ABOUT US

XLR8 – Lynchburg Regional Governor's STEM Academy – is the 16th regional Governor's STEM Academy offering programs in science, technology, engineering, and mathematics (subjects known collectively as "STEM") for high school juniors and seniors in Virginia's Central Virginia region.

Located on the campus of Central Virginia Community College – XLR8 offers academic and technical training related to careers in engineering, mechatronics, biotechnology, health science, and cybersecurity.

MATRICULATION

CVCC	University of Alabama
Embry-Riddle University	University of Kentucky
George Mason University	University of Lynchburg
James Madison University	UNC-Charlotte
Liberty University	University of North Dakota
Old Dominion University	University of Virginia
Mary Washington University	UVA-Wise
Radford University	VCU
Randolph College	Virginia Military Institute
Sweet Briar College	Virginia Tech

OUR PARTNERS

Amherst County Schools
Appomattox County Schools
Bedford County Schools
Campbell County Schools
Lynchburg City Schools
Automated Industrial Technologies (AIT)
Appalachian Power
AMG, Inc.
Advanced Manufacturing Technology (AMTI)
BWX Technologies
Centra and Centra PACE
Central VA Community College
CloudFit Software
CTA Consultants
Delta Star
Electronic Design & Manufacturing (EDM)
Framatome
Greif
L3 Harris Corporation
Liberty University
Lynchburg Morning Rotary Club
Lynchburg Regional Business Alliance
Master Engineers & Designs
Moore's Electrical
Rehab Associates of Central Virginia
Sweet Briar College
Swissomation
Valtim Foundation
Virginia Department of Transportation (VDOT)
Verizon Foundation
Workforce Investment Board
Wegmann USA
Wells Fargo

Please contact us for information on becoming a STEM Academy Partner or sponsoring a STEM Academy event.

Text STEM APP to 77977 to download the STEM APP.

Donate

XLR8 LYNCHBURG REGIONAL GOVERNOR'S STEM ACADEMY

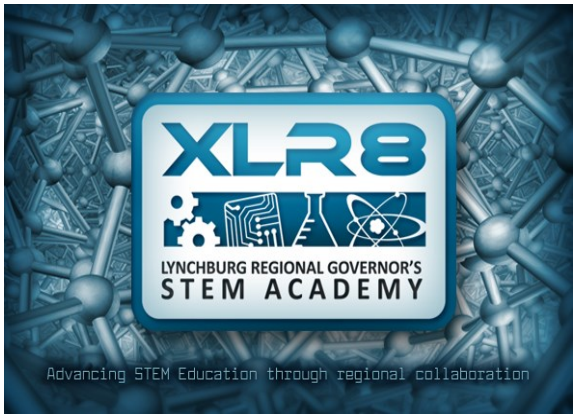
STEM Website

XLR8 STEM ACADEMY

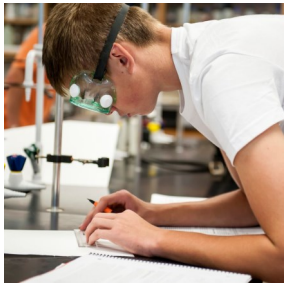
3506 Wards Road
Lynchburg, VA 24502

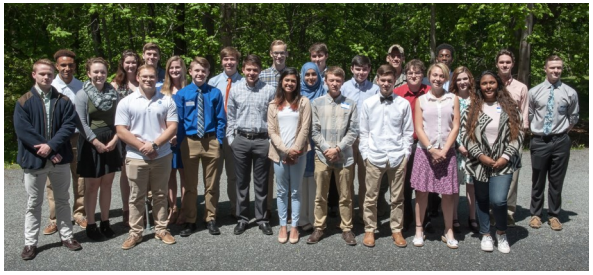
Phone: 434-832-7731
Email: scash@xlr8academy.com

XLR8 STEM ACADEMY



PROGRAM INFORMATION





QUICK FACTS

The STEM Academy is housed on the campus of Central VA Community College (CVCC).

All STEM Academy students are Dual enrolled students at CVCC.

Students can earn up to 44 college credits for their classes.

Students can earn up to two Career Studies Certificates from CVCC.

STEM Academy classes are weighted courses for grade point average (GPA) calculations on base school transcripts.

Parents/Guardians or student must provide transportation to internship locations in the spring of senior year.

STEM Academy operates during the morning hours from 8:00 am - 11:00 am.

Students are eligible to enroll in additional coursework at CVCC.

STEM Academy is a partnership between CVCC, all five public school divisions, higher education, and local business and industry leaders.

OUR CURRICULUM

Junior Year–Mechatronics/Biotech/Health

- Intro to Engineering Design
- Principles of Engineering
- Precalculus I & II
- Applied Calculus I & Statistics
- College Chemistry/College Biology
- Student Success Skills

Senior Year–Mechatronics

- Blueprint Reading
- Industrial Safety-OSHA 10
- Digital Electronics
- Applied Calculus I & Statistics
- Calculus I & Calculus II
- College Physics
- Internship

Senior Year–Biotech/Health Science

- Medical Terminology I
- Digital Electronics (Biotech)
- Principles of Psychology or Developmental Psychology (Health)
- Applied Calculus I & Statistics
- Calculus I and Calculus II
- Human Anatomy and Physiology
- Internship

OUR CURRICULUM

Junior Year–Cybersecurity

- PC Hardware and OS Architecture
- Intro to Network Concepts
- Software Design
- Network Security Basics
- Precalculus I & II
- Applied Calculus I & Statistics
- Student Success Skills

Governor's Science, Technology, Engineering and Mathematics Academy

Senior Year–Cybersecurity

- Network Attacks, Computer Crime and Hacking
- Legal Topics in Network Security
- Applied Calculus I & Statistics
- Calculus I and Calculus II
- College Physics
- Internship

LEARNING ENVIRONMENT

All instructors at the STEM Academy are CVCC college professors.

Students enjoy more freedoms and are responsible for their own learning and time management.

Multidisciplinary connections between science, technology, engineering, mathematics, and health science are emphasized.

Students learn critical thinking, creativity, innovation and real-world problem solving skills through hands-on, project-based learning.

Students are able to meet and network with local business and industry leaders.

Students are able to participate in a semester-long internship experience with a local company.