

# ELECTRONICS ENGINEERING TECHNOLOGY - AUTOMATION & CONTROL

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The Electronics Engineering Technology curriculum prepares individuals to become technicians who design, build, install, test, troubleshoot, repair, and modify development and production electronic components, equipment, and systems such as industrial/computer controls, manufacturing systems, communication systems, and power electronic systems.

A broad-based core of courses including basic electricity, solid-state fundamentals, digital concepts, and microprocessors ensures the student will develop the skills necessary to perform entry-level tasks. Emphasis is placed on developing the student's ability to analyze and troubleshoot electronic systems.

Special emphasis is placed on computer literacy, computer-aided design (CAD), data communications, electronic communications systems (telecommunications), as well as industrial controls (Programmable Logic Controller), microprocessor systems, and industrial control transducers. Online (Internet) experience is also an integral part of the EET program as much of the coursework provides hands-on laboratory experiments that often include accessing the web.

Graduates should qualify for employment as engineering assistants or electronic technicians with job titles such as electronics engineering technician, field service technician, maintenance technician, electronic tester, electronic systems integrator, bench technician, or production control technician.

## Learning Outcomes

Upon completion of this program, students will be able to:

- Analyze and evaluate a broad variety of electronic technologies.
- Exhibit industry standard electronics skills and competencies.
- Analyze and evaluate a wide variety of electronics industry standard technologies.

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- Electronics Engineering Technology - Automation and Control - Associate in Applied Science (p. 1)
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  - Electronics Engineering Technology - CCP (p. 2)

## Electronics Engineering Technology – Automation and Control Associate in Applied Science – A40200

Course	Title	Credit Hours
<b>First Year</b>		
<b>Fall</b>		
ACA 111	College Student Success	1
CIS 110	Introduction to Computers	3
DFT 151	CAD I	3
ELC 131	Circuit Analysis I	4
ELC 131A	Circuit Analysis I Lab	1
Humanities Elective *		3
Credit Hours		15
<b>Spring</b>		
ENG 111	Writing and Inquiry	3
ELN 131	Analog Electronics I	4
ELN 133	Digital Electronics	4
HYD 110	Hydraulics/Pneumatics I	3
ISC 112	Industrial Safety	2
Credit Hours		16
<b>Summer</b>		
MEC 130	Mechanisms	3
Social Science Elective *		3
Credit Hours		6
<b>Second Year</b>		
<b>Fall</b>		
ATR 212	Industrial Robots	3
ELN 132	Analog Electronics II	4
ELN 260	Prog Logic Controllers	4
ENG 112 or ENG 114	Writing and Research in the Disciplines or Professional Research & Reporting	3
MAT 171	Precalculus Algebra	4
Credit Hours		18
<b>Spring</b>		
ATR 214	Advanced PLCs	4
CTS 120	Hardware/Software Support	3
ELC 117	Motors and Controls	4
ELN 234	Communication Systems	4
Credit Hours		15
Total Credit Hours		70

\*Please see the Suggested Humanities and Social/Behavioral Science Elective List for AAS Majors webpage.

**Students seeking to transfer to the BSEET program at UNCC or to double-major with the BMET or CET programs may be allowed to substitute certain courses for some of the above requirements. These students are encouraged to see the EET advisor as early as possible to plan their course sequence.**

## Electronics Engineering Technology – Mechatronics Certificate Option – C40200M

Gainful Employment Disclosure (<https://www.stanly.edu/ajax/gedt/EC40200M.html>)

Course	Title	Credit Hours
<b>Fall</b>		
ELC 131	Circuit Analysis I	4
ELC 131A	Circuit Analysis I Lab	1
ELN 260	Prog Logic Controllers	4
Credit Hours		9
<b>Spring</b>		
ELC 117	Motors and Controls	4
HYD 110	Hydraulics/Pneumatics I	3
ISC 112	Industrial Safety	2
Credit Hours		9
Total Credit Hours		18

## Electronics Engineering Technology - CCP

Tuition-waived program for Career & College Promise (<https://www.stanly.edu/future-students/career-college-promise>) (high school juniors and seniors)

Code	Title	Credit Hours
ACA 111	College Student Success	1
ELC 131	Circuit Analysis I	4
ELC 131A	Circuit Analysis I Lab	1
ELN 131	Analog Electronics I	4
ELN 133	Digital Electronics	4
ELN 260	Prog Logic Controllers	4
Total Credit Hours		18

View our Videos (<https://www.stanly.edu/future-students/educational-offerings/electronics-engineering-technology/view-our-videos>)