Certificate

Advanced Engineering with a Concentration in **Biomedical Engineering** Certificate

The Graduate Certificate in Biomedical Engineering Program offers students and professionals the opportunity to further their knowledge with advanced study in the growing area of Biomedical Engineering. The program is designed to provide well-rounded instruction in several key facets of Biomedical Engineering. Those who complete the Program receive the Advanced Engineering Certificate in Biomedical Engineering from Old Dominion University and a letter of recognition from the Batten College of Engineering and Technology. Courses taken for the certificate program may later be applied to the Ph.D. degree in Biomedical Engineering.

Certificate Program Admission Requirements

- · Bachelor of Science degree (or equivalent) in an engineering field or undergraduate degree in another relevant STEM field.
- · Prerequisites for applicants from non-engineering fields include collegelevel mathematics, calculus-based physics, and chemistry or biology.

Certificate Program Curriculum Requirements

- · Twelve credit hours of graduate course work
- A grade point average of 3.0 or better

BME Fundamentals

Total Credit Hours		12
ECE 564	Biomedical Applications of Low Temperature Plasmas	
ECE 562	Introduction to Medical Image Analysis (MIA)	
BME 724	Neural Engineering	
BME 721	Mathematical Modeling in Physiology	
BME 720	Modern Biomedical Instrumentation	
BME 554	Introduction to Bioelectrics	
Select two of the following:		6
BME Electives [*]		
BME 726	Biomaterials	
BME 721	Mathematical Modeling in Physiology	
BME 720	Modern Biomedical Instrumentation	
Select two of the following:		0

Total Credit Hours

Appropriate course substitutions may be considered with permission of the Graduate Program Director.