

# Electronic Engineering Technology

## *Associate of Applied Science*

### Portland Community College



Electronic Engineering Technicians apply electrical and electronic skills under the direction of an engineer, to ***build, repair, calibrate, and modify*** electrical components, controls, and machinery.



# What is the difference between engineering technology and engineering?

- Employable in 2 years as a technician
- Math pre-requisite is readiness to take Math 111 (College algebra)
- Technician does hands on work and usually works under the supervision of an engineer
- EET AAS degree transfers only to OIT
- Employable in 4+ years as an engineer
- Math pre-requisite is readiness to take calculus (Math 251)
- Engineer designs and manages projects and people
- Take up to 2 years at PCC, and transfer to PSU, OSU, OIT or other 4 year universities

# What can I expect?



Expect to spend many extra hours (even in the evenings and on the weekends) reading, studying, doing homework and completing labs.

Programming languages including LTSpice, Linux, C++, etc.) are taught in the program

**Technicians are problem solvers!**

# What are the EET options at PCC?

**Associate of Applied Science (AAS) 2 year degree:**

**Electronic Engineering Technology (EET) or**

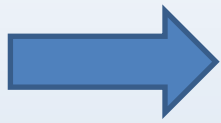
- **EET: Biomedical Engineering Technology**
- **EET: Renewable Energy Systems Technology**
- **EET: Wireless and Data Communication Engineering Technology**
- **EET: Mechatronics/Automation/Robotics Engineering Technology**
- **Also available: 1 year certificate in EET**

# Prerequisite for all programs\*\*

Placement into Math 111  
(College Algebra)

\*\***Biomedical Engineering Technology** has additional program prerequisites you should take before the second year –**Medical Terminology (MP 111) and Anatomy and Physiology (BI 120 OR Biology 121/122)**





# How do I prove I meet the prerequisites?

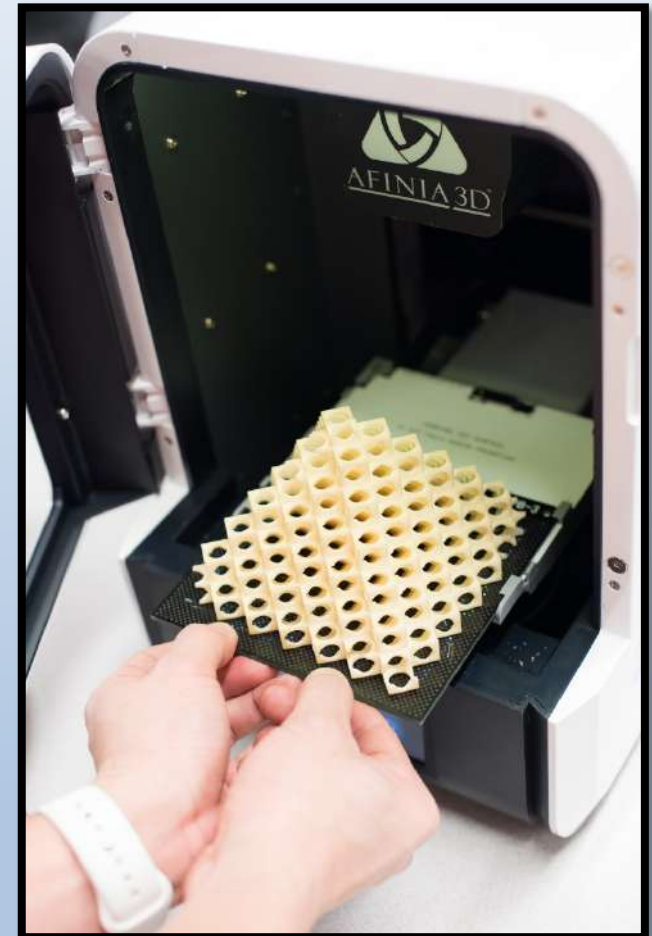
## ***Take a Placement Test***

- Apply for admission to PCC
- Take the ALEKS online Math placement test
- Take the Reading and Writing placement test at any PCC campus

**OR**

## ***Submit transcripts from previous schools:***

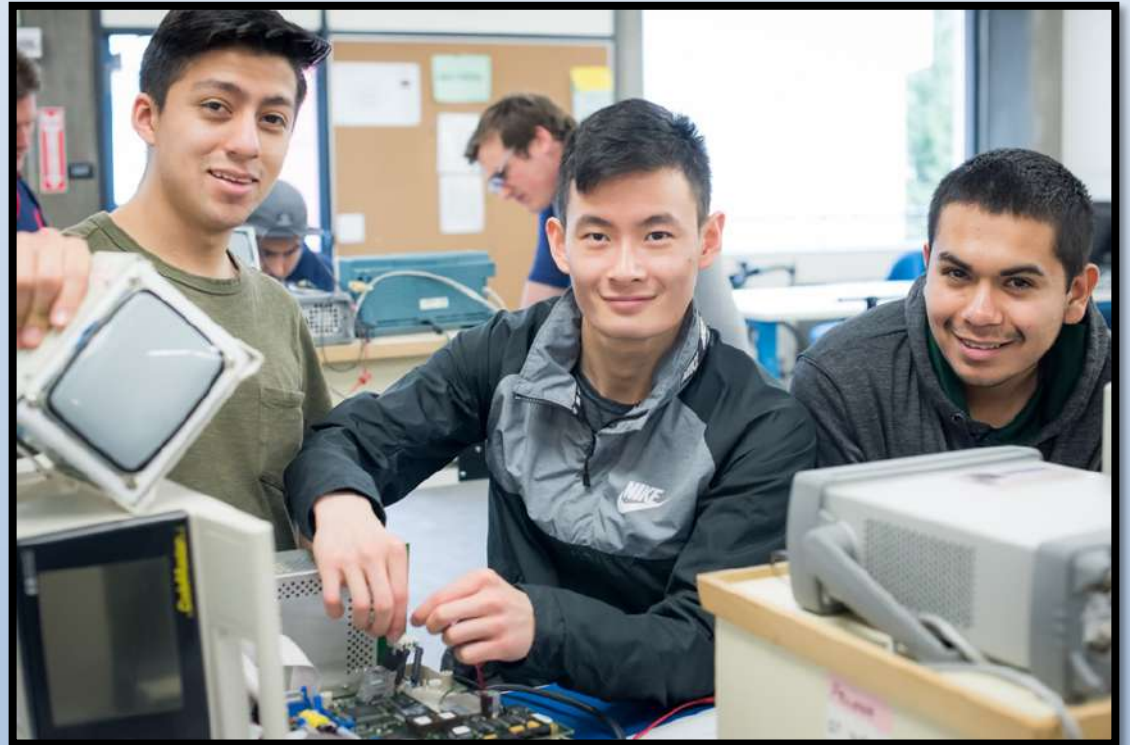
- Have your college send sealed official transcripts to **PCC Student Records.**



# Electronic Engineering Technology

## *Associate of Applied Science degree*

- Students can select the general EET degree or a specialty option
- Students also learn good communication skills, problem solving, and teamwork (soft skills valued by employers)
- Potential employers: **Intel, Microchip, Maxim, Rockwell Collins, Biotronik, Tektronix** and almost any manufacturing company.





# Biomedical Engineering Option

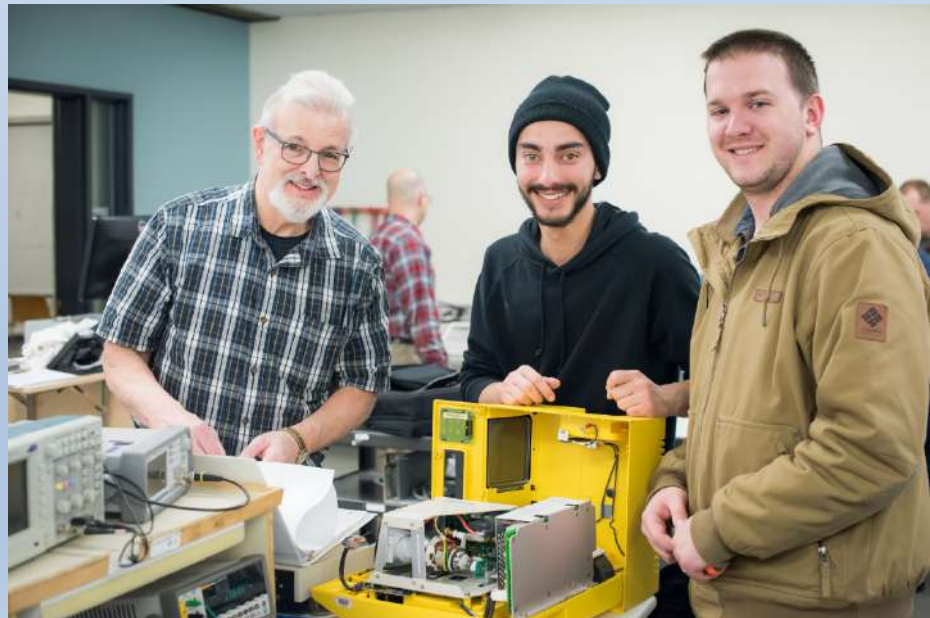
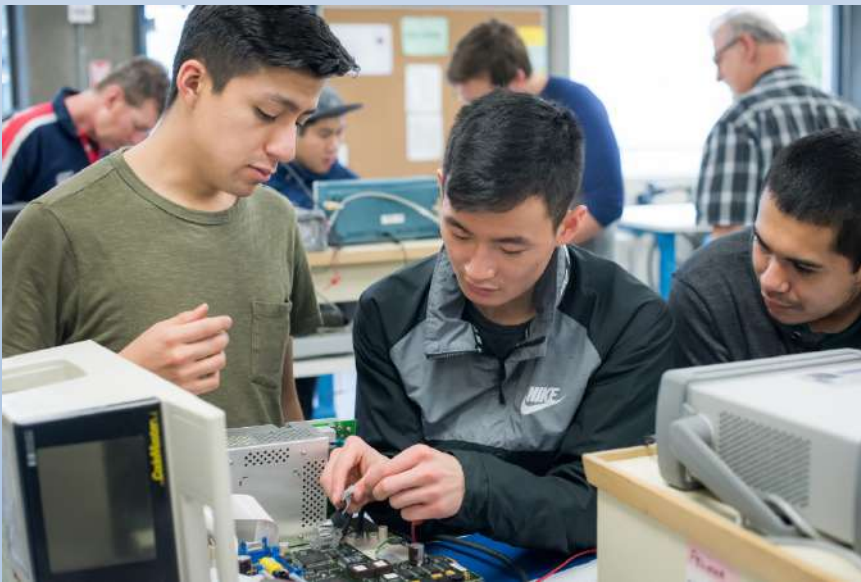


*Biomedical Engineering Technicians* troubleshoot, maintain and repair medical equipment in hospitals and other medical facilities, or work for equipment manufacturers as field technicians.

- You will receive a unique combination of classroom and hands-on training , including a 330 hour internship in a hospital or a manufacturing setting.
- ***NOTE: internships are offered in hospitals only in the daytime!***
- Local employers (and possible internship sites) include Kaiser Permanente, PeaceHealth Southwest Medical Center, Providence, Legacy, Veterans Administration, OHSU, Shriners, Portland Adventist, Tuality Hospital, and Biotronik.
- ***You will need to pass a background check; Students with drug felonies are generally not eligible for hire in hospitals.***
- ***You will need to provide vaccination records and have updated Hepatitis B and flu shots.***

# Wireless and Data Communication

- Radio frequency, microwave, cellular, commercial broadcast – these represent a sample of the communications fields explored.
- Graduates of this program can find work in the **servicing, repair and manufacturing of communications equipment** in fields like satellite, radar and data applications.
- Potential jobs are in telecommunications, Intel, ODOT, hospitals and the Department of Forestry, and the IT department of any company.



# Mechatronics/ Automation/ Robotics

- In the Mechatronics/Automation/Robotics program students learn skills in electronic engineering, computer controls, instrumentation, sensors and controls circuitry.
- A technician can work in the manufacturing, servicing and repair of a wide array of automation equipment.
- *\*Local employers include almost any manufacturing facility.*



# Renewable Energy Systems

Prepare to work as a technician in the solar, wind, fuel cell and other green industries and in energy efficiency.

**Potential solar employers include Tesla and other smaller solar manufacturers**

**Potential wind employers include Vestas, GE Power, Siemens, Iberdrola, Suzlon and PGE.\***

\*For wind, you will need to be able to climb up 250+ feet to work on a wind turbine, and be prepared to move outside of Portland. Jobs are all over the country.



# MAKER LAB!



Come make something!  
[www.pcc.edu/maker/makerlab](http://www.pcc.edu/maker/makerlab)

# Day and evening classes are offered



- ***Fall session*** begins each September—classes are held in the daytime (approximately 8:30-4:30).
- ***Winter session*** begins each January. Classes are held in the evening, generally from 6-10 PM, 4-5 nights per week.
- ***Class schedule will be available on October 23, 2020***
- ***Registration for Winter 2021 classes will begin on November 9, 2020***
- ***Winter classes start on January 4, 2021***

# *How do I apply for the EET program?*



1. Apply for admission to PCC.
2. If needed, take your math, reading and writing placement tests, or have transcripts sent to PCC Student Records.
3. Complete the EET program application on our EET webpage.
4. Meet with Linda Browning, Program Advisor, for questions and to decide which classes you will take: [linda.browning@pcc.edu](mailto:linda.browning@pcc.edu)

# What about transferring to a 4 year degree program?

- EET students can transfer to a Bachelor of Science in EET degree program, but not an ***electrical engineering (EE)*** program.
- In Oregon, PCC has a transfer agreement with **Oregon Institute of Technology (Oregon Tech)**—
- Transfer is relatively seamless, but requires planning.



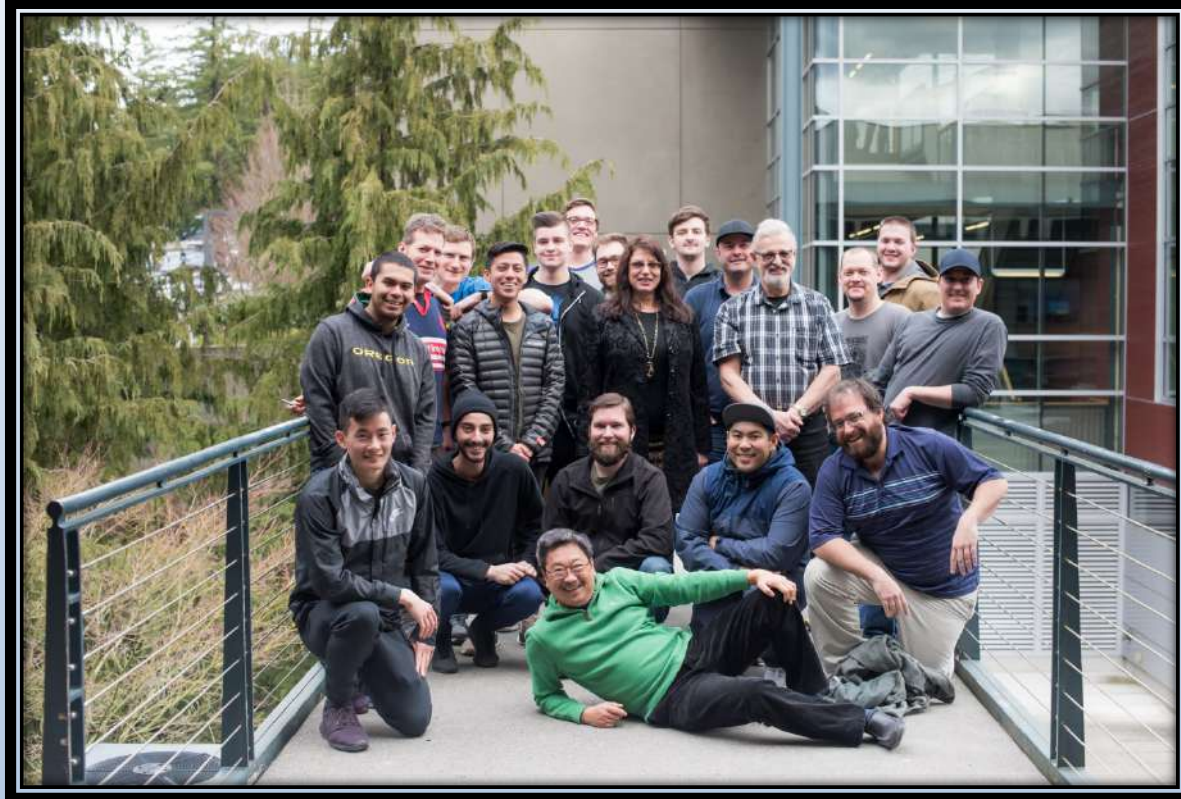


# Funding your education

- Apply for **FAFSA** (fafsa.gov).
- Apply for a **PCC Scholarship** through the PCC Foundation.
- Talk to the engineering advisor and faculty to find out about **special in-house scholarships**.



# Questions?



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