

INNOVATION CAREER PATHWAYS

ADVANCED MANUFACTURING / ENGINEERING / ARCHITECTURAL DESIGN

Build Real Skills • Earn Industry Credentials • Launch Your Future

Engineering

Architecture

Robotics

3D Design & CAD

Electronics

TECHNICAL COURSES

FOUNDATION SKILL-BUILDING



Requirement: Must take a minimum of 2 classes

- **Intro to AutoCAD**
Master industry-standard 2D computer-aided drafting
- **Intro to 3D Design**
Spatial modeling, modern rendering & rapid prototyping
- **Architectural Design 1**
Structural layouts, site planning & drafting fundamentals
- **Intro to Interior Design**
Spatial aesthetics, lighting, color theory & concepts
- **Engineering Design 1**
Technical problem-solving, mechanics & visual design
- **Intro to Electronics & Robotics 1**
Core electronic circuits, microcontrollers & hardware

ADVANCED COURSES

SPECIALIZED DEEP-DIVE LEARNING



Requirement: Must take a minimum of 2 classes

- **Engineering Design 2 & 3**
Advanced mechanical modeling, stress testing & team systems
- **Robotics 2 & 3**
Autonomous programming, sensory feedback & dynamic automation
- **Architectural Design 2, 3, & 4**
Complex residential, commercial & urban development projects

Customized Pathway Option

Independent Studies: Available as needed to support specialized research, individual career goals, and tailored capstone work.



100-HOUR EXPERIENCE

INTERNSHIP / CAPSTONE

Career-focused practical work experience aligned with your discipline:

Industry Internship

Work directly alongside industry professionals in local corporate or lab environments.

Capstone Project

Design and execute a comprehensive engineering or architectural solution to a real-world problem.



INDUSTRY CREDENTIALS

COLLEGE & CAREER CERTIFICATIONS

Graduate with recognized post-secondary certifications:

Computer Aided Design & Drafting Certificate

Official Certification through Bristol Community College (BCC)

AVAILABLE CONCENTRATION OPTIONS:

- **Architectural & Civil Concentration**
- **Mechanical & Manufacturing Concentration**

READY TO LAUNCH YOUR CAREER PATHWAY?

Earn college credits, build a professional portfolio, and stand out for top STEM programs.

Contact Mr. McElroy today to register and secure your pathway schedule!