



# Program Map Power Technology Specialization

Degree: Associate of Applied Science (AAS)  
Certificate: Level 1 (C1)



## DESIGN, MANUFACTURING, CONSTRUCTION & APPLIED TECHNOLOGY

**Program Description:** This is an **example course sequence** for students interested in Electronics and Advanced Technologies Power Technology Specialization. It does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn an Associate of Applied Science (AAS) degree in Electronics and Advanced Technology or a Certificate in Electronics and Advanced Technology, Power Technology Specialization.

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<http://sites.austincc.edu/electronics/>

The Power Technology specialization trains students for the power utility industry. Local employers are Austin Energy, Bluebonnet coop, Pedernales coop, and LCRA. Core skills are electric circuits, semiconductor devices, digital logic and microprocessor controls. Power technology specific training includes National Electric Code, Industrial Safety, Electromechanical Systems as well as Switching and Metering.

To receive an Associate of Applied Science in Electronics and Advanced Technologies, students must: (a) make a minimum grade of "C" in all required electronic, math, and science courses and (b) have an overall GPA of 2.0 or greater.

*Use this Program Map to choose courses with your college advisor and track your progress towards milestones and completion of program.*

### Pre-Degree Requirements

Program Specific	Reading and Writing Placement <i>Placements based on TSI</i>	Mathematics Placement <i>Placements based on TSI</i>
	<input type="checkbox"/> Basic Developmental Courses <input type="checkbox"/> ESOL Courses <input type="checkbox"/> INRW Courses	<input type="checkbox"/> 0332 - Basic Math Skills <input type="checkbox"/> 0370 – Elementary Algebra <input type="checkbox"/> 0385 - Developing Mathematical Thinking <input type="checkbox"/> 0390 – Intermediate Algebra <input type="checkbox"/> 0421 – Developmental Math

### SEMESTER-BY-SEMESTER PROGRAM PLAN FOR FULL-TIME STUDENTS

*Plans can be modified to fit the needs of part-time students by adding more semesters*

D=Degree  
C1=Level 1 Certificate  
C2=Level 2 Certificate

C1	D	Semester 1	C R	Advising Notes
	•	EDUC 1300 - Effective Learning: Strategies for College Success <b>OR</b> Oral Communication	3	New ACC Students with less than 12 SCH of successful college credit must take EDUC 1300. Other students can choose a speech course from the Component Area Option section of the Core Curriculum Course List.
•	•	MATH 1314 - College Algebra	3	Mathematics.
•	•	CETT 1403 - DC Circuits	4	
•	•	ELMT 1371 - Industrial Safety and National Electrical Safety Code	3	
			13	Program Semester Hours / Meet with your advisor
		<b>Semester 2</b>		
•	•	CETT 1405 - AC Circuits	4	
•	•	CETT 1425 - Digital Fundamentals	4	
	•	COSC 1315 - Fundamentals of Programming <b>OR</b> COSC 1336 - Programming Fundamentals I	3	Computer Science Core Curriculum.
			11	Program Semester Hours / Meet with your advisor
		<b>Semester 3</b>		
	•	CETT 1429 - Solid State Devices	4	
•	•	ENGL 1301 - English Composition I	3	Communication Core Curriculum.

	•	Social and Behavioral Sciences	3	Social and Behavioral Sciences Core Curriculum. Select from the appropriate section of the Core Curriculum Course List.
			10	Program Semester Hours / Meet with your advisor
		<b>Semester 4</b>		
•	•	ELMT 2441 - Electromechanical Systems	4	
•	•	INTC 2471 - Data Acquisition and Measurement	4	
•	•	CETT 1445 - Microprocessor	4	
			12	Program Semester Hours
		<b>Semester 5</b>		
•	•	ELPT 2371 - Principles of Switching and Metering	3	
	•	Language, Philosophy, and Culture <b>OR</b> Creative Arts	3	Language, Philosophy and Culture Curriculum. Select from the appropriate section of the Core Curriculum Course List.
	•	Electronics Elective	4	Elective; Select Electronics Elective from the following courses: EECT 2388, ELMT 1371, ELMT 2372, ELPT 2371, WIND 2359.
•	•	ELMT 2473 - Electrical, Electronic, and Fluid Schematics	4	<b>ACHIEVEMENT:</b> Completion of Level 1 Certificate <b>ACHIEVEMENT:</b> Completion of Associate of Applied Science degree
			14	Program Semester Hours

**Total Program Hours: 60**

## Career & Transfer Resources

ACC's Career & Transfer websites provide detailed, guided information on career exploration and transfer.

[www.austincc.edu/career](http://www.austincc.edu/career)

[www.austincc.edu/transfer](http://www.austincc.edu/transfer)

For further information regarding this specific program, please see the Career & Transfer Resources supplement provided in the next section of this Program Map.

## Program Map

# Power Technology Specialization

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Career & Transfer Resources Updated 8/18/17

## Career Information

### Common Job Titles

Electrical Power-Line Installers and Repairers (includes A Class Lineman, Apprentice Lineman Third Step, Class A Lineman, Electric Lineman, Electrical Lineman (Power), Electrical Lineworker, Journeyman Lineman, Lineman, Lineworker, Power Lineman), Electrical Engineering Technicians (includes Electrical Engineering Technician, Electrical Technician, Engineering Assistant, Engineering Technician, Generation Technician, Instrument and Controls Technician (I & C Technician), Relay Tester, Results Technician, Test Specialist, Test Technician)

### Regional Labor Market Information

Electrical Engineering Technicians: New workers start around \$42,009. Normal pay is \$61,657 per year. Highly experienced workers can earn up to \$80,371. Over the last year, 20 companies have posted 43 jobs for Electrical Engineering Technicians in this region. There are currently 2,980 Electrical Engineering Technicians that are employed in Austin-Round Rock, TX.

Source: <https://austincc.emsicc.com/careers/electrical-engineering-technician>

Electrical Power-Line Installers and Repairers: New workers start around \$30,007. Normal pay is \$51,431 per year. Highly experienced workers can earn up to \$87,213. Over the last year, 15 companies have posted 120 jobs for Electrical Power-Line Installers and Repairers in this region. There are currently 447 Electrical Power-Line Installers and Repairers that are employed in Austin-Round Rock, TX.

Source: <https://austincc.emsicc.com/careers/electrical-power-line-installer-and-repairer>

**Career and labor market research tools** (see Quick Reference Guide at <http://www.austincc.edu/career>):

EMSI: <https://austincc.emsicc.com/>, Bureau of Labor Statistics: <http://www.bls.gov/ooh/>, O\*NET: <https://www.onetonline.org/>

**Career Resources:** ACC's career services website provides information on career exploration and employment at <http://www.austincc.edu/career>. Students are encouraged to consult with their area of study advisor for additional career assistance. The above information is provided as a guide and reference tool for occupations related to this program. This is not a guarantee of job placement in any of these occupations after successful completion of an ACC program. The common job titles listed are representative titles and are provided for career research. These are not the only occupations possible in this area of study.

## Transfer Information

to directly enter the workforce. A Bachelor of Applied Arts and Sciences (BAAS) is a degree option for students in AAS programs who want to transfer and complete a 4-year degree.

**Transfer Guides:** *The universities listed here do not constitute an ACC endorsement. Transfer course evaluations and determination of what courses will count toward a bachelor's degree are made by the receiving transfer institution.*

**Texas State University:** <http://www.owls.txstate.edu/undergraduate-degrees/applied-arts-sciences.html>

**Concordia University Texas:** <http://www.concordia.edu/academics/college-of-business-and-communication/baas-in-business.html>

**Texas A&M University Central Texas:** <https://www.tamuct.edu/degrees/undergraduate/business-management.html>

**Texas Tech University:** [https://www.depts.ttu.edu/universitystudies/prospective\\_students/baas.php](https://www.depts.ttu.edu/universitystudies/prospective_students/baas.php)

**Additional Transfer Resources:** ACC's transfer website provides information on additional colleges & universities: <http://www.austincc.edu/transferguides>. Students are encouraged to consult with a faculty advisor, area of study advisor, and/or their chosen transfer institution to ensure courses taken at ACC will apply toward their bachelor's degree program.