

BIOMEDICAL ENGINEERING, MD-PHD

Introduction

For students already enrolled or accepted into the Medical Scientist Training Program (MSTP) at CU Anschutz (<https://catalog.ucdenver.edu/cu-anschutz/schools-colleges-programs/school-medicine/>). Degree completion in 7-8 years with highly individualized training pathway and a multidisciplinary research dissertation. Please contact us for advising at bme@cuanschutz.edu (bioengineering@cuanschutz.edu).

Graduate Education policies and procedures apply to this program.

Advanced Knowledge: Students will know how to take advantage of cutting edge tools, information and knowledge to address complex problems in bioengineering. The graduate student evaluates models and hypotheses using the appropriate experimental, mathematical and statistical approaches.

Ethical Conduct: Students will be able to recognize ethical issues, consider multiple points of view, and use critical and ethical reasoning to determine the appropriate behavior to follow in the practice of biomedical engineering in a global context.

Research and Development: Students will creatively synthesize theory, literature, and personal experience to: 1) generate new ideas or hypotheses in bioengineering, and 2) devise critical tests of hypotheses and/or develop unique solutions to biomedical engineering problems.

Multi-disciplinary Communication (written & oral communication):

PhD: Students will have at least one written product ready for presentation at conference or in refereed journal. Students are capable of a fluent debate in oral defense.

Multi-disciplinary Communication (interpersonal communication): Students will demonstrate the ability to work with other professionals in their own fields and to collaborate with colleagues of diverse scientific backgrounds.

Clinical Knowledge: The students will possess a significant command of medical terminology/knowledge in the areas of anatomy, physiology, pathology, medical procedures and technology in order to communicate effectively with clinical staff over opportunities to improve patient comfort/longevity through new and improved devices, drugs, surgical procedures or planning.

Scholarly Achievement and Research Outcomes: Students can articulate an original idea in the context of the relevant technical literature. Students apply appropriate methods correctly, and findings constitute an original contribution to the student's field.

To learn more about the Student Learning Outcomes for this program, please visit our website (<https://engineering.ucdenver.edu/bioengineering/graduate-programs/phd-in-bioengineering#ac-dual-mdphd-program-2>).