Program Map Engineering Technology

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

DMC & AT

DESIGN, MANUFACTURING, CONSTRUCTION & APPLIED TECHNOLOGY

Program Description: This is an example course sequence for students interested in Electronics and Advanced Technologies Engineering 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, Engineering Technology Specialization. Contact: Albert Quiñonez Department Chair aquinone@austincc.edu 512-223-6407

Department Website: http://sites.austincc.edu/electronics/

This specialization prepares students for engineering technical jobs in several industries. The program is tailored for students who want to transfer to four-year engineering technology

programs. In addition to a solid electronics background, this program offers specializations by electives for microprocessor controls, electromechanical devices and PLCs, and data acquisition (including LabView).

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 Placements based on TSI	Mathematics Placement Placements based on TSI			
	 Basic Developmental Courses ESOL Courses INRW Courses 	 MATD-0332 - Basic Math Skills MATD-042x/032x - ALEKS Sequence MATD-0385/0485 - Developing Mathematical Thinking Not prerequisite for MATH-1314/1324 MATD-0370 - Elementary Algebra MATD-0390 - Intermediate Algebra Take MATD-0370 and 0390 to prepare for MATH-1314/1324 			

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

C 1	C 2	D	Semester 1	C R	Advising Notes
		•	EDUC 1300 - Effective Learning: Strategies for College Success OR 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.
•		٠	CETT 1403 - DC Circuits	4	
•		٠	MATH 1314 - College Algebra	3	Mathematics.
•		٠	ENGL 1301 - English Composition I	3	Communication Core Curriculum.
				13	Program Semester Hours / Meet with your advisor
			Semester 2		
•		•	CETT 1425 - Digital Fundamentals	4	
•		•	CETT 1405 - AC Circuits	4	
•		•	MATH 1316 - Trigonometry	3	Mathematics.



	•	Semester 3 CETT 1429 - Solid State Devices	14	Program Semester Hours / Meet with your advisor
	•	CETT 1429 - Solid State Devices		
	•			
	٠		4	
		COSC 1315 - Fundamentals of Programming OR COSC 1336 - Programming Fundamentals I	3	Computer Science Core Curriculum.
	•	MATH 2412 - Precalculus – Functions and Graphs	4	Mathematics.
			11	Program Semester Hours / Meet with your advisor
		Semester 4		
	•	CETT 1445 - Microprocessor	4	
	•	MATH 2413 - Calculus I	4	Mathematics.
	•	Social and Behavioral Sciences	3	Social and Behavioral Sciences Core Curriculum. Select from the appropriate section of the Core Curriculum Course List.
			11	Program Semester Hours
		Semester 5		
	•	MATH 2414 - Calculus II	4	Mathematics.
	•	Electronics Elective	3	Select Electronics Elective from the following courses: EECT 2339, EECT 2388, ELMT 1371, ELMT 2372, ELPT 2371, PTAC 2314, RBTC 1301, WIND 2359.
•	•	ELMT 2473 - Electrical, Electronic, and Fluid Schematics	4	ACHIEVEMENT: Completion of Associate of Applied Science degree
			11	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

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.

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Career Information

Common Job Titles

Electronics Engineering Technicians (includes Digital Tech (Digital Technician), Electrical Technician, Electronics Engineering Technician, Electronics Technician, Engineering Technician (Engineering Tech), Failure Analysis Technician (FA Technician), Refurbish Technician (Refurb Tech), Senior Electronics Technician, Technician, Test Technician), Electronics Engineers

Regional Labor Market Information

Electronics 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, 106 companies have posted 573 jobs for Electronics Engineering Technicians in this region. There are currently 2,980 Electronics Engineering Technicians that are employed in Austin-Round Rock, TX. Source: https://austincc.emsicc.com/careers/electronics-engineering-technician

Electronics Engineers: New workers start around \$70,130. Normal pay is \$101,262 per year. Highly experienced workers can earn up to \$159,480. Over the last year, 137 companies have posted 1,181 jobs for Electronics Engineers, Except Computer in this region. There are currently 2,109 Electronics Engineers, Except Computer that are employed in Austin-Round Rock, TX. Source: <u>https://austincc.emsicc.com/careers/electronics-engineer-except-computer</u>

Career and labor market research tools (see Quick Reference Guide at <u>http://www.austincc.edu/career</u>): EMSI: <u>https://austincc.emsicc.com/</u>, Bureau of Labor Statistics: <u>http://www.bls.gov/ooh/</u>, O*NET: <u>https://www.onetonline.org/</u>

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

The Associate of Applied Science in Engineering Technology prepares students to directly enter the workforce. A Bachelor of Applied Arts and Sciences (BAAS) is a transfer degree option for students in AAS programs who want to 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: <u>http://www.owls.txstate.edu/undergraduate-degrees/applied-arts-sciences.html</u> Concordia University Texas: <u>http://www.concordia.edu/academics/college-of-business-and-communication/baas-in-business.html</u> Texas A&M University Central Texas: <u>https://www.tamuct.edu/degrees/undergraduate/business-management.html</u> Texas Tech University: <u>https://www.depts.ttu.edu/universitystudies/prospective_students/baas.php</u>

Additional Transfer Resources: ACC's transfer website provides information on additional colleges & universities: <u>http://www.austincc.edu/transferguides</u>. 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.

Career & Transfer Resources Updated 8/18/17