



# Program Map Renewable Energy 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 Renewable Energy 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, Renewable Energy Specialization.

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**Department Website:**  
<http://sites.austincc.edu/electronics/>

Graduates of this program have the skills to work as technicians in the renewable energy industry. Students will go through a common set of basic electronic courses. Students will also take courses in Solar Photovoltaics, Wind Power, Solar Power, Energy Efficiency, and Industrial Safety.

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"/> MATD-0332 - Basic Math Skills <input type="checkbox"/> MATD-042x/032x – ALEKS Sequence <input type="checkbox"/> MATD-0385/0485 – Developing Mathematical Thinking <i>Not prerequisite for MATH-1314/1324</i> <input type="checkbox"/> MATD-0370 – Elementary Algebra <input type="checkbox"/> MATD-0390 – Intermediate Algebra <input type="checkbox"/> <i>Take MATD-0370 and 0390 to prepare for MATH-1314/1324</i>

### 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	C2	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.
•		•	CETT 1403 - DC Circuits	4	
•		•	MATH 1314 - College Algebra	3	Mathematics.
•		•	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	
		•	ENGL 1301 - English Composition I	3	Communications Core Curriculum.
•		•	ELMT 2372 - Energy Efficient Structures and Assessments	3	
				14	Program Semester Hours / Meet with your advisor

Semester 3				
		• CETT 1429 - Solid State Devices	4	
		• COSC 1315 - Fundamentals of Programming <b>OR</b> • COSC 1336 - Programming Fundamentals I	3	Computer Science Core Curriculum.
		• Language, Philosophy, and Culture <b>OR</b> Creative Arts	3	Language, Philosophy and Culture Core Curriculum. Select from the appropriate section of the Core Curriculum.
			10	Program Semester Hours / Meet with your advisor
Semester 4				
		• CETT 144 - Microprocessor	4	
•		• ELMT 2474 - Solar Photovoltaics Systems	4	
•		• ELMT 2275 - Solar Thermal Systems	2	
•	•	Social and Behavioral Sciences	3	Social and Behavioral Sciences Core Curriculum. Select from the appropriate section of the Core Curriculum Course List.
			13	Program Semester Hours
Semester 5				
•		• WIND 2359 - Wind Power Delivery System	3	
		• Restricted Elective	3	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 Associate of Applied Science degree
			10	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

# Renewable Energy Specialization

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Career & Transfer Resources Updated 8/18/17

## Career Information

### Common Job Titles

Solar Photovoltaic Installers, Solar Thermal Installers and Technicians, Solar Energy Technician, Solar Installer, Solar Maintenance Technician, Energy Technicians, Wind Energy Technicians, Weatherization Installers and Technicians, Energy Auditors

### Regional Labor Market Information

Solar Photovoltaic Installers: New workers generally start around \$36,509. Normal pay for Solar Photovoltaic Installers is \$38,559 per year, while highly experienced workers can earn as much as \$41,163. Over the last year, 3 companies have posted 41 jobs for Solar Photovoltaic Installers in this region. There are currently 28 Solar Photovoltaic Installers that are employed in Austin-Round Rock, TX.

Source: <https://austincc.emsicc.com/careers/solar-photovoltaic-installer>

Energy Auditors: New workers generally start around \$42,983. Normal pay for Energy Auditors is \$75,641 per year, while highly experienced workers can earn as much as \$131,825. Over the last year, 2 companies have posted 158 jobs for Energy Auditors in this region. There are currently 6,968 Energy Auditors that are employed in Austin-Round Rock, TX.

Source: <https://austincc.emsicc.com/careers/energy-auditor>

**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

The Associate of Applied Science in Renewable Energy Specialization prepares students 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.