

OEBM-BIOMEDICAL TECHNOLOGY (OEBM)

Prerequisite(s): OEBM 141.

OEBM 140. Applied Human Biology for Biomedical Technology

3 Credits (3)

Essential human biology, anatomy, physiology and medical terminology for biomedical equipment technicians. Focus on the vocabulary necessary for effective communication in the hospital environment as part of the health care team. Restricted to: Community Colleges only.

OEBM 141. Medical Electronics and Safety in Healthcare

3 Credits (3)

Introduction to the biomedical equipment technology field. Operation of common biomedical equipment to include pressure and temperature systems, infusion devices, patient monitors, and other physiologic and patient systems. Hospital safety and health regulations explained.

Restricted to Community Colleges campuses only.

Corequisite(s): OEBM 140.

Learning Outcomes

1. Students will identify historical developments of device, explain the role of BMET personnel, and categorize the usage and methods of medical devices relating to the human body.
2. Students will identify and define, contrast, explain, and demonstrate medical diagnostic and measurement devices.
3. Students will identify and define, compare, explain, and demonstrate medical treatment devices.
4. Students will identify and define, and demonstrate medical system safety procedures, troubleshooting techniques, and testing methods.
5. Students will identify, compare, define, and demonstrate usage of biomedical test and calibration equipment.

OEBM 200. Biomedical Internship

1-4 Credits (3-12P)

Practice working in industry as a biomedical electronics technologist. Students work on a variety of medical equipment and job tasks. An employer evaluation, student report, and a minimum of 100 work hours are required. May be repeated up to 8 credits. Consent of Instructor required. Restricted to Community Colleges campuses only.

Prerequisite(s): OEBM 140 and OEBM 141.

OEBM 211. CBET Exam Preparation

1 Credit (1)

An overview of the Certified Biomedical Equipment Technician exam. Topics include anatomy and physiology, electronics principles, safety issues, equipment operation, and equipment troubleshooting.

Prerequisite(s)/Corequisite(s): OEBM 241 AND OEBM 240. Restricted to Community Colleges campuses only.

OEBM 240. Medical Imaging Systems

3 Credits (3)

The fundamentals of diagnostic radiography equipment will be explored. Principles of an x-ray system will be explained including the x-ray generation, image formation and film processing. Focus will be on both safety and quality. Restricted to Community Colleges campuses only.

Prerequisite(s): OEBM 140.

OEBM 241. Advanced Medical Electronics

3 Credits (3+1P)

Advanced study in biomedical equipment to include cardiovascular, pulmonary, telemetry and other critical life support systems. Restricted to Community Colleges campuses only.