

**Why Choose P.I.T. to  
prepare you as a  
Biomedical Equipment  
Engineering  
Professional?**

- ✓ **Intimate Learning  
Environment and Family  
Atmosphere**
- ✓ **Learn at Your Own Pace  
with eLearning at P.I.T.**
- ✓ **Free Tutoring**
- ✓ **Experienced Instructors**
- ✓ **Portfolio Building and  
Interview Coaching**

# A.S. Biomedical Equipment Engineering

**One of the FASTEST growing areas in the  
healthcare industry**

*Achieve your goals quickly! In under two years, you can earn your college degree with our FLEXIBLE term scheduling.*

## **Why Biomedical Equipment Engineering?**

With an associate degree in Biomedical Equipment Engineering, students are prepared for entry-level jobs in trouble shooting, diagnosing, repairing, and calibrating biomedical equipment. This degree is designed for the individual who is interested in pursuing an entry level career, as well as for the student who is seeking to transfer to a four-year college or university.

## **What kind of career can I expect?**

The Biomedical Equipment Engineering program at P.I.T. enables you to immediately join the workforce in an entry level position in an emerging new career opportunity!

Students will find employment at:

- Hospitals
- Patient care facilities
- Specialty practitioners
- Health practitioners' offices
- Doctors' offices with medical testing equipment



## **Where can I go after earning my degree at P.I.T.?**

In addition to being prepared for immediate employment, P.I.T. has transfer agreements with a number of colleges and universities in the area. These agreements enable you to transfer the college credits that you earned at P.I.T. and complete a bachelor's degree at any accredited college or university. P.I.T. will prepare you for the next step that's right for YOU!

# BIOMEDICAL EQUIPMENT ENGINEERING (BME)

## Associate in Science A.S.

### Recommended Course Sequence

Code	Course (Credits)		
BME 103	Principles of Electronics (3)	BME 215	Biomedical Equipment Calibration and Repair (3)
COM 108	Communications and Social Interaction (3)	PSY 105	Introduction to Psychology (3)
ENG 108	Composition (3)	BME 217	Testing Equipment and Troubleshooting (3)
BME 105	AC-DC Electronics (3)	BUS 131	Business Management (3)
ENG 215	Analytical Writing (3)	MTH 207*	Statistics (3)
SIT 203	Basic Office Software Applications (3)	BME 221	Biomedical Engineering Capstone (3)
BME 107	Biomedical Electronic Devices (3)	BUS 234	Introduction to Project Management (3)
BUS 113	Introduction to Business (3)	_____	Free Elective (3)
CCT 182	Introduction to Programmable Logic Controllers (3)		
BME 207	Electronic Principles of Robotics (3)		
HUM 140	Critical Thinking in the Modern Age (3)		
MTH 145	College Algebra and Trigonometry (3)		
BME 213	Magnetic Resonance Imaging Thermometry (3)		

PROGRAM TOTAL: 63

\*Prerequisite coursework is required.

NOTE: Additional course(s) may be required based on the results of a placement test.

## Course Highlights

### **BME 207—Principals of Robotics**

Students learn to describe the electrical and logical characteristics and operation of basic digital circuits as they apply to robotic operating equipment; diagnose problems with servomotors, stepper motors, rotary encoders, and electronic systems using test equipment, including the ladder logic monitor mode, DMMS, and oscilloscopes; draw and explain robotic schematics and pictorial circuits.

### **BME 213—MRI Thermometry Equipment**

Students gain a knowledge of radiographic studies as it relates to the field of radiography and the radiology department. Students will be able to demonstrate advanced patient positioning, have a broad knowledge of human anatomy, understand the physics and Instrumentation needed to operate advanced imaging equipment.

### **BME 107—Biomedical Electronic Device**

Students learn electrical and logical characteristics of processors, memory, and control systems; design/draw schematics for an embedded system; design a simple motor control system; connect a stepper motor with a rotary encoder to a power supply and exercise the motor in both a clockwise and counter clockwise direction.

## TUITION INFORMATION

### Number of Terms in Program

Traditional – 7 Terms

### Academic or Certification Achievement

Associate Degree for transfer to university or for employment

### Tuition and Fees for Associate Degree Programs

- Tuition: \$390 per credit, plus tech fees
- Graduation Fee: \$100
- May exclude books and supplies, course or program fees.

\*A detailed breakdown may be obtained in the financial aid office.