

## Specialization Requirements

Electronics Technician		
+CETT 1457	Linear Integrated Circuits	4
	Electronics Elective (3)	4
	Electronics Elective (3)	4
#+ELMT2473	Electrical, Electronic, & Fluid Schematics	4
	<b>Specialization Credit Hours</b>	<b>16</b>
	<b>Total Credit Hours for the Degree</b>	<b>70</b>

Automation, Robotics, and Controls		
PTAC 2314	Principles of Quality	3
+RBTC 1405	Robotic Fundamentals	4
RBTC 2445	Robotic Application, Set-up, and Testing	4
#+ELPT 2449	Industrial Automation	4
+EECT 2188	Internship	1
	<b>Specialization Credit Hours</b>	<b>16</b>
	<b>Total Credit Hours for the Degree</b>	<b>70</b>

Nanoelectronics Manufacturing Technology		
PTAC 2314	Principles of Quality	3
SMFT 1474	Solar Cell and Chip Manufacturing Technology	4
SMFT 2341	Vacuum Principles & RF Plasma Systems	3
+SMFT 2474	Nanoelectronics Manufacturing Technology	4
#+ELMT2473	Electrical, Electronic, & Fluid Schematics	4
	<b>Specialization Credit Hours</b>	<b>18</b>
	<b>Total Credit Hours for the Degree</b>	<b>72</b>

Networking/Computer Electronics		
+ITNW 1325	Fundamentals of Networking Technologies	3
+ITNW 2405	Network Administration for Novell NetWare	4
+ITMT 1340	Managing & Maintaining Microsoft Server 2003	3
+ITNW 2321	Networking with TCP/IP	3
#+CETT1457	Linear Integrated Circuits	4
	<b>Specialization Credit Hours</b>	<b>17</b>
	<b>Total Credit Hours for the Degree</b>	<b>71</b>

## 4–Year Transfer Program

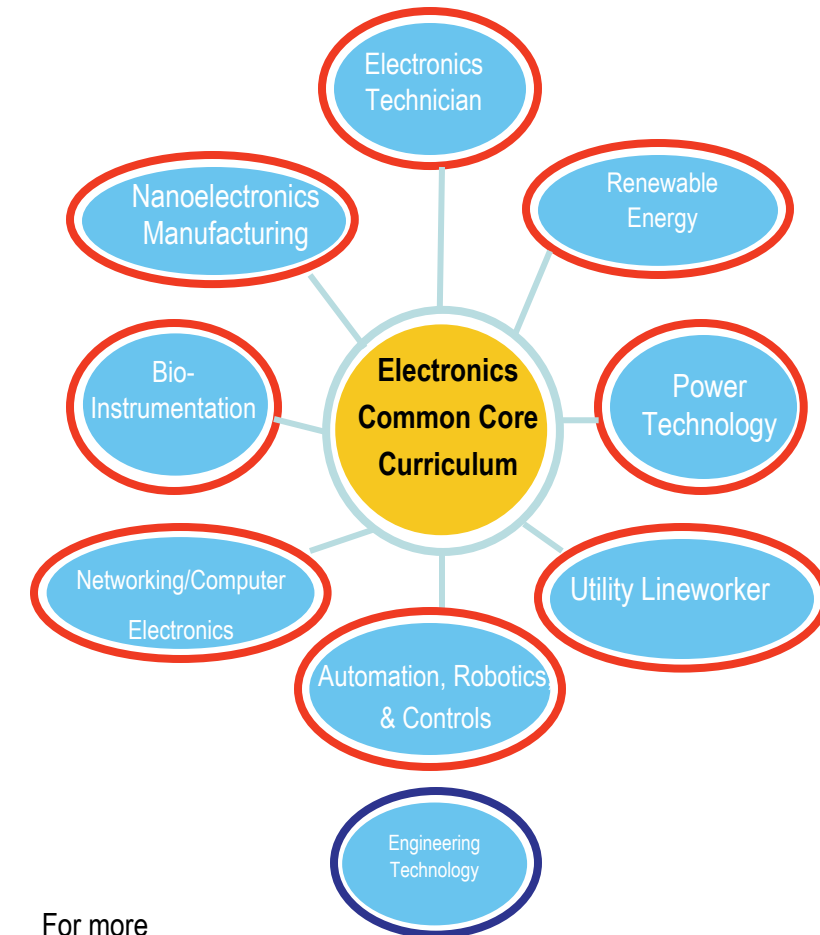
Engineering Technology Program		
+CETT 1403	DC Circuits	4
+CETT 1405	AC Circuits	4
+MATH 2413	Calculus I	4
ENGL 1301	English Composition I	3
SPCH 1311	Introduction to Speech	3
+CETT 1429	Solid State Devices	4
+CETT 1425	Digital Fundamentals	4
PHIL 1301	Introduction to Philosophy	3
+MATH 2414	Calculus II	4
DFTG 1405	Technical Drafting	4
+PHYS 2425	Engineering Physics I	4
GOVT 2305	United States Government	3
GOVT 2306	Texas State and Local Government	3
+CHEM 1311	General Chemistry 1-Lecture	3
+CHEM 1111	General Chemistry 1– Lab	1
+PHYS 2426	Engineering Physics II	4
+ELMT 2441	Electromechanical Systems (#)	4
#+ELMT 2473	Electrical, Electronic, and Fluid Schematics	4
ENGL 1302	English Composition II	3
	<b>Total Credit Hours for the Degree</b>	<b>66</b>

## Specialization Requirements

Bio-Instrumentation Technology		
+ INTC 1491	Biomedical Instrumentation	4
#+INTC 1491	Biotechnology Instrumentation	4
+ ELPT 2449	Industrial Automation	4
+RBTC 1405	Robotic Fundamentals	4
+EECT 2188	Internship	1
	<b>Specialization Credit Hours</b>	<b>17</b>
	<b>Total Credit Hours for the Degree</b>	<b>71</b>



## Electronics and Advanced Technologies



For more information, contact  
 Vidal Almanza at (512) 223-6404  
 Visit [www.austincc.edu/electronics](http://www.austincc.edu/electronics)  
 Register online at [www.austincc.edu](http://www.austincc.edu)



# Electronics and Advanced Technologies



- The Electronics and Advanced Technologies department of Austin Community College offers eight degree plans to help prepare you for specific careers. Students can earn an Associate of Applied Science or a one-year Certificate in one of several specializations offered within the department. Electronics Technology degree plans center on a common core of required electronics courses, plus additional courses to complete the specialized degree. To earn an Associate of Applied Science in Electronics Technology, a student would complete the Electronics Common Core Curriculum (ECCC), a set of courses satisfying the college's General Education requirement, and courses required within the student's choice of specialization. To earn a second degree within Electronics Technology, a student could simply take the additional courses required by the second specialization.
- Within the department, a separate degree option is offered for Engineering Technology which includes much of the ECCC coursework but has more rigorous mathematics and physics components for transfer eligibility to 4-year engineering degree programs.
- All students are strongly encouraged to apply for financial assistance through our numerous grant and scholarship programs.

## Electronics and Advanced Technologies

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1020 Grove Blvd  
Austin, Texas 78741

Phone: 512-223-6225  
Fax: 512-223-6767

Department Chair: Hector Aguilar, Ph.D.

### Electronics Common Core

+ CETT 1403	DC Circuits	4
+ CETT 1405	AC Circuits	4
+ CETT 1425	Digital Fundamentals	4
+ CETT 1429	Solid State Devices	4
COSC 1315	Fundamentals of Programming	3
+ CETT 1445	Microprocessors	4
+ ELMT 2441	Electromechanical Systems	4
+ PHYS 1401	General College Physics I <b>or</b>	4
+CHEM 1311	General Chemistry 1-Lecture	3
+CHEM 1111	General Chemistry 1- Lab	1
CPMT 1445	Computer Systems Maintenance (5)	4
+ INTC 2471	Data Acquisition and Measurement	4
<b>Total ECCC Credit Hours</b>		<b>39</b>

### Courses required for General Education

<i>Courses required for General Education</i>		
+MATH 1314	College Algebra	3
	Oral Communications elective (2)	3
ENGL 1301	English Composition I	3
	Social/Behavioral Science elective (2)	3
	Humanities/Fine Arts elective (2)	3
<b>Total General Education Credit Hours</b>		<b>15</b>

**Total Credit Hours for the Degree 54**

+ Prerequisites: See course descriptions in college catalog

- (1) Introduction to Chemistry is required for the Semiconductor Manufacturing Technology program, all other specializations require General College Physics or higher.
- (2) Select from the appropriate section of the General Education Course List in the college catalog.
- (3) An *electronics elective* is any 3 or 4-semester-hour course within the Electronics and Advanced Technologies Department.
- (4) # Capstone course
- (5) CPMT 1445 Computer Systems Maintenance is not required for Renewable Energy Technology Specialization

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## Specialization Requirements

### Utility Lineworker

ELMT 2472	Elements of Electrical Power Systems	4
+ELMT 1371	Industrial Safety	3
ELPT 1271	National Electrical Safety Code	2
LNWK 1241	Distribution Operations	2
LNWK 1211	Climbing Skills	2
+LNWK 2271	Principles of Power Transmission	2
+LNWK 2272	Climbing Skills II	2
ELPT 2371	Principles of Switching and Metering	3
ELPT 2171	Smart Grid Technology	1
#+ELMT 2473	Electrical, Electronic, & Fluid Schematics	4
+EECT 2188	Internship	1
<b>Specialization Credit Hours</b>		<b>26</b>
<b>Total Credit Hours for the Degree</b>		<b>72</b>

### Power Technology

ELMT 2472	Elements of Electrical Power System	4
ELMT 1371	Industrial Safety	3
ELPT 1271	National Electrical Safety Code	2
ELPT 2371	Principles of Switching and Metering	3
ELPT 2171	Smart Grid Technology	1
#+ELMT 2473	Electrical, Electronic, & Fluid Schematics	4
+EECT 2188	Internship	1
<b>Specialization Credit Hours</b>		<b>18</b>
<b>Total Credit Hours for the Degree</b>		<b>72</b>

### Renewable Energy Technology

+ELMT 2372	Energy Efficient Structures and Assessments	3
+ELMT 2474	Solar Photovoltaics Systems	4
ELMT 2275	Solar Thermal Systems	2
+ELMT 2276	Solar Photovoltaics Installation	2
+WIND 2359	Wind Power Delivery System	3
ELMT 1371	Industrial Safety	3
#+ELMT2473	Electrical, Electronic, & Fluid Schematics	4
+EECT 2188	Internship	1
<b>Specialization Credit Hours</b>		<b>22</b>
<b>Total Credit Hours for the Degree</b>		<b>72</b>