SCIENCE, TECHNOLOGY, ENGINEERING AND MATHEMATICS

Kevon Easley, Instructor

INDUSTRY CERTIFICATIONS

- Customer Service
- Mechatronics, Level 1
- National Career Readiness
- Workplace Readiness Skills for the Commonwealth

POSSIBLE CAREER PATHWAYS

- Field Service Technician
- Manufacturing Systems Technician
- Industrial Maintenance Technician
- Robotic Technician
- CNC Technician
- Fluid Power Technicians
- PLC Technician

COLLEGE AND CAREER OPPORTUNITIES

- Know How Virginia <u>www.knowhowvirginia.org/</u>
- Tidewater Community College
 <u>www.tcc.edu/</u>
- College Board
 <u>www.collegeboard.com/</u>
- Virginia Career View
 <u>www.vaview.vt.edu/</u>
- Bryant and Stratton College
 <u>www.bryantstratton.edu/</u>
- Career Connection
 http://jobs.hamptonroads.com/
- ITT Tech www.itt-tech.edu/
- DeVry University
- www.devry.edu/ Wyotech www.wyotech.edu/
- Wyotech <u>www.wyotech.edu/</u>
- ECPI College of Technology
 <u>www.ecpi.edu/</u>

PRE-REQUISITIES

One Year of Algebra 1A and 1B

STARTING SALARY

\$36,200 - \$54,140 Earning may vary by specialty Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, 2016-17 Edition, Electro-mechanical Technicians, on the Internet at <u>http://www.bls.gov/ooh/architecture-andengineering/electro-mechanical-technicians.htm</u>

**The Engineering Technology course participates in the SkillsUSA co-curricular club.



PROGRAM DESCRIPTION

Engineering Technology is two courses, introductory & advanced, that cover many engineering disciplines through the focus in manufacturing. The students in their first year will begin with an overview of the various fields of engineering disciplines, then learn the basics in electricity, electronics, design, machining, manufacturing, quality control, and robotics, and finally put it all together in automation. The students in their second year go deeper in their study of the above topics and are encourage to choose an area of mastery. Students are tasked to develop new inventions and produce prototypes in the lab. Engineering technology is centered around giving students a foundation to build on and developing their creativity in solving problems using the design process.

PROGRAM CONTENTS/SKILLS

- Demonstrating Workplace Readiness Skills: Personal Qualities and People Skills
- Demonstrating Workplace Readiness Skills: Professional Knowledge and Skills
- Demonstrating Workplace Readiness Skills: Technology Knowledge and Skills
- Examining All Aspects of an Industry
- ♦ Addressing Elements of Student Life
- Practicing Safety
- Introducing Robotics
- Using Robotic Trainers and Training Equipment
- Understanding Physics
- Understanding Power Systems in Robotics
- Explaining Robotic Applications
- Exploring Robotic Careers
- Understanding the Machine Shop
- Understanding the Welding Shop