

Do you like science or math?  
Do you enjoy solving problems?



**Science, Technology,  
Engineering & Mathematics  
CTE Cluster**

Our Career and Technical Education (CTE) Pathways in the Science, Technology, Engineering & Mathematics CTE Cluster lead to a credential for employment (certificate, diploma, or degree).

Prepare for a career related to planning, managing, and providing scientific research and professional and technical services. Check out available CTE Pathways. →

## CAREER AND TECHNICAL EDUCATION PATHWAYS FOR HIGH SCHOOL POPULATIONS

Upon completion of a CTE Pathway, students will have earned substantial credit toward an Associate in Applied Science (AAS) degree, and may take courses in the degree during the remainder of their high school experience. All courses in a CTE Pathway are college-credit, but not all courses are transferable.

To assist students who plan to go on to a four-year university, the courses that transfer under the Comprehensive Articulation Agreement between the N.C. Community College System and the University of North Carolina system are marked with **(T)**. High school students who achieve a grade of B or higher and achieve a score of 93 or higher on the standardized Career and Technical Education (CTE) post-assessment test, for certain high school CTE classes, can be provided college credit for CTE pathway courses marked with **(HS)**. To receive articulated credit, the current high school student must be enrolled in a Career and College Promise CTE pathway that contains the articulated course. High school graduates can receive course credit by requesting the articulated course credit within two years of their high school graduation date. Students are encouraged to consult with their academic advisor while at South Piedmont Community College.

### NEXT STEPS:

Contact your high school guidance counselor or Career Development Coordinator. They can provide information about eligibility and coordinate the high school and college class schedules. Students may enroll concurrently in two CTE pathways. Students may enroll concurrently in two CTE pathways. If you have questions about the CTE pathways listed here, please contact High School Programs at 704-290-5090 or [highschoolprograms@spcc.edu](mailto:highschoolprograms@spcc.edu).

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Classes are offered at our college campuses in Monroe and Polkton and online. Some classes may be offered at your local high school. Classes are organized into pathways and align with the K-12 curriculum and Career and College Ready Standards adopted by the State Board of Education.

*The following CTE pathways are available to eligible high school freshmen, sophomores, juniors, and seniors.*

### ENGINEERING AND PRINT READING CERTIFICATE (C40320PD)

Course	Credits	Prerequisites	Semester offered (SPCC Campus)
DFT 151: CAD I (HS)	3	None	Fall
DFT 152: CAD II	3	None	Spring
DFT 154: Intro Solid Modeling	3	None	Fall
HYD 110: Hydraulics/Pneumatics I	3	None	Spring
MEC 145: Manufacturing Materials I	3	None	Fall
BPR 115: Elc/Fluid Power Diagrams	2	None	Fall
TOTAL CREDITS	17		

(continued)

## CAREER AND TECHNICAL EDUCATION PATHWAYS FOR HIGH SCHOOL POPULATIONS

### ENGINEERING TECHNOLOGY MECHATRONICS CERTIFICATE (C40350PA)

Course	Credits	Prerequisites	Semester offered (SPCC Campus)
ELC 213: Instrumentation	4	None	Fall
MEC 130: Mechanisms	3	None	Spring
ELC 117: Motors and Controls	4	None	Spring
ELC 128: Introduction to PLC	3	None	Spring
HYD 110: Hydraulics/Pneumatics I	3	None	Spring
<b>TOTAL CREDITS</b>	<b>17</b>		

### INTRODUCTION TO MECHATRONICS CERTIFICATE (C40350PB)

Course	Credits	Prerequisites	Semester offered (SPCC Campus)
CIS 110: Intro to Computers (T)	3	None	Fall, Spring, Summer
DFT 151: CAD I (HS)	3	None	Fall
ATR 112: Intro to Automation	3	None	Fall
ELC 213: Instrumentation	4	None	Fall
BUS 139: Entrepreneurship I	3	None	Fall
<b>TOTAL CREDITS</b>	<b>16</b>		

