The Associate of Applied Science Degree in Engineering Technology with Electronics emphasis prepares students to assist in providing support for engineering functions or to function as an Electronics Technician. Instruction includes analog and digital circuit design, implementation and testing, fabrication techniques, telecommunications, microprocessor programming and interface. Specialize concentration instruction includes topics such as in-depth analysis of analog and digital circuits, electrical and power supply troubleshooting, systems such as radar and microwaves, computer and network fundamentals, medical terminology, healthcare organizational dynamics, and fluid dynamics. Accredited by the Technology Accreditation Commission of ABET, http://www.abet.org.

This two-year program provides students with the methods and procedures used in engineering organizations and by electronics technicians in a bench repair, defense contractor, and biomedical equipment repair functions. Instruction takes place in a hands-on, state-of-the-art environment.

**Educational Objectives - Within a few years of graduation:** Graduates from CSN's Engineering Technology with Electronics emphasis program will demonstrate the ability to apply circuit analysis and design, computer programming, analog and digital electronics, and microprocessor/microcontroller principles to install, test, troubleshoot and maintain electrical and electronic systems as bench, defense contractor, and biomedical equipment technicians. Graduates will have effective technical communication skills necessary to function on professional teams as technicians or managers. Graduates are prepared to enter the working force with professional work ethic with the commitment to lifelong learning, quality and continuous improvement through the clear ability to assume increasing levels of responsibility in both industry and community.

**STUDENT LEARNING OUTCOMES – Graduates of this program will have the opportunity to:**

- Demonstrate knowledge of safety procedures and proper electronics fabrication techniques.
- Identify components, design, construct, and test various circuits to include filters and construct a Bode Plot of an amplifier’s frequency response.
- Construct, analyze and test various types of digital circuits and microprocessor/microcontroller circuits. Demonstrate a working knowledge writing programs to control other devices.
- Demonstrate commitment to quality, timeliness, continuous improvement, while showing an understanding of the need for and an ability to engage in continuing professional development.

**GENERAL EDUCATION REQUIREMENTS (27 Credits):**

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<th>COMMUNICATIONS:</th>
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**SPECIAL PROGRAM REQUIREMENTS (37 Credits):**

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**NOTE:** Courses with a B suffix (example - XYZ 123B) may be non-transferable for a NSHE baccalaureate degree.

Students may elect to graduate using the degree requirements in effect at the time of matriculation, or when they declared or changed major or the current catalog. If a program is official after a student has matriculated, the student may choose the degree requirements of the new program. In no case may a student use a catalog which is more than six years old at the time of graduation.
### Detailed Guided Pathway
**Associate of Applied Science Degree**
*Engineering Technology – Electronics Emphasis*
**Total Credits – 64 credits**

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<td>Digital Logic I</td>
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<td>- Defense Contractor Tech</td>
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<td>- Biomedical Equip Tech</td>
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**Summer Session**
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More detailed information can be found on the ET Web page at [http://www.csn.edu/et](http://www.csn.edu/et)
### Associate of Applied Science Degree (AAS)
#### Engineering Technology – Electronics Emphasis
**Total Credits – 64 credits**

*For those with some electrical/electronic theory experience – those without see next page*

<table>
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<th>Credit Hours</th>
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<tr>
<td>Communications</td>
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<td>Fabrication and Soldering Techniques</td>
<td>ET 104B</td>
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<td>Digital Logic I</td>
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**Summer Session**

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<td>Solid State Devices and Circuits I</td>
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**Degree TOTAL**

64
### Detailed Guided Pathway
#### Associate of Applied Science Degree (AAS)
##### Engineering Technology – Electronics Emphasis

Guided Pathway for those without any electric/electronics theory experience

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<th>Term</th>
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*Note: *Elective course