ELECTRICAL ENGINEERING TECHNOLOGY

Overview

Electrical Engineering Technology Associate of Applied Science Degree

Program Code: 10-662-1

For more information: www.wctc.edu/electrical-eng *(http://www.wctc.edu/electrical-eng/)*

Electrical engineering technologists' work involves the design, development, production, testing, manufacturing and repair of electronic and electrical equipment. In this calculus-based program, gain skills necessary to apply knowledge of electrical theory to numerous settings, including research and development, manufacturing, field service engineering among others.

Accredited by the Engineering Technology Accreditation Commission of ABET, https://www.abet.org

The minimum required course grades and program grade point average (GPA) for students under this catalog are:

Core Courses = C
General Studies Courses = C-
Program GPA = 2.0

Learning Outcomes
Program Outcomes

1. An ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering and technology to solve well-defined engineering problems appropriate to the discipline.
2. An ability to design solutions for well-defined technical problems and assist with the engineering design of systems, components, or processes appropriate to the discipline.
3. An ability to apply written, oral, and graphical communication in well-defined technical and non-technical environments; and an ability to identify and use appropriate technical literature.
4. An ability to conduct standard tests, measurements and experiments and to analyze and interpret the results.
5. An ability to function effectively as a member of a technical team.
6. Evaluate the operation of electronic circuits or systems.

Critical Life Skills

To help our students prepare for success in a workplace and society that is **increasingly global, multi-cultural, and collaborative,** all students are given opportunities to develop and demonstrate Critical Life Skills, both in and out of the classroom. The following Critical Life Skills are learning outcomes for WCTC students.

- **Communication:** Demonstrate appropriate communication.
- **Critical Thinking/Problem Solving:** Demonstrate critical thinking skills to analyze situations and solve problems.
- **Relationships:** Demonstrate effective interpersonal skills.
- **Self-management:** Demonstrate responsible and respectful behavior.

Required Courses

Listed below are the required courses for the program. To view the recommended sequence for taking courses click on the plan of study tab(s) above. Work with your Academic Advisor to design a program plan!

View your **Program Matrix** to find out when each course will be offered (term and time of day).

Code	Title	Credits
Core Courses		
605-118	Digital Electronics I	2
605-119	Digital Electronics II	2
605-126	Industrial Systems	3
605-148	Data Acquisition	3
605-182	Microcontrollers	3
605-187	Electronic Data Communications	3
662-102	DC Circuit Analysis	4
662-104	AC Circuit Analysis	4
662-108	Linear Circuit Analysis	3
662-190	Electronic Circuits I	4
662-191	Electronic Circuits II	4
663-104	Programming for Electronics	1
663-106	Electronic Fabrication I	1
	Approved Substitute: 605-127	
General Studies		
801-136	English Composition 1	3
	Approved Substitute: 801-223	
801-196	Oral/Interpersonal Comm	3
	Approved Substitute: 801-198	
804-156	Calculus 2	4
804-198	Calculus 1	4
806-187	Calculus Based Physics 1	3
809-196	Intro to Sociology	3
809-199	Psychology of Human Relations	3
	Approved Substitute: 809-198	
Total Credits		**60**

Full-time Plan

First Year

Fall Term 1		Credits
605-118	Digital Electronics I	2
662-102	DC Circuit Analysis	4
804-198	Calculus 1 This course runs 16 weeks.	4
	Credits	**10**

Fall Term 2		
662-104	AC Circuit Analysis	4
663-106	Electronic Fabrication I	1
	Credits	**5**

Spring Term 1		
804-156	Calculus 2 This course runs 16 weeks.	4
662-190	Electronic Circuits I	4

801-196	Oral/Interpersonal Comm	3
	Credits	**11**
Spring Term 2		
605-119	Digital Electronics II	2
809-196	Intro to Sociology	3
	Credits	**5**
Second Year		
Summer Term		
801-136	English Composition 1	3
663-104	Programming for Electronics	1
	Credits	**4**
Fall Term 1		
662-191	Electronic Circuits II	4
806-187	Calculus Based Physics 1	3
	Credits	**7**
Fall Term 2		
605-182	Microcontrollers	3
809-199	Psychology of Human Relations	3
	Credits	**6**
Spring Term 1		
605-126	Industrial Systems	3
605-187	Electronic Data Communications	3
	Credits	**6**
Spring Term 2		
605-148	Data Acquisition	3
662-108	Linear Circuit Analysis	3
	Credits	**6**
	Total Credits	**60**