

# Electronics Technology

Holland code family: Doers

## Associate of Applied Science Degree

[www.roguecc.edu/Counseling/HollandCodes/test](http://www.roguecc.edu/Counseling/HollandCodes/test)

### About the Program

The Electronics Technology Associate of Applied Science degree provides students the necessary skills for entry into one of today's most dynamic and broad-based technical fields. The program emphasizes electronic theory fundamentals, troubleshooting and design, and involves both highly technical and general studies courses. Advanced courses include radio frequency and microwave communications, PC hardware, and microcontrollers and interfacing. Typical occupations include those of electronics test technicians at manufacturing sites or field engineers in the communications industry.

The technical courses involve extensive lab work using industry standard test equipment and practices. As a capstone, students design and build an electronics project to demonstrate their proficiencies of program outcomes. The AAS degree can be used for technical block transfers to four-year institutions' basic engineering programs, although continuing students will be advised to take additional transfer courses.

The curriculum in RCC courses is derived from a set of identified learning outcomes that are relevant to the discipline. For a list of learning outcomes for this discipline or program, see [www.roguecc.edu/Programs/LearningOutcomes](http://www.roguecc.edu/Programs/LearningOutcomes).

### Entry Requirements

Students are required to take a placement test to determine skill level and readiness in math, reading and writing. As part of their training program, students must begin with courses within their skill levels as determined by placement test scores. Students are required to complete any prerequisites on this guide. In addition, students may also be required to enroll in classes that would increase their employability and success.

### Advanced Standing

Coursework from accredited colleges and universities will be accepted in accordance with college policies and with the Electronics Technology Department chair's recommendation. In order to ensure that coursework is current, program courses over three years old must be reviewed and approved by the appropriate department chair before being accepted toward core requirements. Official transcripts must be filed with the RCC Enrollment Services Office.

### Graduation Requirements

Students are required to complete all courses in this program with a grade of "C" or better to receive their degrees. Certain required courses are graded on a pass/no pass basis only. A grade of "P" for these courses indicates a student earned the equivalent of a "C" or better grade.

### What skills will you learn?

Visit <http://go.roguecc.edu/department/program-learning-outcomes>.

### What are the employment opportunities?

Visit <http://www.roguecc.edu/GainfulEmployment>.

### Prerequisites

Course No.	Course Title	Credits
CS__	Approved 3-4 credit computer science class, CS120 or above or documented computer proficiency <sup>1</sup>	0-4
MTH20	Pre-algebra I or designated placement test score	0-4
RD90	College Reading or designated placement test score	0-4
WR90	Fundamentals of Composition or designated placement test score	0-4
<b>Total Prerequisite Credits</b>		<b>0-16</b>

### First Year Required Courses

Course No.	Course Title	Credits
<b>First Term</b>		
EET112	Introduction to Mechatronics	5
EET125	Electronics Fundamentals I (DC)	6
MTH63	Applied Algebra I or MTH60 Fundamentals of Algebra I or higher level math	4
WR115	Introduction to Expository Writing or designated placement test score as shown on current indicator chart, and either SP100 Basic Communication or SP111 Fundamentals of Public Speaking or SP218 Interpersonal Communication <sup>2</sup>	3-4
		18-19



### Second Term

EET126	Electronics Fundamentals II (AC)	7
EET130	Digital Fundamentals I	6
WR121	English Composition I	4
		17

### Third Term

EET131	Digital Fundamentals II	6
EET140	Solid State Fundamentals	7
CS140	Introduction to Operating Systems	4
LIB127	Introduction to Academic Research	1
		18

### Total First Year Credits

**53-54**

### Second Year Required Courses

Course No.	Course Title	Credits
<b>Fourth Term</b>		
CS227	PC Hardware Fundamentals and Repair	5
EET215	Operational Amplifiers and Linear Integrated Circuits	5
EET220	Solid State Devices	6
		16
<b>Fifth Term</b>		
EET225	Electronics Troubleshooting	3
EET230	Radio Frequency Communications Fundamentals	6
EET240	Microcontrollers I	5
HE112	Emergency First Aid or approved health/first aid elective (see catalog for approved list of electives)	1
PSY101	Psychology of Human Relations or BT101 Human Relations in Organizations	3
		18
<b>Sixth Term</b>		
EET205	International Society of Certified Electronics Technicians (ISCET) Certification Preparation	1
EET235	Microwave Applications	5
EET241	Microcontrollers II	5
EET250	Prototype Development and Documentation or EET280 Cooperative Work Experience/Electronics	4
—	Approved program elective(s)	0-5
		15-20
<b>Total Second Year Credits</b>		<b>49-54</b>
<b>TOTAL PROGRAM CREDITS</b>		<b>102-108</b>

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## Approved Program Electives

Course No.	Course Title	Credits
BA101	Introduction to Business	4
BT121	Digital Marketing and e-Commerce	4
CHEM104	Introductory Chemistry I with lab and recitation	5
CS____	Any computer science course, CS125 or above	3-4
EET101	Introduction to Electronics	3
EET106	Electronics Assembly	3
EET113	Exploration of Alternative Energies	3
EET118	Introduction to Renewable Energy Systems	5
EET132	Digital Fundamentals III	5
EET180S/280S	Cooperative Work Experience Seminar/Electronics	1
EET199	Selected Topics in Technology	1-5
GS104	Physical Science with lab	4
GS105	Physical Science: Chemistry with lab	4
MET101	Mechanical Drafting	3
MET121	CAD I: Mechanical (SolidWorks)	3
MET122	CAD II: Mechanical (SolidWorks)	3
MFG101	Introduction to Manufacturing	3
MFG121	Manufacturing Processes I	4
MFG220	Research and Development Prototyping	4
MFG230	Statistics and Quality Control	3
MFG241	CNC Programming – Mill	4
MFG242	CAM I: Mastercam	4
MFG243	CAM II: Mastercam	4
MFG244	CNC Programming – Lathe	3
MTH65	Fundamentals of Algebra II or higher level math	4-5
MTH60R	Fundamentals of Algebra I Recitation	1
MTH65R	Fundamentals of Algebra II Recitation	1
MTH95R	Intermediate Algebra Recitation	1
MTH111R	College Algebra Recitation	1
MTH112R	Elementary Functions Recitation	1
SP111	Fundamentals of Public Speaking (if not taken as a required course)	4
WR122	English Composition II (if not taken as a required course)	4
WLD101	Welding Fundamentals	3
WR227	Technical Writing	4

<sup>1</sup> Required for graduation. Successful completion of CS120, or otherwise meeting the proficiency requirement within the last 10 years, fulfills this requirement. Contact a computer science advisor to help determine placement.

<sup>2</sup> If students test out of WR115, they may take WR122 instead of speech upon completion of WR121.

For more information contact the Electronics Technology Department:

Grants Pass or Medford ..... 541-245-7809  
 Toll free in Oregon ..... 800-411-6508, Ext. 7809  
 e-mail ..... [electronics@rogucecc.edu](mailto:electronics@rogucecc.edu)  
 Web address ..... [www.rogucecc.edu/electronics](http://www.rogucecc.edu/electronics)  
 TTY ..... Oregon Telecom Relay Service, 711

This advising guide is for advising purposes only. Please see current college catalog for additional information on specific college policies and graduation requirements.

RCC is an open institution and does not discriminate. For RCC's non-discrimination policy and a full list of regulatory specific contact persons visit the following webpage: [www.rogucecc.edu/nondiscrimination](http://www.rogucecc.edu/nondiscrimination).

