

BIOMEDICAL ENGINEERING TECHNOLOGY (BMED)

BMED 1010 Biomedical Technology (2 Credits)

Introduces the interdisciplinary nature of the Biomedical Engineering Technology program through engineering and medical terminology. Presents hospital and industrial policies, procedures, and codes with an emphasis on safety. Introduces biomedical instrumentation, control systems, and the man-machine interface.

Previous: Legacy Equivalent(s): BME* 110

BMED 1016 Physiological Systems (4 Credits)

Examines human anatomy and physiology, using chemical, mechanical, and electrical system models. Presents biopotential generation and regulatory control systems. Develops computer simulations of physiological events.

Additional fees may apply

Previous: Legacy Equivalent(s): BME* 116

BMED 2010 Biomedical Instrumentation (4 Credits)

Presents the principles, applications, and design of biomedical instrumentation. Includes discussion of measuring, monitoring, diagnostic, therapeutic, and clinical laboratory equipment. Presents imaging techniques and computer-based systems.

Prerequisites: CENT 1036

Additional fees may apply

Previous: Legacy Equivalent(s): BME* 210

BMED 2012 Biomedical Equipment Design (4 Credits)

Develops instrumentation standards and construction techniques for biomedical equipment. Design of the documentation and hardware/software for a biomedical instrumentation system. Uses commercial instrumentation systems for analysis and testing.

Prerequisites: BMED 2010

Additional fees may apply

Previous: Legacy Equivalent(s): BME* 212

BMED 2014 Advanced Biomedical Instrumentation (4 Credits)

Presents applications of data acquisition and analysis, imaging, and control systems. Develops microprocessor- and computer-based instrumentation. Systems studied include Medical Networking, Expert Systems, Fiberoptics, Lasers, and Tomography.

Prerequisites: BMED 2010

Additional fees may apply

Previous: Legacy Equivalent(s): BME* 214

BMED 2020 Biomedical Practicum (3 Credits)

Applies safety, calibration and troubleshooting techniques to practical situations. Also provides onsite practical experience in a hospital.

Prerequisites: Approval of Program Coordinator

Previous: Legacy Equivalent(s): BME* 220