

# APPLIED ELECTRONICS & COMPUTER TECHNOLOGY

## ASSOCIATE OF APPLIED SCIENCE AND COMPUTER TECHNOLOGY CERTIFICATE

The Applied Electronics and Computer Technology program at KVCC prepares students with the technical knowledge and professional skills needed for careers in the installation, maintenance, technical support, and troubleshooting of electronic equipment, wired and wireless communication systems, computers, and computer network systems. The primary goal of the program is to ensure each student is well equipped to enter the workforce as a technical support professional.

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“Enrolling in the Applied Electronics and Computer Technology program at KVCC was an incredible experience for me. The instructors taught me to use high-tech electronic equipment and computers in real-world scenarios.”



**Learn to install, maintain, and troubleshoot electronics and computer-based equipment**

### What Applied Electronics and Computer Technology graduates do:

- Provide technical support for computer desktop and computer network systems.
- Provide technical support for computer system end users.
- Provide technical support for network servers and associated infrastructure.
- Provide technical support for software applications.
- Provide technical support for wired and wireless communication systems.
- Install, certify, and troubleshoot copper and fiber-optic network cabling.
- Troubleshoot and repair electronic components and systems.
- Maintain, troubleshoot, and calibrate bio-medical electronic equipment.
- Work with electrical and computer engineers.
- Transfer to a baccalaureate degree program in engineering or computer information systems.

### Career Opportunities:

- Computer support technician
- Information systems support
- Network support technician
- Cable-Fiber installation technician
- Security systems support
- Electronics technician
- Field service support technician
- Bio-medical electronics technician
- Communication system technician
- Cellular telephone system technician
- Cable television network technician
- Marine electronics technician
- Engineering technician

For further questions about this program, please contact: [wdolan@kvcc.me.edu](mailto:wdolan@kvcc.me.edu) or go to: [www.kvcc.me.edu/aect](http://www.kvcc.me.edu/aect)

## APPLIED ELECTRONICS AND COMPUTER TECHNOLOGY DEPARTMENT CHAIR: WILLIAM DOLAN, (207) 453-5111

### Applied Electronics and Computer Technology Associate in Applied Science Degree

#### First Semester

ENG108	Technical Writing . . . . .	3
ETC101*	Managing Desktop Applications . . . . .	1
ETC110*	Computer Technology Support . . . . .	3
ETC112*	Information Technology Fundamentals . . . . .	3
ETC113*	Electrical Circuits I. . . . .	3
MAT114	Technical Math . . . . .	3

#### Second Semester

ETC114*	Electrical Circuits II . . . . .	3
ETC119*	Digital Systems W/C. . . . .	3
ETC125*	Semiconductor Devices. . . . .	3
ETC250*	Computer Technology Support II. . . . .	3
MAT214	Technical Math II . . . . .	3

#### Third Semester

COM105	Interpersonal Communications. . . . .	3
ETC212*	Network Operating System I . . . . .	3
ETC220*	Microcontrollers W/C . . . . .	3
ETC225*	Analog Circuits . . . . .	3
ETC240*	Electronic Communication Systems . . . . .	3
ETC244*	Robotics Lab . . . . .	1

#### Fourth Semester

ECO113	Principles of Macroeconomics (SS). . . . .	3
ETC213*	Network Operating Systems II . . . . .	3
ETC241*	Computer Network Systems . . . . .	3
ETC245*	Networking Applications Lab. . . . .	1
HUM101	Multicultural Nature of American Society (H) . . . . .	3
PHY111	Elements of Physics I (GE). . . . .	4

**Total Credits** **64**

### Applied Engineering Technology Associate in Applied Science Degree

#### First Semester

COM105	Interpersonal Communications. . . . .	3
ENG101	College Composition . . . . .	3
ETC101*	Managing Desktop Applications . . . . .	1
ETC110*	Computer Technology Support I. . . . .	3
ETC113*	Electrical Circuits I. . . . .	3
MAT117	College Algebra. . . . .	3

#### Second Semester

ETC114*	Electrical Circuits II . . . . .	3
ETC119*	Digital Systems W/C. . . . .	3
ETC125*	Semiconductor Devices. . . . .	3
ETC250*	Computer Technology Support II. . . . .	3
MAT 226	Precalculus . . . . .	4

#### Third Semester

ETC220*	Microcontrollers W/C . . . . .	3
ETC225*	Analog Circuits . . . . .	3
ETC240*	Electronic Communication Systems . . . . .	3
ETC244*	Robotics Lab . . . . .	1
PHY111	Elements of Physics . . . . .	4

#### Fourth Semester

ECO113	Principles of Macroeconomics (SS). . . . .	3
ETC241*	Computer Network Systems . . . . .	3
ETC245*	Networking Applications Lab. . . . .	1
HUM101	Multicultural Nature of American Society (H). . . . .	3
PHY211	Elements of Physics II (GE) . . . . .	4

**Total Credits** **60**

### Computer Technology Certificate

#### First Semester

ETC101*	Managing Desktop Applications . . . . .	1
ETC110*	Computer Technology Support I. . . . .	3
ETC112*	Information Technology Fundamentals . . . . .	3
ETC212*	Network Operating Systems I . . . . .	3
MAT114	Technical Math I . . . . .	3

#### Second Semester

ENG108	Technical Writing . . . . .	3
ETC213*	Network Operating Systems II . . . . .	3
ETC241*	Computer Network Systems . . . . .	3
ETC245*	Networking Applications Lab. . . . .	1
ETC250*	Computer Technology Support II. . . . .	3

**Total Credits** **26**

## CRITERIA FOR GRADUATION

Students must successfully complete the required 64 credits in the AECT or 60 in the AET program. Students must successfully complete the required 26 credits in the computer certificate program and achieve a minimum grade of "C" in all core courses (\*). Students must attain a final GPA of 2.0 or higher. (GE,H,SS) Suggested Electives.

Please contact your advisor for more information.

# **APPLIED ELECTRONICS AND COMPUTER TECHNOLOGY APPLIED ENGINEERING TECHNOLOGY Associate in Applied Science Degrees, Certificate**

## **DESCRIPTION**

The AECT program integrates theory and applications through a lab-intensive, project-based curriculum which emphasizes critical thinking, troubleshooting, and problem-solving techniques. The program is well-equipped, employing the latest in electronic test and measure equipment, computers, network servers, and computer network systems.

Upon successful completion of the AECT program, students can directly enter the workforce, or transfer into a bachelor's degree in electrical or computer engineering, computer science, computer information systems, or computer network security.

## **EDUCATIONAL OUTCOMES**

Program Goals and Student Learning Outcomes

Upon Successful Completion of the AECT program, each graduate will be expected to:

- Employ critical thinking and problem-solving skills as expected in a professional work environment.
- Communicate effectively and possess the interpersonal skills necessary for success.
- Practice technical, analytical, and professional skills in a conscientious, responsible, and accountable manner.
- Recognize the need for continued professional development in the pursuit of industry certifications or continuing education towards a bachelor's degree in a technical area of interest.

## **PROFESSIONAL CERTIFICATIONS**

Each AECT student is prepared for, and required to take each of the following nationally recognized professional certification exams:

1. ETA Certified Electronics Technician
2. CompTIA IT Fundamentals (ITF+)
3. CompTIA A+
4. CompTIA Network+
5. TestOut Office Pro, Performance Certification
6. TestOut IT Fundamentals Pro, Performance Certification
7. TestOut PC Pro, Performance Certification
8. TestOut Network Pro, Performance Certification
9. TestOut Server Pro, Performance Certification

## **COLLEGE ADMISSION**

General admission requirements are as follows:

1. Official high school transcript, HiSET or GED scores.
2. Applicants who are homeschooled are required to submit an official copy of their transcript signed by the School Administrator.
3. Acceptable scores in Reading, Sentence Skills, and Numerical Math on Accuplacer. Applicants may be required to complete development coursework prior to enrollment in college level courses. Scores are noted on the General Admission section on [page 34](#).
4. Accepted students must attend the Accepted Student event prior to the start of the semester.