HERZING

ASSOCIATE OF SCIENCE/APPLIED SCIENCE IN COMPUTER, ELECTRONICS, AND TELECOMMUNICATIONS TECHNOLOGY (ASCETT/AASCETT)

(The associate of applied science may be offered at the Akron, Minneapolis, and Toledo campuses only)

PROGRAM DESCRIPTION

This program is designed to provide students with the knowledge and skills to test, install, repair, configure, manage, and maintain a wide range of electronic devices, systems, and services. The program focuses on fundamental skills that ground their ability to broaden their knowledge of electronics in a competitive employment environment.

PROGRAM OBJECTIVES

Upon completion of their program, the student should be able to:

1. Demonstrate the ability to utilize a complete range of electrical/electronic equipment to apply industry standard tests and measurements to build, test, and troubleshoot electrical circuits and systems.
2. Demonstrate the ability to describe and apply fundamental concepts of measurement and electronic theory to solve computer, communication, and electronic system problems.
3. Demonstrate the ability to clearly communicate concise and reasoned lab reports delineating material needs and costs in the field of electronics.
4. Demonstrate the ability to pass industry-recognized certification examinations in the computer, communications, and electronics industries.
5. Think critically, both conceptually and by using mathematical analysis, write and speak effectively, use basic computer applications, and understand human behavior in the context of the greater society.

POTENTIAL JOB POSITION TITLES

Potential entry-level job position titles include robotics and industrial control technician, TV and radio broadcast engineer, computer service technician, biomedical electronics technician, electronics technician, field technician, office automation technician, R & D technician, technical representative, network technician, bench technician, service manager, technical support administrator, and plant maintenance manager.

PROGRAM CONTENT

A minimum of 79.00 semester credit hours is required for graduation.

REQUIRED COURSES

All courses, 44.00 semester credit hours, are required.

Course Number	Course Name	Prerequisites/Corequisites	Semester Credit Hours
ET 106	Basic DC Electricity	MA 090 (or test-out)	4.00
ET 107	AC Electrical Components	ET 106	4.00
ET 119	Electronics Fabrication Laboratory	None	4.00
ET 208	Transistor and Microchip Technology	ET 106	4.00
ET 209	Advanced Transistor and Microchip Technology	ET 208	4.00
ET 232	Digital Electronics	ET 209	4.00
ET 236	Modulation and Propagation for Communications	ET 209	4.00
ET 237	Applied Telecommunications and Fiber Optics	ET 236	4.00
ET 238	Industrial Controls and Motors	ET 209 or ET 272	4.00
IS 112	Computer Networks	IS 102	4.00

Course Number	Course Name	Prerequisites/Corequisites	Semester Credit Hours
IS 185	Computer Architecture and Troubleshooting I	None	4.00

ELECTIVE COURSES IN COMPUTER, ELECTRONICS AND TELECOMMUNICATIONS TECHNOLOGY

A minimum of 8.00 semester credit hours is required.

Course Number	Course Name	Prerequisites/Corequisities	Semester Credit Hours
ET 272	Microprocessors	ET 232	4.00
ET 294	Career Internship	Final semester, program GPA of 2.5, and PD 214	4.00
ET 355	FCC Certification Preparation	ET 236	4.00
ET 363	Industrial Controls: PLCs, Robotics, and Lasers	ET 238	4.00
ET 365	HTI+ - Home Networking+	ET 236 and IS 112	4.00
IS 186	Computer Architecture and Troubleshooting II	IS 185	4.00
IS 191	Linux Administration	IS 112	4.00
IS 282	Network Security	IS 191 and NT 180	4.00
NT 180	Network and Server Operating Systems	IS 112 or IS 186	4.00
NT 200	Network Infrastructure Administration	NT 180	4.00
NT 210	Directory Services Administration	NT 180	4.00
NT 341	Mail Servers	IS 191 and NT 210	4.00
NT 401	Voice-Over IP	IS 112	4.00

GENERAL EDUCATION REQUIREMENTS

Students enrolled in this associate's degree must complete a minimum of 25.00 semester credit hours in general education distributed among the following disciplines. Refer to the General Education section of this catalog for Herzing University courses that would satisfy these requirements. *

1.00 Semester Credit Hour in Information Literacy
3.00 Semester Credit Hours in English Composition
3.00 Semester Credit Hours in Speech
4.00 Semester Credit Hours in Computer Applications ◆
4.00 Semester Credit Hours in Mathematics (College Algebra or Above)
3.00 Semester Credit Hours in Social or Behavioral Science
3.00 Semester Credit Hours in Natural Science or Humanities With a Critical Thinking Focus ** ▲ ◆
4.00 Semester Credit Hours in General Education Electives ◆

* Transfer students may transfer courses that are within 1.00 semester credit hour of the courses listed above to meet these discipline requirements. Any resulting deficiency in the total of 25.00 semester credit hours required in general education may be made up with general education electives from any of the listed disciplines.

** A course with a critical thinking focus would be a course that addresses the theories and application of critical analysis with an emphasis on developing sequential reasoning skills. Examples may be courses in critical thinking, philosophy, science, or logic.

▲ Students in the state of Georgia must take a science course to fulfill this requirement.

- The state of Minnesota requires a minimum of 20.00 semester credit hours of general education for associate's degrees, not counting computer applications. However, all Herzing University students in the AASCJ program must complete a minimum of 24.00 semester credit hours in general education, including computer applications, to complete the requirement for graduation from this associate's degree program. Minnesota students must complete at least 2.00 semester credit hours of general education in the humanities.

PERSONAL AND PROFESSIONAL DEVELOPMENT COURSES

2.00 semester credit hours are required. Students taking the ET 294 Internship must also take PD 214.

Course Number	Course Name	Prerequisites/Corequisites	Semester Credit Hours
PD 121	Professional Development I	None	1.00
PD 202	Professional Development II	None	1.00
PD 214	AS/AAS/BS/Diploma Internship Preparation	None	0.00

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit our website at http://www.herzing.edu/academics/computer-electronics-and-telecommunications-technology