ECONOMICS MA/APPLIED MATHEMATICS MS DUAL DEGREE, WITH A FOCUS IN APPLIED STATISTICS

Introduction

Graduate Advisors:

Economics - Andrew Friedson, Chloe East, and Andrea Velasquez
Applied Mathematics - Click here. (https://clas.ucdenver.edu/
mathematical-and-statistical-sciences/degree-requirements-dual-mams-
economics-and-applied-mathematics/)

The fields of mathematics and economics are inextricably linked. In economics, mathematics and statistics are used extensively in theory construction, tests of existing theories and discovery of regularities to inform new theories. Economics also gives mathematicians/ statisticians new challenges, new outlets and new ideas to incorporate in mathematics. These complementarities have long been recognized and economics graduate students have always been advised to take advanced courses in statistics.

A "dual" degree means that students who complete the program earn two master's degrees: MA in economics and MS in applied mathematics. Students interested in completing the dual degree in economics and applied mathematics must apply separately to each program, meet the admission requirements of each program, and be accepted by each program. If one program accepts a student for the dual degree but the other program does not, then the student may not graduate under the dual degree program. Students may apply to both programs at the same time or apply to the economics program first, and then to the applied math program after their first semester, or vice versa. Both programs must be completed in the same semester to take advantage of the dual degree program. Further information about this program can be obtained from either the Department of Economics or the Math Department.

Click here (http://catalog.ucdenver.edu/cu-denver/graduate/schools-colleges-departments/college-liberal-arts-sciences/economics/ economics-ma/) for admissions requirements for the MA program in Economics

Click here (http://catalog.ucdenver.edu/cu-denver/graduate/schools-colleges-departments/college-liberal-arts-sciences/mathematical-statistical-sciences/applied-mathematics-ms/) for admissions requirements for the MS program in Applied Mathematics

There are an increasing number of economics MA students wishing to obtain graduate training and a degree in statistics. Having an MA degree in economics and an MS degree in Applied Mathematics will make a student highly employable in the job market and provide them an edge in applying for elite PhD programs.

Graduate Education Policies and Procedures apply to this program.

Program Requirements

1. The requirements for the dual degree in economics and applied mathematics include completing 21 credit hours in ECON and 21 credit hours in MATH (42 total credit hours).
2. Students are expected to meet all course prerequisites. ECON 5803 Mathematical Economics is a prerequisite for ECON 5073 Microeconomic Theory and ECON 5813 Econometrics I. This prerequisite requirement is waived for students who are currently admitted to the MS Applied Mathematics program.
3. Students must complete all ECON and MATH credits at the graduate level (5000-level or higher).
4. Students must earn a minimum grade of B- (2.7) in all courses that apply to the degree and must achieve a minimum cumulative GPA of 3.0. All graded attempts in required and elective courses are calculated in the GPA. Courses taken using P+/P/F or S/U grading cannot apply to program requirements. No course may be taken more than twice and only one attempt will retain the credit.
5. Students must complete all coursework with CU Denver faculty.

Code	Title	Hours
Complete the following required ECON courses:		*18*
ECON 5073	Microeconomic Theory	
ECON 5083	Macroeconomic Theory	
ECON 5813	Econometrics I	
ECON 5823	Econometrics II	
ECON 6053	Seminar In Applied Economics [1]	
or ECON 605	Seminar In Applied Economics II	
ECON 6073	Research Seminar	
Complete the following required MATH courses: [2]		*18*
MATH 5070	Applied Analysis	
MATH 5310	Probability	
MATH 5320	Statistical Inference	
MATH 5394	Experimental Designs	
or MATH 637	Statistical Computing	
or MATH 638	Stochastic Processes	
or MATH 638	Spatial Data Analysis	
or MATH 638	Statistical and Machine Learning	
or MATH 738	Mathematical Probability	
or MATH 782	Topics in Probability and Statistics	
MATH 5718	Applied Linear Algebra	
MATH 6330	Workshop in Statistical Consulting	
Complete three credits of graduate (5000-level or higher) ECON elective credits.		*3*
Complete three credits of of graduate (5000-level or higher) MATH elective credits. [3]		*3*
Total Hours		**42**

[1] Students must complete a minimum of three credit hours of ECON 6053 Seminar In Applied Economics / ECON 6054 Seminar In Applied Economics II. Students may complete all three credit hours in one of the courses or they may complete 1.5 credits in each course. After completing the three required credit hours as part of the required coursework, additional credits may be counted as electives.

[2] Students may complete a different course given prior approval by the student's advisor and the Director of the Program.

[3] Except MATH 5000-5017 and MATH 5198. Contact a graduate advisor in the Math Department for information about Math course requirements.

To learn more about the Student Learning Outcomes for the MS program in Applied Mathematics, please visit our website.

To learn more about the Student Learning Outcomes for the MA program in Economics, please visit our website (https://clas.ucdenver.edu/economics/programs/master-arts-economics/).