

EET 281 - BIOMEDICAL EQUIPMENT II

Course Description

This course continues the study of biomedical equipment technology and the role of the technician. Healthcare problem solving techniques will be developed through the analysis, testing and troubleshooting of medical equipment. Information technology needs and requirements will be reviewed as they pertain to the healthcare environment as well as anatomy and physiology specific to the field. Students will continue preparing for the CBET certification exam. Group 2 course.

Credit Hours

3

Contact Hours

4

Lecture Hours

2

Lab Hours

2

Required Prerequisites

EET 180

General Education Outcomes supported by this course

Critical Thinking - Direct

Course Learning Outcomes

Knowledge:

- Describe the structure and function of major organ systems as they pertain to biomedical equipment technology.
- Identify information technology needs for healthcare facilities and devices.
- Illustrate a power distribution and storage system in a healthcare facility.

Application:

- Measure performance parameters of healthcare technologies.
- Apply electronic principles to healthcare devices and systems.
- Calculate electrical parameters of healthcare devices and power distribution systems.
- Operate equipment appropriately.
- Assemble electronic circuits and/or systems.

Integration:

- Compare actual device performance to expected values.
- Incorporate technical problem solving principles to healthcare and information technology situations.
- Modify systems to meet regulatory requirements.

Human Dimension:

- Adapt their role to meet the needs of others as appropriate.
- Communicate appropriate responses to public safety situations in the healthcare environment.

Caring - Civic Learning:

- Reflect on the value of their own continuing professional development.
- Assess the impact of a biomedical equipment technician.

Learning How to Learn:

- Self-identify areas needing improvement for the certification exam.
- Evaluate resources that can aid in adapting to changes in the biomedical field.