

## Short Certificate

To be eligible for the short certificate, students must:

- Complete the following courses.
- Be eligible for ENG 101
- Be eligible for MTH 100
- Have a minimum 2.00 grade point average

### Biomedical Equipment Technology Option

Course	Title	Semester Hours
BET 211	Biomedical Electronic Systems I	3
BET 222	Medical Communications System	3
BET 240	Clinical On-Site Study	4
BET 241	The Law and Legal Issues in Biomed	2
ELM 202	Digital Circuits I	3
ELM 205	Electronics I	3
ELM 206S	Electronics II	3
ELM 200	Electric Circuits I	3
ELM 201S	Electric Circuits II	3
Total Credit Hours		27

### Skills Learned

- Multimeter skills
- Oscilloscope uses
- Diagnostic equipment techniques
- Soldering techniques
- PM procedures
- Schematic reading
- Troubleshooting techniques
- Tools
- Project building
- And much more

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## Why Choose This Career Path?

The Biomedical Equipment Technology field is one of the fastest growing technical fields. According to the Bureau of Labor Statistics, the need for individuals who can repair medical equipment is expected to grow six percent between 2014 and 2024. This growth is due to increased demand for medical services as well as the increasing complexity of the medical equipment used in clinics and hospitals.

## The Program

### Hands-On Labs

- ⇒ Medical Equipment Repair
- ⇒ AC & DC Electronics
- ⇒ Digital Electronics
- Medical Hydraulic and Pneumatic Equipment Repair
- Medical Mechanical Equipment Systems
- CBET Certification Preparation
- Internship With Qualified Technicians

**Learn to repair, service and calibrate electronic medical devices that interface with the human body and start working in an exciting career in a relatively short time!**

2601 Carson Road  
Birmingham, Alabama 35215

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**BIOMEDICAL  
EQUIPMENT  
TECHNOLOGY**

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# Biomedical Equipment Technician

The Biomedical Equipment Technician (BET) performs a valuable function in the maintenance of high technology equipment in the medical field. Due to the advances in electronics and instrumentation, computerized biomedical equipment is vital in the diagnosis, monitoring and treatment of medical problems. Such equipment is used for routine laboratory procedures, daily patient care and acquisition of information concerning patient conditions in emergency situations.

The BET installs, calibrates, services and maintains sophisticated biomedical equipment under the supervision of a biomedical engineer. The BET may also supervise equipment management programs, electrical safety functions, operational checkouts and preventive maintenance programs. Because of the rapidly increasing number of computers used in conjunction with medical and industrial instrumentation, the BET must also have a thorough understanding of digital computer technology and its application.

BETs find employment in both medical and industrial fields repairing medical devices. The employment demand for BETs is great and projected to increase because of the need by hospitals, clinics and medical equipment manufacturers for technicians to install, maintain and repair their equipment. Service contract organizations, equipment manufacturers, hospitals and clinics frequently have their own BET staff who are responsible for all electronic maintenance and repairs.

## Associate in Applied Science Degree Requirements

While completing requirements for the A.A.S degree a student can earn a short certificate and the advance certificate. All course work in the certificate will apply to the corresponding Associate in Applied Science degree.

Course	Title	Semester Hours
ENG 101	English Composition I	3
MTH 100	Intermediate College Algebra	3
SPH 107	Fundamentals of Public Speaking <b>or</b>	3
SPH 106	Fundamentals of Oral Communication	
CIS 146	Microcomputer Applications	3
BIO 103	Principles of Biology (Biomed Only)	4
<b>Social and Behavioral Science Elective:</b> (Anthropology, geography, history, economics, political science, sociology, psychology)		3
<b>Humanities and Fine Arts Elective:</b> (Art, humanities, religion, theatre, music, philosophy, foreign language, literature)		3
BIO 201	Human Anatomy & Physiology	4
BET 211	Biomedical Electronic Systems I	3
BET 222	Medical Communications System	3
BET 233	Pulse and Computer Circuits	3
BET 234	Biomedical Electronic Systems III	3
BET 240	Clinical On-Site Study	4
BET 241	The Law and Legal Issues in Biomed	3
ELM 202	Digital Circuits I	3
ELM 205	Electronics I	3
ELM 206S	Electronics II	3
ELM 200	Electric Circuits I	3
ELM 201S	Electric Circuits II	3
ELM 210	Fluid Power I	3
HED 231	First Aid	3
MET 190	Mechanical Tools I	4
Total Credit Hours		70

**Contact Us!**

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## Certificate Requirements

The program is designed to be an intermediate recognition step for individuals working towards their Manufacturing and Technology associate degree. All course work in the certificate will apply to the corresponding Associate in Applied Science degree.

Upon completion of the prescribed courses, the college awards a certificate. Prior to taking courses, the student is to meet with the advisor and develop a plan for satisfying program requirements.

## Biomedical Equipment Technology Advanced Certificate

A student also earns the advanced certificate upon completing requirements for the associate in applied science degree.

ENG 101	English Composition I	3
MTH 100	Intermediate College Algebra	3
CIS 146	Microcomputer Applications	3
Humanities and Fine Arts Elective: (AHUM) (Art, humanities, religion, theatre, music, philosophy, foreign language, literature)		3
BET 211	Biomedical Electronic Systems I	3
BET 222	Medical Communications System	3
BET 240	Clinical On-Site Study	4
BET 241	The Law and Legal Issues in Biomed	3
ELM 202	Digital Circuits I	3
ELM 205	Electronics I	3
ELM 206S	Electronics II	3
ELM 200	Electric Circuits I	3
ELM 201S	Electric Circuits II	3
Total Credit Hours		40