

# ADVANCED MANUFACTURING COLLEGE CREDIT CERTIFICATE

The Advanced Manufacturing college credit certificate equips students with broad skills for working in automated environments. Students will gain hands-on experience in hydraulics, pneumatics, PLCs, and automation. The program also covers core engineering technology concepts like electronics, maintenance, technical documentation, and quality assurance. This combination prepares students for various technical careers that utilize automation and robotics. This certificate is upward compatible with the Engineering Technology AS degree Advanced Manufacturing Specialization.

## Engineering Core:

The engineering core comprises the 18-credit hour Engineering Technology Support Specialist College Credit Certificate, aligns with the Manufacturing Skills Standards Council (MSSC), prepares students for the MSSC Certified Production Technician (CPT) Certification, and provides a foundation in:

- Electronics
- Computer-aided drafting (CAD)
- Mechanical Measurement & Instrumentation
- Manufacturing Processes & Materials
- Quality Assurance
- Industrial Safety

## Mechatronics Core:

The mechatronics core focuses on technical skills for manufacturing careers covering:

- Programmable Logic Controllers
- Automation Process Control
- Electro-Mechanical Systems
- Hydraulics and Pneumatics

The college credit certificate is upward compatible with the Engineering Technology - Advanced Manufacturing Specialization AS degree (<https://lssc-public.courseleaf.com/academic-programs/career-technical-education-programs/engineering-technology-substation-relay-technology-specialization-as/>).

## Academic Advising

- [advising@lssc.edu](mailto:advising@lssc.edu) 352-787-3747

## Career Development Services

- [Careers@lssc.edu](mailto:Careers@lssc.edu) 352-323-3603

## Program Contact Information

- Mr. Jeff Light, Engineering Technology Program  
Director [Relay@lssc.edu](mailto:Relay@lssc.edu) ([relay@lssc.edu](mailto:relay@lssc.edu)) 352-435-6528
- Workforce Programs Main Office 352-435-5024

ETI 1701C	Industrial Safety	3
<b>Mechatronics Core</b>		
ETS 1542C	Introduction to PLCs	3
ETS 1535C	Automation Process Control	3
ETS 2511C	Electro-Mechanical Systems	3
ETS 1700C	Hydraulics and Pneumatics	3
<b>Total Hours</b>		<b>30</b>

Students should make an appointment with the program director prior to or immediately after enrolling to discuss the nuances of the program.

*Only required courses for an LSSC degree or qualifying certificate program are eligible for federal financial aid. Verify course choices and avoid charges by making an appointment with an academic advisor.*

*For information about career options, visit [www.lssc.edu/careers](http://www.lssc.edu/careers) (<http://www.lssc.edu/careers>).*

Students must complete 25% of each program's total credit hours at LSSC.

Code	Title	Hours
<b>Engineering Tech Core</b>		
EET 1084C	Introduction to Electronics	3
ETD 1320C	Introduction to AutoCAD	3
ETM 1010C	Mechanical Measurement & Instrumentation	3
ETI 1420C	Manufacturing Processes and Materials	3
ETI 1110C	Introduction to Quality Assurance	3