



MECHATRONICS



A Career in Mechatronics starts in high school.

CHESAPEAKE PUBLIC SCHOOLS & TIDEWATER COMMUNITY COLLEGE

GET STARTED RIGHT NOW!

In our diverse, technologically challenging, and increasingly global economy, a good education is no longer a luxury; it is a necessity. Critical thinking, communication skills, practical, hands-on ability - are all crucial to succeeding in today's workplace. The bar is being set higher every day; the education your child receives can help him or her jump that bar and go higher than ever imagined.



MECHATRONICS AND DUAL ENROLLMENT

Chesapeake Public Schools has partnered with TCC to provide an opportunity for high school students to prepare for in-demand jobs in the exciting and challenging field of mechatronics.

MECHATRONICS

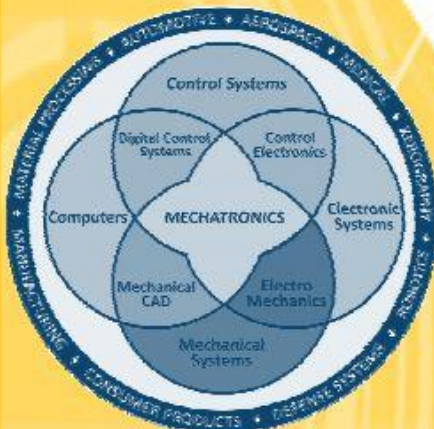
The term mechatronics is a combination of MECHANical and elecTRONICS, and is a relatively new approach to product design and development. Mechatronic systems are typically composed of traditional mechanical and electrical components and are referred to as "smart" devices or systems because of the incorporation of sensors, actuators, robotics, instrumentation, process control and automated systems.

HOW IT WORKS

Rising high school freshmen sign up for TCC/CPS Dual Enrollment: Mechatronics program. Students take selected classes during the first two years of high school, working toward a standard high school diploma and a recognized industry credential in electronics. During the final two years of high school, students take some classes in their home high school, while taking classes at TCC's Chesapeake Campus, where they get hands-on training in the Precision Machining Lab and earn the TCC Career Studies Certificate in Mechatronics. They can then choose to continue at TCC to earn the Associate of Applied Science degree in just one year.

Rising freshmen, current eighth-grade students, should elect the course pathway for the TCC/CPS Dual Enrollment: Mechatronics program when scheduling classes for high school.

Dual enrollment courses for mechatronics are jointly funded by TCC, Chesapeake Public Schools and the enrolled student.



FOR MORE INFORMATION

Contact your school counselor or the Career Counselor at the high school you will attend.

Standard Diploma with Mechatronics Certificate

9th grade	
English 9	World History I
Algebra I	Biology
PE 9	Fine Art
Earth Science	Technology of Robotics Design (77711) (elective option)
10th grade	
English 10	Geometry
Elective	PE 10
Elec. Tech I (78151) - Home School (ELE 150 – A.C. and D.C. Circuit Fundamentals) DE 3Cr.	Elec. Tech II (78152) - Home School (ETR 281 – Digital Systems) DE 3Cr.
Physics for Technology I (science option)	Physics for Technology II (science option)
11th grade	
English 11	US History
Algebra 2	Economics and Personal Finance
<i>ELE 146 (Electric Motor Control) 4Cr. At TCC</i>	<i>ELE 233 (Programmable Logics Controller Systems I) 3Cr. At TCC</i>
12th grade	
English 12	<i>ELE 234 (Programmable Logics Controller Systems II) 3Cr. At TCC</i>
Government	<i>INS 233 (Process Control Integration) 4Cr. At TCC</i>
<i>INS 230 (Instrumentation I) 3Cr. At TCC</i>	<i>MEC 268 (Fluid Power Hydraulic) OR</i> <i>MEC269 (Fluid Power Pneumatic) 3Cr. At TCC</i>
<i>ELE 246 (Industrial Robotics Programming) 3Cr. FULL YEAR COURSE At TCC</i>	

BOLD – TCC Class at home HS as Dual - Enrollment
Italicize Classes taken on Chesapeake TCC Campus

Cost based on the 2016-2017 school year contract
TCC credit - \$45 per credit 29= \$1,305