

Biomedical Equipment Technology II Proficiency Certificate

Description: Biomedical Equipment Technicians (BMETs) are professionals that work in health care settings to test, maintain and repair medical equipment, such as ECG and blood pressure monitors, defibrillators, ventilators and infusion pumps, among others. BMETs typically work for hospitals, medical device manufacturers or third party companies that provide service to hospitals. To be successful in this field, BMETs need to have an understanding of the operation and functions of a range of medical devices and their clinical applications, and the ability to test medical device operation to a set of specifications.

Students who complete the proficiency certificate for Biomedical Equipment Technology I will be able to function as entry-level BMETs. Students may continue their education by earning the Biomedical Technology II Proficiency Certificate, which will enable them to troubleshoot more complex equipment problems and address equipment problems that are network/wireless related. The increased qualifications will enhance the potential for advancement. All credits earned toward the BMET proficiency certificates can be applied to earning an Associate of Applied Science degree in **Biomedical Equipment Technology**.

Student Learning Outcomes:

Upon completion of the Biomedical Technician Proficiency II Certificate, the student will be able to:

- Apply knowledge of medical devices, electronics, computer networks, and anatomy and physiology to resolving medical equipment repair problems.
- Demonstrate professional behavior in the workplace, such as teamwork, communication, etc.
- Work in accordance with applicable safety procedures to ensure their own safety, as well as that of patients and other employees.
- Follow applicable department, hospital and legal guidelines in relation to record keeping, patient privacy, etc.

Program Entry Requirements: This certificate is primarily intended for students who have completed the BMET I proficiency certificate, and completion of the BMET I proficiency certificate provides students with the course prerequisites needed for many of the courses in the level II certificate. The program may also be appropriate for individuals currently working in the profession who wish to increase their knowledge and skills. New students are normally required to take the College's placement test at their time of entry. Students who are identified as needing developmental coursework must satisfactorily complete the appropriate English and mathematics courses as part of the certificate. Applicants must be at least 18 years of age at the start of the internship experience.

Program of Study and Graduation Requirements: Successful completion of the program requires a "C" grade or better in each of the courses listed.

Pending departmental review, students may be terminated from the program for behavior that is inconsistent with the professional standards of the field.

Course Sequence:

Course Number and Name	Prerequisites	Credits
BMET 201 - Medical Devices	BMET 103 with a grade "C" or better	4 credits
ELEC 124 - Semiconductor Devices	ELEC 120 with a grade "C" or better	4 credits
CIS 150 - Network Technology		4 credits
BMET 202 - Medical Devices in a Networked Environment	BMET 201; ELEC 130 , which may be taken concurrently; CIS 105 ; and CIS 150 with a grade of "C" or better in all courses	4 credits
ELEC 130 - Digital Electronics	FNMT 118 completed or higher math placement	4 credits
BMET 203 - Biomedical Equipment Technology Internship II	BMET 202 (with a "C" or better)	3 credits

Minimum Credits Needed to Graduate: 23

Courses and Completion Sequence

The following courses and sequence of courses is designed for the optimal success and completion of the [Biomedical Equipment Technology II Proficiency Certificate](#) degree/certificate. Any alterations should be discussed with your academic advisor.

Course Number and Name	Credits	Advisory Notes
BMET 201 - Medical Devices	4 credits	Prerequisite for BMET 202 (with a "C" or better)
ELEC 124 - Semiconductor Devices	4 credits	

CIS 150 - Network Technology	4 credits	Prerequisite for BMET 202 (with a "C" or better)
BMET 202 - Medical Devices in a Networked Environment	4 credits	Prerequisite for BMET 203 (with a "C" or better)
ELEC 130 - Digital Electronics	4 credits	Prerequisite for BMET 202, may be taken concurrently (with a "C" or better)
BMET 203 - Biomedical Equipment Technology Internship II	3 credits	