

Applied Biomedical Engineering CSU and the Cleveland Clinic Joint Doctoral Program

INTRODUCTION

The Applied Biomedical Engineering (ABE) doctoral program was developed mainly as a response to the need for highly-educated bioengineering researchers and professionals in the expanding medical industry. CSU and the Cleveland Clinic, based on their excellence in research and education, identified this need and combined forces to create the ABE program.

PROGRAM DESCRIPTION

ABE is a joint program between the Fenn College of Engineering of CSU and the Department of Biomedical Engineering of the world-renowned Cleveland Clinic. The program's great success is based on the excellence in teaching and applied research of CSU and the internationally-recognized achievements in research of the Cleveland Clinic.

ABE students are admitted into CSU's Department of Chemical and Biomedical Engineering. Assistantships are available for highly-qualified students. Classes are taken at CSU and the doctoral research is performed either at the Cleveland Clinic or at CSU. Graduates of the ABE program have careers in the biomedical industry, in medical research centers, and in academia.

RESEARCH and OTHER AREAS of DISTINCTION

The Fenn College of Engineering at CSU is well-known for hands-on education and emphasis on applied research funded by national agencies, foundations, and industry. The Department of

Biomedical Engineering at the Cleveland Clinic is famous for its basic and clinical research to develop innovative diagnostic and therapeutic technologies. The ABE faculty at CSU and at the Cleveland Clinic conduct their world-recognized research in a variety of areas, including biomechanics, bioprocesses, cardiovascular disease, diabetes technology, medical devices, medical imaging, nanotechnology, orthopedics, and tissue engineering. The ABE students perform their doctoral research in some of the best laboratories and take classes from some of the best instructors in engineering. Classes include tours in clinical facilities and in local, world-leading biomedical companies.

DEGREE REQUIREMENTS

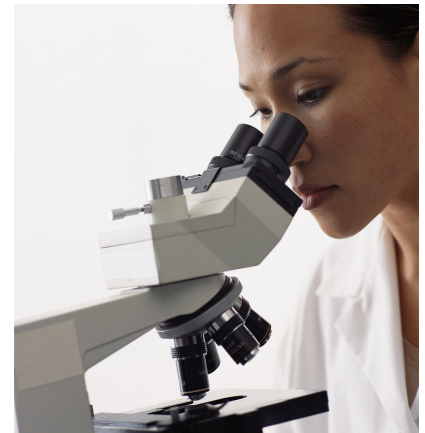
To obtain the doctoral degree, ABE students take at least 60 credit hours beyond the Master's degree. These include at least 30 credit hours of coursework and at least 30 credit hours of doctoral research/dissertation.

The coursework for students in the ABE specialization includes:

- core and elective biomedical engineering courses
- advanced engineering mathematics courses

- non-engineering elective courses (including a Physiology course)

In addition to the required coursework, students must pass the qualifying examination and the candidacy examination and successfully defend their dissertation.



For admission information contact:
Cleveland State University
Graduate Admissions Office
2121 Euclid Ave., PH 227
Cleveland, OH 44115
(216) 687-5599
www.csuohio.edu/gradcollege/

For program information contact:
The Applied Biomedical Engineering
Department of Chemical and
Biomedical Engineering, SH 455
(216) 687-2569
[http://www.csuohio.edu/engineering/
chemical/academic/](http://www.csuohio.edu/engineering/chemical/academic/)