

## **Design/Pre-Construction Career Pathway**

### *What High School Courses Should I take?*

Course selection always involves the student, school counselor and parent. Newtown High School courses listed below include specific skills for this pathway. This is not a mandatory listing, nor does it indicate the level of any course. It is provided to raise awareness of the wide variety of options available to NHS students.

### *Suggested Courses:*

English: 4 years

Math: 4 years

Science: 4 years to include Physics

Social Studies: 4 years

World Language: 4 years

Technology Education:

- Drafting/Engineering Design 1 and 2
- Architectural Design 1 and 2

Junior/Senior Project: In this course, students work with a community professional to develop and present a project. Besides allowing students to determine their course content, it is an opportunity for students to learn time management skills prior to college. Sample projects include: “Art Inspiring Architecture” and “Sandy Hook Memorial.”

### *NHS Programs/Activities:*

Career Center Programs utilize community volunteers to provide career information to students. Programs include:

- Career Speakers: open to all students with permission of their teacher(s).
- Career Tours: open to sophomores, juniors, and seniors. An example would be Connecticut Construction Day.
- Career Shadowing: This program allows sophomores, juniors, and seniors one excused day per semester to spend time in a career field of their interest with a community volunteer.
- Internships: Junior and senior students spend 30 hours at a workplace to gain knowledge about a career. Internships occur outside of the school day and may be either paid or unpaid.

Current Community Volunteers include: Claris Construction and JK Architecture, LLC.

### Related NHS Student Activities:

Math Team

3D Printer Club

### *Scholarship Opportunities Related to the Design/Pre-Construction Pathway:*

Associated General Contractors of CT Scholarship

Newtown Cultural Arts Scholarship

CT Building Congress Scholarship

Weller - The Vincent Voccia Vocational Award  
Weller Engineering  
Professional Women in Construction Award

*Careers*

Architect  
Building code Official  
Building Designer  
Civil Engineer  
Code Official  
Cost Estimator  
Drafter  
Electrical Engineer  
Electronic Engineer  
Environmental Designer  
Environmental Engineer  
Fire Prevention and Protection Engineer  
Industrial Engineer  
Interior Designer  
Landscape Architect  
Materials Engineer  
Mechanical Engineer  
Regional and Urban Planner/Designer  
Safety Director  
Specification Writer  
Structural Engineer  
Surveying and Mapping Technician

*Sample Listing of Major(s)/Certificate Programs*

**Certificate:** ACI Field Technician Certification, Certified Construction Manager, Plumbing Certificate.

**Associate Degree:** Construction Management or Construction Technology

**Bachelor Degree:** Engineering and Construction Management, Civil Engineering, or Energy and Power Management

**Master Degree:** Architecture

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