU Denver.

Take all of the following courses in Mechanical Engineering major:

- MECH 1025 - CAD and Graphics for Mechanical Engineering
- MECH 2023 - Statics or CVEN 2121 - Analytical Mechanics I
- MECH 2033 - Dynamics or CVEN 3111 - Analytical Mechanics II
- MECH 1045 - Manufacturing Processes Design
- MECH 2024 - Introduction to Materials Science
- MECH 2034 - Properties of Engineering Materials
- MECH 3010 - Elementary Numerical Methods and Programming
- MECH 3012 - Thermodynamics
- MECH 3021 - Introduction to Fluid Mechanics
- MECH 3022 - Thermodynamics II
- MECH 3023 - System Dynamics I: Vibrations
- MECH 3027 - Measurements
- MECH 3028 - Laboratory of Mechanical Measurements
- MECH 3030 - Electric Circuits and Systems
- MECH 3031 - Fluids/Thermal Laboratory
- MECH 3032 - Electric Circuits and Systems Lab
- MECH 3035 - Design of Mechanical Elements
- MECH 3042 - Heat Transfer
- MECH 3043 - Strength of Materials
- MECH 3065 - Intermediate Dynamics
- MECH 4023 - System Dynamics II: Controls
- MECH 4035 - Senior Design I
- MECH 4045 - Senior Design II

Take 12 semester hours of Technical Electives.

Take all of the following Mathematics courses:
- MATH 1401 - Calculus I
- MATH 2411 - Calculus II
- MATH 2421 - Calculus III
- MATH 3195 - Linear Algebra and Differential Equations

Take all of the following Science courses:

- CHEM 1130 - Engineering General Chemistry
- PHYS 2311 - General Physics I: Calculus-Based
- PHYS 2321 - General Physics Lab I
- PHYS 2331 - General Physics II: Calculus-Based
- PHYS 2341 - General Physics Lab II

**Music Business Emphasis, Audition Track, Music BS**

**Introduction**

Please click here to see general Music information.

**Program Delivery**

- This is an on-campus program.

**Declaring This Major**

- Click here to go to information about declaring a major.
- The bachelor of science (BS) in music has a competitive application process. Please refer to the Music & Entertainment Industry Studies Department (MEIS) website for additional guidelines and information at http://www.ucdenver.edu/academics/colleges/CAM/programs/meis/Pages/index.aspx.
- Students who wish to pursue the music business emphasis, audition track, are required to pass an entrance audition on their primary instrument or voice as part of the application process and pass varying levels of performance proficiency as part of the curriculum.

**General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Arts & Media Graduation Requirements
- Click here for information about Academic Policies

**Program Requirements**

1. To earn a BS in music, students must complete musicianship courses, MEIS core courses and requirements from one of the four emphasis areas: performance, singer/songwriter, music business or recording arts.
2. A minimum grade of C (2.0) is required for each course applied toward a CAM major, minor or certificate requirement. A grade of C- (1.7) or lower will not fulfill a major, minor or certificate requirement. A grade of P is acceptable for courses in which the only grade available is Pass or Fail.

Take all of the following Musicianship course groups:

- PMUS 1100 - Music Theory I
- PMUS 1110 - Ear Training and Sight Singing I
- PMUS 1023 - Piano Class I
- PMUS 1200 - Music Theory II
- PMUS 1210 - Ear Training and Sight Singing II
- PMUS 1024 - Piano Class II
- PMUS 2100 - Music Theory III
- PMUS 2110 - Ear Training and Sight Singing III
- PMUS 1025 - Piano Class III
- PMUS 2200 - Jazz Theory
- PMUS 1026 - Piano Class IV
- PMUS 3830 - History and Literature of Music I
- PMUS 3831 - History and Literature of Music II
  - PMUS___ Music History Elective (3 semester hours)
  - PMUS 1___ Applied Instrument/Voice (1 semester hour)
  - PMUS 1500 - General Recital
  - PMUS____ Ensemble (1 semester hour) *Note: Students must complete PMUS 1470 - Performance Practice Ensemble during their first or second semester of Applied Instrument/Voice.*
  - PMUS 1___ Applied Instrument/Voice (1 semester hour)
  - PMUS 1500 - General Recital
  - PMUS____ Ensemble (1 semester hour)
  - PMUS 2___ Applied Instrument/Voice (1 semester hour)
  - PMUS 1500 - General Recital
  - PMUS____ Ensemble (1 semester hour)
o PMUS 2___ Applied Instrument/Voice (1 semester hour)
o PMUS 1500 - General Recital
o PMUS____ Ensemble (1 semester hour)

o PMUS____ Ensemble (1 semester hour)
• PMUS____ Ensemble (1 semester hour)

Take all of the following MEIS Core courses:

• MUSC 2700 - Introduction to Music Business
• MUSC 2540 - Audio Production I
• MUSC 2560 - Audio Production II

Take all of the following Music Business Emphasis courses:

• MUSC 3210 - Music and Entertainment Marketing
• MUSC 3220 - Artist Management
• MUSC 3690 - Concert Promotion, Tour, and Venue Management
• MUSC 3700 - Music and Entertainment Business in the Digital Age
• MUSC 3710 - CAM Records
• MUSC 3720 - Law and the Music Industry
• MUSC 3755 - Music Publishing
• MUSC 4740 - Music Business Analysis
• MUSC 4890 - Music Business Senior Seminar

Take three semester hours of Music Business electives.

Music Business Emphasis, Non-Audition Track, Music BS

Introduction

Please click here to see general Music information.

Program Delivery

• This is an on-campus program.

Declaring This Major

• Click here to go to information about declaring a major.
• The bachelor of science (BS) in music has a competitive application process. Please refer to the Music & Entertainment Industry Studies Department (MEIS) website for additional guidelines and information at http://www.ucdenver.edu/academics/colleges/CAM/programs/meis/Pages/index.aspx.
• Students who wish to pursue the music business emphasis, non-audition track, are required to complete the Non-Audition Application Form as part of the application process. Students will be assessed for varying levels of performance proficiency as part of the curriculum.
General Requirements

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Arts & Media Graduation Requirements
- Click here for information about Academic Policies

Program Requirements

1. To earn a BS in music, students must complete musicianship courses, MEIS core courses and requirements from one of the four emphasis areas: performance, singer/songwriter, music business or recording arts.
2. A minimum grade of C (2.0) is required for each course applied toward a CAM major, minor or certificate requirement. A grade of C- (1.7) or lower will not fulfill a major, minor or certificate requirement. A grade of P is acceptable for courses in which the only grade available is Pass or Fail.

Take all of the following Musicianship course groups:

- PMUS 1100 - Music Theory I
- PMUS 1110 - Ear Training and Sight Singing I
- PMUS 1023 - Piano Class I

- PMUS 1200 - Music Theory II
- PMUS 1210 - Ear Training and Sight Singing II
- PMUS 1024 - Piano Class II

- PMUS 3830 - History and Literature of Music I
- PMUS 3831 - History and Literature of Music II
- PMUS ____ Music History Elective (3 semester hours)
  o PMUS 18__ Applied Instrument/Voice, Non-Juried (1 semester hour)
  o PMUS 1500 - General Recital

- PMUS 18__ Applied Instrument/Voice, Non-Juried (1 semester hour)
- PMUS 1500 - General Recital

Take all of the following Musicianship courses:

- PMUS 1310 - Sight Reading and Improvisation
- PMUS 2310 - Introduction to Songwriting
- PMUS ____ Ensemble (1 semester hour)
- PMUS ____ Ensemble (1 semester hour)
• PMUS Electives in Performance (3 semester hours)

Take **two** of the following Musicianship courses:

• PMUS 1025 - Piano Class III
• PMUS 1026 - Piano Class IV
• PMUS 1040 - Class Guitar
• PMUS 1041 - Class Guitar II
• PMUS 1050 - Voice Class I
• PMUS 1060 - Voice Class II

Take **one** of the following Musicianship courses:

• PMUS 2200 - Jazz Theory
• PMUS 3310 - Intermediate Songwriting
• PMUS 2220 - Commercial Electronic Music Composition

Take **all** of the following MEIS Core courses:

• MUSC 2700 - Introduction to Music Business
• MUSC 2540 - Audio Production I
• MUSC 2560 - Audio Production II

Take **all** of the following Music Business Emphasis courses:

• MUSC 3210 - Music and Entertainment Marketing
• MUSC 3220 - Artist Management
• MUSC 3690 - Concert Promotion, Tour, and Venue Management
• MUSC 3700 - Music and Entertainment Business in the Digital Age
• MUSC 3710 - CAM Records
• MUSC 3720 - Law and the Music Industry
• MUSC 3755 - Music Publishing
• MUSC 4740 - Music Business Analysis
• MUSC 4890 - Music Business Senior Seminar

Take **six** semester hours of Music Business Emphasis electives.

**Painting/Drawing Emphasis, Fine Arts BFA**

**Introduction**

Please click here to see general Visual Arts information.
The painting and drawing emphasis takes a contemporary approach that works to integrate painterly and drawing concerns with focused artistic practice and developing critical dialogue. As a studio discipline, painting and drawing is as rich in visual arts history as it is charged with contemporary innovation. Painting and drawing as a studio practice encourages a multi-faceted dialogue within this continuum. Students are introduced to a variety of techniques and ideas, exposed to several art-historical and contemporary practices, and are challenged to develop a studio process that involves both formal and conceptual impact. Painting and drawing classes are interdisciplinary in that they allow the use of multiple materials and/or techniques in the production of a successful art piece or body of work. Students come away with a strong studio skill base, an engaged conceptual framework, and an ability to take part in the exciting discourse of contemporary painting and drawing.

**Program Delivery**

- This is an on-campus program.

**Declaring This Major**

- Click here to go to information about declaring a major.
- Students who are applying for entrance into the painting and drawing emphasis are required to submit a portfolio of 10 images in digital format, a written statement and unofficial transcript(s) from CU Denver and all previous post-secondary educational institutions. The painting and drawing emphasis accepts applications only once a year. Students who meet the following requirements can apply. Upon acceptance students will be able to register for upper-division courses in painting and drawing

**ELIGIBILITY**

**University of Colorado Denver Students**

The student has completed, or is in the process of completing, the following courses:

- FINE 1100 - Drawing I
- FINE 1400 - Two Dimensional Design
- FINE 1500 - Three-Dimensional Design
- FINE 2155 - Introduction to Digital Photography
- FINE 2030 - Life Drawing
- FINE 2600 - Art History Survey I
- FINE 2610 - Art History Survey II

A minimum cumulative fine arts/art history GPA of 2.75

**Transfer Students**

The student has completed and is transferring a minimum of 24 credit hours from a previous institution.

Student has completed, or is in the process of completing, the equivalents of the following courses:

- FINE 1100 - Drawing I
- FINE 1400 - Two Dimensional Design
- FINE 1500 - Three-Dimensional Design
- FINE 2030 - Life Drawing
- FINE 2600 - Art History Survey I
A minimum cumulative fine arts/art history GPA of 2.75

APPLICATION PORTFOLIO REQUIREMENTS

Students applying to the painting and drawing emphasis submit a portfolio of 10 images in digital format, a written statement and unofficial transcript(s) from CU Denver and all previous post-secondary educational institutions. Application materials must be uploaded to SlideRoom.com by **November 1 at 5:00 pm** (Mountain Time). Applications are only accepted online and must be formatted to the specifications listed below. There is a $25 fee to apply.

**Portfolio of Images**

The portfolio must include a minimum of 10 digital images of creative work (but no more than 15). Submit six or more images of artworks done in foundation studio courses and from FINE 2030 Life Drawing. Also provide two or more artworks that demonstrate an understanding of value and color. Additional examples (up to five) may include design, drawing, painting, mixed media, installation and/or printmaking.

All images should be formatted as JPEGs. **Limit file size to 1 megabyte.** File names must be numbered, include the student's last name, and then an underscore, and a brief title.

**File Name Examples:**

- 1_lastname_figuredrawing.jpeg
- 2_lastname_still-lifedrawing.jpeg

**Note:** For each image uploaded to SlideRoom, the applicant must provide the following information: title, year, media and size, and a brief explanation of the artwork.

**Written Statement**

A written statement must be uploaded as a PDF file with the portfolio on SlideRoom. In the essay, the student should address the following in no more than one page in length (400-500 words).

- Why do you want to study painting and drawing and what goals and expectations do you have regarding a career as a studio artist?
- What are your creative strengths, and what areas need further development?
- What other accomplishments would you like the committee to know about, such as Dean's List, GPA, internships, art-related extracurricular activities or relevant professional experience?

**Course Transcripts**

These may be official or unofficial transcripts from CU Denver and previous post-secondary institutions.

**THE EVALUATION PROCESS**

- A committee of painting and drawing faculty members reviews the application materials. Acceptance into the painting and drawing emphasis is based on the portfolio images, written statement and GPA.
- If not admitted into the painting and drawing emphasis, a student has the choice of attempting the review process again the following year or applying to another emphasis. Students are encouraged to schedule a meeting with the area head of painting and drawing to learn ways to improve their portfolios for future submissions.
The application is evaluated on the following criteria:

- **Presentation** - The portfolio should be well crafted and well organized in content and presentation.
- **Technical Skill** - The portfolio should demonstrate strong proficiency in drawing, composition, design and color.
- **Creativity** - The portfolio should demonstrate creative choices in content and aesthetics.
- **Conceptual Skills** - The portfolio and written statements should reflect analytical thinking and conceptual exploration of the foundations of drawing and design.
- **Written Statement** - The statement should outline academic and artistic goals, addressing any potential strengths and weaknesses.
- **Academic Performance** - The grades must reflect a commitment to learning and growth.
- **Completeness of Application** - All required documentation must be submitted (images, written statement and transcripts).

**QUESTIONS**

Please contact CAMadvising@ucdenver.edu for emphasis and portfolio information, or contact painting/drawing area head Mary K. Connelly at 303-315-1508 or mary.connelly@ucdenver.edu.

**General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Arts & Media Graduation Requirements
- Click here for information about Academic Policies

**Program Requirements**

1. A minimum grade of C (2.0) is required for each course applied toward a CAM major, minor or certificate requirement. A grade of C- (1.7) or lower will not fulfill a major, minor or certificate requirement. A grade of P is acceptable for courses in which the only grade available is Pass or Fail.
2. All upper-division visual arts courses must be taken at CU Denver unless otherwise approved by visual arts faculty.
3. At least 27 semester hours of visual arts credits (at any level) must be taken at CU Denver.
4. At least 24 semester hours of total visual arts courses must be upper-division.

Take **all** of the following Visual Arts Foundation courses:

- FINE 1100 - Drawing I
- FINE 1400 - Two Dimensional Design
- FINE 1500 - Three-Dimensional Design
- FINE 2155 - Introduction to Digital Photography
- FINE 2600 - Art History Survey I
- FINE 2610 - Art History Survey II

Take **all** of the following Painting & Drawing Emphasis courses (entry level):

- FINE 2010 - The Graphic Novel Workshop
- FINE 2030 - Life Drawing
- FINE 2200 - Painting I
- FINE 3030 - The Media of Drawing

Take all of the following Painting & Drawing Emphasis courses (many are available only to students accepted to emphasis via portfolio review):

- FINE 3050 - Figure Painting
- FINE 3200 - Intermediate Painting and Drawing I
- FINE 3210 - Intermediate Painting and Drawing II
- FINE 3240 - Abstract Painting and Drawing
- FINE 3300 - Painting, Drawing and the Printed Image
- FINE 4100 - Painting & Drawing Theory & Practice
- FINE 4200 - Advanced Painting and Drawing I
- FINE 4210 - Advanced Painting/Drawing II

Take the following Visual Arts course:

- FINE 4990 - Contemporary Art: 1960 to Present

Take three semester hours of Pre-20th Century Art History elective. Consult a CAM advisor for approved options.

Take three semester hours of upper-division Art History elective.

Take three semester hours of Studio Arts elective in an area outside of painting, drawing or illustration.

Take six semester hours of Studio Arts electives.

Take six semester hours of Visual Arts electives. These may include studio, lecture, internship or art history courses.

Take the following Capstone course:

- FINE 4950 - Studio BFA Thesis

**Performance Emphasis, Music BS**

**Introduction**

Please click here to see general Music information.
Program Delivery

- This is an on-campus program.

Declaring This Major

- Click here to go to information about declaring a major.
- The bachelor of science (BS) in music has a competitive application process. Please refer to the Music & Entertainment Industry Studies Department (MEIS) website for additional guidelines and information at http://www.ucdenver.edu/academics/colleges/CAM/programs/meis/Pages/index.aspx.
- Students who wish to pursue the performance emphasis are required to pass an entrance audition on their primary instrument or voice as part of the application process and pass varying levels of performance proficiency as part of the curriculum. Each student must also successfully pass a Sophomore Proficiency on his or her primary instrument or voice in order to maintain performance emphasis status. Each student is also required to successfully complete a Junior Recital in addition to the 2-credit PMUS 4200 Senior Recital Project. Please contact an advisor in the College of Arts & Media at CAMadvising@ucdenver.edu for further information.

General Requirements

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Arts & Media Graduation Requirements
- Click here for information about Academic Policies

Program Requirements

1. To earn a BS in music, students must complete musicianship courses, MEIS core courses and requirements from one of the four emphasis areas: performance, singer/songwriter, music business or recording arts.
2. A minimum grade of C (2.0) is required for each course applied toward a CAM major, minor or certificate requirement. A grade of C- (1.7) or lower will not fulfill a major, minor or certificate requirement. A grade of P is acceptable for courses in which the only grade available is Pass or Fail.

Take all of the following Musicianship course groups:

- PMUS 1100 - Music Theory I
- PMUS 1110 - Ear Training and Sight Singing I
- PMUS 1023 - Piano Class I
- PMUS 1200 - Music Theory II
- PMUS 1210 - Ear Training and Sight Singing II
- PMUS 1024 - Piano Class II
- PMUS 2100 - Music Theory III
- PMUS 2110 - Ear Training and Sight Singing III
- PMUS 1025 - Piano Class III
- PMUS 2200 - Jazz Theory
- PMUS 1026 - Piano Class IV
- PMUS 3830 - History and Literature of Music I
- PMUS 3831 - History and Literature of Music II
- PMUS____ Music History elective (3 semester hours)
- PMUS 1____ Applied Instrument/Voice (1 semester hour)
- PMUS 1500 - General Recital
- PMUS ____ Ensemble (1 semester hour) *Note:* Students must complete PMUS 1470 - Performance Practice Ensemble during their first or second semester of Applied Instrument/Voice.
- PMUS 1____ Applied Instrument/Voice (1 semester hour)
- PMUS 1500 - General Recital
- PMUS ____ Ensemble (1 semester hour)
- PMUS 2____ Applied Instrument/Voice (1 semester hour)
- PMUS 1500 - General Recital
- PMUS ____ Ensemble (1 semester hour)
- PMUS 2____ Applied Instrument/Voice (1 semester hour)
- PMUS 1500 - General Recital
- PMUS ____ Ensemble (1 semester hour)

Take **all** of the following MEIS Core courses:
- MUSC 2700 - Introduction to Music Business
- MUSC 2540 - Audio Production I
- MUSC 2560 - Audio Production II

Take **one** of the following MEIS Core courses:
- MUSC 3210 - Music and Entertainment Marketing
- MUSC 3220 - Artist Management

Take **all** of the following Performance Emphasis course groups:
- PMUS 3____ Applied Instrument/Voice (2 semester hours)
- PMUS 1500 - General Recital
- PMUS ____ Ensemble (1 semester hour)
- PMUS 3____ Applied Instrument/Voice (2 semester hours)
- PMUS 1500 - General Recital
- PMUS ____ Ensemble (1 semester hour)
- PMUS 4____ Applied Instrument/Voice (2 semester hours)
- PMUS 1500 - General Recital
- PMUS ____ Ensemble (1 semester hour)

- PMUS 4___ Applied Instrument/Voice (2 semester hours)
- PMUS 1500 - General Recital
- PMUS ____ Ensemble (1 semester hour)

Take one of the following Performance Emphasis courses:

- PMUS 3300 - Advanced Jazz Improvisation
- PMUS 3330 - Advanced Vocal Improvisation (for Voice students only)

Take all of the following Performance Emphasis courses:

- PMUS 3210 - Introduction to Teaching Private Music Lessons
- PMUS 4060 - Music Theory Analysis
- PMUS 4200 - Senior Recital Project

Take five semester hours of Music electives. Specific elective courses may be required depending on student's primary instrument. Consult CAM Advising at CAMadvising@ucdenver.edu for more details.

**Philosophy BA**

**Introduction**

Please click here to see Philosophy department information.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

**Program Delivery**

- This is an on-campus program.

**Declaring This Major**

- Click here to go to information about declaring a major

**General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.
Program Requirements

1. A total of 36 semester hours must be completed for the Philosophy major and at least 18 of which must be taken at CU Denver.
2. A minimum grade of C (2.0) is required in each course.
3. A total of 18 upper-division semester hours are required for the major and no more than 6 hours below the 3000-level may be counted toward the major.

Take all of the following required courses:

- PHIL 3002 - Ancient Greek Philosophy
- PHIL 3022 - Modern Philosophy
  (It is recommended, but not required, that PHIL 3002 be taken before PHIL 3022)

- PHIL 3440 - Introduction to Symbolic Logic or
- PHIL 2441 - Logic, Language and Scientific Reasoning
- PHIL 4760 - Kan

Take one upper division course in Social/Political philosophy

Take one upper division course in Ethics

Take one upper division course in Continental philosophy

Take one upper division course in American or Analytic philosophy

Take one upper division course with specific focus in the history of philosophy (may be fulfilled by a course in a single figure)

Take one upper division elective (may include courses from previous lists that are not counted toward those requirements)

Take two electives at any level

Photography Emphasis, Fine Arts BFA

Introduction

Please click here to see general Visual Arts information.

Students in the photography emphasis develop skills in traditional and digital photography while refining their creative and conceptual approaches to the medium. The photography curriculum emphasizes individual artistic development that integrates the history of photography, critical theory and contemporary practice. Through an exploration of photographic techniques, students are given the tools to create visually compelling images that communicate their artistic ideas.
Program Delivery

- This is an on-campus program.

Declaring This Major

- Click here to go to information about declaring a major.
- Students who apply for entrance into the photography emphasis must complete a portfolio submission that includes a written statement, a portfolio of images and unofficial transcript(s) from CU Denver and all previous post-secondary educational institutions. The Photography emphasis accepts applications only once a year. Students who meet the requirements and are accepted into the emphasis will be eligible to register for upper-division studio photography courses.

ELIGIBILITY

University of Colorado Denver students and transfer students must have a minimum cumulative GPA of 2.75 in fine art and art history courses. In order to apply to the photography emphasis, students must have completed, or be in the process of completing, the following courses:

- FINE 1100 - Drawing I
- FINE 1150 - Introduction to Darkroom Photography
- FINE 1400 - Two Dimensional Design
- FINE 2155 - Introduction to Digital Photography
- FINE 2600 - Art History Survey I

APPLICATION PORTFOLIO REQUIREMENTS

Properly prepared application submissions must be uploaded to SlideRoom.com by 5:00 P.M. Central Mountain Time on November 1. Applications are only accepted online and must be formatted to the specifications listed here.

It is strongly recommended that students visit the submission website early and begin uploads two weeks before the due date. Late submissions due to technical difficulties on the part of the applicant will not be accepted.

Step 1: Register and create an account in SlideRoom. Please go to the following link to complete this process: https://ucdvisualarts.slideroom.com. (Please note that SlideRoom charges a $25.00 fee to process portfolio submissions.)

Step 2: When prompted answer all questions about the application.

Step 3: Upload documents including the written statement and transcripts from the University of Colorado Denver and all previous post-secondary institutions.

Step 4: Upload 10 image files of creative work.

Portfolio of Images

- The photography portfolio must include 10 image files of creative work. At least six portfolio images should be photographic, demonstrating the student's understanding of concept, form, composition and technique. The remaining four portfolio pieces may be photographic or they may be examples of design, drawing, painting, mixed media, sculpture, installation and/or printmaking.
For each portfolio image, the student should write a brief description (150 words or less) that identifies the medium (silver gelatin print, ink jet print, charcoal drawing, etc.) and explains the student's approach to the project.

Images must be submitted in jpeg format, 12 inches on the longer side, sized at 72 pixels per inch, and saved at the highest setting available (usually 10 or 12). Files should be named with the student's last name, then first name and image title using underscores to separate. Example: Doe_Jane_ImageTitle.jpg.

Written Statement

Written statements should be limited to one page in length (400-500 words) and saved as a .pdf file. Statements should address the following:

- Why do you want to study photography?
- What goals and expectations do you have regarding a career as a photographer?
- What are your creative strengths, and what areas need further development?
- Are there additional accomplishments that you would like the committee to know about (such as Dean's List, GPA, internships, art-related extracurricular activities or relevant professional experience)?

Course Transcripts

These may be official or unofficial transcripts from CU Denver and previous post-secondary institutions.

THE EVALUATION PROCESS

- A committee of photography faculty members reviews the portfolio submissions. Acceptance into the photography emphasis is based on the portfolio images, written statement and GPA.
- If not admitted into the photography emphasis, a student has the choice of attempting the review process again the following year or applying to another emphasis. Students not admitted into the photography emphasis are encouraged to schedule a meeting with the area head of photography to learn ways to improve their portfolios for future submissions.
- Portfolios are evaluated based on quality of presentation, technical skill, creativity, conceptual development and overall aptitude for excelling in the photography emphasis. Additional evaluation is based on the applicant's written statement and GPA in visual arts courses.

The application is evaluated on the following criteria:

- **Technical Skill** - The portfolio should demonstrate strong knowledge of the fundamental tools of photography, including camera functions, analog film development, darkroom printing and digital imaging, as well as an understanding of design, form, composition and color.
- **Creativity** - The portfolio should demonstrate creative choices in content and aesthetics.
- **Conceptual Skill** - The portfolio and written statements should reflect analytical thinking and conceptual exploration of the photographic medium.
- **Written Statement** - The statement should outline academic and artistic goals, addressing any potential strengths and weaknesses.
- **Academic Performance** - The grades must reflect a commitment to learning and growth.
- **Completeness of Application** - All required documentation must be submitted (images, written statement and transcripts).

QUESTIONS

Please contact CAMadvising@ucdenver.edu for emphasis and portfolio information, or contact photography area head Carol Golemboski at carol.golemboski@ucdenver.edu.
General Requirements

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Arts & Media Graduation Requirements
- Click here for information about Academic Policies

Program Requirements

1. A minimum grade of C (2.0) is required for each course applied toward a CAM major, minor or certificate requirement. A grade of C- (1.7) or lower will not fulfill a major, minor or certificate requirement. A grade of P is acceptable for courses in which the only grade available is Pass or Fail.
2. All upper-division visual arts courses must be taken at CU Denver unless otherwise approved by visual arts faculty.
3. At least 27 semester hours of visual arts credits (at any level) must be taken at CU Denver.
4. At least 24 semester hours of total visual arts courses must be upper-division.

Take all of the following Visual Arts Foundation courses:

- FINE 1100 - Drawing I
- FINE 1400 - Two Dimensional Design
- FINE 1500 - Three-Dimensional Design
- FINE 2600 - Art History Survey I
- FINE 2610 - Art History Survey II

Take all of the following Photography Emphasis courses (entry level):

- FINE 1150 - Introduction to Darkroom Photography
- FINE 2155 - Introduction to Digital Photography

Take all of the following Photography Emphasis courses (available only to students accepted to emphasis via portfolio review):

- FINE 3160 - Color and Studio Lighting
- FINE 3161 - The Silver Fine Print
- FINE 3162 - The Digital Fine Print
- FINE 3171 - Concepts and Processes in Photography
- FINE 3172 - Digital Bookmaking
- FINE 4195 - Advanced Photography I
- FINE 4196 - Advanced Photography II

Take all of the following Visual Arts courses:

- FINE 3630 - History of Photography
- FINE 3631 - Photography: Theory and Criticism
- FINE 3635 - Photography Now
- FINE 4990 - Contemporary Art: 1960 to Present

  Take three semester hours of Pre-20th Century Art History elective. Consult a CAM advisor for approved options.

  Take three semester hours of Studio Arts elective in an area outside of photography.

  Take twelve semester hours of Studio Arts electives.

  Take six semester of Visual Arts electives. These may include studio, lecture, internship or art history courses.

  Take the following Capstone course:

  - FINE 4950 - Studio BFA Thesis

**Physics - Biophysics and Medical Physics Option BS**

**Introduction**

Please click here to see Physics department information.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

**Program Delivery**

- This is an on-campus program.

**Declaring This Major**

- Click here to go to information about declaring a major.

**General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
• Click here for information about Academic Policies

Program Requirements

1. Students must declare their intention to major in Physics by the time they have completed 60 semester hours.
2. Students must complete between 46 and 50 credit hours in physics (depending on the track chosen) to receive the degree of Bachelor of Science in Physics.
3. No grade below a C (2.0) can be used to meet the requirements for the major.
4. At least 12 semester hours of the requirements for the major must be completed at CU Denver.

Take all of the following required courses:

• PHYS 2311 - General Physics I: Calculus-Based
• PHYS 2321 - General Physics Lab I
• PHYS 2331 - General Physics II: Calculus-Based
• PHYS 2341 - General Physics Lab II
• PHYS 2711 - Vibrations and Waves
• PHYS 2811 - Modern Physics I
• PHYS 3120 - Methods of Mathematical Physics
• PHYS 3711 - Junior Laboratory I
• PHYS 3811 - Quantum Mechanics

Take all of the following ancillary courses:

• MATH 1401 - Calculus I
• MATH 2411 - Calculus II
• MATH 2421 - Calculus III
• MATH 3195 - Linear Algebra and Differential Equations

Note: The department will accept the following combination of math courses in place of MATH 3195:

• MATH 3191 - Applied Linear Algebra
• MATH 3200 - Elementary Differential Equations

Take all of the following Biophysics and Medical Physics track courses:

• PHYS 3251 - Biophysics of the Body
• PHYS 3451 - Biophysics of the Cell

Take one of the following courses:

• PHYS 4351 - Bioelectromagnetism (recommended option)
• PHYS 4331 - Principles of Electricity and Magnetism

Take eight semester hours of Biophysics electives at the 3000-level or above approved by advisor (including up to 3 semester hours independent study and/or two courses, PHYS 3151 and PHYS 3161, listed below) or

The following four courses (an option primarily for pre-med physics majors):
- * BIOL 2051 - General Biology I
- * BIOL 2061 - General Biology II
- PHYS 3151 - Biophysics Outlook I
- PHYS 3161 - Biophysics Outlook II

Additionally, take a laboratory:

- PHYS 3721 - Junior Laboratory II or

The following two courses (an option primarily for pre-med physics majors):

- * BIOL 2071 - General Biology Laboratory I
- * BIOL 2081 - General Biology Laboratory II
- * Note: courses marked with an asterisk are generally required for medical school admissions.

Take one three semester hour numerical modeling or probability and statistics course approved by advisor.

Physics - Pure and Applied Physics Option BS

Introduction

Please click here to see Physics department information.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

Program Delivery

- This is an on-campus program.

Declaring This Major

- Click here to go to information about declaring a major.

General Requirements

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

Program Requirements
1. Students must declare their intention to major in Physics by the time they have completed 60 semester hours.
2. Students must complete between 46 and 50 credit hours in physics (depending on the track chosen) to receive the degree of Bachelor of Science in Physics.
3. No grade below a C (2.0) can be used to meet the requirements for the major.
4. At least 12 semester hours of the requirements for the major must be completed at CU Denver.

Take all of the following required courses:

- PHYS 2311 - General Physics I: Calculus-Based
- PHYS 2321 - General Physics Lab I
- PHYS 2331 - General Physics II: Calculus-Based
- PHYS 2341 - General Physics Lab II
- PHYS 2711 - Vibrations and Waves
- PHYS 2811 - Modern Physics I
- PHYS 3120 - Methods of Mathematical Physics
- PHYS 3711 - Junior Laboratory I
- PHYS 3811 - Quantum Mechanics

Take all of the following ancillary courses:

- MATH 1401 - Calculus I
- MATH 2411 - Calculus II
- MATH 2421 - Calculus III
- MATH 3195 - Linear Algebra and Differential Equations

Note: The department will accept the following combination of math courses in place of MATH 3195:

- MATH 3191 - Applied Linear Algebra
- MATH 3200 - Elementary Differential Equations

Take all of the following Pure and Applied Physics track courses:

- PHYS 3211 - Analytical Mechanics
- PHYS 3411 - Thermal Physics
- PHYS 3721 - Junior Laboratory II
- * PHYS 4331 - Principles of Electricity and Magnetism
- PHYS 4711 - Senior Laboratory I
- (or a course in computational physics approved by advisor)

* Note: Students who must retake PHYS 4331 may fulfill this requirement by obtaining a C or better in:

- PHYS 4351 - Bioelectromagnetism

Take six semester hours of physics-related electives at 3000-level or above approved by advisor, including up to 3 semester hours of independent study.

Political Science - Public Policy Option, BA

Introduction
Please click here to see Political Science department information.

This option was designed for students who specifically desire to pursue careers in public policy and/or public administration in the public or nonprofit sectors. This BA track emphasizes the specifically political aspects of public policy processes, settings and is grounded in basic political science theory and familiarity with American, Comparative and International politics. Courses will emphasize key policy issues confronting U.S. local, state and national decision makers and citizens. A focus on politics and the policy-making process will prepare students conceptually and methodologically to move beyond partisan politics to address how leaders can best mobilize resources to achieve constituent goals consistent with the public interest.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

**Program Delivery**

- This is an on-campus program.

**Declaring This Major**

- Click here to go to information about declaring a major

**General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

**Program Requirements**

1. Must complete a minimum of 36 semester hours in political science, of which at least 21 must be upper-division courses.
2. Fifteen of the 36 hours must be taken from CU Denver faculty.
3. A minimum GPA of 2.0 or better is required for all PSCI courses taken at CU Denver.
4. Two cognate courses (don't count toward the 36 hours) from the list below must be completed.

Take all of the following courses:

- PSCI 1001 - Introduction to Political Science: The Quest for Freedom and Justice
- PSCI 1101 - American Political System
- PSCI 3011 - Research Methods

Take one of the following 4000-level American Politics courses:

- PSCI 4002 - Topics in Political Science
• PSCI 4014 - Media and Politics
• PSCI 4024 - State Politics: Focus Colorado
• PSCI 4025 - Local Governance and Globalization
• PSCI 4044 - The Presidency
• PSCI 4094 - Seminar: American Politics
• PSCI 4124 - Denver Politics
• PSCI 4324 - Politics, Public Policy and Leadership
• PSCI 4354 - Environmental Politics
• PSCI 4374 - Public Priorities for the 21st Century
• PSCI 4477 - Constitutional Law I
• PSCI 4487 - Constitutional Law II
• PSCI 4545 - Immigration Politics

Take one of the following 4000-level Comparative Politics and International Relations courses:

• PSCI 4085 - Comparative Governance: Environment and Society
• PSCI 4124 - Denver Politics
• PSCI 4185 - Corruption in the U.S. and Abroad
• PSCI 4226 - The United Nations in World Affairs
• PSCI 4236 - American Foreign Policy
• PSCI 4266 - International Law
• PSCI 4326 - Advanced International Political Economy: Globalization
• PSCI 4645 - Comparative Political Leadership

Take one of the following 4000-level Public Policy and Administration courses:

• PSCI 4009 - Politics of the Budgetary Process
• PSCI 4024 - State Politics: Focus Colorado
• PSCI 4084 - Local Government and Administration
• PSCI 4274 - Conflict Resolution and Public Consent Building
• PSCI 4414 - Organizational Change Agents
• PSCI 4644 - Ethical Responsibilities of Leaders

Take any two additional courses from the three fields above, plus take any one other upper or lower-division PSCI course.

Take all of the following Political Theory courses:

• PSCI 4427 - Law, Politics and Justice
• PSCI 4437 - Coercion and the State

Take one of the following courses: (Students with significant pre-existing political or civic engagement experience in the community, or for whom the experiential-learning requirement poses a hardship may petition the chair to waive the experiential-learning requirement; the overall requirement of 36 credit hours for Political Science graduation will still apply.)

• PSCI 3939 - Internship
• PSCI 4934 - CU at the Capitol

Take all of the following cognate courses:
Political Science BA

Introduction

Please click here to see Political Science department information.

Courses are distributed among the primary fields as listed in this section, i.e., American politics, comparative politics, international relations, political theory and public policy and administration.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

Program Delivery

- This is an on-campus program.

Declaring This Major

- Click here to go to information about declaring a major

General Requirements

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

Program Requirements

1. Must complete a minimum of 36 semester hours in political science, of which at least 21 must be upper-division courses.
2. Fifteen of the 36 hours must be taken from CU Denver faculty.
3. A minimum GPA of 2.0 or better is required for all PSCI courses taken at CU Denver.
4. Two cognate courses (don't count toward the 36 hours) from the list below must be completed.

   Take all of the following required courses:

- PSCI 1001 - Introduction to Political Science: The Quest for Freedom and Justice
- PSCI 1101 - American Political System
- PSCI 3011 - Research Methods or
PSCI 4011 - GIS in Political Science

Take two of the following courses:

- PSCI 4207 - Theories of Social and Political Change
- PSCI 4265 - Social Justice And Globalization
- PSCI 4407 - Early Political Thought
- PSCI 4417 - Modern Political Thought
- PSCI 4427 - Law, Politics and Justice
- PSCI 4437 - Coercion and the State
- PSCI 4457 - American Political Thought

Take one of the following 4000-level American Politics courses:

- PSCI 4009 - Politics of the Budgetary Process
- PSCI 4014 - Media and Politics
- PSCI 4024 - State Politics: Focus Colorado
- PSCI 4034 - Political Parties and Pressure Groups
- PSCI 4044 - The Presidency
- PSCI 4057 - Religion and Politics
- PSCI 4074 - Urban Politics
- PSCI 4084 - Local Government and Administration
- PSCI 4085 - Comparative Governance: Environment and Society
- PSCI 4094 - Seminar: American Politics
- PSCI 4124 - Denver Politics
- PSCI 4236 - American Foreign Policy
- PSCI 4237 - American National Security
- PSCI 4324 - Politics, Public Policy and Leadership
- PSCI 4330 - U.S. Health Policy
- PSCI 4354 - Environmental Politics
- PSCI 4374 - Public Priorities for the 21st Century
- PSCI 4444 - Contemporary Culture and Politics in America
- PSCI 4457 - American Political Thought
- PSCI 4477 - Constitutional Law I
- PSCI 4487 - Constitutional Law II
- PSCI 4494 - Judicial Politics
- PSCI 4545 - Immigration Politics
- PSCI 4554 - Chicano and Latino Politics
- PSCI 4564 - Gender and Politics
- PSCI 4644 - Ethical Responsibilities of Leaders
- PSCI 4827 - Women and the Law
- PSCI 4837 - Contemporary Issues in Civil Liberties

Take one of the following 4000-level Comparative Politics courses:

- PSCI 4057 - Religion and Politics
- PSCI 4074 - Urban Politics
- PSCI 4085 - Comparative Governance: Environment and Society
- PSCI 4105 - Comparative Politics: Europe
- PSCI 4115 - Third World Politics
- PSCI 4144 - Indigenous Political Systems
- PSCI 4146 - Indigenous Politics
• PSCI 4155 - Political Systems of the Middle East and North Africa
• PSCI 4165 - Islamic Politics and Culture
• PSCI 4176 - Gandhi’s Legacy: Non-Violent Resistance Today
• PSCI 4185 - Corruption in the U.S. and Abroad
• PSCI 4195 - Political Systems of Sub-Saharan Africa
• PSCI 4206 - Social Movements, Democracy and Global Politics
• PSCI 4215 - Women’s Rights, Human Rights: Global Perspectives
• PSCI 4224 - Dictatorships in 21st Century
• PSCI 4225 - Democracy and Democratization
• PSCI 4235 - Politics and Markets in Latin America
• PSCI 4248 - Gender, Globalization and Development
• PSCI 4265 - Social Justice And Globalization
• PSCI 4365 - Global Ecological Crises
• PSCI 4446 - Advanced Indigenous Peoples' Politics
• PSCI 4505 - Political System of Russia and Its Neighbors
• PSCI 4555 - International Women's Resistance
• PSCI 4605 - Politics and Governments of South Asia
• PSCI 4615 - Politics and Government of China
• PSCI 4807 - Political Violence
• PSCI 4808 - Strategies of Peacebuilding

Take one of the following 4000-level International Politics courses:

• PSCI 4126 - Introduction to International Political Economy
• PSCI 4156 - The Arab-Israeli Peace Process
• PSCI 4186 - East Asia in World Affairs
• PSCI 4206 - Social Movements, Democracy and Global Politics
• PSCI 4216 - International Politics: Human Rights
• PSCI 4236 - American Foreign Policy
• PSCI 4237 - American National Security
• PSCI 4266 - International Law
• PSCI 4274 - Conflict Resolution and Public Consent Building
• PSCI 4286 - International Relations: War or Peace?
• PSCI 4326 - Advanced International Political Economy: Globalization
• PSCI 4726 - Russian and Chinese Foreign Policy
• PSCI 4736 - The Middle East in World Affairs

Take one of the following courses:

• * PSCI 3914 - The Urban Citizen
• * PSCI 3939 - Internship
• * PSCI 4934 - CU at the Capitol
• *Exceptions to the course-work requirement of the Experiential Learning Requirement

In lieu of taking one of the preceding courses, students may complete a substantial experiential learning project in a different PSCI class. The course instructor must certify with a written submission to the departmental undergraduate advisor that the experiential learning project in that course fulfills the departmental experiential learning requirement.

- Students with pre-existing significant political or civic engagement experience in the community or for whom the experiential-learning requirement poses a hardship may petition the chair to waive the requirement
Note: In either of these cases of exception to the Experiential Learning coursework requirement, 36 total credit hours in political science are still required for graduation.

Take three Political Science elective courses.

Take two of the following cognate courses:

- ECON 2012 - Principles of Economics: Macroeconomics
- ECON 2022 - Principles of Economics: Microeconomics
- HIST 1016 - World History to 1500
- HIST 1026 - World History Since 1500
- HIST 1211 - Western Civilization I
- HIST 1212 - Western Civilization II
- HIST 1361 - U.S. History to 1876
- HIST 1362 - U.S. History Since 1876

Psychology BA

Introduction

Please click here to see Psychology department information.

The College of Liberal Arts and Sciences also offers a Psychology BS degree.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

Program Delivery

- This is an on-campus program.

Declaring This Major

- Click here to go to information about declaring a major.

General Requirements

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
Program Requirements

1. Psychology BA major requirements include at least 37 and not more than 56 semester hours in psychology.
2. Of these, at least 15 hours must be in upper-division courses taught by CU Denver faculty.
3. No grade below C (2.0) will be accepted toward the major requirements, nor will pass/fail grades.
4. PSYC 3939, Internship/Cooperative Education, does NOT count toward the 37-hour minimum or the 15-hour upper-division requirement, but it does count as elective psychology credit.
5. Topics courses (PSYC 3600): See your advisor to determine if they count as Group A or Group B courses.
6. Refer to the course descriptions for prerequisites.

Take all of the following required courses:

- PSYC 1000 - Introduction to Psychology I
- PSYC 1005 - Introduction to Psychology II
- PSYC 2090 - Statistics and Research Methods
- PSYC 2220 - Biological Basis of Behavior
- PSYC 3090 - Research Methods in Psychology
- PSYC 4511 - History of Psychology

**Group A: Two** Group A courses are required.

Take one of the following:

- PSYC 3222 - Principles of Learning and Behavior
- PSYC 3144 - Human Cognition

Take one of the following to reach a total of **two** Group A courses:

- PSYC 3104 - Behavioral Genetics
- PSYC 3144 - Human Cognition (if not taken above)
- PSYC 3222 - Principles of Learning and Behavior (if not taken above)
- PSYC 3254 - Introduction to Animal Behavior
- PSYC 3262 - Health Psychology
- PSYC 3263 - Hormones and Behavior
- PSYC 3265 - Drugs, Brain and Behavior
- PSYC 3385 - Psychology of Mindfulness
- PSYC 3724 - Developmental Psychobiology
- PSYC 3810 - Neuropsychobiology
- PSYC 3822 - Aging, Brain and Behavior
- PSYC 3832 - Neural Basis of Learning
- PSYC 4054 - Behavioral Neuroscience
- PSYC 4164 - Psychology of Perception

**Group B: Three** Group B courses required.

Take two of the following courses:
Take one of the following to reach a total of three Group B courses:

- PSYC 3145 - Industrial and Organizational Psychology
- PSYC 3215 - Human Development II: Adolescence and Adulthood
- PSYC 3235 - Human Sexuality
- PSYC 3305 - Abnormal Psychology (if not taken above)
- PSYC 3405 - Family Psychology
- PSYC 3415 - Experimental Social Psychology (if not taken above)
- PSYC 3505 - Psychology and the Law
- PSYC 3610 - Psychological Trauma
- PSYC 3611 - Psychology of Women
- PSYC 3612 - Domestic Abuse
- PSYC 3615 - Positive Psychology
- PSYC 4455 - Theories of Personality
- PSYC 4485 - Psychology of Cultural Diversity
- PSYC 4500 - Psychotherapy
- PSYC 4730 - Clinical Psychology: Ethics and Issues

Take one additional course from either Group A or Group B not already taken to fulfill that group requirement.

Psychology BS

Introduction

Please click here to see Psychology department information.

The College of Liberal Arts and Sciences also offers a Psychology BA degree.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

Program Delivery

- This is an on-campus program.

Declaring This Major

- Click here to go to information about declaring a major.

General Requirements
To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

**Program Requirements**

1. Students must take at least 24 hours and a maximum of 56 semester hours in psychology that will count toward graduation.
2. Students must take 23-27 credit hours of ancillary course work in Biology and Chemistry.
3. A minimum of 15 upper-division Psychology semester hours must be taken from CU Denver faculty.
4. No grade below C is acceptable toward the major requirements; i.e., psychology, biology or chemistry courses in which a student earns a C- or below will not count toward the major. Pass/fail grades also do not count toward the major requirements.

**Note:** An experiential learning component is required, and this requirement is often fulfilled through an independent study course (PSYC 4840), which requires a GPA of 2.50, or an internship (PSYC 3939), which requires a GPA of 2.75.

Take all of the following required courses:

- PSYC 1000 - Introduction to Psychology I
- PSYC 1005 - Introduction to Psychology II
- PSYC 2090 - Statistics and Research Methods
- PSYC 2220 - Biological Basis of Behavior
- PSYC 3090 - Research Methods in Psychology
- PSYC 4054 - Behavioral Neuroscience

Take two of the following courses:

- PSYC 3104 - Behavioral Genetics
- PSYC 3222 - Principles of Learning and Behavior
- PSYC 3254 - Introduction to Animal Behavior
- PSYC 3263 - Hormones and Behavior
- PSYC 3265 - Drugs, Brain and Behavior
- PSYC 3724 - Developmental Psychobiology
- PSYC 3810 - Neuropsychology
- PSYC 3822 - Aging, Brain and Behavior
- PSYC 4164 - Psychology of Perception

Take at least one of the following (all require consultation with BS advisor AND permission of instructor):

- PSYC 3939 - Internship (2.75 GPA required)
- PSYC 4840 - Independent Study: PSYC (2.5 GPA required)
- Honors Project in Psychology (3.5 GPA required): 3 Semester Hours

Take all of the following required courses:
• BIOL 2051 - General Biology I
• BIOL 2061 - General Biology II
• BIOL 2071 - General Biology Laboratory I
• BIOL 2081 - General Biology Laboratory II
• CHEM 2031 - General Chemistry I
• CHEM 2038 - General Chemistry Laboratory I
• CHEM 2061 - General Chemistry II
• CHEM 2068 - General Chemistry Laboratory II

Take two of the following courses:

• BIOL 3225 - Human Physiology
• BIOL 3244 - Human Anatomy
• BIOL 3611 - General Cell Biology
• BIOL 3654 - General Microbiology
• BIOL 3832 - General Genetics
• BIOL 4134 - Human Genetics
• BIOL 4165 - Neurobiology
• CHEM 3810 - Biochemistry

Public Health BA

Introduction

Please click here to see Health and Behavioral Sciences department information.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

Director: Karen Lutfey, Professor of Public Health
Office: Administration Building, 280
Telephone: 303-556-8501
Fax: 303-556-8501
E-mail: Karen.Lutfey@ucdenver.edu

Click here for BS in Public Health

Program Delivery

• This is an on-campus program.

Declaring This Major

• Click here to go to information about declaring a major.

General Requirements
To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

Program Requirements

1. The Bachelor of Arts in Public Health consists of 43 credit hours in required classes.
2. Each class must be completed with a grade of C (2.0) or higher to count towards the major.

Take all of the following required courses (five of the following courses must be taken at the University of Colorado Denver):

- PBHL 2001 - Introduction To Public Health
- PBHL 2020 - Introduction to Environmental Health
- PBHL 3001 - Introduction to Epidemiology
- PBHL 3030 - Health Policy
- PBHL 3070 - Perspectives in Global Health
- PBHL 4040 - Social Determinants of Health
- PBHL 4099 - Capstone Experience in Public Health

Take one of the following Quantitative Methods courses, or another statistics course that has been approved by the undergraduate program director/advisor in advance:

- ANTH 4050 - Quantitative Methods in Anthropology
- MATH 2830 - Introductory Statistics
- PSYC 2090 - Statistics and Research Methods
- SOCY 3121 - Statistics

Take two PBHL electives from the following list:

- PBHL 3002 - Ethnicity, Health and Social Justice
- PBHL 3010 - Human Sexuality and Public Health
- PBHL 3021 - Fundamentals of Health Promotion
- PBHL 3031 - Health, Human Biology and Behavior
- PBHL 3041 - Health, Culture and Society
- PBHL 3071 - Global Topics In Sexual and Reproductive Health
- PBHL 3200 - Human Migration: Nomads, Sojourners, and Settlers
- PBHL 3440 - Medical Sociology
- PBHL 4020 - Global Health: Comparative Public Health Systems
- PBHL 4031 - Ethnographic Research In Public Health
- PBHL 4060 - Evolutionary Medicine
- PBHL 4080 - Global Health Practice
- PBHL 4090 - Political Economy of Drugs
- PBHL 4110 - Public Health Perspectives On Family Violence
- PBHL 4200 - The Global HIV/AIDS Epidemic
- PBHL 4999 - Topics In Public Health
Take **one** elective from either the PBHL list (above) or the following list:

- ANTH 4010 - Medical Anthropology: Global Health
- ANTH 4080 - Global Health Practice
- ANTH 4290 - Anthropology and Public Health
- ANTH 4600 - Medical Anthropology
- COMM 4500 - Health Communication
- COMM 4550 - Rhetorics of Medicine & Health
- COMM 4620 - Health Risk Communication
- ECON 5660 - Health Economics
- ENVS 1342 - Environment, Society and Sustainability
- ETST 3002 - Ethnicity, Health and Social Justice
- GEOG 3501 - Geography of Health
- GEOG 4230 - Hazard Mitigation and Vulnerability Assessment
- GEOG 4235 - GIS Applications in the Health Sciences
- HEHM 3100 - Introduction to Health Humanities
- HIST 4345 - Gender, Science, and Medicine: 1600 to the Present
- HIST 4346 - Medicine and Society: the Ancients to the Present
- PHIL 4242 - Bioethics
- PSCI 4215 - Women's Rights, Human Rights: Global Perspectives
- PSCI 4330 - U.S. Health Policy
- PSYC 3262 - Health Psychology
- PSYC 3265 - Drugs, Brain and Behavior
- PSYC 3305 - Abnormal Psychology
- PSYC 3822 - Aging, Brain and Behavior
- SOCY 3440 - Medical Sociology
- SOCY 3560 - Death and Dying
- SOCY 4110 - Sociology of Health Care
- SOCY 4290 - Aging, Society and Social Policy

Take **two** of the following Biological Sciences ancillary courses:

- BIOL 1550 - Basic Biology: Ecology and the Diversity of Life  **or**
- BIOL 2051 - General Biology I  **and**
- BIOL 2071 - General Biology Laboratory I

- BIOL 1560 - Basic Biology: From Cells to Organisms  **or**
- ANTH 1303 - Introduction to Biological Anthropology

**Public Health BS**

**Introduction**

Please click here to see Health and Behavioral Sciences department information.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.
Program Delivery

- This is an on-campus program.

Declaring This Major

- Click here to go to information about declaring a major.

General Requirements

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Degree Requirements
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences General Degree Requirements
- Click here for information about Academic Policies

Program Requirements

1. The Bachelor of Science in Public Health consists of 73 hours in required classes.
2. Each class must be completed with a grade of C (2.0) or higher to count towards the major.

Take all of the following courses (five of the following courses must be taken at the University of Colorado Denver):

- PBHL 2001 - Introduction To Public Health
- PBHL 2020 - Introduction to Environmental Health
- PBHL 3001 - Introduction to Epidemiology
- PBHL 3030 - Health Policy
- PBHL 3070 - Perspectives in Global Health
- PBHL 4040 - Social Determinants of Health
- PBHL 4099 - Capstone Experience in Public Health

Take one of the following Quantitative Methods courses, OR another statistics course that has been approved by the undergraduate program director/advisor in advance:

- ANTH 4050 - Quantitative Methods in Anthropology
- MATH 2830 - Introductory Statistics
- PSYC 2090 - Statistics and Research Methods
- SOCY 3121 - Statistics

Take one PBHL elective from the following list:
Take **one** elective from either the PBHL list (above), from the following list or another course that has been approved by the undergraduate program director/advisor in advance:

- ANTH 4010 - Medical Anthropology: Global Health
- ANTH 4080 - Global Health Practice
- ANTH 4290 - Anthropology and Public Health
- ANTH 4600 - Medical Anthropology
- ECON 5660 - Health Economics
- GEOG 3501 - Geography of Health
- GEOG 4230 - Hazard Mitigation and Vulnerability Assessment
- GEOG 4235 - GIS Applications in the Health Sciences
- HEHM 3100 - Introduction to Health Humanities
- HIST 4345 - Gender, Science, and Medicine: 1600 to the Present
- HIST 4346 - Medicine and Society: the Ancients to the Present
- PHIL 4242 - Bioethics
- PSCI 4215 - Women's Rights, Human Rights: Global Perspectives
- PSCI 4330 - U.S. Health Policy
- PSYC 3262 - Health Psychology
- PSYC 3265 - Drugs, Brain and Behavior
- PSYC 3305 - Abnormal Psychology
- PSYC 3822 - Aging, Brain and Behavior
- SOCY 3440 - Medical Sociology
- SOCY 3560 - Death and Dying
- SOCY 4110 - Sociology of Health Care
- SOCY 4290 - Aging, Society and Social Policy

Take **all** of the following lecture/lab courses:

- BIOL 2051 - General Biology I
- BIOL 2071 - General Biology Laboratory I
- BIOL 2061 - General Biology II
- BIOL 2081 - General Biology Laboratory II

Take **all** of the following additional math and science ancillary courses:
• CHEM 2031 - General Chemistry I
• CHEM 2038 - General Chemistry Laboratory I
• CHEM 2061 - General Chemistry II
• CHEM 2068 - General Chemistry Laboratory II
• CHEM 3411 - Organic Chemistry I
• CHEM 3418 - Organic Chemistry Laboratory I
• CHEM 3421 - Organic Chemistry II
• CHEM 3428 - Organic Chemistry Laboratory II
• MATH 1401 - Calculus I
• PHYS 2010 - College Physics I
• PHYS 2030 - College Physics Lab I
• PHYS 2020 - College Physics II
• PHYS 2040 - College Physics Lab II

Recording Arts Emphasis, Audition Track, Music BS

Introduction

Please click here to see general Music information.

Program Delivery

• This is an on-campus program.

Declaring This Major

• Click here to go to information about declaring a major.
• The bachelor of science (BS) in music has a competitive application process. Please refer to the Music & Entertainment Industry Studies Department (MEIS) website for additional guidelines and information at http://www.ucdenver.edu/academics/colleges/CAM/programs/meis/Pages/index.aspx.
• Students who wish to pursue the recording arts emphasis, audition track, are required to pass an entrance audition on their primary instrument or voice as part of the application process, and pass varying levels of performance proficiency as part of the curriculum. Students must be accepted into the recording arts emphasis before being able to take any of the upper-division (3000/4000 level) recording arts course work. Please contact an advisor in the College of Arts & Media at CAMadvising@ucdenver.edu for further information.

General Requirements

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

• CU Denver General Graduation Requirements
• CU Denver Core Curriculum
• College of Arts & Media Graduation Requirements
• Click here for information about Academic Policies

Program Requirements
1. To earn a BS in music, students must complete musicianship courses, MEIS core courses and requirements from one of the four emphasis areas: performance, singer/songwriter, music business or recording arts.

2. A minimum grade of C (2.0) is required for each course applied toward a CAM major, minor or certificate requirement. A grade of C- (1.7) or lower will not fulfill a major, minor or certificate requirement. A grade of P is acceptable for courses in which the only grade available is Pass or Fail.

Take all of the following Musicianship course groups:

- PMUS 1100 - Music Theory I
- PMUS 1110 - Ear Training and Sight Singing I
- PMUS 1023 - Piano Class I
- PMUS 1200 - Music Theory II
- PMUS 1210 - Ear Training and Sight Singing II
- PMUS 1024 - Piano Class II
- PMUS 2100 - Music Theory III
- PMUS 2110 - Ear Training and Sight Singing III
- PMUS 1025 - Piano Class III
- PMUS 2200 - Jazz Theory
- PMUS 1026 - Piano Class IV
- PMUS 3830 - History and Literature of Music I
- PMUS 3831 - History and Literature of Music II
- PMUS___ Music History Elective (3 semester hours)
- PMUS 1___ Applied Instrument/Voice (1 semester hour)
- PMUS 1500 - General Recital
- PMUS___ Ensemble (1 semester hour) \(\text{Note: Students must complete PMUS 1470 - Performance Practice Ensemble during their first or second semester of Applied Instrument/Voice.}\)
- PMUS 1___ Applied Instrument/Voice (1 semester hour)
- PMUS 1500 - General Recital
- PMUS___ Ensemble (1 semester hour)
- PMUS 2___ Applied Instrument/Voice (1 semester hour)
- PMUS 1500 - General Recital
- PMUS___ Ensemble (1 semester hour)
- PMUS 2___ Applied Instrument/Voice (1 semester hour)
- PMUS 1500 - General Recital
- PMUS___ Ensemble (1 semester hour)
- PMUS___ Ensemble (1 semester hour)
- PMUS___ Ensemble (1 semester hour)
- PMUS___ Ensemble (1 semester hour)

Take all of the following MEIS Core courses:

- MUSC 2700 - Introduction to Music Business
• MUSC 2540 - Audio Production I
• MUSC 2560 - Audio Production II

Take one of the following MEIS Core courses:
• MUSC 3210 - Music and Entertainment Marketing
• MUSC 3220 - Artist Management

Take the following course. This course must be completed or in progress while applying to the Recording Arts Emphasis:
• PHYS 3620 - Sound and Music

Take all of the following Recording Arts Emphasis courses:
• MUSC 3550 - Critical Listening for Recording Arts
• MUSC 4550 - Audio Production III
• MUSC 4560 - Mastering & Advanced Digital Audio
• MUSC 4505 - Audio Post Production I
• MUSC 4580 - Audio Production Seminar I
• MUSC 4581 - Audio Production Seminar II

Take 7 semester hours of Recording Arts electives.

Recording Arts Emphasis, Non-Audition Track, Music BS

Introduction

Please click here to see general Music information.

Program Delivery

• This is an on-campus program.

Declaring This Major

• Click here to go to information about declaring a major.
• The bachelor of science (BS) in music has a competitive application process. Please refer to the Music & Entertainment Industry Studies Department (MEIS) website for additional guidelines and information at http://www.ucdenver.edu/academics/colleges/CAM/programs/meis/Pages/index.aspx.
• Students who wish to pursue the recording arts emphasis, non-audition track, are required to complete the Non-Audition Application Form as part of the application process. Students will be assessed for varying
levels of performance proficiency as part of the curriculum. Students must be accepted into the recording arts emphasis before being able to take any of the upper-division (3000/4000 level) recording arts course work. Please contact an advisor in the College of Arts & Media at CAMadvising@ucdenver.edu for further information.

General Requirements

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Arts & Media Graduation Requirements
- Click here for information about Academic Policies

Program Requirements

1. To earn a BS in music, students must complete musicianship courses, MEIS core courses and requirements from one of the four emphasis areas: performance, singer/songwriter, music business or recording arts.
2. A minimum grade of C (2.0) is required for each course applied toward a CAM major, minor or certificate requirement. A grade of C- (1.7) or lower will not fulfill a major, minor or certificate requirement. A grade of P is acceptable for courses in which the only grade available is Pass or Fail.

Take all of the following Musicianship course groups:

- PMUS 1100 - Music Theory I
- PMUS 1110 - Ear Training and Sight Singing I
- PMUS 1023 - Piano Class I
- PMUS 1200 - Music Theory II
- PMUS 1210 - Ear Training and Sight Singing II
- PMUS 1024 - Piano Class II
- PMUS 3830 - History and Literature of Music I
- PMUS 3831 - History and Literature of Music II
- PMUS ____ Music History Elective (3 semester hours)

- PMUS 18__ Applied Instrument/Voice, Non-Juried (1 semester hour)
- PMUS 1500 - General Recital
- PMUS 18__ Applied Instrument/Voice, Non-Juried (1 semester hour)
- PMUS 1500 - General Recital

Take all of the following Musicianship courses:

- PMUS 1310 - Sight Reading and Improvisation
- PMUS 2310 - Introduction to Songwriting
- PMUS ____ Ensemble (1 semester hour)
- PMUS ____ Ensemble (1 semester hour)
- PMUS Electives in Performance (3 semester hours)
Take two of the following Musicianship courses:

- PMUS 1025 - Piano Class III
- PMUS 1026 - Piano Class IV
- PMUS 1040 - Class Guitar
- PMUS 1041 - Class Guitar II
- PMUS 1050 - Voice Class I
- PMUS 1060 - Voice Class II

Take one of the following Musicianship courses:

- PMUS 2200 - Jazz Theory
- PMUS 2220 - Commercial Electronic Music Composition
- PMUS 3310 - Intermediate Songwriting

Take all of the following MEIS Core courses:

- MUSC 2700 - Introduction to Music Business
- MUSC 2540 - Audio Production I
- MUSC 2560 - Audio Production II

Take one of the following MEIS Core courses:

- MUSC 3210 - Music and Entertainment Marketing
- MUSC 3220 - Artist Management

Take the following course. This course must be completed or in progress while applying to the Recording Arts Emphasis:

- PHYS 3620 - Sound and Music

Take all of the following Recording Arts Emphasis courses:

- MUSC 3550 - Critical Listening for Recording Arts
- MUSC 4550 - Audio Production III
- MUSC 4560 - Mastering & Advanced Digital Audio
- MUSC 4505 - Audio Post Production I
- MUSC 4580 - Audio Production Seminar I
- MUSC 4581 - Audio Production Seminar II
Take **nine** semester hours of Recording Arts electives.

**Risk Management and Insurance Emphasis - BS in Business Administration**

**Introduction**

Please click here to see Business School information.

The risk management and insurance emphasis provides students with the fundamental knowledge needed to accurately measure and manage risk.

Recent crisis situations suggest that understanding risk and how to manage it, and ultimately, how risk management can be used to increase firm value, is essential in the current business environment. The RISK emphasis will provide an overall perspective on risk, with a specific focus on insurance products and their use in mitigating risk in business and personal situations. The insurance industry recognizes many high-level certifications as a sign of expertise, and the RISK course work will provide the knowledge base so that students can proceed to acquire certification in their specific choice of insurance specialty.

Potential job opportunities include positions in the insurance industry and those that require a thorough understanding of risk, such as corporate risk officer or risk manager. In addition, students who choose to work in the insurance industry can make a seamless transition into underwriting, ratemaking, and policy approval. The program will be supported by a unique internship and special project opportunities in the insurance industry, and is the first program of its kind in the region.

**Program Delivery**

- This is an on-campus program.

**Declaring This Major**

- Click here to go to information about declaring a major

**General Requirements**

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- Business School Graduation Requirements
- Click here for information about Academic Policies

**Program Requirements**

1. A grade of C or higher must be earned in all courses that are used as prerequisites. These are noted with an asterisk.

   Take **all** of the following required courses:
- FNCE 3500 - Management of Business Capital *
- RISK 3809 - Introduction to Risk Management
- RISK 3949 - Experiential Learning in RMI Industry (Also fulfills BGEN Experiential Learning requirement)
- RISK 4809 - Property & Casualty Insurance
- RISK 4909 - Corporate Risk Management

Take **three** of the following courses:

- FNCE 3600 - Financial Markets and Institutions
- FNCE 3700 - Investment and Portfolio Management *
- FNCE 4500 - Corporate Financial Decisions *
- RISK 4509 - Global Risk Management
- RISK 4129 - Practical Enterprise Risk Management
- RISK 4409 - Employee Benefits and Workforce Risk Management
- RISK 4709 - Life & Health Insurance
- RISK 4950 - Special Topics: Cyber Risk Management & Cyber Warfare

**Note**

All RISK courses have a fixed tuition rate. However, students have the option to apply for RMI scholarships for each RISK course they take.

**Singer/Songwriter Emphasis, Music BS**

**Introduction**

Please click here to see general Music information.

**Program Delivery**

- This is an on-campus program.

**Declaring This Major**

- Click here to go to information about declaring a major.
- The bachelor of science (BS) in music has a competitive application process. Please refer to the Music & Entertainment Industry Studies Department (MEIS) website for additional guidelines and information at http://www.ucdenver.edu/academics/colleges/CAM/programs/meis/Pages/index.aspx.
- Students who wish to pursue the singer/songwriter emphasis are required to pass an audition on their accompanying instrument AND voice as part of the application process, and pass varying levels of performance proficiency as part of the curriculum. Each student must also successfully pass a Sophomore Proficiency in order to maintain singer/songwriter emphasis status. Each student is also required to successfully complete a Junior Recital in addition to the two-credit PMUS 4200 - Senior Recital Project. Please contact an advisor in the College of Arts & Media at CAMadvising@ucdenver.edu for further information.

**General Requirements**
To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Arts & Media Graduation Requirements
- Click here for information about Academic Policies

Program Requirements

1. To earn a BS in music, students must complete musicianship courses, MEIS core courses and requirements from one of the four emphasis areas: performance, singer/songwriter, music business or recording arts.
2. A minimum grade of C (2.0) is required for each course applied toward a CAM major, minor or certificate requirement. A grade of C- (1.7) or lower will not fulfill a major, minor or certificate requirement. A grade of P is acceptable for courses in which the only grade available is Pass or Fail.

Take all of the following Musicianship course groups:

- PMUS 1100 - Music Theory I
- PMUS 1110 - Ear Training and Sight Singing I
- PMUS 1023 - Piano Class I
- PMUS 1200 - Music Theory II
- PMUS 1210 - Ear Training and Sight Singing II
- PMUS 1024 - Piano Class II
- PMUS 2100 - Music Theory III
- PMUS 2110 - Ear Training and Sight Singing III
- PMUS 1025 - Piano Class III
- PMUS 4060 - Music Theory Analysis
- PMUS 3830 - History and Literature of Music I
- PMUS 3831 - History and Literature of Music II
- PMUS____ Music History Elective (3 semester hours)
- Either PMUS 1574 - Applied Guitar, Singer/Songwriter or PMUS 1644 - Applied Piano, Singer/Songwriter Note: Students must complete both semesters of applied instrument lessons on their primary audition instrument.
- PMUS 1500 - General Recital
- PMUS____ Ensemble (1 semester hour) Note: Students must complete PMUS 1470 - Performance Practice Ensemble during their first or second semester of Applied Music.
- Either PMUS 1574 - Applied Guitar, Singer/Songwriter or PMUS 1644 - Applied Piano, Singer/Songwriter Note: Students must complete both semesters of applied instrument lessons on their primary audition instrument.
- PMUS 1500 - General Recital
- PMUS____ Ensemble (1 semester hour)
- Either PMUS 1734 - Applied Voice, Singer/Songwriter or PMUS 1500 - General Recital
- PMUS____ Ensemble (1 semester hour)
- Either PMUS 1734 - Applied Voice, Singer/Songwriter or
PMUS 1500 - General Recital
PMUS____ Ensemble (1 semester hour)

Take **one** of the following Musicianship courses:

- PMUS 1026 - Piano Class IV (for Piano/Voice students)
- PMUS 2750 - Functional Guitar Skills: Acoustic Guitar Styles (for Guitar/Voice students)
- PMUS 2751 - Functional Guitar Skills: Electric Guitar Styles (for Guitar/Voice students)

Take **all** of the following MEIS Core courses:

- MUSC 2700 - Introduction to Music Business
- MUSC 2540 - Audio Production I
- MUSC 2560 - Audio Production II

Take **one** of the following MEIS Core courses:

- MUSC 3210 - Music and Entertainment Marketing
- MUSC 3220 - Artist Management
- MUSC 3755 - Music Publishing

Take **all** of the following Singer/Songwriter Emphasis course groups:

- PMUS 3772 - Applied Singer/Songwriter
- PMUS 1500 - General Recital
- PMUS____ Ensemble (1 semester hour)

- PMUS 3772 - Applied Singer/Songwriter
- PMUS 1500 - General Recital
- PMUS____ Ensemble (1 semester hour)

- PMUS 4772 - Applied Singer/Songwriter
- PMUS 1500 - General Recital
- PMUS____ Ensemble (1 semester hour)

- PMUS 4772 - Applied Singer/Songwriter
- PMUS 1500 - General Recital
- PMUS____ Ensemble (1 semester hour)

Take **all** of the following Singer/Songwriter Emphasis courses:

- PMUS 3200 - Popular Music Performance Skills
- PMUS 3310 - Intermediate Songwriting
- PMUS 3320 - Popular Music Arranging
- PMUS 4200 - Senior Recital Project
- PMUS 4310 - Advanced Songwriting

**Sociology BA**
Introduction

Please click here to see Sociology department information.

All prospective majors should contact the undergraduate advisor in Sociology as early in their academic careers as possible for information about the degree requirements. Transfer or returning students should consult with the undergraduate advisor in Sociology concerning completion of the core courses.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their Sociology advisor and CLAS advisor to confirm the best plans of study before finalizing them.

Program Delivery

- This is an on-campus program.
- This program is also offered online.

Declaring This Major

- Click here to go to information about declaring a major

General Requirements

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

Program Requirements

1. The major requires a total of 31 hours.
2. A minimum GPA of 2.0 is required for all courses applying to Sociology requirements.
3. At least 16 of the 31 hours must be upper-division (3000-4000 level) courses.
4. The maximum number of hours allowed in sociology is 56.
5. The department requires that at least 13 hours of sociology be taken from CU Denver faculty, including the following courses: SOCY 2001, 3111, 3121 and 3140.

Take all of the following courses, earning a grade of C or better in each:

- SOCY 1001 - Introduction to Sociology
- SOCY 2001 - Inequalities in Social World
- SOCY 3111 - Research Methods
- SOCY 3121 - Statistics
- SOCY 3140 - Sociological Theory

*Must be taken from Downtown Campus faculty
Take a minimum of \textbf{15 hours} and a maximum of 29 hours of electives in sociology, with an average grade of C (2.0) in elective courses.

\section*{Spanish, International Language and Culture for the Professions Option BA}

\subsection*{Introduction}

Please click here to see Modern Languages department information.

This option in the Spanish major offers career possibilities, both in government and private industry, at home and abroad. Languages are useful in business, industry, commerce, civil service, law, library science, media, science, economics, health and social sciences. Students who follow this course of study could also qualify as teachers of general business subjects in bilingual as well as traditional school systems. (However, students who wish to be certified to teach Spanish in the public schools should consult the department for information concerning the undergraduate language licensure program.)

These degree requirements are subject to periodic revision by the academic department, and the College of Liberal Arts and Sciences reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

\subsection*{Program Delivery}

- This is an on-campus program.

\subsection*{Declaring This Major}

- Click here to go to information about declaring a major
- International Spanish for the professions is a controlled-enrollment major that takes two years to complete. Interested students should contact the Spanish advisor in the Department of Modern Languages to declare the major. This should be done as early as possible in the student's academic career, but not later than the second semester of the sophomore year.
- To be admitted to major status in Spanish, students must have an overall GPA of C+ (2.3).
- Prerequisites: \textit{(These courses do not count toward the major total of 45 semester hours)}
  - ECON 2012 - Principles of Economics: Macroeconomics
  - ECON 2022 - Principles of Economics: Microeconomics
  - MATH 1070 - Algebra for Social Sciences and Business \textbf{or}
  - MATH 1110 - College Algebra \textbf{or}
  - higher level math course
  - SPAN 2110 - Second Year Spanish I \textbf{or}
  - SPAN 2120 - Second Year Spanish II

\subsection*{General Requirements}

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
Program Requirements

1. The minimum grade acceptable in any course applied to a Spanish major or minor is a C (2.0).
2. The GPA in all courses applied to a Spanish major or minor at CU Denver must be 2.5.
3. No courses taken on a pass/fail basis may be credited toward a Spanish major or minor.
4. The BA in Spanish requires 30 semester hours of upper-division course work in Spanish and 6 additional hours in related fields.
5. A minimum of 18 semester hours of Spanish course work for the major, and 9 hours for the minor, must be taken from Spanish faculty at CU Denver.
6. Courses taken at other institutions while a student is enrolled at CU Denver may be applied to the major only with departmental approval before enrollment in those courses.
7. Before enrolling in their final semester in the language, Spanish majors must be evaluated by the faculty in oral and written skills. Students must see their Spanish advisor for specific information.

Take all of the following Spanish courses:

- SPAN 3101 - Introduction to the Study of Literature
- SPAN 3700 - Spanish for International Business I
- SPAN 3710 - Spanish for International Business II
- SPAN 3782 - Introduction to Translation I or SPAN 3792 - Introduction to Translation II

Take two of the following language skills and theory courses:

- SPAN 3010 - Spanish Composition I
- SPAN 3020 - Spanish Composition II
- SPAN 3030 - Spanish Oral Proficiency
- SPAN 3050 - Advanced Spanish Grammar
- SPAN 3060 - Hispanic Phonetics: Theory and Practice

Take one of the following courses:

- SPAN 3213 - Contemporary Latin American Culture and Institutions
- SPAN 3223 - Contemporary Spanish Culture and Institutions

Take one of the following courses:

- SPAN 3212 - Spanish American Culture and Civilization
- SPAN 3213 - Contemporary Latin American Culture and Institutions (if not taken for the above requirement)
- SPAN 3221 - Culture and Civilization of Spain I
- SPAN 3222 - Culture and Civilization of Spain II
- SPAN 3223 - Contemporary Spanish Culture and Institutions (if not taken for the above requirement)
- SPAN 3225 - Special Topics In Hispanic Culture
- SPAN 3230 - Ibero-American Cultures through Film

Take two Spanish electives at the 4000-level.
Take all of the following Business courses:

- ACCT 2200 - Financial Accounting and Financial Statement Analysis
- MGMT 1000 - Introduction to Business
- MGMT 3000 - Managing Individuals and Teams
- MGMT 4400 - Environments of International Business
- MKTG 3000 - Principles of Marketing

Spanish, Language, Literature and Culture Option BA

Introduction

Please click here to see Modern Languages department information.

The Spanish program studies the language, linguistics, literature, culture and civilization of Spain, Spanish America and the Spanish-speaking areas of the United States.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

Program Delivery

- This is an on-campus program.

Declaring This Major

- Click here to go to information about declaring a major
- To be admitted to major status in Spanish, students must have an overall GPA of C+ (2.3).

General Requirements

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

Program Requirements

1. The minimum grade acceptable in any course applied to a Spanish major or minor is a C (2.0).
2. The GPA in all courses applied to a Spanish major at CU Denver must be 2.5.
3. No courses taken on a pass/fail basis may be credited toward a Spanish major or minor.
4. The BA in Spanish requires 30 semester hours of upper-division course work in Spanish and 6 additional hours in related fields.

5. A minimum of 18 semester hours of Spanish course work for the major, and 9 hours for the minor, must be taken from Spanish faculty at CU Denver.

6. Courses taken at other institutions while a student is enrolled at CU Denver may be applied to the major only with departmental approval before enrollment in those courses.

7. Before enrolling in their final semester in the language, Spanish majors must be evaluated by the faculty in oral and written skills. Students must see their Spanish advisor for specific information.

8. Students majoring in Spanish for the BA degree must complete 30 semester hours of upper-division course work, at least 12 of which must be at the 4000-level. All course work applied to the 30 semester hour minimum must be taught in Spanish.

Take the following **required** course:

- SPAN 3101 - Introduction to the Study of Literature

Take **at least one** course on the literature of Spain.

Take **at least one** course on the literature of Spanish America.

Take the following **required** language skills and theory course:

- SPAN 3060 - Hispanic Phonetics: Theory and Practice

Take **two** of the following Culture and Civilizations of Spain or Spanish America courses:

- SPAN 3212 - Spanish American Culture and Civilization
- SPAN 3213 - Contemporary Latin American Culture and Institutions
- SPAN 3221 - Culture and Civilization of Spain I
- SPAN 3222 - Culture and Civilization of Spain II
- SPAN 3223 - Contemporary Spanish Culture and Institutions
- SPAN 3225 - Special Topics In Hispanic Culture
- SPAN 3230 - Ibero-American Cultures through Film
- SPAN 3270 - Bilingual Communities: Spanish as a Language of Contact
- SPAN 4330 - Modern Culture of Spain through Film and Narrative

Take **two** Spanish electives at the 4000-level.

Take **two** courses from the following related fields of study:

- ANTH 3121 - Language, Culture, and Communication
- ANTH 4320 - Archaeology of Mexico and Central America
- ENGL 3160 - Language Theory
- ENGL 3798 - International Perspectives in Literature and Film
- ENGL 4601 - Principles and Practices of Second Language Acquisition
- ENGL 4460 - Contemporary World Literature
Sports Management Emphasis - BS in Business Administration

Introduction

Please click here to see Business School information.

The Sports Management emphasis offers students the opportunity to prepare for a competitive career in the sports industry. This program was developed with industry partners who are in need of qualified leaders in the field. Sports firms are currently hiring at the entry level and promoting from within. The Sports Management emphasis will provide you with the knowledge and skills you need to begin your career in the exciting field of sports.

The program includes faculty who are active researchers in the field, prominent guest speakers, and the opportunity to participate in exciting internships with local leaders in the industry. Some companies where students have interned include Broncos Football Club, Kroenke Sports and Entertainment, United States Olympic Committee and Anschutz Entertainment group.

Students completing the Sports Management emphasis are also eligible to participate in the London Calling study abroad program. This unique opportunity provides students with a firsthand look at the global sports management field through behind-the-scenes visits to key sports and entertainment organizations and venues in London. The two-week elective includes visits to the UK’s top sports facilities, including Arsenal FC, O2 Arena, Wimbledon, 2012 Olympic committee and more.

Students enrolled in the program will learn about diverse, cross-functional areas of the sports industry, including:

* Sports industry trends & growth opportunities
Sports media trends & new media
Stadium financing & development
Naming rights & sponsorships
Sports specific marketing plans
Sports pricing & fan loyalty
Negotiating contracts with athletes
Team valuations
Labor law and collective bargaining agreements
Pro team and college athletics management
Money flow in teams - managing revenue streams
Outdoor sports industry - marketing & management
Community relations and event planning
Olympics bid process and finances

Program Delivery
This is an on-campus program.

Declaring This Major
Click here to go to information about declaring a major.

General Requirements
To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- Business School Graduation Requirements
- Click here for information about Academic Policies

Program Requirements

Take all of the following required courses:

- MGMT 4230 - Sports Management
- MGMT 4832 - Law & Negotiation in the Sports and Entertainment Industry
- MKTG 3100 - Marketing Research or
- MKTG 4000 - Advertising
- MKTG 4250 - Sports Marketing

Take three of the following courses:

- ENTP 3000 - Principles of Entrepreneurship
- MGMT 4834 - Global Sports & Entertainment Management
- MKTG 4050 - Applied Marketing Management
- Any 3000 or 4000-level MGMT course
Studio Art Emphasis, Fine Arts BA

Introduction

Please click here to see general Visual Arts information.

In this general studio art emphasis, students take directed (lower through intermediate-level) courses in photography, transmedia sculpture, painting and drawing, along with gaining a basis in art history and digital imaging.

Program Delivery

- This is an on-campus program.

Declaring This Major

- Click here to go to information about declaring a major.
- Consult an advisor in the College of Arts & Media at CAMadvising@ucdenver.edu for information about this emphasis.

General Requirements

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Arts & Media Graduation Requirements
- Click here for information about Academic Policies

Program Requirements

1. A minimum grade of C (2.0) is required for each course applied toward a CAM major, minor or certificate requirement. A grade of C- (1.7) or lower will not fulfill a major, minor or certificate requirement. A grade of P is acceptable for courses in which the only grade available is Pass or Fail.
2. All upper-division visual arts courses must be taken at CU Denver unless approved otherwise by visual arts faculty.
3. At least 21 semester hours of visual arts credits (at any level) must be taken at CU Denver.
4. At least 18 semester hours of total visual arts courses must be upper-division.

Take all of the following Visual Arts Foundation courses:

- FINE 1100 - Drawing I
- FINE 1400 - Two Dimensional Design
- FINE 1500 - Three-Dimensional Design
- FINE 2600 - Art History Survey I
- FINE 2610 - Art History Survey II

Take all of the following lower-division Studio courses:
- FINE 1150 - Introduction to Darkroom Photography
- FINE 2010 - The Graphic Novel Workshop
- FINE 2030 - Life Drawing
- FINE 2200 - Painting I
- FINE 2155 - Introduction to Digital Photography
- FINE 2500 - Bronze Casting
- FINE 2510 - Wood and Metal Sculpture

Take all of the following upper-division Studio courses:

- FINE 3030 - The Media of Drawing
- FINE 3161 - The Silver Fine Print
- FINE 3162 - The Digital Fine Print
- FINE 3172 - Digital Bookmaking
- FINE 3240 - Abstract Painting and Drawing
- FINE 3300 - Painting, Drawing and the Printed Image
- FINE 3500 - Installation Art
- FINE 3510 - Mold Design & Casting

Take all of the following Visual Arts courses:

- FINE 3405 - Introduction to Digital Video
- FINE 4990 - Contemporary Art: 1960 to Present

Take three semester hours of Pre-20th Century Art History elective. Consult a CAM advisor for approved options.

Take six semester hours of Visual Arts electives.

**Transmedia Sculpture Emphasis, Fine Arts BFA**

**Introduction**

Please click here to see general Visual Arts information.

The transmedia sculpture emphasis encompasses 21st Century digital practice with 5000 year old metal casting process. Students learn how to use a full range of equipment and methods in art making - from working with metals, wood, casting and mold making to performance, live media and interactive digital work.

Graduating students will develop a portfolio of work appropriate for exhibition, admission to graduate schools, residencies and post graduate art programs, as well as fabrication experience that will enable them to work in art fabrication and design.

**Program Delivery**

- This is an on-campus program.

**Declaring This Major**
• Click here to go to information about declaring a major.
• Consult an advisor in the College of Arts & Media at CAMadvising@ucdenver.edu for information about the emphasis.

General Requirements

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

• CU Denver General Graduation Requirements
• CU Denver Core Curriculum
• College of Arts & Media Graduation Requirements
• Click here for information about Academic Policies

Program Requirements

1. A minimum grade of C (2.0) is required for each course applied toward a CAM major, minor or certificate requirement. A grade of C- (1.7) or lower will not fulfill a major, minor or certificate requirement. A grade of P is acceptable for courses in which the only grade available is Pass or Fail.
2. All upper-division visual arts courses must be taken at CU Denver unless approved otherwise by visual arts faculty.
3. At least 27 semester hours of visual arts credits (at any level) must be taken at CU Denver.
4. At least 24 semester hours of total visual arts courses must be upper-division.

Take all of the following Visual Arts Foundation courses:

• FINE 1100 - Drawing I
• FINE 1400 - Two Dimensional Design
• FINE 1500 - Three-Dimensional Design
• FINE 2155 - Introduction to Digital Photography
• FINE 2600 - Art History Survey I
• FINE 2610 - Art History Survey II

Take one of the following Transmedia Sculpture Emphasis courses (entry-level):

• FINE 2405 - Introduction to Digital Design
• FINE 2500 - Bronze Casting

Take all of the following Transmedia Sculpture Emphasis courses (entry-level):

• FINE 2510 - Wood and Metal Sculpture
• FINE 3405 - Introduction to Digital Video

Take all of the following Transmedia Sculpture Emphasis courses (completion of all above courses highly recommended before continuing emphasis):

• FINE 3500 - Installation Art
• FINE 3505 - Environmental Art
• FINE 3510 - Mold Design & Casting
• FINE 3525 - Modeling for Manufacture
• FINE 3530 - Electronic Art
- FINE 3550 - Iron Casting
- FINE 4500 - Electronic Performance
- FINE 4505 - Sculptural Rendering
- FINE 4510 - Advanced Sculpture

Take the following Visual Arts course:

- FINE 4990 - Contemporary Art: 1960 to Present

Take **three** semester hours of Pre-20th Century Art History elective. Consult a CAM advisor for approved options.

Take **three** semester hours of upper-division Art History elective.

Take **nine** semester hours of Studio Arts electives.

Take **nine** semester hours of Studio Arts electives. These may include studio, lecture, internship or art history courses.

Take the following Capstone course:

- FINE 4950 - Studio BFA Thesis

**Undergraduate Minors**

**Anthropology Minor**

**Introduction**

Please click here to see Anthropology department information.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

**Program Delivery**

- This is an on-campus program.

**Declaring This Minor**

- Please see your advisor.
General Requirements

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

Program Requirements

1. A minimum of 18 semester hours in anthropology must be completed with a grade of C (2.0) or better in each course.
2. Nine of the 18 hours must be upper division.
3. Nine hours must be taken from CU Denver faculty. **Note:** All upper division core courses must be taken from CU Denver faculty in order to count for specific requirements. Upper division courses from other schools will only count as electives.

Take at least **three** of the following courses:

- ANTH 1302 - Introduction to Archaeology
- ANTH 1303 - Introduction to Biological Anthropology
- ANTH 2102 - Culture and the Human Experience
- ANTH 3101 - Foundations of Cultural Anthropology
- ANTH 3301 - World Prehistory
- ANTH 3512 - Human Evolution

Take 7-9 semester hours of Anthropology electives.

Art History Minor

Introduction

Please click here to see general Visual Arts information.

The art history minor familiarizes students with the principal traditions of art history and includes a selection of lecture courses in advanced studies. This program provides a strong introduction to historical developments while developing analytical skills in research, writing, and visual culture.

Program Delivery

- This is an on-campus program.

Declaring This Minor

- To declare a CAM minor, please see the College of Arts & Media's Office of Advising and Student Services in Arts Building, 177. Consult an advisor in the College of Arts & Media at CAMadvising@ucdenver.edu for more information.

General Requirements
To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

Program Requirements

1. Students may transfer up to 6 semester hours of non-CU Denver courses toward a College of Arts & Media minor. All other courses must be taken at CU Denver.
2. A minimum grade of C (2.0) is required for each course applied toward a CAM major, minor or certificate requirement. A grade of C- (1.7) or lower will not fulfill a major, minor or certificate requirement. A grade of P is acceptable for courses in which the only grade available is Pass or Fail.
3. Students may use up to 6 semester hours to fulfill both major and minor requirements; the remaining semester hours for the minor must be taken in addition to the major requirements.

Take all of the following Art History Minor courses:

- FINE 2600 - Art History Survey I
- FINE 2610 - Art History Survey II

Take three semester hours of Studio Arts elective.

Take nine semester hours of upper-division Art History electives.

Astrophysics Minor

Introduction

Please click here to see Physics department information.

Astrophysics is an important and well-represented subdiscipline of physics. It includes the study of the solar system, galactic and extra-galactic astrophysics, as well as cosmology. A minor in this field combines a theoretical approach with observational analysis. There is also opportunity to do research in this field.

While the Department of Physics offers minors in both physics and astrophysics, it is not possible to receive minors in both fields. A physics minor is not an option for physics majors.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

Program Delivery

- This is an on-campus program.

Declaring This Minor
• Please see your advisor.

General Requirements

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

• CU Denver General Graduation Requirements
• Click here for information about Academic Policies

Program Requirements

1. The astrophysics minor requires a total of 17 semester hours, in which no grade below a C (2.0) may be used to meet the requirements for the minor.
2. At least 6 semester hours taken for the minor must be completed at the Denver Campus.
3. Requirements for the minor in astrophysics may be used to fulfill the requirements of the major in physics.
4. However, a student majoring in physics who wants to minor in astrophysics needs to take 15 semester hours in astrophysics that do not overlap with the major.

Take the following required course:

• PHYS 1052 - General Astronomy I

Take either of the following sequences:

• PHYS 2010 - College Physics I
• PHYS 2020 - College Physics II
• PHYS 2030 - College Physics Lab I
• PHYS 2040 - College Physics Lab II
• or
• PHYS 2311 - General Physics I: Calculus-Based
• PHYS 2321 - General Physics Lab I
• PHYS 2331 - General Physics II: Calculus-Based
• PHYS 2341 - General Physics Lab II

Take one of the following courses:

• PHYS 3040 - Modern Cosmology
• PHYS 3050 - General Astronomy II
• PHYS 3082 - Energy and the Environment
• PHYS 3411 - Thermal Physics
• * PHYS 3840 - Independent Study: PHYS
• PHYS 3939 - Internship
• PHYS 4510 - Optics
• PHYS 4550 - Astrophysics
• * PHYS 4840 - Independent Study: PHYS
• * PHYS 4920 - Advanced Undergraduate Seminar
• * PHYS 4931 - Internship in Applied Physics
• * PHYS 4980 - Advanced Physics Topics
*Topics in these classes vary, as do the number of credits which can be earned. See departmental advisor for approval.

Biology Minor

Introduction

Please click here to see Integrative Biology department information.

These degree requirements are subject to periodic revision by the academic department, and the College of Liberal Arts and Sciences reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

Program Delivery

- This is an on-campus program.

Declaring This Minor

- Please see your advisor.

General Requirements

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

Program Requirements

1. Students must complete all biology core requirements (20-23 hours), of which a minimum of 9 hours must be completed in residence at CU Denver.
2. All biology courses applied to the undergraduate biology minor must be completed within 10 years of graduation.
3. A GPA of 2.0 must be attained in BIOL coursework.
4. Biology and ancillary courses must be completed with a letter grade of C- (1.7) or higher.

Take all of the following required courses:

- BIOL 2051 - General Biology I or
- BIOL 2095 - Honors General Biology I

- BIOL 2071 - General Biology Laboratory I or
- BIOL 2096 - Honors General Biology Lab I
• BIOL 2061 - General Biology II or
• BIOL 2097 - Honors General Biology II

• BIOL 2081 - General Biology Laboratory II or
• BIOL 2098 - Honors General Biology Lab II

Take two of the following courses:

• BIOL 3411 - Principles of Ecology
• BIOL 3611 - General Cell Biology
• BIOL 3832 - General Genetics
• BIOL 3445 - Introduction to Evolution

Take at least two upper division Biology courses, including at least one lab.

Take all of the following ancillary courses:

• CHEM 2031 - General Chemistry I or
• CHEM 2081 - Honors General Chemistry I

• CHEM 2038 - General Chemistry Laboratory I or
• CHEM 2088 - Honors General Chemistry I Laboratory

• CHEM 2061 - General Chemistry II or
• CHEM 2091 - Honors General Chemistry II Lecture

• CHEM 2068 - General Chemistry Laboratory II or
• CHEM 2098 - Honors General Chemistry II Laboratory

Biophysics Minor

Introduction

Please click here to see Physics department information.

The minor in biophysics enables students with primary interests in biology, chemistry, health sciences, mathematics, anthropology, psychology, or other disciplines to explore the deep connections between fundamental physical processes and the functions and development of life. Using mathematical and computational models as well as precise experimental measurements and advanced instrumentation, biophysics explores living processes within a framework that builds upon fundamental physics concepts of mechanics, electrodynamics, statistical physics, and quantum physics. Students taking a minor in biophysics will be able to synthesize some or all of these areas of physics at a mature level of understanding into their primary field(s) of study, bringing an enriched array of intellectual and experimental tools to the pursuit of their professional goals.

Program Delivery

• This is an on-campus program.

Declaring This Minor
• Please see your advisor.

General Requirements

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

• CU Denver General Graduation Requirements
• Click here for information about Academic Policies

Program Requirements

1. A minimum 2.0 GPA is required to qualify for the minor.
2. At least 12 hours of required minor courses must be completed with a grade of C or higher.
3. Students must complete at least 9 hours of the minor in residence at CU Denver.

Take all of the courses in one of the following four course Physics lecture/lab sequences:

• PHYS 2010 - College Physics I
• PHYS 2030 - College Physics Lab I
• PHYS 2020 - College Physics II
• PHYS 2040 - College Physics Lab II
• or
• PHYS 2311 - General Physics I: Calculus-Based
• PHYS 2321 - General Physics Lab I
• PHYS 2331 - General Physics II: Calculus-Based
• PHYS 2341 - General Physics Lab II

Take both of the following upper division biophysics courses:

• PHYS 3151 - Biophysics Outlook I
• PHYS 3161 - Biophysics Outlook II

Take at least one of the following:

• PHYS 3251 - Biophysics of the Body or
• PHYS 3252 - Biophysics of the Body NM
• PHYS 3451 - Biophysics of the Cell or
• PHYS 3452 - Biophysics of the Cell NM
• PHYS 4351 - Bioelectromagnetism or
• PHYS 4352 - Bioelectromagnetism NM
• PHYS 4840 - Independent Study: PHYS

Additional biophysics-related special topics or elective courses may be approved by the department advisor. Such courses include topics such as Radiation Physics in Biomedicine, Computational Modeling in Biophysics, Nonlinear Dynamics in Biomedicine, and specialized courses in biophysics-related instrumentation.

**Note: the courses containing "NM" are versions whose math and use of prior physics knowledge has been adjusted - in terms of grading and assignments - for students who have taken fewer math and physics courses than physics majors (NM stands for non-majors). Both versions are meant to be content rich and conceptually challenging, still require quantitative modeling, and are
offered simultaneous by the same instructor. Students with strong math backgrounds are encouraged to take the “majors” (xx51) version. Either one or the other version can count toward the minor, but not both.

**Business Administration Minor**

**Introduction**

Please click here to see Business School information.

Business minors can give you an edge in your career.

By adding a business minor to a liberal arts, arts and media, architecture, or engineering degree you will gain an edge in the job market. The business minor allows you to focus on a specific area of business that fits your career goals.

The Business School offers all undergraduate students at CU Denver the opportunity to add a minor in business administration.

**Program Delivery**

- This is an on-campus program.

**Declaring This Minor**

- As a CU Denver Undergraduate student, you need a 2.0 GPA to be accepted for a business minor.

**General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

**Program Requirements**

1. Please see an advisor regarding residency requirements.
2. If the student has already taken the equivalent of one or more of these courses, other higher-level business courses may be substituted with Business School approval.
3. Students must maintain or exceed a 2.0 GPA to graduate with the minor.

Take all of the following courses:

- MGMT 1000 - Introduction to Business or
- ISMG 2050 - Introduction to Business Problem Solving
- ACCT 2200 - Financial Accounting and Financial Statement Analysis
Take three of the following courses:

- BANA 3000 - Operations Management
- BLAW 3050 - Business Law and Ethics
- ENTP 3000 - Principles of Entrepreneurship
- FNCE 3000 - Principles of Finance
- INTB 3000 - Global Perspectives
- ISMG 3000 - Technology In Business
- MGMT 3000 - Managing Individuals and Teams
- MKTG 3000 - Principles of Marketing

Chemistry Minor

Introduction

Please click here to see Chemistry department information.

The objective of the chemistry minor is to provide broad introductory course work and laboratory experience to science majors without the more technical mathematical and chemical prerequisites required of the chemistry major. The chemistry minor is open to all CLAS students and should prove beneficial for science majors, pre-professional health science majors and students seeking science education certification.

These degree requirements are subject to periodic revision by the academic department, and the College of Liberal Arts and Sciences reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

Program Delivery

- This is an on-campus program.

Declaring This Minor

- To register your minor in chemistry, please visit the CLAS advising office in NC 4002. After establishing your minor status, you are encouraged to meet with the chemistry minor advisor, Dr. Pricilla Burrow.

General Requirements

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

Program Requirements

1. A minimum of 20 semester hours of chemistry courses, including at least 10 at the upper division level.
2. Upper-division course work must include three of the six subdisciplines that comprise chemistry: analytical, biochemistry, inorganic, organic, physical and environmental chemistry.
3. A minimum 2.0 GPA for chemistry courses taken at CU Denver.
4. All chemistry minor courses must be taken for a letter grade rather than with the pass/fail grading option.
5. No grade below C- (1.7) may be applied towards a minor in chemistry.
6. To satisfy the department residency requirement, a minimum of 7 upper-division hours of chemistry must be taken at the Denver campus.

Take courses from three of the following six subdisciplines. Choose from the following suggested courses, or other electives approved by your Chemistry Minor advisor:

**Analytical**
- CHEM 3111 - Analytical Chemistry
- CHEM 3118 - Analytical Chemistry Laboratory

**Biochemistry**
- CHEM 3810 - Biochemistry

**Organic**
- CHEM 3411 - Organic Chemistry I or
- CHEM 3481 - Honors Organic Chemistry I
- CHEM 3418 - Organic Chemistry Laboratory I or
- CHEM 3488 - Honors Organic Chemistry Laboratory I
- CHEM 3421 - Organic Chemistry II or
- CHEM 3491 - Honors Organic Chemistry II
- CHEM 3428 - Organic Chemistry Laboratory II or
- CHEM 3498 - Honors Organic Chemistry Laboratory II

**Inorganic**
- CHEM 3011 - Inorganic Chemistry

**Physical**
- Course selections to be announced

**Environmental**
- CHEM 4700 - Environmental Chemistry

**Chinese Studies Minor**

**Introduction**

Please click here to see Modern Languages department information.
This innovative program offers specialized study of China through course work in the related disciplines of language, anthropology, history, geography, literature, political science and business. China's economic and political presence is increasingly prominent in the United States. According to a recent national survey, Chinese is the fastest-growing foreign language in American colleges and universities. CU Denver is uniquely positioned to make use of its location as the cultural, economic and political center of the Rocky Mountain region and of its diverse, well-trained and highly qualified faculty to offer a course of interdisciplinary studies related to China.

The increasing prominence of China in world affairs has made knowledge of Chinese language and cultures a valuable asset in numerous fields. Today, career opportunities abound for Chinese studies graduates in government, international business, banking and financial services, law, medicine, journalism and graduate study in sinology. The breadth of the program's course offerings, coupled with the resources of the faculty, ensures that its graduates will be especially well prepared for any of these professional pursuits.

The program in Chinese studies offers a host of study abroad opportunities throughout the academic year and every summer. CU Denver has on-going programs at the China Agricultural University in Beijing. Study abroad programs of two weeks to one year in length may be arranged, and program faculty can help students enroll in intensive Chinese language programs. Students pursuing the minor in Chinese language and area studies are encouraged to complete the program with a period of residence and study in a Chinese-speaking region.

Program Director: Dr. Kuan-Yi Rose Chang  
Advisor: Dr. Kuan-Yi Rose Chang, CLAS, Campus Box 144, NC 5014  
Tel: 303-556-2434  
Fax: 303-556-4861  
Email: kuan-yi.chang@ucdenver.edu

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

**Program Delivery**

- This is an on-campus program.

**Declaring This Minor**

- Please see your advisor.

**General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

**Program Requirements**

1. The minor requires a total of 21 semester hours.
2. A minimum of 15 semester hours must be taken from Denver campus faculty.
3. All courses must be completed with a grade of C (2.0) or better.
Take the following required course:

- * CHIN 1000 - China and the Chinese
- *CHIN 1000 should be taken toward the beginning of the minor.

Take at least one of the following language courses:

- CHIN 1010 - Beginning Chinese I
- CHIN 1020 - Beginning Chinese II
- CHIN 2110 - Second Year Chinese I
- CHIN 2120 - Second Year Chinese II

Take an additional thirteen to fifteen hours from the following courses, or any course approved in advance by the Chinese Studies Program Director. Students are encouraged to contact the program advisor to devise a study plan:

- ANTH 4000 - Special Topics in Anthropology
- CHIN 3200 - Contemporary Chinese Society and Culture
- FINE 4750 - Arts of China
- GEOG 3160 - Geography of China
- HIST 3470 - Intro to East Asia: Since 1800
- HIST 4420 - Traditional China: China to 1600
- HIST 4421 - Modern China
- HIST 4422 - Lving thr Mao's China: Life, Mat. Cult, Movies, 1949-76
- PSCI 4186 - East Asia in World Affairs
- PSCI 4615 - Politics and Government of China
- PSCI 4726 - Russian and Chinese Foreign Policy
- PHIL 3666 - Asian Philosophies and Religions
- PHIL 3981 - Chinese Philosophy and Culture

China-related travel study, taken under the following course numbers:

- ANTH 4995 - Travel Study
- CHIN 3995 - Travel Study
- COMM 4995 - Travel Study
- PSCI 4995 - Travel Study

Communication Minor

Introduction

Please click here to see Communication department information.

The minor in communication is designed to provide students who are not communication majors with knowledge and skills in communication that are useful in any discipline or profession.

Knowledge in any area of study, whether in business, politics, biology or sociology, means little unless it can be communicated effectively. The minor in communication is designed to provide students who are not communication majors with knowledge and skills in communication that are useful in any discipline or profession.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly
urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

**Program Delivery**

- This program is offered both on-campus and online.

**Declaring This Minor**

- Please see your advisor.

**General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

**Program Requirements**

1. The Communication minor requires 18 semester hours (six courses).

   Take **all** of the following Communication courses:

   - COMM 1011 - Fundamentals of Communication
   - COMM 1021 - Introduction To Media Studies
   - COMM 2020 - Communication, Citizenship, and Social Justice

   Take **one** of the following Communication courses:

   - COMM 1001 - Presentational Speaking
   - COMM 2050 - Business and Professional Speaking

   In addition to the four courses specified above, students must take **two** upper-division courses (3000 level or above) to be selected with the aid of the undergraduate advisor in communication.

**Computer Science Minor**

**Introduction**

Please click here to see Computer Science department information.

The Department of Computer Science and Engineering offers a minor in computer science. The requirements for the minor are listed below.

**Program Delivery**
• This is an on-campus program.

Declaring This Minor

• The student must file a minor declaration form with the Engineering Student Services office in North Classroom, 2605. For more information or an advising appointment, contact the Department of Computer Science and Engineering in the Lawrence Street Center, 8th floor, or by phone at 303-315-1411.

General Requirements

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

• CU Denver General Graduation Requirements
• Click here for information about Academic Policies

Program Requirements

1. Any undergraduate student currently enrolled in a CU Denver degree program with a major other than computer science and engineering may earn a minor in computer science. This includes students from the College of Engineering and Applied Science, the College of Liberal Arts and Sciences, the Business School, the College of Arts & Media and the School of Public Affairs.
2. A student must fulfill all prerequisites for the courses he/she selects. See the catalog course descriptions for prerequisite information for each course.
3. The student must complete (with a C- or better) three additional computer science and engineering courses (CSCI) at the 3000-level or higher from an approved list of computer science courses, available in the CSE department, and must obtain an approved plan from a Computer Science and Engineering faculty advisor.
4. All computer science and engineering courses (CSCI) numbered 3000 and above must be taken from the CSE department at the University of Colorado Denver and be from the approved list of courses for the minor in computer science.
5. At the time of graduation, the student must have a CU Denver cumulative GPA of 2.0 and must have a 2.0 GPA for the eight classes taken for the minor.
6. All courses taken for the minor must be completed with a grade of C- or better.

Take all of the following required courses:

• MATH 1401 - Calculus I
• MATH 2411 - Calculus II
• CSCI 1410 - Fundamentals of Computing
• CSCI 1411 - Fundamentals of Computing Laboratory
• CSCI 2312 - Intermediate Programming
• CSCI 2421 - Data Structures and Program Design
• CSCI 2511 - Discrete Structures

Take three additional computer science courses at the 3000-level or higher with the approval of an undergraduate advisor (see #3 above for details).

Creative Writing Minor

Introduction
Please click here to see English department information.

The creative writing minor gives students the opportunity to complement their area of major study with experience writing and reading poetry or fiction.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

Program Delivery

- This is an on-campus program.

Declaring This Minor

- Please see your advisor.

General Requirements

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

Program Requirements

1. Students must complete a total of 15 hours.
2. Only courses completed with a grade of C (2.0) or better may be counted toward the minor.
3. Students must take ENGL 1020 before beginning the minor.
4. Courses in a minor cannot be counted toward the English major or English Writing major.

Take all of the following required courses:

- ENGL 2154 - Introduction to Creative Writing
- ENGL 2450 - Introduction to Literature

Take one of the following courses:

- ENGL 3020 - Poetry Workshop
- ENGL 3050 - Fiction Workshop

Take one of the following courses:

- ENGL 4025 - Advanced Poetry Workshop
- ENGL 4055 - Advanced Fiction Workshop
- ENGL 3___ Writing Workshop (3000-level not previously taken)

Students who have taken ENGL 3020, take one of the following Poetry courses:
Criminal Justice Minor

Introduction

Please click here to see School of Public Affairs information.

A minor in criminal justice will provide students with foundational knowledge of criminology and criminal justice. Students majoring in sociology, psychology, political science, and related fields are likely to interact with the criminal justice system in their careers and would benefit from the addition of the CJ minor to their degree plan.

Program Delivery

- This is an on-campus and online program.

Declaring This Minor

- Please see your advisor.

General Requirements

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

Program Requirements

1. A minor in Criminal Justice requires 18 semester hours of course work.
2. A maximum of 9 transfer credits may be applied to the minor.
3. Electives must be taken from outside the student's major.

Take all of the following required courses:

- CRJU 1000 - Criminology and Criminal Justice: An Overview
• CRJU 2041 - Crime Theory and Causes

Take one of the following courses:

• CRJU 4042 - Corrections
• CRJU 4043 - Law Enforcement
• CRJU 4044 - Courts and Judicial Process

Take three additional upper-division elective courses in Criminal Justice or ancillary fields.

Culturally and Linguistically Diverse Education Minor

Introduction

Please click here to see School of Education and Human Development information.

The Culturally and Linguistically Diverse Education (CLDE) Minor is designed to provide students with an understanding of culturally and linguistically diverse students, families and communities, particularly in their relationship to public institutions. This minor is a powerful addition to majors in elementary education, sociology, psychology, ethnic studies, gender studies, public health, communication, the humanities, and anyone becoming a teacher as it provides professionals with a strong understanding of how to serve culturally and linguistically diverse students in school and community environments.

Please contact the advisor for the course list.

Program Delivery

This is an on-campus program with a variety of delivery options for many of our courses including hybrid, evening, and online courses.

Declaring This Minor

If you are currently a CU Denver student please contact the Undergraduate Advisor in the School of Education & Human Development for specific meeting times to discuss the process.

General Requirements

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

• CU Denver General Graduation Requirements
• Click here for information about Academic Policies

Program Requirements

1. To complete a minor in CLDE, a student will need to complete 15 credit hours of CLDE courses with a minimum grade of C (2.0).
2. Of those CLDE courses, at least 9 credits must be completed at the University of Colorado Denver.
3. Transfer courses must be approved by faculty and/or advisor to apply to the minor.
Take 15 semester hours of CLDE courses.

Demography Minor

Introduction

Please click here to see Health and Behavioral Sciences department information.

Demography is the scientific study of human populations. It is an interdisciplinary field that examines the causes and consequences of health and mortality, population aging, migration, fertility, maternal and child health, interactions between human populations and the environment and population growth and decline.

Students working toward a minor in demography within the Department of Health and Behavioral Sciences (HBS) will acquire focused training in theories and methods of demography. The minor will help students develop important skills in critical thinking and quantitative reasoning, and will prepare them for graduate-level training in demography or related fields and for jobs requiring an understanding of population dynamics. Demographers are frequently employed in occupations including academia, risk assessment, marketing, consulting, non-profits and various local, state and federal government agencies.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

Program Delivery

- This is an on-campus program.

Declaring This Minor

- Please see your advisor.

General Requirements

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

Program Requirements

1. All students must complete a minimum of 18 credits drawn from the approved course list (see below).
2. Although students may count courses taken for other majors or minors toward the requirements for the demography minor, they must still take at least 18 credits that count exclusively toward the demography minor.
3. All undergraduate CU Denver students are eligible to take this minor.
4. Students must achieve a C (2.0) or above in all the courses for them to be counted toward the minor.
5. A minimum of 15 credit hours, at least 12 of which must be upper division courses, must be taken in residence at CU Denver.
Note: Students should check for prerequisites when enrolling in courses.

- SOCY 4220 - Population Change and Analysis

**Quantitative Methods** - take at least one of the following; additional courses may not be counted toward the minor:

- MATH 2830 - Introductory Statistics
- PBHL 3001 - Introduction to Epidemiology

**Strong Demographic Themes** - take at least one of the following; more may be counted toward the minor:

- ANTH 4260 - Human Reproductive Ecology
- PBHL 3071 - Global Topics In Sexual and Reproductive Health
- PBHL 4020 - Global Health: Comparative Public Health Systems
- PBHL 4040 - Social Determinants of Health
- SOCY 3520 - Topics in Sociology (when offered as Medical Sociology topic)
- SOCY 4440 - Social Inequality
- ECON 3100 - Economics of Race and Gender
- ECON 3400 - Economics of Sex and Drugs
- GEOG 1602 - Urban Studies and Planning
- GEOG 3300 - Population and Resources in the World Environment
- GEOG 3501 - Geography of Health
- PBHL 3002 - Ethnicity, Health and Social Justice
- PBHL 3031 - Health, Human Biology and Behavior
- PBHL 3200 - Human Migration: Nomads, Sojourners, and Settlers or
- ANTH 3200 - Human Migration: Nomads, Sojourners, and Settlers
- PBHL 4200 - The Global HIV/AIDS Epidemic or
- HBSC 5200 - The Global HIV/AIDS Epidemic
- PSCI 4545 - Immigration Politics
- SOCY 3700 - Sociology of the Family
- SOCY 4772 - Advanced Topics in Sociology (when offered as Crime and Inequality over the Life course topic)

**Digital Design Minor**

**Introduction**

Please click here to see general Visual Arts information.

Digital design integrates aesthetic, creative and critical thought with expertise in advanced electronic media. Configured as an interdisciplinary arts and design laboratory, digital design offers a hands-on education combining new art technologies and design concepts in a concentrated theoretical framework that promotes an understanding of the cultural impact and uses of digital technologies. Through this interdisciplinary approach combining arts and communication, digital design strives to produce artists and designers who will use technology in innovative ways in both commercial and artistic spheres.

**Program Delivery**
• This is an on-campus program.

Declaring This Minor

• Students who are applying for entrance into the digital design minor are required to submit a designed portfolio and transcript(s) from CU Denver and all previous post-secondary educational institutions. For specific application details, see http://www.designucd.com/portfolio/. The digital design course sequence starts in fall semester. Students who meet the following requirements can apply. Upon acceptance students can register for upper-division digital design courses.

ELIGIBILITY

The student has completed, or is in the process of completing, the following foundation studio courses with a grade of C (2.0) or better in each:

- FINE 2405 - Introduction to Digital Design
- FINE 2415 - Typography Studio

FINE 2405 and 2415 are both offered fall-only at CU Denver.

Those applying to the minor (and not the Digital Design emphasis) are not required to complete the following course or its college-level equivalent:

- FINE 1400 - Two Dimensional Design

However, students must show equivalent studio work in their application portfolios.

APPLICATION PORTFOLIO REQUIREMENTS

To properly prepare your application, refer to http://www.designucd.com/portfolio/ for detailed instructions. Applications are due by 5 p.m. on December 1 or on the following business day if the deadline falls on a weekend or holiday.

Applications are only accepted online via the portfolio service SlideRoom.com and must be formatted to the specifications listed on http://www.designucd.com/portfolio/. The portfolio samples should consist of images (JPGs) and embedded video. Written work should be integrated into the submission. It is VERY important for students to visit the submission page early and begin uploads two weeks before the due date. Late submissions due to technical difficulties on the part of the applicant will NOT be accepted.

Portfolio of Images

The portfolio must include 13-17 electronic examples of the student's creative work, consisting of a Design Project (including a writing sample) and works from FINE 2405 Introduction to Digital Design and FINE 2415 Typography. Two to five additional creative works may also be included within the maximum of 17 works altogether.

Course Transcripts

These may be official or unofficial transcripts from CU Denver and previous post-secondary institutions.

EVALUATION PROCESS
A committee of design faculty members reviews the portfolio and grades. For acceptance, the committee looks for an understanding of 2D design, writing and presentation skills.

If not admitted into the digital design minor, a student has the choice of attempting the review process again the following year or applying to another minor. Students not admitted into the digital design minor are encouraged to schedule a meeting with a digital design faculty member to learn of ways to improve portfolios for future submissions.

**Broad criteria for the portfolio evaluation are as follows:**

- **Process Research and Analysis** - Does the portfolio demonstrate an ability to compile relevant information by identifying resources necessary to formulate a deeper understanding of context(s)?
- **Design Principles** - Does the portfolio demonstrate awareness of design principles through various means of technical production and successful color experimentation?
- **Visual Literacy** - Does the portfolio reflect sensitivity to design concepts and visual logic, and does it demonstrate fundamental understanding of composition? Does the work communicate effectively?
- **Use of Imagery** - Does the portfolio demonstrate a student's potential ability to create and develop visual form in response to communication problems?
- **Expressive Typography** - Does the portfolio demonstrate a burgeoning awareness of the importance of risk-taking while solving typographic design problems?
- **Generating and Selecting Ideas** - Does the portfolio demonstrate the student's ability to generate multiple solutions to artistic problems and utilize process to select the most effective solutions?
- **Technical Skill** - Does the portfolio reflect a strong knowledge of tools and materials and an aptitude for digital design skills?
- **Conceptual Skills** - Do the portfolio and writing sample demonstrate analytical thinking as it applies to visual art and design? Is there a developing conceptual exploration of the digital medium?
- **Writing Sample** - Does the writing demonstrate the student's critical thinking skills regarding the work and ability to address an assignment in a notable way?
- **Presentation** - Is the portfolio well-crafted and well organized in content and presentation? Are all of the required components included?
- **Academic Performance** - Do the student's grades reflect a commitment to learning and growth?

**QUESTIONS**

Please contact CAMadvising@ucdenver.edu for minor and portfolio information, or contact the Digital Design area head by calling the Visual Arts Department at (303) 315-1501.

**General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

**Program Requirements**

1. All courses for this minor must be taken at CU Denver unless approved otherwise by the digital design faculty advisor.
2. A minimum grade of C (2.0) is required for each course applied toward a CAM major, minor or certificate requirement. A grade of C- (1.7) or lower will not fulfill a major, minor or certificate requirement. A grade of P is acceptable for courses in which the only grade available is Pass or Fail.
3. Students may use up to 6 semester hours to fulfill both major and minor requirements; the remaining semester hours for the minor must be taken in addition to major requirements.

Take all of the following Digital Design Minor courses (entry level):

- FINE 2405 - Introduction to Digital Design
- FINE 2415 - Typography Studio
- FINE 4600 - History of Modern Design: Industrial Revolution-Present

Take all of the following Digital Design Minor courses (available only to students accepted to minor via portfolio review):

- FINE 3414 - Motion Design I
- FINE 3415 - Design Studio I
- FINE 3424 - Interactive Media
- FINE 3434 - 3D Motion Design

Digital Learning Minor

Introduction

Please click here to see School of Education and Human Development information.

The Digital Learning (DIGD) Minor prepares students to use media and emerging technologies to create and share knowledge with others. Inspired by the maker movement, our students work, play, and solve problems together as they explore learning uses of new media, digital storytelling, mobile learning, games, and social media/networking. The Digital Learning minor augments any chosen major by helping students be better learners and better knowledge producers in the workplace.

Please contact the advisor for the course list.

Program Delivery

This is an on-campus program with a variety of delivery options for many of our courses including hybrid, evening, and online courses.

Declaring This Minor

If you are currently a CU Denver student please contact the Undergraduate Advisor in the School of Education & Human Development for specific meeting times to discuss the process.

General Requirements

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies
Program Requirements

1. To complete a minor in Digital Learning, a student will need to complete 15 credit hours of Digital Learning courses with a minimum grade of C (2.0).
2. Of those Digital Learning courses, at least 9 credits must be completed at the University of Colorado Denver.
3. Transfer courses must be approved by faculty and/or advisor to apply to the minor.

Take 15 semester hours of Digital Learning courses.

Economics Minor

Introduction

Please click here to see Economics department information.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

Program Delivery

- This is an on-campus program.

Declaring This Minor

- Please see your advisor.

General Requirements

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

Program Requirements

1. Students minoring in economics must complete a minimum of 15 semester hours in economics.
2. At least three upper-division courses must be completed at CU Denver only the equivalent of ECON 2012 and ECON 2022 can be transferred in from other institutions and no grade below C- will count toward fulfillment of the minor requirements.
3. At least two upper-division courses must not overlap with courses required in the student's major program.

Take the following required courses:

- ECON 2012 - Principles of Economics: Macroeconomics
- ECON 2022 - Principles of Economics: Microeconomics and
Three upper-division electives in economics: 9 semester hours (ECON 3100 - Economics of Race and Gender is acceptable)

Environmental Sciences Minor

Introduction

Please click here to see Geography and Environmental Sciences department information.

The environmental sciences minor offers students exposure to the breadth of environmental issues. Students may emphasize the natural/physical sciences, the social sciences and humanities or structure their own mixed emphasis.

These degree requirements are subject to periodic revision by the academic department, and the College of Liberal Arts and Sciences reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

Program Delivery

- This is an on-campus program.

Declaring This Minor

- Please see your advisor.

General Requirements

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

Program Requirements

1. All work submitted for an environmental sciences minor must have a grade of C (2.0) or above.
2. The lecture/laboratory sequence can be part of the requirements for the major, but not in the student's major department (i.e., a biology major cannot use the general biology sequence, but could use the general chemistry sequence, which is also required for the biology major).
3. Students must take a minimum of 9 hours of the upper-division courses at the Downtown Campus.
4. If the student plans to go on to the MS in Environmental Sciences program, he/she should choose courses other than CHEM 4700. This is a core course in the MS in Environmental Sciences program.
5. Many of the upper-division courses have prerequisites; the student must check the catalog for prerequisite requirements for these courses.
6. The four upper-division elective courses for the Environmental Sciences minor cannot be from the student's major discipline, even if the particular course is not counted toward the major.

Take two of the following lecture/laboratory courses (see Minor Requirements, note 2, above):

- BIOL 2051 - General Biology I and
• BIOL 2071 - General Biology Laboratory I
• BIOL 2061 - General Biology II and
• BIOL 2081 - General Biology Laboratory II
• CHEM 2031 - General Chemistry I and
• CHEM 2038 - General Chemistry Laboratory I
• CHEM 2061 - General Chemistry II and
• CHEM 2068 - General Chemistry Laboratory II
• ENVS 1042 - Introduction to Environmental Sciences
• GEOL 1072 - Physical Geology: Surface Processes
• GEOL 1082 - Physical Geology: Internal Processes
• PHYS 2010 - College Physics I and
• PHYS 2030 - College Physics Lab I
• PHYS 2020 - College Physics II and
• PHYS 2040 - College Physics Lab II

Take three of the following courses outside of the student's major discipline (see Minor Requirements, notes 5 and 6, above):

• ANTH 4010 - Medical Anthropology: Global Health
• BIOL 3411 - Principles of Ecology
• CHEM 4700 - Environmental Chemistry (see Minor Requirements, note 4, above)
• ECON 4540 - Environmental Economics
• ENVS 3082 - Energy and the Environment or
• PHYS 3082 - Energy and the Environment
• GEOG 3232 - Weather and Climate
• GEOG 3240 - Colorado Climates
• GEOG 4020 - Earth Environments and Human Impacts
• GEOG 4060 - Remote Sensing I: Introduction to Environmental Remote Sensing
• GEOG 4080 - Introduction to GIS
• GEOG 4090 - Environmental Modeling with Geographic Information Systems
• GEOG 4220 - Environmental Impact Assessment
• GEOG 4230 - Hazard Mitigation and Vulnerability Assessment
• GEOG 4240 - Applied Geomorphology
• GEOG 4265 - Sustainability in Resources Management
• GEOG 4270 - Glacial Geomorphology
• GEOG 4335 - Contemporary Environmental Issues
• GEOG 4350 - Environment and Society in the American Past
• GEOG 4420 - The Politics of Nature
• GEOL 4030 - Environmental Geology
• PSCI 4354 - Environmental Politics

Ethics Minor

Introduction
Please click here to see Philosophy department information.

These degree requirements are subject to periodic revision by the academic department, and the College of Liberal Arts and Sciences reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

Program Delivery

- This is an on-campus program.

Declaring This Minor

- Please see your advisor.

General Requirements

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

Program Requirements

1. A total of 15 semester hours is required for an ethics minor, with a minimum grade of C (2.0) in each course.
2. For those students who major in philosophy and minor in ethics, no course can satisfy the requirements for both. For example, if a student takes PHIL 4150, Twentieth Century Ethics, it cannot satisfy the requirement in the major for a course in 19th or 20th century philosophy.

Take the following required course:

- PHIL 1020 - Introduction to Ethical Reasoning

Take four of the following courses:

- PHIL 3002 - Ancient Greek Philosophy
- PHIL 3150 - History of Ethics
- PHIL 3200 - Social and Political Philosophy
- PHIL 3250 - Business Ethics
- PHIL 3280 - War and Morality
- PHIL 3500 - Ideology and Culture: Racism and Sexism
- PHIL 3550 - Philosophy of Death and Dying
- PHIL 4150 - Twentieth Century Ethics
- PHIL 4242 - Bioethics
- PHIL 4250 - Environmental Ethics
- PHIL 4260 - Philosophy of Law
Ethnic Studies Minor

Introduction

Please click here to see Ethnic Studies department information.

The minor in ethnic studies offers students the opportunity to enhance and broaden the body of knowledge acquired in their chosen majors and to apply it in a variety of careers involving intercultural relations.

These degree requirements are subject to periodic revision by the academic department, and the College of Liberal Arts and Sciences reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

Program Delivery

- This is an on-campus program with some courses available online.

Declaring This Minor

- Please click here to go to information about declaring a minor.

General Requirements

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

Program Requirements

1. Students are required to complete 18 semester hours (6 courses) in ethnic studies with a grade of C or better.
2. These hours are to be taken with CU Denver faculty (any exception needs to be approved by the ethnic studies advisor).
3. At least 9 of the required 18 hours must be in courses numbered 3000 or above.

Take the following required course:

- ETST 2000 - Introduction to Ethnic Studies

Take four upper- or lower-division ETST courses from the following four focal U.S. racial/ethnic groups:

- Asian-Americans
- African-Americans
- American Indians
- Chicanos/as and Latinos/as
Take one ETST elective course of your choice, including any of the following:

- ETST 2024 - Race and Ethnic Relations
- ETST 2036 - American Indian Cultural Images
- ETST 2105 - African American Contemporary Social Issues
- ETST 2115 - Genocide in the 21st Century: Darfur and Beyond
- ETST 2125 - The Bi-Racial Family
- ETST 2145 - The Gullah in Novel and Film
- ETST 2155 - African American History
- ETST 2165 - Cultural Diversity Awareness in the Workplace
- ETST 2294 - Race and the Media
- ETST 2400 - Issues in Chicano/a Education
- ETST 2496 - American Indian Literature
- ETST 2606 - The American Indian Experience
- ETST 2840 - Independent Study: ETST
- ETST 2939 - Internship
- ETST 3001 - Urban Sociology
- ETST 3002 - Ethnicity, Health and Social Justice
- ETST 3010 - Conference Participation
- ETST 3108 - Chicano/a and Latino/a History
- ETST 3110 - Indigenous Studies
- ETST 3129 - Contemporary Latin American Literature
- ETST 3211 - Hip Hop Music & Culture
- ETST 3216 - Federal Law and American Indians
- ETST 3224 - U.S. Middle East Culture and Religion
- ETST 3230 - African American Family
- ETST 3254 - Race and Ethnicity in the Inner City
- ETST 3272 - Global Media
- ETST 3274 - Power, Poverty, Culture
- ETST 3297 - Social History of Asian Americans
- ETST 3300 - Shamanic Traditions
- ETST 3307 - Selected Topics: Asian Americans
- ETST 3350 - Colonial Latin America
- ETST 3357 - Asian American Literature
- ETST 3365 - Aztlán in the United States: Chicano History from 1821
- ETST 3394 - Literature of Social Protest from an Ethnic Perspective
- ETST 3396 - History of the American Indian
- ETST 3408 - Social Psychology of Latinos/as
- ETST 3567 - Asian American Women
- ETST 3574 - Topics in Ethnic Studies
- ETST 3616 - Selected Topics: American Indians
- ETST 3697 - Contemporary Asian American Experience
- ETST 3704 - Culture, Racism and Alienation
- ETST 3794 - Ethnicity and Race in Contemporary American Culture
- ETST 3838 - History of the Mexican American in Colorado
- ETST 3840 - Independent Study: ETST
- ETST 3842 - Independent Study: ETST
- ETST 3939 - Internship
- ETST 3995 - Travel Study
- ETST 4000 - Research Methods in Ethnic Studies
- ETST 4144 - Indigenous Political Systems
- ETST 4146 - Indigenous Politics
Film Studies Minor

Introduction

The film studies minor offers students the opportunity to gain an informed understanding of the sophisticated medium of film, its language and history. Courses cover critical writing about cinema, creative screenwriting, the evolution of Hollywood movies, international cinema and film in its cultural context. The film studies minor makes a valuable complement to a range of undergraduate majors.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

Program Delivery

- This is an on-campus program.

Declaring This Minor

- Please see your CLAS advisor.

General Requirements

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

Program Requirements

1. Students must complete a total of 15 hours for the film studies minor.
2. A minimum grade of C (2.0) is required for each course applied toward a CAM major, minor or certificate requirement. A grade of C- (1.7) or lower will not fulfill a major, minor or certificate requirement. A grade of P is acceptable for courses in which the only grade available is Pass or Fail.
3. None of the required 15 hours may be taken Pass/Fail.
4. A minimum of 9 hours must be taken with CU Denver faculty.
5. Students are also advised to fulfill the liberal arts and sciences core curriculum writing requirements before enrolling in upper-division topics in film courses.
6. No more than two online film studies courses can be counted toward the minor.
7. Courses in a minor cannot be counted toward the English major or English Writing major; consult an English advisor for substitutions.

Take all of the following required courses:

- ENGL 2250 - Introduction to Film
- ENGL 2450 - Introduction to Literature

Take one of the following courses:

- ENGL 3070 - Film History I
- ENGL 3080 - Film History II

Take two additional courses:

- ENGL 2415 - Introduction to Movie Writing
- ENGL 3070 - Film History I (if not taken above)
- ENGL 3080 - Film History II (if not taken above)
- ENGL 3075 - Film Genres *
- ENGL 3085 - Film Directors *
- ENGL 3200 - From Literature to Film
- ENGL 3300 - Topics in Film *
- ENGL 4420 - Film Theory and Criticism
- ENGL 4770 - Topics in English: Film and Literature (film topics only) *

*Courses are repeatable if taken as a different genre/director/topic.

Finance Minor

Introduction

Please click here to see Business School information.

Students in other undergraduate schools and colleges at CU Denver wishing to complete the Finance minor need to complete the course work described below.

Program Delivery

- This is an on-campus program.

Declaring This Minor
To declare the Finance minor, students must have a 3.0 GPA, either cumulative or from their last 24 completed semester hours.

General Requirements

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

Program Requirements

1. Students must maintain or exceed a 2.0 GPA to graduate with the minor.
2. A student must take 12 of the 15 hours of required business courses in the minor while in residence at the University of Colorado Denver. If a student has already taken the equivalent of one or more of these courses at another university, other higher-level business courses may be substituted with the approval of the Business School.
3. Students must have declared the Finance minor to register for any of the upper-division FNCE courses or petition separately to take each of these courses.

Take all of the following required prerequisite and proficiency courses:

- MATH 1070 - College Algebra for Business
- MATH 1110 - College Algebra
- ECON 2012 - Principles of Economics: Macroeconomics
- ECON 2022 - Principles of Economics: Microeconomics

Take all of the following courses:

- ACCT 2200 - Financial Accounting and Financial Statement Analysis
- FNCE 3000 - Principles of Finance

Take two of the following courses:

- FNCE 3500 - Management of Business Capital
- FNCE 3600 - Financial Markets and Institutions
- FNCE 3700 - Investment and Portfolio Management
- FNCE 4370 - International Financial Management

Take one of the following courses:

- FNCE 4500 - Corporate Financial Decisions
- FNCE Elective (Can be from list above or any other upper-division FNCE course)

French Minor

Introduction
Please click here to see Modern Languages department information.

These degree requirements are subject to periodic revision by the academic department, and the College of Liberal Arts and Sciences reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

**Program Delivery**

- This is an on-campus program.

**Declaring This Minor**

- Students may declare a major in the CLAS advising office, but should see the French advisor to discuss course selections.

**General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

**Program Requirements**

1. Students minoring in French must complete 15 semester hours of upper-division courses taught in French (courses numbered 3000 and above).
2. The minor in French must include at least one language skills class, chosen from the classes listed below.

Take one of the following courses:

- FREN 3010 - French Phonetics and Pronunciation
- FREN 3020 - Oral Practice
- FREN 3050 - Advanced Grammar and Composition
- FREN 3060 - Advanced French Language Skills

Take four additional upper-division French courses taught in French.

Note: FREN 3200 is taught in English, and does not count toward the minor.

**Geography Minor**

**Introduction**

Please click here to see Geography and Environmental Sciences department information.

These degree requirements are subject to periodic revision by the academic department, and the College of Liberal Arts and Sciences reserves the right to make exceptions and substitutions as judged necessary in individual cases.
Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

**Program Delivery**

- This is an on-campus program.

**Declaring This Minor**

- Please see your advisor.

**General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

**Program Requirements**

1. Students must complete 15 semester hours in geography, including at least 6 semester hours of upper-division courses.
2. Students must achieve a grade of C (2.0) or above on required courses.
3. At least 9 semester hours of geography courses must be completed at CU Denver.

**Geology Minor**

**Introduction**

Please click here to see Geography and Environmental Sciences department information.

These degree requirements are subject to periodic revision by the academic department, and the College of Liberal Arts and Sciences reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

**Program Delivery**

- This is an on-campus program.

**Declaring This Minor**

- Please see your advisor.

**General Requirements**
To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

**Program Requirements**

1. At least two of the upper-division requirements must be completed at CU Denver.
2. Transfer students who have earned the equivalent of all these courses elsewhere must complete a minimum of two of the required upper-division courses at CU Denver.
3. No grade below a C (2.0) will be counted toward the minor requirements.

Take the following **required** courses:

- GEOL 1072 - Physical Geology: Surface Processes
- GEOL 1082 - Physical Geology: Internal Processes

Take **two** of the following courses:

- GEOL 3011 - Mineralogy
- GEOL 3032 - Geology of Colorado
- GEOL 3421 - Sedimentation and Stratigraphy
- GEOL 4020 - Earth Environments and Human Impacts
- GEOL 4030 - Environmental Geology
- GEOL 4240 - Applied Geomorphology
- GEOL 4270 - Glacial Geomorphology
- GEOL 4280 - Environmental Hydrology

*Note:* Any upper-division courses applied to the geography major, option 5, cannot also be applied to the geology minor.

**German Studies Minor**

**Introduction**

Please click here to see Modern Languages department information.

The German Studies minor uses an interdisciplinary approach to learning language that also provides the opportunity to discover the culture of the speakers of German, which can include course work from outside the department. Students improve their German language skills as well as develop cultural knowledge in fields such as history, political science, philosophy, the arts and any of the multiple fields to which the German culture has so richly contributed.

These degree requirements are subject to periodic revision by the academic department, and the College of Liberal Arts and Sciences reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

**Program Delivery**
• This is an on-campus program.

Declaring This Minor

• Please see your advisor.

General Requirements

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

• CU Denver General Graduation Requirements
• Click here for information about Academic Policies

Program Requirements

1. Students minoring in German Studies must maintain a minimum overall GPA of 2.3, and a GPA of 2.5 in courses applied to the German Studies minor.

2. The minimum grade acceptable in any course applied to the German Studies minor is a C (2.0).

3. No courses taken on a pass/fail basis may be credited toward the German Studies minor.

4. Course Substitutions: With prior consent from a CU Denver German faculty advisor, students may apply substitute course work to fulfill the required areas of study. This would include, for example, courses taken outside the department, transfer credit, study abroad course work, etc. Please consult with a CU Denver German faculty advisor to receive permission for course substitution. GRMN 1010 and GRMN 1020 can NOT be applied toward this minor.

5. The German Studies minor requires 6 semester hours of upper-division course work.

6. A minimum of 12 semester hours must be taken from German faculty at CU Denver.

7. Courses taken at other institutions while a student is enrolled at CU Denver may be applied to the minor only with departmental approval before enrollment in those courses.

8. Students who have completed course work through an approved exchange program must also complete a residency requirement of a minimum of 6 credits of upper-division German courses.

9. This residency requirement must include at least 3 semester hours of language skills courses at CU Denver.

10. No portion of these 18 credits may be applied to satisfy the requirement of any specific program outside the German Studies minor (such as satisfying core curriculum requirements) other than the total number of credits required for an undergraduate degree.

11. Students may apply up to 6 semester credits toward the German minor from UCD courses outside the department provided that the content of the course work is pertinent to the study of German language and/or culture (such as courses in history, political science, philosophy, etc.). Students must receive prior approval from a German faculty advisor to apply credits from outside the department toward the German minor.

12. Students enrolled in a degree program, and who complete the Certificate in Applied German Language Skills, satisfy the requirements for a German Studies minor and can earn both upon graduation.

Take 6 semester-hours of Language Proficiency courses.

Skills courses are those taught in German with the goal of improving the student's abilities in spoken and written German.

Any courses taught in German at the 3000 level or higher may be applied toward language proficiency (example courses: GRMN 3030, GRMN 3050, GRMN 3060). Only courses taught in German may apply toward the language proficiency minimum.
Take **3 semester-hours** of required courses in German Culture.

Culture courses are those whose primary content focuses on the aspects of German society, current and/or historical issues. Students may complete this component in any language of instruction. (Examples of such courses include GRMN 1000, GRMN 3200, and may include courses outside the department.)

Take **9 semester-hours** of electives.

These credits may be chosen from any course offerings with a GRMN prefix (such as GRMN 3200) and may also include GRMN 1000, GRMN 2110 and GRMN 2150 with permission from a German faculty advisor. Please note that GRMN 1010 and GRMN 1020 can NOT be applied toward the German minor.

**Health Humanities Minor**

**Introduction**

Please click here to see Health Humanities department information.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

**Program Delivery**

- This is an on-campus program.

**Declaring This Minor**

- Please see your advisor.

**General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

**Program Requirements**

1. Students declaring a minor in HEHM must have at least a 2.5 overall GPA.
2. No grade lower than a C will count towards the minor.
3. At least 12 credits for the minor must be taken with CU Denver faculty.
4. Students may count ONE relevant transfer course toward their elective requirements for the minor.

- Take the following **required** course:
- HEHM 3100 - Introduction to Health Humanities
Take three elective courses. The following list is not exhaustive and continues to be updated. One elective course can be a service learning course or independent study approved by an HEHM advisor. Electives must come from at least two different disciplines and must be at the 3000 or 4000-level.

- ANTH 4600 - Medical Anthropology
- COMM 4500 - Health Communication
- ETST 3002 - Ethnicity, Health and Social Justice
- GEOG 3501 - Geography of Health
- GEOG 4235 - GIS Applications in the Health Sciences
- GEOG 4710 - Disasters, Climate Change, and Health
- HIST 4307 - History of Sexuality
- HIST 4503 - Topics in History of Science
- PBHL 3030 - Health Policy
- PBHL 3070 - Perspectives in Global Health
- PBHL 3041 - Health, Culture and Society
- PBHL 4040 - Social Determinants of Health
- PHIL 4242 - Bioethics
- PSCI 4330 - U.S. Health Policy
- PSYC 3262 - Health Psychology
- SOCY 3440 - Medical Sociology
- * COMM 4550 - Rhetorics of Medicine & Health
- * ENGL 4290 - Rhetoric and the Body
- * HIST 4345 - Gender, Science, and Medicine: 1600 to the Present
- * HIST 4346 - Medicine and Society: the Ancients to the Present

Take one capstone course, identified by an asterisk* in the above list. These courses incorporate substantial original writing or research projects designed to promote broad reflection about the role of culture, society, and ethics in medicine. Students should choose these courses at the culmination of their minor course work.

**History Minor**

**Introduction**

Please click here to see History department information.

These degree requirements are subject to periodic revision by the academic department, and the College of Liberal Arts and Sciences reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

**Program Delivery**

- This is an on-campus program.

**Declaring This Minor**

- Please see your advisor.

**General Requirements**
To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

Program Requirements

1. Students interested in a minor in history are required to complete 18 hours of course work.
2. At least 12 semester hours must be completed at CU Denver.
3. No grade below a C (2.0) will count toward the minor.
4. Students minoring in history must take at least 9 credit hours of upper division (3000- and 4000-level) History courses.

Take a minimum of three semester hours in each of the following areas:

- United States
- Europe
- World.

At least six semester hours of these electives must be upper-division history courses.

Human Development and Family Relations Minor

Introduction

Please click here to see School of Education and Human Development information.

The Human Development and Family Relations (HDFR) minor is designed to give students an understanding of culturally and linguistically diverse family systems. For students who are interested in becoming family therapist, work in community based organizations or work as a university or college advisor/administrator this minor will provide excellent foundational courses in these areas. It also provides students with a family systems and ecological systems theories foundation of families and how they interact with community and educational contexts.

Program Delivery

- This is an on-campus program with a variety of delivery options for many of our courses including hybrid, evening, weekend and online courses.

Declaring This Minor

- If you are currently a CU Denver student please contact the Undergraduate Advisor in the School of Education and Human Development to set up an appointment to discuss the process.

General Requirements

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.
Program Requirements

1. To earn a minor, students must complete 15 approved credit hours specific to the minor, maintain good academic standing in the courses, must complete their undergraduate degree concurrently, must satisfy all requirements in each of the areas below, in addition to their individual major requirements.
2. To complete a minor in HDFR, a student will need to complete 15 semester hours of HDFR courses with a minimum grade of C (2.0) including 1 required and 4 electives.
3. Of those HDFR courses at least 9 credits must be completed at the University of Colorado Denver.
4. Transfer courses must be approved by faculty and/or advisor to apply to the minor.

Take one of the following courses:

- HDFR 2000 - Introduction to Family and Community Services
- HDFR 2200 - Love, Family and Human Development

Take four HDFR electives from the following list (or newly approved HDFR courses). Students will be encouraged to select courses that meet their interest and/or career aspirations. All course selections must be approved by an HDFR/TLED advisor or an HDFR faculty. Please check the university catalog for when courses are offered. Other HDFR/TLED courses will be added to the list as they are designed and approved.

- HDFR 1000 - Global Human Development & Learning
- HDFR 1010 - Life Span Development in Ecological Settings
- HDFR 1020 - Black and Latino Children
- HDFR 2000 - Introduction to Family and Community Services
- HDFR 2110 - Child Ecology
- HDFR 2200 - Love, Family and Human Development (Core approved - Social Sciences)
- HDFR 3100 - Adolescent Ecology
- HDFR 3250 - Families in Global Perspectives (Core approved - International Perspectives)
- HDFR 3260 - Family Systems and Social Justice
- HDFR 3500 - Introduction to Higher Education
- HDFR 4000 - Human Sexuality
- HDFR 4003 - Leadership and Organizations
- HDFR 4004 - Family and Comm. Prog. II Grant Writing/Fundraising
- HDFR 4040 - Latino Families in School and Communities
- HDFR 4050 - Foundations of Student Affairs
- HDFR 4090 - Helping Profession Skills in HDFR
- HDFR 4200 - Adult Ecology
- HDFR 4500 - Diversity, Inclusion, Social Justice in Higher Education
- TLED 2050 - Current Topics in Teaching, Learning & Development (limited to a total of 3 credit hours)
- TLED 2840 - Independent Study in Teaching, Learning & Development (limited to a total of 3 credit hours)
- TLED 2910 - Service Learning in TLED (limited to a total of 3 credit hours)
- TLED 4050 - Special Topics in Teaching, Learning & Development (limited to a total of 3 credit hours)
- EDFN 3000 - Undocumented Mexican Immigration
- EDFN 4000 - Food Justice in City & Schools

International Studies Minor
Introduction

Please click here to see International Studies department information.

As the globe becomes increasingly connected, students gravitate towards classes that provide the interdisciplinary skills and international awareness required for success in the 21st century. The International Studies minor at CU Denver offers students a unique opportunity to create an individually-tailored and relevant minor based upon a spectrum of Liberal Arts classes.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

Program Delivery

- This is an on-campus program.

Declaring This Minor

- Please see your advisor.

General Requirements

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

Program Requirements

1. This minor requires a total of 18 semester hours.
2. All coursework must be graded at a C or above to be accepted.
3. At least 9 hours must be taken on the student's home campus (whether the ICB or Auraria).

   Take one introductory class from Economics, Political Science or History:

   - ECON 2012 - Principles of Economics: Macroeconomics
   - ECON 2022 - Principles of Economics: Microeconomics
   - PSCI 3022 - Introduction to Comparative Politics
   - PSCI 3042 - Introduction to International Relations
   - HIST 3451 - Introduction to African History
   - HIST 3460 - Modern Latin American History
   - HIST 3470 - Intro to East Asia: Since 1800
   - HIST 3480 - Introduction to European History
   - HIST 3483 - Gandhi's India and Modern South Asia
   - HIST 4032 - Globalization in World History Since 1945

   Take four of the following suggested elective courses using the following guidelines:
1. Students cannot take more than two upper-division classes from the same department.
2. Extra introductory classes will be accepted as minor elective classes, but a minimum of 3 credits must be upper-division.
3. Courses in addition to those listed below may be accepted with the approval of the appropriate campus advisor (whether at the ICB or Auraria).

- ANTH 3121 - Language, Culture, and Communication
- ANTH 3142 - Cultural Diversity in the Modern World
- ANTH 4070 - Culture of Development and Globalization
- COMM 4270 - Intercultural Communication
- ECON 3100 - Economics of Race and Gender
- ECON 3400 - Economics of Sex and Drugs
- ECON 4410 - International Trade
- ECON 4420 - International Finance
- ECON 4530 - Economics of Natural Resources
- ECON 4540 - Environmental Economics
- ECON 4770 - Economic Development--Theory and Problems
- GEOG 3300 - Population and Resources in the World Environment
- GEOG 3411 - Globalization and Regional Development
- GEOG 3430 - Geography of Tourism
- GEOG 4265 - Sustainability in Resources Management
- HIST 4220 - U.S. Foreign Policy Since 1912
- HIST 4411 - Modern Mexico
- HIST 4421 - Modern China
- HIST 4451 - Southern Africa
- HIST 4455 - African Struggle for Independence
- HIST 4460 - The Islamic World's Golden Age
- HIST 4461 - The Modern Middle East
- PSCI 4057 - Religion and Politics
- PSCI 4105 - Comparative Politics: Europe
- PSCI 4126 - Introduction to International Political Economy
- PSCI 4146 - Indigenous Politics
- PSCI 4165 - Islamic Politics and Culture
- PSCI 4186 - East Asia in World Affairs
- PSCI 4225 - Democracy and Democratization
- PSCI 4226 - The United Nations in World Affairs
- PSCI 4235 - Politics and Markets in Latin America
- PSCI 4236 - American Foreign Policy
- PSCI 4248 - Gender, Globalization and Development
- PSCI 4265 - Social Justice And Globalization
- PSCI 4266 - International Law
- PSCI 4286 - International Relations: War or Peace?
- PSCI 4736 - The Middle East in World Affairs
- RLST 3100 - Islamic Politics and Culture
- RLST 3400 - Asian Philosophies and Religions
- RLST 3500 - Religions of India
- RLST 3660 - Chinese Philosophy and Culture
- RLST 4010 - Comparative Religious Systems
- RLST 4500 - Religion and Politics
- SOCY 3710 - Sociology of Global Issues
Take one of the following capstone courses:

- HIST 4417 - Commodities and Globalization: Dessert in World History
- PSCI 4216 - International Politics: Human Rights

Law Studies Minor

Introduction

Please click here to see Law Studies department information.

These degree requirements are subject to periodic revision by the academic department, and the College of Liberal Arts and Sciences reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

Program Delivery

- This is an on-campus program.

Declaring This Minor

- To apply for this minor, students must complete and submit a major/minor change declaration form to the CLAS Advising Office in North Classroom, 4002.

General Requirements

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

Program Requirements

1. A total of 18 semester hours must be completed for the law studies minor.
2. The courses must be taken in residence at CU Denver.
3. A minimum grade of C is required in each course and students must maintain a GPA of 3.0 in courses taken toward the minor.
4. Every course taken for the minor must be upper division.
5. Courses taken for the minor cannot serve to fulfill requirements of the of the undergraduate core, and students should check with their major department to determine whether courses counted toward the law studies minor can fulfill major requirements.

Take the following Foundation course:

- SSCI 4251 / HUMN 4251 - Introduction to Legal Studies

Take one of the following United States Constitutional Thought courses:
- HIST 3231 - Famous U.S. Trials
- PSCI 4477 - Constitutional Law I
- PSCI 4487 - Constitutional Law II

Take **two** of the following Communication Issues in the Law courses:

- COMM 4680 - Mass Media Law And Policy
- COMM 4681 - Communication Issues in Trial Court Practices and Processes
- COMM 4750 - Legal Reasoning and Writing

Take **one** of the following Philosophical Perspectives of Law courses:

- ECON 4230 - Law and Economics

- PHIL 4260 - Philosophy of Law
- PSCI 4427 - Law, Politics and Justice

Take **one** of the following Law and Society courses:

- CRJU 4430 - Law and Society
- HIST 4308 - Crime, Policing, and Justice in American History
- SOCY 4700 - Sociology of Law

**Literature Minor**

**Introduction**

Please click here to see English department information.

This program is designed for students who are interested in the study of English literature but who have elected to major in another area. The recommended series of courses allows students to become acquainted with some of the methods of literary study and with a number of the most important literary works.

The literature minor allows students to complement their area of major study with systematic experience in literature.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

**Program Delivery**

- This is an on-campus program.

**Declaring This Minor**
• Please see your CLAS advisor.

General Requirements

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

• CU Denver General Graduation Requirements
• Click here for information about Academic Policies

Program Requirements

1. Students minoring in literature must complete a total of 15 hours (excluding ENGL 1010, 1020, 2030).
2. None of the required 15 hours may be taken pass/fail.
3. Only courses completed with a grade of C (2.0) or better may be counted toward the minor.
4. A minimum of 9 upper-division hours of work in the minor must be taken with CU Denver English faculty.
5. Courses in a minor cannot be counted toward the English major or English Writing major.

Note: Students are advised to fulfill the liberal arts and sciences core curriculum writing requirements before enrolling in upper-division literature courses.

Take all of the following required courses:

• ENGL 2450 - Introduction to Literature
• ENGL 3001 - Critical Writing

Take any three upper-division courses from the English major, Literature Option area requirements:

Historical Survey

• ENGL 4080 - History of English Language
• ENGL 4166 - History of American Poetry
• ENGL 4200 - History of the English Novel I
• ENGL 4210 - History of the English Novel II
• ENGL 4230 - The American Novel
• ENGL 4236 - The American Short Story
• ENGL 4300 - History of British Drama
• ENGL 4320 - History of Poetry in English
• ENGL 4350 - History of American Drama

Old English, Medieval Language and Literature

• ENGL 4400 - Old English I
• ENGL 4500 - Medieval Literature
• ENGL 4510 - Whores and Saints: Medieval Women
• ENGL 4730 - Chaucer

Renaissance, Restoration and 18th Century British Literature
• ENGL 3661 - Shakespeare
• ENGL 4520 - English Renaissance
• ENGL 4530 - Milton
• ENGL 4540 - Restoration and the 18th Century

Eighteenth- and Nineteenth-Century British Literature

• ENGL 4200 - History of the English Novel I
• ENGL 4210 - History of the English Novel II
• ENGL 4560 - English Romanticism
• ENGL 4580 - The Victorian Age

American Literature

• ENGL 3700 - American Literature to the Civil War
• ENGL 3750 - American Literature after the Civil War
• ENGL 4166 - History of American Poetry
• ENGL 4230 - The American Novel
• ENGL 4236 - The American Short Story
• ENGL 4350 - History of American Drama

Modern and Contemporary Literature

• ENGL 3450 - Twentieth Century Women Writers
• ENGL 3480 - Modern Drama
• ENGL 4250 - Twentieth Century Fiction
• ENGL 4460 - Contemporary World Literature
• ENGL 4600 - Modernism

Mathematics Minor

Introduction

Please click here to see Mathematical and Statistical Sciences department information.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

Program Delivery

• This is an on-campus program.

Declaring This Minor

• Please see your advisor.

General Requirements
To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

**Program Requirements**

1. Minimum of 21 semester hours.
2. At least 6 of the upper-division MATH semester hours must be taken at CU Denver.
3. Students must receive a grade of C or better in order for the course to be counted toward the minor requirements.

Take all of the following Mathematics courses:

- MATH 1401 - Calculus I
- MATH 2411 - Calculus II
- MATH 2421 - Calculus III

Take three approved upper-division MATH courses (three or more semester hours each, above 3000, excluding MATH 3040, 4012, 4013, 4014 and 4015).

**Philosophy Minor**

**Introduction**

Please click here to see Philosophy department information.

These degree requirements are subject to periodic revision by the academic department, and the College of Liberal Arts and Sciences reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

**Program Delivery**

- This is an on-campus program.

**Declaring This Minor**

- Please see your advisor.

**General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies
Program Requirements

1. A total of 15 semester hours is required for the minor in philosophy, with a minimum grade of C (2.0) in each course.

   Take all of the following required courses:

   - PHIL 1012 - Introduction to Philosophy: Relationship of the Individual to the World
   - PHIL 3002 - Ancient Greek Philosophy
   - PHIL 3022 - Modern Philosophy

   (It is recommended but not required that PHIL 3002 be taken before PHIL 3022.)

   Take two additional philosophy courses, one of which must be at the upper-division level.

   Religious Studies courses cannot be used to fulfill the requirements for the minor.

Photography Minor

Introduction

Please click here to see general Visual Arts information.

Students in the photography minor develop skills in traditional and digital photography while refining their creative and conceptual approaches to the medium. The photography curriculum emphasizes individual artistic development that integrates the history of photography, critical theory and contemporary practice. Through an exploration of photographic techniques, students are given the tools to create visually compelling images that communicate their artistic ideas.

Program Delivery

- This is an on-campus program.

Declaring This Minor

- Students who apply for entrance into the photography minor must complete a portfolio submission that includes a written statement, a portfolio of images, and unofficial transcript(s) from CU Denver and all previous post-secondary educational institutions. The Photography minor accepts applications only once a year. Students who meet the following requirements and are accepted into the minor will be eligible to register for upper-division studio photography courses.

ELIGIBILITY

University of Colorado Denver students and transfer students must have a minimum cumulative GPA of 2.75 in fine art and art history courses. In order to apply to the photography minor, students must have completed, or be in the process of completing, the following courses:

- FINE 1150 - Introduction to Darkroom Photography
- FINE 2155 - Introduction to Digital Photography
APPLICATION PORTFOLIO REQUIREMENTS

Properly prepared application submissions must be uploaded to Slideroom.com by 5:00 P.M. Central Mountain Time on November 1. Applications are only accepted online and must be formatted to the specifications listed here.

It is strongly recommended that students visit the submission website early and begin uploads two weeks before the due date. Late submissions due to technical difficulties on the part of the applicant will not be accepted.

Step 1: Register and create an account in SlideRoom. Please go to the following link to complete this process: https://ucdvisualarts.slideroom.com. (Please note that SlideRoom charges a $25.00 fee to process portfolio submissions).

Step 2: When prompted answer all questions about the application.

Step 3: Upload documents including the written statement and transcripts from the University of Colorado Denver and all previous post-secondary institutions.

Step 4: Upload 10 image files of creative work.

Portfolio of Images

- The photography portfolio must include 10 image files of creative work. At least six portfolio images should be photographic, demonstrating the student's understanding of concept, form, composition and technique. The remaining four portfolio pieces may be photographic or they may be examples of design, drawing, painting, mixed media, sculpture, installation and/or printmaking.
- For each portfolio image, the student should write a brief description (150 words or less) that identifies the medium (silver gelatin print, ink jet print, charcoal drawing, etc.) and explains the student's approach to the project.
- Images must be submitted in jpeg format, 12 inches on the longer side, sized at 72 pixels per inch, and saved at the highest setting available (usually 10 or 12). Files should be named with the student's last name, then first name and image title using underscores to separate. Example: Doe_Jane_ImageTitle.jpg.

Written Statement

Written statements should be limited to one page in length (400-500 words) and saved as a .pdf file. Statements should address the following:

- Why do you want to study photography?
- What are your creative strengths, and what areas need further development?
- Are there additional accomplishments that you would like the committee to know about (such as Dean's List, GPA, internships, art-related extracurricular activities or relevant professional experience)?

Course Transcripts

These may be official or unofficial transcripts from CU Denver and previous post-secondary institutions.

THE EVALUATION PROCESS
• A committee of photography faculty members reviews the portfolio submissions. Acceptance into the photography minor is based on the portfolio images, written statement and GPA.

• If not admitted into the photography minor, a student has the choice of attempting the review process again the following year or applying to another minor. Students not admitted into the photography minor are encouraged to schedule a meeting with the area head of photography to learn ways to improve their portfolios for future submissions.

Portfolios are evaluated based on quality of presentation, technical skill, creativity, conceptual development and overall aptitude for excelling in the photography minor. Additional evaluation is based on the applicant's written statement and GPA in visual arts courses.

The application is evaluated on the following criteria:

• **Technical Skill** - The portfolio should demonstrate strong knowledge of the fundamental tools of photography including camera functions, analog film development, darkroom printing, and digital imaging, as well as an understanding of design, form, composition and color.

• **Creativity** - The portfolio should demonstrate creative choices in content and aesthetics.

• **Conceptual Skill** - The portfolio and written statements should reflect analytical thinking and conceptual exploration of the photographic medium.

• **Written Statement** - The statement should outline academic and artistic goals, addressing any potential strengths and weaknesses.

• **Academic Performance** - The grades must reflect a commitment to learning and growth.

• **Completeness of Application** - All required documentation must be submitted (images, written statement and transcripts).

QUESTIONS

Please contact CAMadvising@ucdenver.edu for minor and portfolio information, or contact photography area head Carol Golemboski at carol.golemboski@ucdenver.edu.

General Requirements

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

• CU Denver General Graduation Requirements

• Click here for information about Academic Policies

Program Requirements

1. Students may transfer up to 6 semester hours of non-CU Denver courses toward a College of Arts & Media minor. All other courses must be taken at CU Denver.

2. A minimum grade of C (2.0) is required for each course applied toward a CAM major, minor or certificate requirement. A grade of C- (1.7) or lower will not fulfill a major, minor or certificate requirement. A grade of P is acceptable for courses in which the only grade available is Pass or Fail.

3. Students may use up to 6 semester hours to fulfill both major and minor requirements; the remaining semester hours for the minor must be taken in addition to the major requirements.

Take all of the following Photography Minor courses (entry level):

• FINE 1150 - Introduction to Darkroom Photography
• FINE 2155 - Introduction to Digital Photography
• FINE 3630 - History of Photography

Take three of the following Photography Minor courses (all except FINE 3135 are available only to students accepted to minor via portfolio review):

• FINE 3135 - Historic Photographic Processes in Italy
• FINE 3160 - Color and Studio Lighting
• FINE 3161 - The Silver Fine Print
• FINE 3162 - The Digital Fine Print
• FINE 3171 - Concepts and Processes in Photography
• FINE 3172 - Digital Bookmaking
• FINE 3175 - Creative Commercial Applications

Physics Minor

Introduction

Please click here to see Physics department information.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

Program Delivery

• This is an on-campus program.

Declaring This Minor

• Please see your advisor.

General Requirements

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

• CU Denver General Graduation Requirements
• Click here for information about Academic Policies

Program Requirements

1. A total of 16 semester hours is required for a minor in physics.
2. No grade below a C (2.0) can be used to meet the requirements for the minor.
3. At least 6 semester hours of the requirements for the minor must be completed at CU Denver.

Take either one of the following sequences:
• PHYS 2010 - College Physics I
• PHYS 2020 - College Physics II
• PHYS 2030 - College Physics Lab I
• PHYS 2040 - College Physics Lab II
• or
• PHYS 2311 - General Physics I: Calculus-Based
• PHYS 2321 - General Physics Lab I
• PHYS 2331 - General Physics II: Calculus-Based
• PHYS 2341 - General Physics Lab II

Take six semester hours of electives; 3 at the 2000-level or above and 3 at the 3000-level or above.

Political Science Minor

Introduction

Please click here to see Political Science department information.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

Program Delivery

• This is an on-campus program.

Declaring This Minor

• Please see your advisor.

General Requirements

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

• CU Denver General Graduation Requirements
  • Click here for information about Academic Policies

Program Requirements

1. At least 9 of the 15 hours required for this minor must be taken from CU Denver faculty.

   Take one of the following courses:

   • PSCI 1001 - Introduction to Political Science: The Quest for Freedom and Justice
   • PSCI 1101 - American Political System

   Take four of the following 4000-level American Politics courses:
- PSCI 4009 - Politics of the Budgetary Process
- PSCI 4014 - Media and Politics
- PSCI 4024 - State Politics: Focus Colorado
- PSCI 4034 - Political Parties and Pressure Groups
- PSCI 4044 - The Presidency
- PSCI 4057 - Religion and Politics
- PSCI 4074 - Urban Politics
- PSCI 4084 - Local Government and Administration
- PSCI 4085 - Comparative Governance: Environment and Society
- PSCI 4094 - Seminar: American Politics
- PSCI 4124 - Denver Politics
- PSCI 4236 - American Foreign Policy
- PSCI 4237 - American National Security
- PSCI 4324 - Politics, Public Policy and Leadership
- PSCI 4330 - U.S. Health Policy
- PSCI 4354 - Environmental Politics
- PSCI 4374 - Public Priorities for the 21st Century
- PSCI 4444 - Contemporary Culture and Politics in America
- PSCI 4457 - American Political Thought
- PSCI 4477 - Constitutional Law I
- PSCI 4487 - Constitutional Law II
- PSCI 4494 - Judicial Politics
- PSCI 4545 - Immigration Politics
- PSCI 4554 - Chicano and Latino Politics
- PSCI 4564 - Gender and Politics
- PSCI 4644 - Ethical Responsibilities of Leaders
- PSCI 4827 - Women and the Law
- PSCI 4837 - Contemporary Issues in Civil Liberties

Take one of the following 4000-level Comparative Politics courses:

- PSCI 4057 - Religion and Politics
- PSCI 4074 - Urban Politics
- PSCI 4085 - Comparative Governance: Environment and Society
- PSCI 4105 - Comparative Politics: Europe
- PSCI 4115 - Third World Politics
- PSCI 4144 - Indigenous Political Systems
- PSCI 4146 - Indigenous Politics
- PSCI 4155 - Political Systems of the Middle East and North Africa
- PSCI 4165 - Islamic Politics and Culture
- PSCI 4176 - Gandhi's Legacy: Non-Violent Resistance Today
- PSCI 4185 - Corruption in the U.S. and Abroad
- PSCI 4195 - Political Systems of Sub-Saharan Africa
- PSCI 4206 - Social Movements, Democracy and Global Politics
- PSCI 4215 - Women's Rights, Human Rights: Global Perspectives
- PSCI 4224 - Dictatorships in 21st Century
- PSCI 4225 - Democracy and Democratization
- PSCI 4235 - Politics and Markets in Latin America
- PSCI 4248 - Gender, Globalization and Development
- PSCI 4265 - Social Justice And Globalization
- PSCI 4365 - Global Ecological Crises
- PSCI 4446 - Advanced Indigenous Peoples' Politics
- PSCI 4505 - Political System of Russia and Its Neighbors
- PSCI 4555 - International Women's Resistance
- PSCI 4605 - Politics and Governments of South Asia
- PSCI 4615 - Politics and Government of China
- PSCI 4807 - Political Violence
- PSCI 4808 - Strategies of Peacebuilding

Take one of the following 4000-level International Politics courses:

- PSCI 4126 - Introduction to International Political Economy
- PSCI 4156 - The Arab-Israeli Peace Process
- PSCI 4186 - East Asia in World Affairs
- PSCI 4206 - Social Movements, Democracy and Global Politics
- PSCI 4216 - International Politics: Human Rights
- PSCI 4236 - American Foreign Policy
- PSCI 4237 - American National Security
- PSCI 4266 - International Law
- PSCI 4274 - Conflict Resolution and Public Consent Building
- PSCI 4286 - International Relations: War or Peace?
- PSCI 4326 - Advanced International Political Economy: Globalization
- PSCI 4726 - Russian and Chinese Foreign Policy
- PSCI 4736 - The Middle East in World Affairs

Take one of the following 4000-level Political Theory courses:

- PSCI 4207 - Theories of Social and Political Change
- PSCI 4265 - Social Justice And Globalization
- PSCI 4407 - Early Political Thought
- PSCI 4417 - Modern Political Thought
- PSCI 4427 - Law, Politics and Justice
- PSCI 4437 - Coercion and the State
- PSCI 4457 - American Political Thought

Psychology Minor

Introduction

Please click here to see Psychology department information.

Further information about the department may be obtained from department advisors or by calling 303-556-8565.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

Program Delivery

- This is an on-campus program.
Declaring This Minor

- Please see your advisor.

General Requirements

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

Program Requirements

1. A minor in psychology requires the completion of 15 semester hours with a grade of C (2.0) or better in each course.
2. At least 9 semester hours must be taken from CU Denver faculty.
3. At least 6 upper-division semester hours must be taken from CU Denver faculty.
4. Because the minor is optional, there are no substitutions allowed to these requirements.

Take all of the following required courses:

- PSYC 1000 - Introduction to Psychology I
- PSYC 1005 - Introduction to Psychology II

Take one of the following courses:

- PSYC 3222 - Principles of Learning and Behavior
- PSYC 3144 - Human Cognition

Take one of the following courses:

- PSYC 3205 - Human Development I: Child Psychology
- PSYC 3305 - Abnormal Psychology
- PSYC 3415 - Experimental Social Psychology

Take one additional PSYC course as an elective (any PSYC course that is not listed above and that is not already counting toward another requirement may be used). Students should see their minor advisor regularly to make sure they are completing the correct coursework.

Public Health Minor

Introduction

Please click here to see Health and Behavioral Sciences department information.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.
Program Delivery

- This is an on-campus program.

Declaring This Minor

- Please see your advisor.

General Requirements

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

Program Requirements

1. A minimum of 24 semester hours are required, of which 12 must be upper-division and taken from CU Denver faculty.
2. Students must achieve no less than a C (2.0) in each course applied toward minor requirements.
3. Up to 6 credit hours completed toward a major or minor in another department may be counted toward the minor in public health.

- PBHL 3010 - Human Sexuality and Public Health

Take at least two of the following courses. All four may be taken in lieu of two of the elective courses listed below.

- PBHL 2020 - Introduction to Environmental Health
- PBHL 3030 - Health Policy
- PBHL 3070 - Perspectives in Global Health
- PBHL 4040 - Social Determinants of Health

Take one of the following courses:

- ANTH 1303 - Introduction to Biological Anthropology
- BIOL 1550 - Basic Biology: Ecology and the Diversity of Life
- BIOL 1560 - Basic Biology: From Cells to Organisms
- PBHL 3021 - Fundamentals of Health Promotion
- PBHL 3031 - Health, Human Biology and Behavior
- PBHL 3041 - Health, Culture and Society
- PBHL 3071 - Global Topics In Sexual and Reproductive Health
- PBHL 4080 - Global Health Practice
- PBHL 4200 - The Global HIV/AIDS Epidemic
- ANTH 4090 - Political Economy of Drugs
- ANTH 4260 - Human Reproductive Ecology
- COMM 4500 - Health Communication
- COMM 4620 - Health Risk Communication
- GEOG 4235 - GIS Applications in the Health Sciences
- PSYC 3235 - Human Sexuality
Introduction

Please click here to see Religious Studies department information.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

Program Delivery

- This is an on-campus program.

Declaring This Minor

- Please see your advisor.

General Requirements

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

Program Requirements

1. Eighteen semester hours, at least 9 of which must be upper division and at least 9 semester hours taken with CU Denver faculty.
2. A minimum cumulative GPA of 2.0 for all CU Denver courses taken in the minor is required, with no individual course grade lower than a C (2.0).

Required Course

- Take the following required course:
  - RLST 1610 - Introduction to Religious Studies

Western Religion

Take one course from the following approved list:
- RLST 2660 - World Religions *
- RLST 2700 - The Bible as Literature or
- ENGL 2520 - The Bible as Literature
- RLST 3000 - Judaism, Christianity and Islam: Affinity and Difference
- RLST 3060 - History of Early Christianity
- RLST 3740 - Biblical Traditions: Old Testament
- RLST 3770 - Archaeological Discoveries Relating to the Bible
- RLST 4070 - Western Religious Thought or
- PHIL 4710 - Western Religious Thought
- RLST 4400 - Differing Concepts of God or *
- PHIL 4650 - Differing Concepts of God *
- RLST 4440 - Concepts of the Soul or *
- PHIL 4470 - Concepts of the Soul *
- RLST 4460 - Death and Concepts of Afterlife *

* Fulfills requirement for either Eastern or Western religion, but not both simultaneously

**Eastern Religion**

Take one course from the following approved list:

- RLST 2660 - World Religions *
- RLST 3400 - Asian Philosophies and Religions or
- PHIL 3666 - Asian Philosophies and Religions
- RLST 3500 - Religions of India
- RLST 3660 - Chinese Philosophy and Culture or
- PHIL 3981 - Chinese Philosophy and Culture
- RLST 4080 - Eastern Religious Thought or
- PHIL 4720 - Eastern Religious Thought
- RLST 4160 - Mysticism
- RLST 4400 - Differing Concepts of God or *
- PHIL 4650 - Differing Concepts of God *
- RLST 4440 - Concepts of the Soul or *
- PHIL 4470 - Concepts of the Soul *
- RLST 4460 - Death and Concepts of Afterlife *
Fulfills requirement for either Eastern or Western religion, but not both simultaneously

**Elective courses**

Take **three** courses from the following list. Other courses, such as certain special topics, art history courses featuring religious themes and others may count toward the minor at the discretion of the course instructor and the director.

- RLST 2660 - World Religions
- RLST 2680 - The American Indian Experience **or**
- ETST 2606 - The American Indian Experience
- RLST 2700 - The Bible as Literature **or**
- ENGL 2520 - The Bible as Literature
- RLST 3000 - Judaism, Christianity and Islam: Affinity and Difference
- RLST 3060 - History of Early Christianity
- RLST 3080 - Reformation Europe
- RLST 3100 - Islamic Politics and Culture **or**
- PSCI 4165 - Islamic Politics and Culture
- RLST 3300 - Shamanic Traditions
- RLST 3400 - Asian Philosophies and Religions **or**
- PHIL 3666 - Asian Philosophies and Religions
- RLST 3500 - Religions of India
- RLST 3660 - Chinese Philosophy and Culture **or**
- PHIL 3981 - Chinese Philosophy and Culture
- RLST 3720 - Religious Narratives **or**
- ENGL 3520 - Religious Narratives
- RLST 3740 - Biblical Traditions: Old Testament
- RLST 3770 - Archaeological Discoveries Relating to the Bible
- RLST 4000 - Religion and Cultural Diversity
- RLST 4010 - Comparative Religious Systems
- RLST 4020 - Sociology of Religion **or**
- SOCY 4610 - Sociology of Religion
- RLST 4040 - Psychology of Religion
- RLST 4060 - Philosophy of Religion **or**
- PHIL 4600 - Philosophy of Religion
- RLST 4070 - Western Religious Thought **or**
• PHIL 4710 - Western Religious Thought
• Rlst 4080 - Eastern Religious Thought or
• PHIL 4720 - Eastern Religious Thought
• Rlst 4100 - Special Topics in Religion
• Rlst 4160 - Mysticism
• Rlst 4300 - Myth and Symbol
• Rlst 4320 - Spirituality in the Modern World
• Rlst 4340 - The Hero’s Journey
• Rlst 4360 - Freudian and Jungian Perspectives in Dream Analysis
• Rlst 4400 - Differing Concepts of God or
• PHIL 4650 - Differing Concepts of God
• Rlst 4420 - Goddess Traditions or
• WGST 4420 - Goddess Traditions
• Rlst 4440 - Concepts of the Soul or
• PHIL 4470 - Concepts of the Soul
• Rlst 4460 - Death and Concepts of Afterlife
• Rlst 4480 - Perspectives on Good and Evil or
• PHIL 4480 - Perspectives on Good and Evil
• Rlst 4500 - Religion and Politics or
• PSCI 4057 - Religion and Politics
• Rlst 4710 - Women and Religion or
• WGST 4710 - Women and Religion
• Rlst 4730 - Whores and Saints: Medieval Women or
• ENGL 4510 - Whores and Saints: Medieval Women or
• WGST 4510 - Whores and Saints: Medieval Women
• Rlst 4840 - Independent Study: RLST

Risk Management and Insurance Minor

Introduction

Please click here to see Business School information.

Students in other undergraduate schools and colleges at CU Denver wishing to complete the Risk Management and Insurance minor need to complete the course work described below.

Program Delivery

• This is an on-campus program.

Declaring This Minor
To declare the RMI minor, students must have a 3.0 GPA, either cumulative or from their last 24 completed semester hours.

General Requirements

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

Program Requirements

1. Students must maintain or exceed a 2.0 GPA to graduate with the minor.
2. Up to 6 of the 18 semester hours required for the minor may be completed at another institution.
3. Students must have declared the Risk Management and Insurance minor to register for any of the courses or petition separately to take each of these courses.

Take all of the following required prerequisite and proficiency courses:

- ISMG 2050 - Introduction to Business Problem Solving
- MATH 1070 - College Algebra for Business or
- MATH 1110 - College Algebra
- MATH 1080 - Calculus for Social Sciences and Business
- BANA 2010 - Business Statistics
- ECON 2012 - Principles of Economics: Macroeconomics
- ECON 2022 - Principles of Economics: Microeconomics
- ACCT 2200 - Financial Accounting and Financial Statement Analysis

Take all of the following required courses:

- FNCE 3000 - Principles of Finance
- FNCE 3500 - Management of Business Capital
- FNCE 3809 - Introduction to Risk Management
- FNCE 4809 - Property & Casualty Insurance

Take two of the following courses:

- FNCE 3700 - Investment and Portfolio Management
- FNCE 4909 - Corporate Risk Management
- FNCE 4129 - Practical Enterprise Risk Mgmt
- RISK 4409 - Employee Benefits and Workforce Risk Management
- RISK 4509 - Global Risk Management
- RISK 4709 - Life & Health Insurance
- RISK 4950 - Special Topics: Cyber Risk Management & Cyber Warfare

Notes

1. Some of the prerequisite courses may be substituted on a case by case basis. Please see an advisor for details.
2. All RISK courses have a fixed tuition rate. However, students have the option to apply for RMI scholarships for each RISK course they take.

Social Justice Minor

Introduction

Please click here to see Social Justice department information.

These degree requirements are subject to periodic revision by the academic department, and the College of Liberal Arts and Sciences reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

Program Delivery

- This is an on-campus program.

Declaring This Minor

- Please see your advisor.

General Requirements

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

Program Requirements

1. The minor consists of 18 semester hours.
2. Coursework includes a required introductory class (with either a social science or humanities focus).
3. The minor includes an experiential learning component of 3 semester hours.
4. Upper-division course work is to be determined by individual students in consultation with the Social Justice minor director. At least two disciplines must be represented.
5. A 3-semester-hour capstone seminar that will provide opportunity for further reflection on the experiential learning projects and student group projects is required.

Take one of the following courses:

- SJUS 2000 - Democratic Participation and Social Justice
- SJUS 2010 - Social Justice: Theories, Narratives, and Technologies

Take a 3-semester-hour internship in any discipline of the social sciences or humanities, involving community work and including a reflective component and public dissemination or report.
Take **three** courses from those listed below. This is a sample list of upper-division courses, but other courses may be considered.

- ANTH 3142 - Cultural Diversity in the Modern World
- ANTH 4070 - Culture of Development and Globalization
- COMM 2000 - Persuasion
- COMM 4022 - Critical Analysis of Communication
- COMM 4260 - Communication and Conflict
- ENGL 3795 - Race and Ethnicity in American Literature
- ENGL 4280 - Proposal and Grant Writing
- ETST 3108 - Chicano/a and Latino/a History
- ETST 3274 - Power, Poverty, Culture
- ETST 3396 - History of the American Indian
- ETST 3704 - Culture, Racism and Alienation
- GEOG 3411 - Globalization and Regional Development
- GEOG 4335 - Contemporary Environmental Issues
- GEOG 4640 - Urban Geography: Denver and the U.S.
- HIST 3345 - Immigration and Ethnicity in American History
- HIST 4217 - Consumer Culture
- HIST 4219 - Depression, Affluence and Anxiety: U.S. History, 1929 to the Present
- PHIL 3200 - Social and Political Philosophy
- PHIL 3280 - War and Morality
- PHIL 3500 - Ideology and Culture: Racism and Sexism
- PHIL 4920 - Philosophy of Media and Technology or
- PHIL 5920 - Philosophy of Media and Technology
- PSCI 3034 - Race, Gender, Law and Public Policy
- PSCI 4025 - Local Governance and Globalization
- PSCI 4207 - Theories of Social and Political Change
- RLST 4000 - Religion and Cultural Diversity
- SOCY 3001 - Urban Sociology
- SOCY 4440 - Social Inequality

Take a **3-semester-hour** capstone seminar.

**Sociology Minor**

**Introduction**

Please click here to see Sociology department information.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

**Program Delivery**

- This program is offered on-campus and online.
Declaring This Minor

- Please consult with College of Liberal Arts and Sciences (CLAS) Advising.

General Requirements

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

Program Requirements

1. For an undergraduate minor in sociology, a minimum of 15 semester hours in sociology must be completed with a grade of C or better in each individual course.
2. Nine of these hours must be taken from CU Denver faculty.

Take all of the following required courses:

- SOCY 1001 - Introduction to Sociology
- SOCY 3140 - Sociological Theory

Take nine credit hours of additional Sociology electives.

Spanish Minor

Introduction

Please click here to see Modern Languages department information.

These degree requirements are subject to periodic revision by the academic department, and the College of Liberal Arts and Sciences reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

Program Delivery

- This is an on-campus program.

Declaring This Minor

- Please see your advisor.

General Requirements

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.
**Program Requirements**

1. Students minoring in Spanish for the BA degree must complete 15 semester hours of upper-division Spanish courses (courses numbered 3000 and higher).
2. All course work must be taught in Spanish.

Take **one** of the following courses:

- SPAN 3270 - Bilingual Communities: Spanish as a Language of Contact
- SPAN 3212 - Spanish American Culture and Civilization
- SPAN 3213 - Contemporary Latin American Culture and Institutions
- SPAN 3221 - Culture and Civilization of Spain I
- SPAN 3222 - Culture and Civilization of Spain II
- SPAN 3223 - Contemporary Spanish Culture and Institutions
- SPAN 3230 - Ibero-American Cultures through Film
- SPAN 4330 - Modern Culture of Spain through Film and Narrative

Take **four** additional upper-division Spanish courses.

**Studio Art Minor**

**Introduction**

Please click here to see general Visual Arts information.

This general minor in studio art offers students the opportunity to explore one or multiple areas of studio art (e.g., photography, transmedia sculpture, painting/drawing) along with an introduction to art history.

**Program Delivery**

- This is an on-campus program.

**Declaring This Minor**

- To declare a CAM minor, please see the College of Arts & Media's Office of Advising and Student Services in Arts Building, 177. Consult an advisor in the College of Arts & Media at CAMadvising@ucdenver.edu for more information.

**General Requirements**

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies
Program Requirements

1. Students may transfer up to 6 semester hours of non-CU Denver courses toward a College of Arts & Media minor. All other courses must be taken at CU Denver.
2. A minimum grade of C (2.0) is required for each course applied toward a CAM major, minor or certificate requirement. A grade of C- (1.7) or lower will not fulfill a major, minor or certificate requirement. A grade of P is acceptable for courses in which the only grade available is Pass or Fail.
3. Students may use up to 6 semester hours to fulfill both major and minor requirements; the remaining semester hours for the minor must be taken in addition to the major requirements.

Take two of the following Studio Art Minor courses:

- FINE 1100 - Drawing I
- FINE 1150 - Introduction to Darkroom Photography
- FINE 1400 - Two Dimensional Design
- FINE 1500 - Three-Dimensional Design
- FINE 2155 - Introduction to Digital Photography
- FINE 2200 - Painting I
- FINE 3500 - Installation Art

Take six semester hours of Studio Arts electives.

Take three semester hours of upper-division Studio Arts elective.

Take three semester hours of Art History elective.

Sustainability Minor

Introduction

Please click here to see Sustainability department information.

The sustainability minor is interdisciplinary, drawing on the expertise across CLAS departments: anthropology, biology, chemistry, communication, economics, environmental sciences, geography, geology, history, economics, philosophy, physics and political science. The core courses are taught by faculty from natural sciences and social sciences, who present theories and concepts from both empirical and humanistic perspectives. The teaching faculty change each term so that faculty from any given CLAS department will rotate through the core courses every 3-4 years.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

Program Delivery

- This is an on-campus program.
Declaring This Minor

- Please see your advisor.

General Requirements

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

Program Requirements

Students should consult with the Sustainability advisor before registering for any courses applicable toward the minor. *Graduate-level courses and cross-lists may be used with prior consent from the advisor.

The minor is comprised of 18 credit hours, distributed as follows:

1. Two core courses that introduce students to the systems theories that document how living things affect and are affected by their environments.
2. Three electives chosen from an approved list of CLAS courses.
3. A capstone course in sustainability, which focuses on social change within specific communities and groups.

Take all of the following required courses:

- SUST 3010 - The Non-Sustainable Past
- SUST 3011 - Toward a Sustainable Future

Take three from the following list of courses:

Anthropology

- ANTH 3006 - Sustainable Development and Equity
- ANTH 3210 - Urban Food Systems and Sustainability
- ANTH 6063 - Qualitative Research Design and Methods
- ANTH 4010 - Medical Anthropology: Global Health or
- ANTH 5014 - Medical Anthropology: Global Health
- ANTH 4030 - Ethnobiology or
- ANTH 5030 – Ethnobiology
- ANTH 4040 - Anthropology of Food and Nutrition or
- ANTH 5040 - Anthropology of Food and Nutrition
- ANTH 4050 - Quantitative Methods in Anthropology or
• ANTH 5053 - Quantitative Methods in Anthropology
• ANTH 4070 - Culture of Development and Globalization or ANTH 5070 - Culture of Development and Globalization
• ANTH 4080 - Global Health Practice or ANTH 5080 - Global Health Practice
• ANTH 4090 - Political Economy of Drugs or ANTH 5090 - Political Economy of Drugs
• ANTH 4170 - Culture and the Environment or ANTH 5170 - Culture and the Environment
• ANTH 4450 - Development and Conservation: Contemporary Issues or ANTH 5450 - Development and Conservation: Contemporary Issues
• ANTH 4460 - Development and Conservation: Theory and Practice or ANTH 5460 - Development and Conservation: Theory and Practice
• ANTH 4560 - Human Ecology or ANTH 5560 - Human Ecology

Integrative Biology
• BIOL 3330 - Plant Diversity
• BIOL 3411 - Principles of Ecology
• BIOL 3654 - General Microbiology
• BIOL 4052 - Advanced Ecology
• BIOL 4154 - Conservation Biology
• BIOL 4345 - Flora of Colorado
• BIOL 4415 - Microbial Ecology
• BIOL 4416 - Aquatic Ecology
• BIOL 4474 - Ecological Methods
• BIOL 4910 - Field Studies
• BIOL 4974 - Evolution

Business
• MGMT 4950 - Special Topics in Management (when offered as Business and Sustainability)
• MKTG 4950 - Special Topics (when offered as Nonprofit and Social Marketing)

Chemistry
• CHEM 4700 - Environmental Chemistry or CHEM 5700 - Environmental Chemistry
• CHEM 5710 - Air Pollution Chemistry
• CHEM 5720 - Atmospheric Sampling and Analysis

Communication
- COMM 2082 - Introduction to Environmental Communication
- COMM 4082 - Wilderness Communication or
- COMM 5082 - Wilderness Communication
- COMM 4282 - Environmental Communication or
- COMM 5282 - Environmental Communication
- COMM 4710 - Topics in Communication or
- COMM 5710 - Topics in Communication

Economics
- ECON 4530 - Economics of Natural Resources or
- ECON 5530 - Economics of Natural Resources
- ECON 4540 - Environmental Economics or
- ECON 5540 - Environmental Economics
- ECON 4770 - Economic Development--Theory and Problems

Engineering
- ENGR 3400 - Technology and Culture

Environmental Sciences
- ENVS 1042 - Introduction to Environmental Sciences
- ENVS 1342 - Environment, Society and Sustainability
- ENVS 3082 - Energy and the Environment
- ENVS 4850 - Understanding and Communicating Field Methods
- ENVS 4995 - Travel Study (Sustainability in the Caribbean, The Costa Rica Experience and others)

Geography
- GEOG 1202 - Introduction to Physical Geography
- GEOG 2202 - Hazards to Disasters: Perception and Management
- GEOG 3300 - Population and Resources in the World Environment
- GEOG 3401 - Geography of Food and Agriculture
- GEOG 3411 - Globalization and Regional Development
- GEOG 3440 - Ecotourism
- GEOG 4010 - Landscape Geochemistry
- GEOG 4020 - Earth Environments and Human Impacts
- GEOG 4260 - Energy and Natural Resource Planning
- GEOG 4060 - Remote Sensing I: Introduction to Environmental Remote Sensing or
- GEOG 5060 - Remote Sensing I: Introduction to Environmental Remote Sensing
- GEOG 4090 - Environmental Modeling with Geographic Information Systems or
- GEOG 5090 - Environmental Modeling with Geographic Information Systems
- GEOG 4230 - Hazard Mitigation and Vulnerability Assessment or
• GEOG 5230 - Hazard Mitigation and Vulnerability Assessment
• GEOG 4265 - Sustainability in Resources Management or
• GEOG 5265 - Sustainability in Resources Management
• GEOG 4335 - Contemporary Environmental Issues or
• GEOG 5335 - Contemporary Environmental Issues
• GEOG 4350 - Environment and Society in the American Past or
• GEOG 5350 - Environment and Society in the American Past
• GEOG 4420 - The Politics of Nature
• GEOG 4440 - Science, Policy and the Environment
• GEOG 4450 - Urban Food and Agriculture: Perspectives and Research
• GEOG 4460 - Sustainable Urban Agriculture Field Study I
• GEOG 4680 - Urban Sustainability: Perspectives and Practice
• GEOG 4470 - Sustainable Urban Agriculture Field Study II
• GEOG 4710 - Disasters, Climate Change, and Health
• GEOG 4770 - Applied Statistics for the Natural Sciences
• GEOG 4995 - Travel Study (Sustainability in the Caribbean, The Costa Rica Experience and others)

Geology

• GEOL 4030 - Environmental Geology
• GEOL 4280 - Environmental Hydrology

History

• HIST 3366 - Environmental History of North America
• HIST 4240 - National Parks History

Physics

• PHYS 3082 - Energy and the Environment

Philosophy

• PHIL 2510 - Philosophy of Nature
• PHIL 4250 - Environmental Ethics

Political Science

• PSCI 4354 - Environmental Politics or
• PSCI 5354 - Seminar: Environmental Politics and Policy
• PSCI 4146 - Indigenous Politics
• PSCI 4365 - Global Ecological Crises
• PSCI 5217 - Human Rights in Theory and Practice
• PSCI 5276 - Conflicts and Rights in International Law
• PSCI 5468 - Research Methods in Political Science

Public Health
• PBHL 2020 - Introduction to Environmental Health

Take the following capstone course:

• SUST 4960 - Capstone in Sustainability

Theatre, Film and Television Minor

Introduction

Please click here to see general Theatre, Film & Video Production information.

Program Delivery

• This is an on-campus program.

Declaring This Minor

• To declare a CAM minor, please see the College of Arts & Media's Office of Advising and Student Services in Arts Building, 177. Consult an advisor in the College of Arts & Media at CAMadvising@ucdenver.edu for more information.

General Requirements

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

• CU Denver Graduation Requirements
• Click here for information about Academic Policies

Program Requirements

1. Students may transfer up to 6 semester hours of non-CU Denver courses toward a minor. All other courses must be taken at CU Denver.
2. A minimum grade of C (2.0) is required for each course applied toward a CAM major, minor or certificate requirement. A grade of C- (1.7) or lower will not fulfill a major, minor or certificate requirement. A grade of P is acceptable for courses in which the only grade available is Pass or Fail.
3. Students may use up to 6 semester hours to fulfill both major and minor requirements; the remaining semester hours for the minor must be taken in addition to the major requirements.

Take all of the following Theatre, Film and Television Minor courses:

• FITV 1200 - Aesthetics of Television
• THTR 1001 - Introduction to Theatre & Arts in the Community

Take two of the following Theatre, Film & Television Minor courses, chosen in consultation with a Theatre, Film & Video Production (TFVP) faculty advisor:

• FITV 3200 - History of Film to 1937
• FITV 3300 - History of Film from 1938
• THTR 3610 - Performance: Theory/History/Criticism I
• THTR 3620 - Performance: Theory/History/Criticism II

Take twelve semester hours of Theatre, Film and Television Minor electives, chosen in consultation with a TFVP faculty advisor.

Transmedia Sculpture Minor

Introduction

Please click here to see general Visual Arts information.

The transmedia sculpture minor provides experiences that span digital practice, traditional metal casting, wood work and fabrication processes. Students learn how to use a wide variety of equipment that encompass the breadth of sculpture today, from metal, wood and assembled sculpture, to installation and performance work, to live media and interactive digital work.

Program Delivery

• This is an on-campus program.

Declaring This Minor

• To declare a CAM minor, please see the College of Arts & Media's Office of Advising and Student Services in Arts Building, 177. Consult an advisor in the College of Arts & Media at CAMadvising@ucdenver.edu for more information.

General Requirements

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

• CU Denver General Graduation Requirements
• Click here for information about Academic Policies

Program Requirements

1. Students may transfer up to 6 semester hours of non-CU Denver courses toward a College of Arts & Media minor. All other courses must be taken at CU Denver.
2. A minimum grade of C (2.0) is required for each course applied toward a CAM major, minor or certificate requirement. A grade of C- (1.7) or lower will not fulfill a major, minor or certificate requirement. A grade of P is acceptable for courses in which the only grade available is Pass or Fail.
3. Students may use up to 6 semester hours to fulfill both major and minor requirements; the remaining semester hours for the minor must be taken in addition to the major requirements.

Take all of the following Transmedia Sculpture Minor courses:

• FINE 1500 - Three-Dimensional Design
• FINE 2500 - Bronze Casting
• FINE 2510 - Wood and Metal Sculpture

Take three of the following Transmedia and Sculpture Minor courses:

• FINE 3500 - Installation Art
• FINE 3510 - Mold Design & Casting
• FINE 4500 - Electronic Performance
• FINE 4510 - Advanced Sculpture

Take three semester hours of Art History elective.

Urban and Regional Planning Minor

Introduction

Please click here to see Geography and Environmental Sciences department information.

The undergraduate planning minor in the Department of Geography and Environmental Sciences provides non-geography undergraduate students the opportunity to pursue studies in the professional field of planning. Geography majors can pursue the urban studies option, so this minor would not be available to these majors.

Geography and urban and regional planning share a common concern for the spatial configuration of the places that we inhabit and enjoy. In recognition of this close association, there is currently an articulation agreement between the Department of Geography and Environmental Sciences and the College of Architecture and Planning that provides students with a mechanism for acceleration through the Master of Urban and Regional Planning (MURP) degree program, if accepted into that graduate program. Those students completing the requirements for an undergraduate planning minor may also be eligible to pursue an accelerated MURP degree. (Please see the Graduate Catalog for more information on this graduate program.)

All core courses are offered on a yearly basis.

These degree requirements are subject to periodic revision by the academic department, and the College of Liberal Arts and Sciences reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

Program Delivery

• This is an on-campus program.

Declaring This Minor

• Please see your advisor.

General Requirements

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

• CU Denver General Graduation Requirements
• Click here for information about Academic Policies

Program Requirements

1. Students must complete three core requirements and two electives, totaling 15 semester hours.
2. 12 semester hours of upper-division courses are required.
3. Although the three core courses may be taken in any order, it is advisable to begin with GEOG 1602, since this course familiarize students with many key concepts used in other classes.
4. All undergraduate students, except geography majors, are eligible for this minor.
5. Students must achieve a grade of C (2.0) or higher in required courses.
6. All upper-division courses must be completed at CU Denver and a minimum of 9 semester hours must be completed in CLAS (geography) to satisfy residency requirements.

Take all of the following required courses:

• GEOG 1602 - Urban Studies and Planning
• GEOG 4640 - Urban Geography: Denver and the U.S.
• GEOG 4680 - Urban Sustainability: Perspectives and Practice

Take two of the following courses:

• GEOG 4000 - Planning Methods
• GEOG 4060 - Remote Sensing I: Introduction to Environmental Remote Sensing
• GEOG 4080 - Introduction to GIS
• GEOG 4085 - GIS Applications for the Urban Environment
• GEOG 4090 - Environmental Modeling with Geographic Information Systems
• GEOG 4095 - Deploying GIS Functionality on the Web
• GEOG 4230 - Hazard Mitigation and Vulnerability Assessment
• GEOG 4235 - GIS Applications in the Health Sciences
• GEOG 4400 - Regional Economic Systems
• GEOG 4450 - Urban Food and Agriculture: Perspectives and Research
• GEOG 4630 - Transportation and Land Use
• GEOG 4990 - Special Topics

Women's and Gender Studies Minor

Introduction

Please click here to see Women's and Gender Studies department information.

The women's and gender studies minor gives students the opportunity to explore gender issues in the humanities and social sciences.

These degree requirements are subject to periodic revision by the academic department, and the College of Liberal Arts and Sciences reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

Program Delivery

• This is an on-campus program.
Declaring This Minor

- Please see your advisor.

General Requirements

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

Program Requirements

1. Completion of 18 semester hours in WGST courses with a grade of C or better.
2. At least 12 semester hours must be taken with CU Denver faculty.
3. All courses for the minor must be approved by a WGST advisor.
4. Students are strongly urged to take at least one course that focuses on women's and gender issues in international perspective.
5. An internship working in the community around issues related to women and gender. Working with a WGST advisor and the CU Denver Experiential Learning Center (ELC), students will choose an internship related to their interests in WGST. Through the ELC, students sign up for their internship under WGST 3939. Students will be required to complete a critical writing component comprising an ongoing log about the internship experience and an 8-10 page final paper discussing the interrelationships between the practical internship experience and the theoretical/scholarly insights of women's and gender studies. Students may also choose to use WGST 2900, Smart Girl Leadership Training, in lieu of their internship and must follow the requirements of that course and practicum. Students must have taken WGST 1050 before enrolling for their internship.

Take the following **required** course:

- WGST 1050 - Introduction to Women's and Gender Studies

Take **12-semester-hours** of WGST-related courses at the 3000-level or above. Eligible courses include, but are not limited to:

**Humanities**

- ENGL 3450 - Twentieth Century Women Writers
- ENGL 4510 - Whores and Saints: Medieval Women
- FREN 4510 - French Women Writers
- HIST 3343 - Women in U.S. History
- HIST 4230 - Women in the West
- HIST 4303 - Sex and Gender in Modern Britain
- HIST 4307 - History of Sexuality
- HIST 4345 - Gender, Science, and Medicine: 1600 to the Present
- PHIL 3500 - Ideology and Culture: Racism and Sexism
- PHIL 4933 - Philosophy of Eros
- RLST 4420 - Goddess Traditions
- WGST 4306 - Survey of Feminist Thought or
- ENGL 4306 - Survey of Feminist Thought or
- HIST 4306 - Survey of Feminist Thought

Social Sciences

- ANTH 4200 - Gender in Cross-Cultural Perspective
- ANTH 4260 - Human Reproductive Ecology
- COMM 3275 - Family Communication
- COMM 4020 - Feminist Perspectives on Communication
- COMM 4265 - Gender and Communication
- COMM 4268 - Communication and Diversity in U.S. History
- ECON 3100 - Economics of Race and Gender
- ECON 3400 - Economics of Sex and Drugs
- PSCI 3034 - Race, Gender, Law and Public Policy
- PSCI 3035 - Political Movements: Race and Gender
- PSCI 4215 - Women's Rights, Human Rights: Global Perspectives
- PSCI 4248 - Gender, Globalization and Development
- PSCI 4555 - International Women's Resistance
- PSCI 4564 - Gender and Politics
- PSCI 4827 - Women and the Law
- PSYC 3235 - Human Sexuality
- PSYC 3405 - Family Psychology
- PSYC 3611 - Psychology of Women
- PSYC 3612 - Domestic Abuse
- SOCY 3010 - Sociology of Human Sexuality
- SOCY 3080 - Sex and Gender
- SOCY 3700 - Sociology of the Family

Take one of the following courses:

- WGST 3939 - Internship
- WGST 2900 - Smart Girl Leadership Training and Practicum

Writing Minor

Introduction

Please click here to see English department information.

The writing minor allows students to complement their area of major study with systematic experience in writing.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

Program Delivery

- This is an on-campus program.
Declaring This Minor

- Please see your CLAS advisor.

General Requirements

To earn a degree, students must satisfy all requirements in each of the areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- Click here for information about Academic Policies

Program Requirements

1. Students minoring in writing must complete a total of 15 hours (excluding ENGL 1010, 1020, 2030).
2. None of the required 15 hours may be taken pass/fail.
3. Only courses completed with a grade of C (2.0) or better may be counted toward the minor.
4. A minimum of 9 upper-division hours of work in the minor must be taken with CU Denver English faculty.
5. Courses in a minor cannot be counted toward the English Major or English Writing major.

Take all of the following required courses:

- ENGL 2060 - Introduction to Writing Studies
- ENGL 3084 - Multimedia Composition

Take one of the following courses:

- ENGL 3160 - Language Theory
- ENGL 4080 - History of English Language

Take one of the following courses:

- ENGL 3154 - Technical Writing
- ENGL 3170 - Business Writing
- ENGL 4190 - Special Topics in Rhetoric and Writing (non-repeatable)

Take one 3000-level or 4000-level ENGL course.

Dual Degree Programs

Chemistry BS/MS

Introduction

Please click here to see Chemistry department information.

Program Delivery

- This is an on-campus program.
Declaring This Major

- Click here to go to information about declaring a major.

General Requirements

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

Program Requirements

1. The student must apply and be accepted for participation in the BS/MS program prior to completion of the BS degree and be advised by both the undergraduate and graduate advisors.
2. Up to 9 semester hours of graduate-level course work may be taken as an undergraduate and applied toward the MS degree. This course work may not be applied toward the BS degree or ACS certification requirements for the BS degree.
3. Up to 3 semester hours of independent study (research) may be applied toward the graduate degree if that research is expanded and continued for a portion of the master's thesis research. This requires approval of the student's graduate research advisor in chemistry, the chemistry graduate program director and the CLAS associate dean for graduate studies.
4. The chemistry department will waive the requirement for qualifying examinations in each area of chemistry for which the student has completed the undergraduate sequence of courses and laboratories at the Downtown Campus with grades of B or better for each course.
5. The student must apply for and be admitted to the graduate program in chemistry beginning the semester immediately following completion of the BS degree in chemistry at the Downtown Campus.
6. This program allows undergraduate students who have begun their research as undergraduates to complete up to 12 semester hours (with approval of the graduate dean) toward the 30 semester hours required for a Plan I MS degree in chemistry while they are still completing their BS degree.

Criminal Justice BA/MCJ

Introduction

Please click here to see School of Public Affairs information.

The dual BA/MCJ program is designed to allow students to work concurrently toward the BA in criminal justice and the master of criminal justice (MCJ). Graduate credit hours earned while enrolled in the BA/MCJ program can be counted toward both the bachelor of arts and master of criminal justice. This program offers high-achieving students the opportunity to complete their undergraduate and graduate degrees in criminal justice in five years.
Program Delivery

- Courses are offered on campus, online, and in hybrid formats.

Declaring This Major

Both current CU Denver students and new transfer students are eligible to apply to the Criminal Justice BA/MCJ Dual Degree after meeting the following:

- Currently enrolled in the School of Public Affairs as a criminal justice major
- Completed the University of Colorado Denver’s undergraduate core curriculum
- Completed 60 semester credit hours
- Completed the following 12 semester credit hours in criminal justice: CRJU 1000 - Criminal Justice: An Overview, CRJU 2041 - Crime Theory and Causes, CRJU 3100 - Criminal Justice Research Methods, and CRJU 3150 - Statistics for Criminal Justice (transfer criminal justice courses must have been approved and accepted toward the major).
- Minimum 3.0 cumulative GPA
- Minimum 3.5 cumulative GPA in criminal justice courses
- Completed or scheduled official GRE or LSAT exam

Interested students should contact their BA academic advisor as early as possible to ensure proper planning for the five year degree.

Students must apply no later than the semester in which they first earn 20 credits toward the BACJ degree, most likely the second semester of their junior year. For full consideration, students must submit all application materials by Oct. 15 for admission to the following spring semester and by March 15 for admission to the fall semester. The following steps should help in the application process:

- Plan ahead when scheduling courses through the junior year. All four of the required criminal justice courses listed above and all of the student's core education requirements must be completed by the end of the student's junior year.
- At the beginning of the semester in which the student is applying to the program, the student should approach a criminal justice faculty member about writing a letter of recommendation. The student should also begin working on a personal statement of purpose. The following guidelines should help with writing the statement.
  - Length: 1 to 2 pages. The statement should describe:
    - Applicant's reasons for undertaking graduate study in criminal justice
    - Applicant's future career plans
    - Planned area of concentration within criminal justice
- By Oct 15 of the fall semester or March 15 of the spring semester the student must submit the following items to the undergraduate coordinator:
  - Personal statement of purpose
  - One letter of recommendation from a faculty member
  - School of Public Affairs' BA/MCJ application form
  - Official GRE or LSAT scores

Admission to the BA/MCJ program is competitive. Applicants will be evaluated on the following:

- Grade point average (overall and in criminal justice course work)
- Grade trend (improving, consistent, or declining)
• Total number of credit hours completed
• Likelihood of success and persistence based from the Statement of Intent and Reference Letter
• Official GRE or LSAT scores

Students who are not admitted to the BA/MCJ program are eligible to reapply after completing an additional 12 semester credit hours. Students can apply and be considered for admission to the dual BACJ/MCJ program a maximum of two times.

General Requirements

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

• CU Denver General Graduation Requirements
• CU Denver Core Curriculum
• School of Public Affairs Graduation Requirements
• Click here for information about Academic Policies

Program Requirements

1. Student must have a minimum of 30 hours of resident credit; 21 out of the last 30 hours in resident course work.
2. Students must have a minimum of a B (3.0) in each required core MCJ course.
3. A minimum of 3.0 CU cumulative grade point average is required in all graduate level courses.
4. Students must successfully complete master of criminal justice capstone or thesis.
5. Students must fulfill all college and major requirements.
6. Students are eligible to receive the BA in criminal justice degree once they have successfully completed 120 semester hours and all CU Denver undergraduate degree requirements.
7. Students must have a full acceptance to the Graduate School and the master in criminal justice program.
8. Students must have a minimum of a 3.0 CU cumulative grade point average in undergraduate criminal justice courses.
9. The MCJ will be conferred once the student has completed all requirements of the master of criminal justice degree.

Take 144 total semester credit hours.

Take 37-38 semester credit hours in the general education core curriculum.

Take 46-48 semester credit hours in general electives.

Take 21 semester hours of undergraduate criminal justice course work.

Take 18 upper-level (3000 or higher) semester credit hours in criminal justice.

Take 45 total semester hours of upper-division course work (3000 and above).

Take a minimum of 36 semester hours of graduate-level course work (5000 and above).

Economics BA/Mathematics BS Dual Degree
Introduction

Please click here to see Economics department information or here for Mathematical and Statistical Sciences department information.

A solid training in the mathematical and statistical sciences is fundamental to optimally prepare economics students for graduate school. A dual degree in economics and mathematics will substantially increase program quality and career prospects for our students, as well as enhance the reputation of the economics program at CU Denver. Similarly, a solid training in quantitative and qualitative economic principles offers significant benefits to mathematics majors who seek industrial and/or consulting positions.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

Program Delivery

- This is an on-campus program.

Declaring This Major

- Click here to go to information about declaring a major.

General Requirements

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

Program Requirements

1. No pass/fail grades may count toward the dual degree.
2. The minimum grade for all economics classes taken at CU Denver and applied toward the major is C- (one D- grade is allowed for one economics elective).
3. A minimum GPA of 2.5 is required for all ECON courses. Note: Only courses taken at CU Denver will apply.
4. The minimum grade for all mathematics classes taken at CU Denver and applied toward the major is C-.
5. A minimum GPA of 2.25 is required for all CU Denver mathematics classes applied to the major.
6. In addition to the CLAS residence requirements, the Economics Department requires that all courses other than Econ 2012 and Econ 2022 require written department approval to be transferred in as satisfying major requirements.
7. Additionally, the Mathematics Department requires that at least 15 upper division Mathematics credits must be taken at CU Denver. The Economics Department requires that Graduating seniors must
submit the three best papers that the student wrote in any three separate courses taken in the Economics Department for the outcomes assessment of the Economics program.

8. The three papers should be handed in at one time in a folder to the Economics office, before the first day of the month in which the student plans to graduate.

9. The Mathematics Department requires that in the semester of graduation, students must submit a portfolio consisting of two papers, typically written for previous courses, that demonstrate mathematical and writing proficiency; participate in an exit interview, which may be scheduled by the department administrative assistant; and complete a senior survey, available from the department administrative assistant.

Take all of the following Economics courses:

- ECON 2012 - Principles of Economics: Macroeconomics
- ECON 2022 - Principles of Economics: Microeconomics
- ECON 4071 - Intermediate Microeconomic Theory
- ECON 4081 - Intermediate Macroeconomic Theory
- ECON 4811 - Introduction to Econometrics

Take all of the following Mathematics courses:

- MATH 1401 - Calculus I
- MATH 2411 - Calculus II
- MATH 2421 - Calculus III
- MATH 3000 - Introduction to Abstract Mathematics
- MATH 3191 - Applied Linear Algebra
- MATH 3200 - Elementary Differential Equations
- MATH 4310 - Introduction to Real Analysis I
- MATH 4650 - Numerical Analysis I
- MATH 4779 - Math Clinic
- MATH 4810 - Probability
- MATH 4820 - Introduction to Mathematical Statistics

Take one of the following courses:

- MATH 3301 - Introduction to Optimization in Operations Research
- MATH 3302 - Simulation in Operations Research
- MATH 4387 - Applied Regression Analysis
- MATH 4409 - Applied Combinatorics
- MATH 4733 - Partial Differential Equations
- MATH 4791 - Continuous Modeling
- MATH 4792 - Probabilistic Modeling
- MATH 4793 - Discrete Math Modeling
- MATH 4794 - Optimization Modeling

Take one of the following courses:

- MATH 4110 - Theory of Numbers
- MATH 4140 - Introduction to Modern Algebra
- MATH 4201 - Topology
- MATH 4220 - Higher Geometry II
- MATH 4320 - Introduction to Real Analysis II
- MATH 4408 - Applied Graph Theory
Take six Economics elective courses or five Economics elective courses plus one Mathematics elective course:

- Any six three semester hour courses (four of them must be 4000-level) taken in Economics may satisfy this requirement, other than internships and independent studies (which require the approval of the department chair). Note: ECON 3801 and ECON 3811 cannot be counted as electives.

- One of the following Mathematics courses can be counted as one Economics elective (it may also be counted as one Mathematics required course or one Mathematics elective):
  - MATH 3301 - Introduction to Optimization in Operations Research
  - MATH 3302 - Simulation in Operations Research
  - MATH 4387 - Applied Regression Analysis
  - MATH 4390 - Game Theory
  - MATH 4450 - Complex Variables
  - MATH 4733 - Partial Differential Equations
  - MATH 4830 - Applied Statistics
  - MATH 5350 - Mathematical Theory of Interest

Take two Mathematics elective courses or one Mathematics elective course plus one Economics elective course:

- Students must choose two approved Mathematics electives (at least three semester hours) above 3000, excluding MATH 4012, 4013, 4014, 4015 and 4830.

- One of the following Economics courses can be counted as one Mathematics elective (and can also be counted as one Economics elective):
  - ECON 4030 - Data Analysis with SAS
  - ECON 4110 - Money and Banking
  - ECON 4150 - Economic Forecasting
  - ECON 4320 - Financial Economics
  - ECON 4430 - Economic Growth
  - ECON 4550 - Game Theory and Economic Applications
  - ECON 4610 - Labor Economics
  - ECON 4740 - Industrial Organization

Public Affairs BA/MPA

Introduction

Please click here to see School of Public Affairs information.

The BA/MPA degree program offered by the College of Liberal Arts and Sciences and the School of Public Affairs provides students the opportunity to complete both a bachelor's degree and master's degree in five years rather than the usual six years. The program combines undergraduate general education and major studies with a specialized curriculum in public affairs and strives to develop intellectual and professional skills in a coordinated manner. The five year BA/MPA program decreases the time and number of semester hours required to earn both degrees by allowing students to count graduate level courses in the School of Public Affairs toward the bachelor's degree requirements. The program is designed to give students an opportunity to prepare for professional positions and advancement with federal, state or local governments, nonprofits or private sector firms concerned or involved with public affairs.

Program Delivery

- This is an on-campus program.
Declaring This Major

- Click here to go to information about declaring a major.
- Interested students should contact their CLAS advisor and the School of Public Affairs' MPA director as early as possible to ensure proper planning for the five year degree.
- Students may apply to the program during the semester in which they will successfully complete 90 semester hours, and should have most of their general education and major requirements completed by this time.
- Students must complete all the required MPA application materials for the School of Public Affairs.

General Requirements

To earn a degree, students must satisfy all requirements in each of the three areas below, in addition to their individual major requirements.

- CU Denver General Graduation Requirements
- CU Denver Core Curriculum
- College of Liberal Arts & Sciences Graduation Requirements
- Click here for information about Academic Policies

Program Requirements

1. BA/MPA students may choose from any CLAS major.
2. BA/MPA students may choose to do a general MPA or select an MPA concentration in local government, nonprofit management, environmental policy, emergency management and homeland security or domestic violence.
3. Students must maintain a 3.5 GPA in CLAS coursework.
4. Students may complete a maximum of 18 semester hours of SPA graduate course work while classified as an undergraduate student.
5. Students must maintain a 3.0 or higher GPA in public affairs coursework.
6. Student must successfully complete the capstone course in a semester AFTER all core courses are completed. A thesis option is available. Interested students should contact their SPA faculty advisor.
7. Students may apply to the program during the semester in which they will successfully complete 90 semester hours, and should have most of their general education and major requirements completed by this time.

Students must fulfill all the requirements for graduation for CLAS:

- 30 hours in the core curriculum
- 30-48 hours to satisfy major requirements
- Writing proficiency (1 - 7 hours)
- Mathematics proficiency (0 - 3 hours)
- Level III foreign language (0 - 13 hours)

Note: It is highly recommended that students complete a course in American government, statistics and economics before applying to the MPA program

Students must fulfill all the requirements for graduation from SPA:

- Total of 36-39 semester hours in public affairs
- Six core courses (PUAD 5001 - PUAD 5006)
Five elective courses at the graduate level (5000 and 6000 level courses)
Nine of the 15 elective semester hours must be PUAD courses
An internship (3 hours) is required from those who do not have significant work experience in the field.

Licensure

Undergraduate Teacher Licensure

Undergraduate Teacher Education Program

Please click here to see School of Education & Human Development information.

There are several pathways that CU Denver undergraduates can take to become a licensed teacher in Colorado. The BA major in Education and Human Development (EDHD) includes three areas of specialization related to licensure -- Early Childhood, Elementary or Special Education. In addition, several options are possible in conjunction with the College of Liberal Arts and Sciences (CLAS).

SEHD Major Pathway:

The CU Denver bachelor's degree with a major in Education and Human Development is a four-year, 126-credit-hour, interdisciplinary program with a licensure track in Elementary Education, Early Childhood and Special Education. It focuses on engaging Colorado's rapidly diversifying student and family population and combines cutting-edge research with real classroom experiences.

The program prepares educators who are culturally affirming and responsive, collaborate closely with families and communities, and have the knowledge and skills to create engaging, relevant, and rigorous classroom communities where all students can achieve and grow. We work alongside our P-12 partner educators throughout the UCD Professional Development School Network comprised of over 20 urban schools across 6 districts in the Denver metro region. Through these internships UCTE students live the life of a teacher for an entire academic year while enrolled in the program. Ultimately our goal is that all teacher candidates have the unique knowledge and skills to positively impact urban and diverse schools and act with a sense of urgency to support equity in education for all children. The Urban Community Teacher Education Program is a nationally accredited program that exceeds expectations.

Professional Development Schools

While in the licensure portion of the program, teacher candidates intern in a professional development school for an entire academic year, gradually beginning with two days a week early on and increasing over time to five days per week by the end of the program. University courses are closely integrated with the sequence of clinical internship experiences providing teacher candidates with multiple opportunities to engage in the authentic work of teachers. Teacher candidates co-teach closely with practicing teachers in the school and gradually assume full responsibility for teaching by the end of the program. Elementary teacher candidates generally spend an entire academic year in a single partner elementary school. The schools are located in several Denver metropolitan districts serving large populations of low-income and/or minority students, as well as a sizeable number of students for whom English is a second language and students with special needs. Each school is supported by a site professor from the university one day per week and by a master teacher, called a site coordinator, who supports teacher candidates through their academic year of internships.

Assessment
The coursework and the internship experiences have been created to align with the Colorado Teacher Quality Standards, as well as frameworks for culturally and linguistically responsive instruction and Universal Design for Learning. Students in all programs engage in a common set of learning opportunities and internship assessments. They also engage in Program Level Assessments at different stages of the program. Colorado mandates that all teacher education programs be “performance based” in order to recommend candidates completing the program for licensure; thus all candidates in the Urban Community Teacher Education program must demonstrate proficiency in both the university-based coursework and their internships.

Programs of Study

Additional information about the three tracks can be found at the following links:

Early Childhood Education - BA in Education and Human Development
Undergraduate teacher education program in early childhood education

Elementary Education Track - BA in Education and Development
Undergraduate teacher education elementary

Special Education Track - BA in Education and Human Development
Undergraduate teacher education special education

Due to the complex nature of teacher preparation that is governed by state and national accreditation and legislative mandates that can change from year to year, please see current programs of study in the teacher education handbook.

The goal of all SEHD programs is to prepare students to become a highly effective, innovative, and compassionate elementary teachers skilled in improving student performance and reaching the needs of today's diverse learners in a variety of school settings. The program is offered in a hybrid format with both in-class and online coursework that support the needs of talented students from all backgrounds, including nontraditional and underrepresented students.

SEHD accepts applications from incoming freshmen, current students at CU Denver, transfer students from community colleges or four-year institutions, individuals who are working as paraprofessionals, assistant teachers or developmental intervention assistants in early childhood centers or elementary schools and people who are interested in working in community-based organizations serving diverse families.

Email education@ucdenver.edu for more information. We encourage students to take advantage of the scholarships and grants that are available in this major.

CLAS Major Pathway:

The second undergraduate teacher education route at CU Denver is a joint effort between the College of Liberal Arts and Sciences and the School of Education & Human Development. On this route, students earn a bachelor's degree through the College of Liberal Arts and Sciences and a teaching license through the School of Education & Human Development.

This undergraduate program is also dedicated to quality teacher education. To that end, our admission standards are rigorous and there are a number of program "gates" that teacher candidates go through to complete licensure.
CU Denver has selective admission standards for entering freshmen, including a 93 institutional index that includes students who are typically in the top third of their class or have a 3.4 GPA or score above a 23 on the ACT or 1100 on the SAT. Students transferring from community colleges must have a minimum of a 2.5 GPA.

*Please note: The admission into the School of Education & Human Development teacher education program for CLAS majors is a separate process from admission to the university.* Summer deadlines are January 15* February 15; the fall deadline is March 15. Spring admission deadlines are August 15, September 15 and October 15.

**CLAS Undergraduate Teacher Education Pathways**

Undergraduate teacher candidates can earn a BA and a Colorado provisional teacher's license in the following areas:

- **BA-Individually Structured Major Elementary Education Licensure**
- **BA-English Literature Secondary English Licensure**
- **BS-Mathematics Secondary Mathematics Licensure**
- **BA-History Secondary Social Science Licensure**
- **BA-Political Science Secondary Social Science Licensure**
- **BA-Spanish Secondary Spanish Licensure**
- **BA-French Secondary French Licensure**

**Program Distinctions**

**Program Structure**

The School of Education & Human Development teacher education program admits teacher candidates in two cohort groups: one in the summer/fall and one in the spring. The initial professional teacher education program includes a 12- or 15-month licensure plan. Students will be taking course work at the university and field-based work in one of CU Denver's partner schools. By enrolling in several courses together, elementary and secondary teacher candidates consider how students develop as learners over the entire K-12 school span. This collaborative approach applies to students in the general and special education program as well. This ensures that all elementary and secondary classroom teachers are well-prepared to work with students with special needs and that all special educators have a solid foundation in general education in curriculum and instruction.

**Professional Development Schools**

While in the licensure portion of the program, teacher candidates work in a partner school one to four days per week, depending on the internship. University courses are closely interrelated with the four internship experiences in which teacher candidates gradually assume responsibility for teaching. Elementary teacher candidates generally spend an entire academic year in a single partner elementary school, whereas secondary teacher candidates spend their four internships in one of the partner middle schools and one of the partner high schools. The partner schools are located in several Denver metropolitan districts with most serving large populations of low-income and/or minority students, as well as a sizeable number of students for whom English is a second language and students with special needs. Each partner school is supported by a site professor from the university one day per week and by a master teacher, called a site coordinator.

**Assessment**

Passing the PLACE or PRAXIS II Content examination prior to the final internship is also required before a candidate is eligible for a provisional teaching license in Colorado.

**Undergraduate Advising**
Undergraduate teacher candidates from CLAS will have a team of individuals who work with them throughout the completion of their bachelor's degree and teacher licensure. The following are the members of the advising team:

**College of Liberal Arts and Science (CLAS) Education Advisor**

The CLAS advisor will assist you upon entry to the university though graduation. The CLAS advisor will monitor your progress through the core curriculum, pre-UCTE curriculum, eligibility requirements for the UCTE program and transfer credits. The CLAS advisor will also approve individually structured major-elementary education contracts for elementary education teacher candidates.

**Faculty Advisor**

A faculty advisor designated within the academic department works with undergraduate teacher education students pursuing secondary licensure regarding specific requirements within academic major (i.e., English, history, mathematics, Spanish, French, and political science). See the CLAS advisor for specific names and contact information.

**School of Education and Human Development Advisor**

An advisor in the School of Education and Human Development's Student Services Center (Lawrence St. Center Bldg., 701; 303-315-6300) is able to help with questions about prerequisite completion, taking the PRAXIS II/PLACE exam and other general questions.

**UCTE Undergraduate Academic Planning Sheets**

Developed in collaboration with the academic departments and UCTE program faculty, advisors will work with the teacher candidates on an academic planning sheet. There is little flexibility in the program course requirements as these requirements meet and exceed the Colorado Department of Education's teacher education professional and content standards.

**UCTE Undergraduate Community College Articulation**

CU Denver honors the community college articulation agreement to transfer the 60 designated semester hours from the community college to anyone admitted to the teacher licensure program. If the teacher candidate is a transfer student, he/she should work with his/her CLAS advisor early and often to ensure that all courses are transferred properly.

**Programs of Study**

Due to the complex nature of state mandated influences of teacher preparation courses and consistently evaluating this program for students, please refer to the most current version of the teacher education program handbook for academic requirements for this program.

**Undergraduate Certificate Programs**

**Applied German Language Skills Undergraduate Certificate**

**Introduction**

Please click here to see Modern Language department information.
The undergraduate certificate in applied German language skills is designed for students of any discipline who wish to acquire and demonstrate to potential employers that they possess a fluid working knowledge of the German language and understanding of the cultures in which German is spoken. The completion of the requirements for this certificate can also serve as a means for nondegree-seeking professionals to develop a working competency in the German language and culture for use in such areas as international business, education, genealogy, transatlantic travel, academic research, translation and many other fields.

These degree requirements are subject to periodic revision by the academic department, and the College of Liberal Arts and Sciences reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

Program Delivery

- This is an on-campus program.

Declaring This Certificate

- All currently enrolled students at CU Denver (undergraduate or graduate) in good standing (including nondegree-seeking students) are eligible for admission into the program.
- Any student who already possesses an undergraduate degree is also qualified for admission into the program, but must apply to the university as a nondegree-seeking student.
- Students working toward a baccalaureate degree who are currently enrolled in a college-level institution other than CU Denver are also eligible for certification.

General Requirements

- Click here for information about Academic Policies.

Certificate Requirements

1. Students must maintain a minimum 3.0 GPA in all course work applied to the certificate.
2. Students must submit documentation that they have passed an internationally recognized German language skills examination.

Take **15 hours** of German Language Skills:

Students must complete a minimum of 15 semester credit hours of upper-division German language skills courses. These courses are defined as those areas of study in which grammar, vocabulary, pronunciation and/or communicative abilities in German are the primary focus of instruction. Up to six credit hours of upper-division German skills courses may be applied as transfer credit from outside, college-level institutions. Alternately, students may apply up to nine credit hours of officially recognized study abroad credit toward this requirement.

Take **9 hours** of German Culture:

Students must complete a minimum of nine semester credit hours of German culture courses where the primary focus of instruction addresses any facet of Austrian, German and/or Swiss culture. These courses may be completed at any level (lower or upper division as well as graduate) and in any combination of disciplines, provided that the student supplies evidence that a significant portion of each course is devoted to
Austrian, German and/or Swiss culture. This includes but is not limited to history, philosophy, political science, literature (in German or in translation) and other German cultural topics. Up to three credit hours of culture courses may be applied as transfer credit from outside, college-level institutions. Alternately, students may apply up to six credit hours of officially recognized, documented university-level course work (or the equivalent) in a German-speaking country.

**Applied Statistics Undergraduate Certificate**

**Introduction**

Please click here to see Mathematical and Statistical Sciences department information.

There is a growing need for qualified statistical analysts of the ever-increasing amounts of data collected in business, industry, and government. The Certificates in Applied Statistics program is designed to give students a strong background in statistical methodology and data analysis in preparation for opportunities in the work force or for graduate studies.

Students will gain competence in such topics as descriptive statistics, estimation, confidence intervals, probability and inferential techniques, simple and multiple regression, analysis of variance, and more-advanced topics. Students can focus on a particular application area such as economics, psychology, sociology, geology or environmental science through the choice of an elective course and the data analysis project.

Programs are offered at the undergraduate and graduate level.

These degree requirements are subject to periodic revision by the academic department, and the College of Liberal Arts and Sciences reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

**Program Delivery**

This is an on-campus program.

**Declaring This Certificate**

- Admission requirements: Completion of calculus 1, 2 and 3 as well as linear algebra, each at a B- or above. Students enrolled in the certificate program will be expected to utilize concepts from calculus and linear algebra without the use of technology, e.g., evaluation of limits, derivatives and integrals.
- Click here to see and print the application form.

**General Requirements**

- Click here for information about Academic Policies.

**Certificate Requirements**

1. Students must maintain a 3.0 GPA or above in certificate courses with no credit given for courses with grades below B-.
2. Since a certificate is a University of Colorado Denver certification of a student's specialized knowledge in an advanced subject area, all courses in the certificate program are expected to be taken in residency at the University of Colorado Denver.

3. Students must be enrolled in one course per year to maintain their status in the certificate program.

4. Certificates must be completed within 3 years from matriculation.

Take one of the following Probability courses:

- MATH 3800 - Probability and Statistics for Engineers
- MATH 4810 - Probability (recommended)

Take the following Mathematical Statistics course:

- MATH 4820 - Introduction to Mathematical Statistics

Take the following Advanced Applications course:

- MATH 4387 - Applied Regression Analysis

Take one of the following elective courses:

- Any statistics course in the Department of Mathematical and Statistical Sciences at the 4000 level or higher (must be pre-approved by the Certificate Coordinator). MATH 4830 cannot apply toward the certificate.
- ECON 4030 - Data Analysis with SAS
- ECON 4150 - Economic Forecasting
- ECON 4811 - Introduction to Econometrics
- GEOG 4770 - Applied Statistics for the Natural Sciences
- GEOL 4770 - Applied Statistics for the Natural Sciences
- Equivalent course pre-approved by the Certificate Coordinator

Complete an independent data analysis project:

- MATH 4840 - Independent Study (1 hour) or an equivalent course pre-approved by the certificate coordinator.

Note: An independent data analysis project includes a report and presentation to demonstrate proficiency with data analysis techniques and a statistical computing software package.

Biochemistry Certificate

Introduction

Please click here to see Chemistry department information.

These degree requirements are subject to periodic revision by the academic department, and the College of Liberal Arts and Sciences reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with the Chemistry advisor to confirm the best plans of study before finalizing them.

Program Delivery
This is an on-campus program.

Declaring This Certificate

- Prerequisites for the Certificate (these courses do not have to be completed at CU Denver):
  - 2 semesters General Chemistry, with laboratories
  - 2 semesters General Biology, with laboratories
  - 2 semesters Organic Chemistry, with at least 1 semester laboratory

- A grade of C (2.0, not C-) or better in each of the Prerequisites is required.

General Requirements

- Click here for information about Academic Policies

Certificate Requirements

1. The required courses including electives must be completed at CU Denver with a grade of C (2.0, not C-) or better in each class, and a minimum GPA of 2.7 among the Required Courses including electives counted toward the certificate.

   Take one of the following Biochemistry courses:

   - CHEM 3810 - Biochemistry
   - CHEM 4810 - General Biochemistry I
   - CHEM 5810 - Graduate Biochemistry I

   Take one of the following Biochemistry courses:

   - CHEM 4820 - General Biochemistry II
   - CHEM 5830 - Graduate Biochemistry II

   Take the following course:

   - BIOL 3611 - General Cell Biology

   Take two of the following Electives courses:

   - CHEM 3011 - Inorganic Chemistry
   - CHEM 3111 - Analytical Chemistry
   - CHEM 4121 - Instrumental Analysis
   - CHEM 4511 - Physical Chemistry: Thermodynamics and Kinetics
   - CHEM 4521 - Physical Chemistry: Quantum and Spectroscopy
   - CHEM 4828 - Biochemistry Lab
   - 3-credit internship or independent study in Biochemistry, with prior approval
   - PHYS 3151 - Biophysics Outlook I and
   - PHYS 3161 - Biophysics Outlook II
   - (these two 1-credit courses together fulfill one elective requirement)
Biotechnology Certificate

Introduction

Please click here to see Integrative Biology department information.

Biotechnology is a rapidly growing field in Colorado, and nationally. Biotechnology is a broad term covering many disciplines. Agriculture, pharmaceuticals, microbiology, and medical device development are a few of the thriving areas of biotechnology in Colorado. Those wishing to pursue a career in biotechnology need to have a strong knowledge of biology and chemistry. The Department of Integrative Biology offers a Certificate program in Biotechnology that allows students to acquire special skills in research-based biology and chemistry. The certificate is designed to provide a strong background in chemistry, including organic and biochemistry, and in Biology, including both prokaryotic and eukaryotic molecular biology and gene regulation. Upon completion of the requirements, the student will obtain recognition in the form of a Certificate and designation on their transcript.

These degree requirements are subject to periodic revision by the academic department, and the College of Liberal Arts and Sciences reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

Program Delivery

- This is an on-campus program.

Declaring This Certificate

Students may earn the certificate while working on their Bachelors or Master's Degree; or, the courses may be taken through non-degree admission. All admissions questions should be directed to the Registrar's office (303-556-2389). All questions regarding tuition and fees should be directed to the Bursar's office (303-556-2710).

Prerequisites:

- One year of General Biology and one semester of General Microbiology, both with labs.
- Cumulative GPA of 2.75 or better.
Students interested in completing the Biotechnology certificate should contact the Department of Integrative Biology. A certificate will be issued and noted on your transcript upon proof of satisfactory completion of the course work. You must contact the program advisor when you have completed all the requirements, the semester you are going to graduate, in order for the certificate recognition to appear on your transcripts.

**General Requirements**

- Click here for information about Academic Policies.

**Certificate Requirements**

1. All courses (21-22 credits) used to satisfy the requirements for the Biotechnology Certificate must be completed with a grade of B- (2.7) or better.
2. No fewer than 14 credits of those used to satisfy the requirements for the Biotechnology Certificate must be completed at CU Denver.
3. All courses used to satisfy the requirements for the Biotechnology Certificate must be completed within a five year period.
4. Students may earn the certificate while working on their Bachelors Degree; or, the courses may be taken through non-degree admission.

Take **all** of the following Biotechnology courses:

- BIOL 4024 - Introduction to Biotechnology
- BIOL 3124 - Introduction to Molecular Biology **or**
- BIOL 4128 - Topics in Molecular Biology
- BIOL 4125 - Molecular Biology Laboratory
- CHEM 4810 - General Biochemistry I **or**
- CHEM 5810 - Graduate Biochemistry I
- and
- CHEM 4820 - General Biochemistry II **or**
- CHEM 3111 - Analytical Chemistry **and**
- CHEM 3810 – Biochemistry
- BIOL 3939 - Internship **or**
- BIOL 4840 - Independent Study **or**
- BIOL 5840 - Independent Study: BIOL

Take **one** of the following Elective courses (or a course pre-approved by Dr. Johansen):

- BIOL 4051 - Advanced Topics In Microbiology **or**
- BIOL 5051 - Advanced Topics In Microbiology
- BIOL 4126 - Molecular Genetics **or**
- BIOL 5126 - Molecular Genetics
- BIOL 4144 - Medical Microbiology **or**
- BIOL 5144 - Medical Microbiology
- CHEM 3111 - Analytical Chemistry (if not applied above) **or**
Commodities Certificate

Introduction

The Business Schools undergraduate certificates are primarily intended for students currently pursuing a degree in any undergraduate discipline that want to expand their business knowledge to give themselves a leg up when they enter the work force. However, they can also be taken by students with only a high school diploma.

Students can pursue one of our undergraduate certificates, even if they are not CU Denver students. Credit earned as a part of the certificate DOES count towards your undergraduate degree, should you choose to pursue a degree here.

The Business School awards a Certificate (of completion) in Commodities to students completing three finance and commodities courses. Students completing the certificate will have an improved understanding of the complex commodities market. Topics covered include regulation, trading, financial fundamentals, investing, risk management and ethics. Please contact the Commodities Center for more information.

Program Delivery

This is an on-campus program.

Declaring This Certificate

Please contact the Commodities Center for more information.

Community Leadership Undergraduate Certificate

Introduction

Please click here to see Political Science department information.

The Center for NEW DIRECTIONS in Politics and Public Policy offers an undergraduate certificate in Community Leadership to meet the needs of individuals in formal public and nonprofit positions that require development of their leadership competencies and for individuals in informal community leadership positions who want to build their knowledge, skills, and effectiveness. The certificate is open to non-degree seeking students (without an undergraduate degree) as well as undergraduates.

This certificate will help human resources directors in local governments and nonprofit organizations who are seeking additional leadership development for the department heads and other individuals they want to groom for succession to leadership. The certificate can also serve as a re-entry point for individuals who have been away from higher education for some time and who are fearful of returning to college to complete their BA degree program when their study skills may have faded.
Students who successfully complete the certificate program would be allowed to transfer in the credits received in the certificate program to complete their undergraduate degree at the University of Colorado Denver. Undergraduate student transfer of credits would follow completion of the formal application for admission and follow the established review for acceptance of transfer credits.

Program Delivery

- This is an on-campus program.

Declaring This Certificate

- Individuals who are not currently admitted students seeking the undergraduate Community Leadership Certificate should use the "quick admit" feature online or the extended studies admissions form previously developed by the College of Liberal Arts and Sciences.
- Students requesting admission to the undergraduate program at CU Denver would need to complete the application for admissions and be formally admitted by the University prior to requesting transfer of their certificate credits for their degree program.
- Currently admitted undergraduates should schedule certificate advising appointments with the NEW DIRECTIONS office to register their intent to pursue the Community Leadership Certificate. Then they may register for classes as usual.

General Requirements

- Click here for information about Academic Policies.

Certificate Requirements

1. Twelve credit hours must be successfully completed with a grade of B- or better.

   Take all of the following courses:

   - PSCI 4324 - Politics, Public Policy and Leadership
   - PSCI 4644 - Ethical Responsibilities of Leaders

   Take one of the following electives:

   - PSCI 4274 - Conflict Resolution and Public Consent Building
   - PSCI 4414 - Organizational Change Agents

   Take one of the following electives:

   - PSCI 4374 - Public Priorities for the 21st Century
   - PSCI 4084 - Local Government and Administration

Computer Graphics and Visual Effects Undergraduate Certificate

Introduction

Please click here to see general Visual Arts information.
The undergraduate certificate in computer graphics and visual effects is designed to enhance computer science majors' post-graduation professional marketability and preparation for graduate studies. Students who complete this certificate will understand the characteristics and capabilities of various computer graphic technologies (hardware and software), their value for expressive, functional and strategic applications, their positions within larger contexts and systems, and their influences on individuals and society.

Courses for this certificate are billed at a different rate than the standard course tuition due to the state-of-the-art technology used in the program. For more information regarding this rate, contact Digital Animation Center (DAC) Director Howard Cook at howard.cook@ucdenver.edu or the College of Arts & Media Advising Office at CAMadvising@ucdenver.edu.

Program Delivery

- This is an on-campus program.

Declaring This Certificate

- Only students enrolled in the CU Denver computer science degree program may apply for admission to this certificate. Please contact DAC Director Howard Cook at howard.cook@ucdenver.edu for information about the application process.

General Requirements

- Click here for information about Academic Policies.

Certificate Requirements

1. All courses for this certificate must be taken at CU Denver.
2. A minimum grade of C (2.0) is required for each course applied toward a CAM major, minor or certificate requirement. A grade of C- (1.7) or lower will not fulfill a major, minor or certificate requirement. A grade of P is acceptable for courses in which the only grade available is Pass or Fail.
3. Students earning the certificate must have at least a 2.0 cumulative CU GPA.
4. All applicable courses taken in a College of Arts & Media certificate program can be used toward the requirements for a CAM degree program.

- The following Computer Graphics and Visual Effects Certificate course requirements are subject to change. Please contact DAC Director Howard Cook at howard.cook@ucdenver.edu for updates.

Take all of the following Computer Graphics and Visual Effects Certificate courses (entry-level):

- FINE 1810 - Digital Animation Foundations: Producing Animation
- FINE 1820 - Digital Animation Foundations: Introduction to Digital 3D

After completing the above two courses, take the following Computer Graphics and Visual Effects Certificate course (available only to students who are accepted into the certificate):

- FINE 2810 - Digital Animation Techniques: Surface Modeling
Cultural Diversity Studies Undergraduate Certificate

Introduction

Please click here to see Ethnic Studies department information.

The undergraduate certificate in cultural diversity studies is designed to appeal to undergraduate students with a background in any major. It will allow students to demonstrate to potential employers that they possess the multicultural skills and knowledge necessary to succeed in the workplace. Students will enroll in department courses that focus on the historical context in which race and culture have emerged in the United States.

This certificate is also targeted to non-degree-seeking professionals who seek to acquire multicultural knowledge and the skills necessary to ensure their success in professional environments. Students will be encouraged to think critically about race and race relations. Their expanded understandings of the implications of race and culture in work environments will ensure employers that they offer the highest quality employees opportunities in employment or advancement.

These degree requirements are subject to periodic revision by the academic department, and the College of Liberal Arts and Sciences reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

Additional information about the undergraduate certificate in cultural diversity studies may be obtained from ethnic studies department at 303-556-6560 or email: ethnic_studies@ucdenver.edu

Program Delivery

- This is an on-campus program with some courses available online.

Declaring This Certificate

- Please see your advisor.

General Requirements

- Click here for information about Academic Policies.

Certificate Requirements

1. The undergraduate certificate in cultural diversity studies requires 12 semester hours (four courses).
2. A minimum grade of C must be earned in each of the four courses completed as part of the certificate.
3. All credits for the certificate must be earned at CU Denver.

Take the following required Cultural Diversity Studies course:

- ETST 2000 - Introduction to Ethnic Studies

Choose three Elective courses from any Ethnic Studies Department courses, including the following:

- ETST 2155 - African American History
- ETST 2294 - Race and the Media
- ETST 3254 - Race and Ethnicity in the Inner City
- ETST 3297 - Social History of Asian Americans
- ETST 3396 - History of the American Indian
- ETST 3704 - Culture, Racism and Alienation
- ETST 4558 - Chicano and Latino Politics

There are cross-listed courses in a variety of departments, including history, political science and sociology. Any cross-listed course is acceptable. You must register for it under ETST numbers. A complete listing of department offerings and cross-listed courses can be obtained every semester from the Ethnic Studies Department web page or by calling our office at 303-315-3616 for a copy.

Democracy and Social Movements Undergraduate Certificate

Introduction

Please click here to see Political Science department information.

The Democracy and Social Movements (DSM) certificate program in political science introduces students to current research and practice concerning the complex interplay between social movements and the processes for initiating and consolidating democracies. While contentious political activities have historically contributed to democratization, they have also led to repression, ethnic conflict and substantive human rights violations.

Students in the DSM program examine relevant theoretical and methodological literature in these aforementioned areas and apply it to current circumstances by taking specified courses in each of the four major subfields of political science: American, comparative, international politics and political theory.

The DSM certificate program is designed to appeal to persons who want to focus their studies on the recent state of democratization processes around the world, including explorations of the ways in which social movements can catalyze or even threaten those democratization processes. Students in the program will explore how globalization is simultaneously fragmenting and uniting the globe, enhancing wealth and impoverishing people, consolidating human rights regimes and transgressing them and provoking questions about the boundaries of our ethical commitments and the means whereby communities strive for democracy and justice.

These degree requirements are subject to periodic revision by the academic department, and the College of Liberal Arts and Sciences reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

Program Delivery

- This is an on-campus program.

Declaring This Certificate

- Please see your advisor.

General Requirements

- Click here for information about Academic Policies.
Certificate Requirements

1. The undergraduate certificate requires five program courses (15 credits, with at least 6 credits at the upper division level), one in each of the four political science subfields and the capstone seminar, as well as completion of an appropriate experiential learning requirement.
2. All courses for the certificate must be taken in residency at CU Denver, and completed with a grade of C or higher.
3. A minimum GPA of 2.0 is required for the undergraduate certificate.
4. Topics courses approved by the program advisor can also satisfy course requirements.
5. All students, whether working toward a degree or as a non-degree student, are eligible for the certificate.

Take one of the following International Politics courses*:

- PSCI 4216 - International Politics: Human Rights
- PSCI 4225 - Democracy and Democratization
- PSCI 4265 - Social Justice And Globalization
- PSCI 4808 - Strategies of Peacebuilding

Take one of the following Comparative Politics courses*:

- PSCI 4146 - Indigenous Politics
- PSCI 4224 - Dictatorships in 21st Century
- PSCI 4225 - Democracy and Democratization
- PSCI 4555 - International Women's Resistance
- PSCI 4808 - Strategies of Peacebuilding

Take one of the following American Politics courses*:

- PSCI 3035 - Political Movements: Race and Gender
- PSCI 3914 - The Urban Citizen
- PSCI 4074 - Urban Politics

Take one of the following Political Theory courses*:

- PSCI 4207 - Theories of Social and Political Change
- PSCI 4265 - Social Justice And Globalization

*Note: Some courses appear more than once in different subfields; students should choose four different subfield courses, not count one toward two subfields.

Take the following Capstone course:

- PSCI 4206 - Social Movements, Democracy and Global Politics

Complete the Experiential Learning Requirement:

Like the existing departmental experiential learning requirement for majors, this requirement can be fulfilled without taking course credits, for example, by documenting the inclusion of significant experiential learning/field work in regular course work, or by documenting significant relevant field work in one's professional life.
Ethics Undergraduate Certificate

Introduction

Please click here to see Philosophy department information.

The certificate in ethics is designed for students currently enrolled in a degree program as well as nondegree students.

These degree requirements are subject to periodic revision by the academic department, and the College of Liberal Arts and Sciences reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

Program Delivery

- This is an on-campus program.

Declaring This Certificate

- Please see your advisor.

General Requirements

- Click here for information about Academic Policies.

Certificate Requirements

1. A total of 12 semester hours is required for an Ethics certificate.

   Take four of the following Ethics courses:

   - PHIL 1020 - Introduction to Ethical Reasoning
   - PHIL 3002 - Ancient Greek Philosophy
   - PHIL 3150 - History of Ethics
   - PHIL 3200 - Social and Political Philosophy
   - PHIL 3250 - Business Ethics
   - PHIL 3280 - War and Morality
   - PHIL 3500 - Ideology and Culture: Racism and Sexism
   - PHIL 3550 - Philosophy of Death and Dying
   - PHIL 4150 - Twentieth Century Ethics
   - PHIL 4242 - Bioethics
   - PHIL 4250 - Environmental Ethics
   - PHIL 4260 - Philosophy of Law

Geographic Information Science Undergraduate Certificate
Introduction

Please click here to see Geography and Environmental Sciences department information.

The intention of this certificate is to provide undergraduates with a mechanism for demonstrating capabilities in spatial techniques in the social and/or physical sciences. The focus of this certificate is on a broad array of geotechniques, including geographic information systems, remote sensing, cartography and statistics, which give students additional analytical skills to take into the workplace or on to graduate school. This certificate is designed for geography majors as well as nonmajors.

Upon successful completion of the certificate, students will be able to:

- understand basic theoretical underpinnings of spatial analysis
- apply geo-spatial technologies to real-world applications
- have a basic knowledge of how to operate at least three types of software used for spatial analysis

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

Program Delivery

- This is an on-campus program.

Declaring This Certificate

- Of the four core requirements, only the statistics class has prerequisites, including algebra and introductory calculus. Because of the technical nature of the GIS and remote sensing course work, however, some mathematical experience is desirable prior to beginning the program.
- Students may begin the program in any semester or during the summer by making arrangements with the GISci certificate coordinator, and completing and signing the Application for GISci Certificate.

General Requirements

- Click here for information about Academic Policies.

Certificate Requirements

1. Students must have a 3.0 GPA in all approved geographic technology courses to earn the certificate.
2. The certificate will be awarded when the student graduates with the bachelor's degree. For those who already have a bachelor's degree, the certificate will be awarded upon completion of the program.
3. To obtain the certificate, students must complete four core courses, one elective, and a 1-hour independent study, totaling 16 hours.
4. Although the four core courses may be taken in any order, it is advisable to begin with GEOG 4081 - Introduction to Cartography and Computer Mapping since this course familiarizes students with many key concepts used in the other classes.
5. All core courses are offered on a yearly basis. Any alterations to the program MUST be approved by the GISci Coordinator.
Take **all** of the following Geographic Information Science courses:

- GEOG 4060 - Remote Sensing I: Introduction to Environmental Remote Sensing
- GEOG 4080 - Introduction to GIS
- GEOG 4081 - Cartography and Computer Mapping
- GEOL 4770 - Applied Statistics for the Natural Sciences or equivalent course approved by the GISci Certificate Coordinator.

Take **two** of the following Electives courses:

- GEOG 4070 - Remote Sensing II: Advanced Remote Sensing
- GEOG 4085 - GIS Applications for the Urban Environment
- GEOG 4090 - Environmental Modeling with Geographic Information Systems
- GEOG 4095 - Deploying GIS Functionality on the Web
- GEOG 4235 - GIS Applications in the Health Sciences
- CVEN 5382 - GIS Spatial Database Development
- CVEN 5385 - GIS Relational Database Systems or an elective approved by the GISci Certificate Coordinator.

**Launchpad Entrepreneurship Certificate**

Return to: Programs

**Introduction**

The Business Schools undergraduate certificates are primarily intended for students currently pursuing a degree in any undergraduate discipline that want to expand their business knowledge to give themselves a leg up when they enter the work force. However, they can also be taken by students with only a high school diploma.

Students can pursue one of our undergraduate certificates, even if they are not CU Denver students. Credit earned as a part of the certificate DOES count towards your undergraduate degree, should you choose to pursue a degree here.

The Jake Jabs Center for Entrepreneurship is offering an affordable program in one of the fastest growing business segments in the country—Innovation and Entrepreneurship. All courses are taught by faculty from the Jake Jabs Center for Entrepreneurship at CU Denver. You will find many opportunities including scholarships, mentoring, and networking. You will gain skills that prepare you to start a successful business or become an entrepreneurial asset to an existing company.

**Benefits:**

- Experiential opportunities
- Condensed 8-Week courses
- Two convenient Denver locations
- Cost effective - Scholarships available
- No GPA requirements or prerequisites

**Program Delivery**

This certificate can be earned in either downtown Denver at the Jake Jabs Center for Entrepreneurship or CU South Denver.
Declaring This Certificate

For more details about Launchpad courses and registration, visit the Launchpad Certificate page.

Mediation Undergraduate Certificate

Introduction

Please click here to see Communication department information.

Mediation entails a third-party intervention designed to assist parties in managing conflict. Trained mediators are impartial process experts who learn to utilize communication and conflict philosophy and theories to increase the probability of more favorable outcomes between parties in conflict. The undergraduate certificate is designed for communication majors or any student interested in developing practical skills in alternative dispute resolution. The courses in this certificate focus on alternative dispute processes that include strategies for managing conflict in personal, public, legal, political, governmental and corporate contexts.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

Program Delivery

- This is an on-campus program.

Declaring This Certificate

- Students should apply for the undergraduate certificate in Mediation after the completion of the required courses.
- To apply, students must complete the certificate application (see the Communication Department website) and return it to Dr. Larry Erbert in room 3008 of the Student Commons Building, or mail to Department of Communication; P.O. Box 173364, Campus Box 176; University of Colorado Denver; Denver, CO 80217-3364. The approved certificate is mailed to the student after final grades are posted for the semester.
- Students who are not already enrolled at CU Denver must also complete an Application for Non-Degree Admission prior to registering for courses. The form should be returned to the Office of Admissions.

Additional information about the undergraduate certificate in Mediation may be obtained from Dr. Larry Erbert, Department of Communication, 303-315-1918, Larry.Erbert@ucdenver.edu.

General Requirements

- Click here for information about Academic Policies.

Certificate Requirements

1. The undergraduate certificate in mediation requires 12 semester hours (four courses).
2. A grade of B or higher must be earned in each course completed as part of the certificate (a grade of B- is not acceptable).
3. All of the credit hours for the certificate must be earned at the University of Colorado Denver.
Take the following **Mediation** core course:

- COMM 4262 - Mediation

Take **at least one** of the following two courses (students who take both classes take one elective rather than two; students who take only one must select two electives):

- COMM 4255 - Negotiations and Bargaining
- COMM 4260 - Communication and Conflict

Take **one or two** of the following Elective courses:

- COMM 2140 - Argumentation
- COMM 3271 - Communication and Diversity
- COMM 4240 - Organizational Communication
- COMM 4282 - Environmental Communication
- COMM 4681 - Communication Issues in Trial Court Practices and Processes

**Risk Management and Insurance Certificate**

Return to: Programs

**Introduction**

The Business Schools undergraduate certificates are primarily intended for students currently pursuing a degree in any undergraduate discipline that want to expand their business knowledge to give themselves a leg up when they enter the work force. However, they can also be taken by students with only a high school diploma.

Students can pursue one of our undergraduate certificates, even if they are not CU Denver students. Credit earned as a part of the certificate DOES count towards your undergraduate degree, should you choose to pursue a degree here.

Broaden your knowledge of Risk Management and Insurance (RMI) by completing a one-year Certificate in RMI Studies from the University of Colorado Denver. By completing three semester-long RMI courses, all available online, and meeting prior finance course requirements, you will be on your way to enhancing your personal knowledge and providing your employer with RMI awareness and professional skills.

**Program Delivery**

This is an on-campus program.

**Declaring This Certificate**

See the [Risk Management and Insurance Certificate page](#) for more information.

**Scientific Foundations of Technical Innovation Certificate**

**Introduction**

Please click here to see Physics department information.
The goal of this certificate is to give students and working professionals an opportunity to broaden their technical knowledge while contributing to regional economic development. Two real-world projects—one for a client and one for the student's own pursuits—are combined with a series of six short courses to provide both context and substance for gaining knowledge needed to create technical prototypes.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

Program Delivery

- This is an on-campus program.

Declaring This Certificate

- Entry into the certificate program requires prior completion of two semesters of calculus-based physics and two semesters of calculus or permission of the certificate advisor.

General Requirements

- Click here for information about Academic Policies.

Certificate Requirements

Take all of the following Scientific Foundations of Technical Innovation courses:

- PHYS 4850 - Physics for Design and Innovation I
- PHYS 4852 - Physics for Design and Innovation II

Take six 1 semester-hour short courses out of the list of Topics in Scientific Instrumentation; the specific sequence must be approved by the certificate advisor.

- PHYS 4400 - Topics in Scientific Instrumentation and Laboratory Methods

Strategic Communication Undergraduate Certificate

Introduction

Please click here to see Communication department information.

In keeping with worldwide transformations in journalistic practices, information technology, media production, image consumption, message distribution, and norms of citizen engagement, the Department of Communication is replacing its existing Certificate in Public Relations with a new Certificate in Strategic Communication. The new Strategic Communication certificate will require students to complete 18 semester hours (six courses) in a structured manner.
PLEASE NOTE: Students who are currently working to earn a certificate in Public Relations must complete all required coursework no later than the end of the Fall 2016 semester, or apply relevant courses to the new Certificate in Strategic Communication.

These degree requirements are subject to periodic revision by the academic department, and the College reserves the right to make exceptions and substitutions as judged necessary in individual cases. Therefore, the College strongly urges students to consult regularly with their major advisor and CLAS advisor to confirm the best plans of study before finalizing them.

Program Delivery

- This is an on-campus program.

Declaring This Certificate

- Students should apply for the undergraduate certificate in Strategic Communication after the completion of the required courses.
- To apply, students must complete the certificate application (see the Communications Department website) and return it to Dr. Hamilton Bean in his mailbox in room 3010 in the Student Commons Building, or mail to Department of Communication; P. O. Box 173364, Campus Box 176; University of Colorado Denver; Denver, CO 80217-3364. The approved certificate is mailed to the student after final grades are posted for the semester.
- Students who are not already enrolled at CU Denver must also complete an Application for Non-Degree Admission prior to registering for courses. The form should be returned to the Office of Admissions.

Additional information about the undergraduate certificate in Strategic Communication may be obtained from Dr. Hamilton Bean, 303-315-1909, or Hamilton.Bean@ucdenver.edu.

General Requirements

- Click here for information about Academic Policies.

Certificate Requirements

1. The undergraduate certificate in strategic communication requires 18 semester hours (six courses).
2. A grade of B must be earned in each course completed as part of the certificate (a grade of B- is not acceptable).
3. All of the credit hours for the certificate must be earned at the University of Colorado Denver.

Take all of the following courses:

- COMM 1071 - Introduction to Journalism
- COMM 2051 - Introduction to Strategic Communication
- COMM 2071 - Media Writing Skills

Take two of the following elective courses:

- Elective 1: Take either FINE 2155 - Introduction to Digital Photography or FINE 3405 - Introduction to Digital Video or COMM 4620 - Media Production.
Elective 2: For the second elective, pick a class approved for the CSC in consultation with a Department of Communication advisor.

Complete a semester-long capstone project conducted in conjunction with an internship appointment with a community partner (selected via consultation with the Department of Communication's Internship Director). All capstone/internships will conclude with the production of a professional-grade portfolios and formal presentation of work in a public forum.

This requirement will be satisfied by taking:

- COMM 3939 - Internship or
- COMM 4051 - Advanced Strategic Communication

Sustainable Urban Agriculture Undergraduate Certificate

Introduction

Please click here to see Geography and Environmental Sciences department information.

The goal of the certificate program is to provide GES students advanced training in sustainable urban agriculture through the integration of university classroom study and field-based practicum conducted at the department’s field research station. Requirements for the certificate are therefore divided between on-campus courses and field courses.

Upon successful completion of the certificate, students will:

- Have knowledge of the history of urban farming
- Understand the modern agro-food system
- Participate in sustainable urban agricultural practices

Program Delivery

This is both an on-campus and field-based program.

Declaring This Certificate

- Please see your advisor.

General Requirements

- Click here for information about Academic Policies.

Certificate Requirements

Take one of the following courses:

- GEOG 4450 - Urban Food and Agriculture: Perspectives and Research
- ENVS 5450 - Urban Food and Agriculture: Perspectives and Research
Take **two** of the following elective courses:

- GEOG 4460 - Sustainable Urban Agriculture Field Study I or
- ENVS 5460 - Sustainable Urban Agriculture Field Study I
- GEOG 4470 - Sustainable Urban Agriculture Field Study II or
- ENVS 5470 - Sustainable Urban Agriculture Field Study II
- GEOG 4990 / GEOG 5990 - Special Topics In Geography or
- ENVS 5500 - Topics in Environmental Sciences

Take **three** semester hours of additional elective credit, choosing one of the following:

- A sustainable agriculture internship with any local food/urban agriculture community organization or
- An elective course approved by the certificate coordinator