



Construction Trades

The **Construction Trades Pathway** equips students with the knowledge, skills, and hands-on experience necessary to pursue careers in the skilled trades or continue into postsecondary programs. Students engage in real-world projects that emphasize safety, efficiency, and innovation, preparing them for industry certifications, apprenticeships, leadership roles, or direct entry into the construction workforce.

Location: John F. Kennedy High School

Courses

Construction Trades I (Grade 10)

Construction Trades I introduces students to the core skills and knowledge needed for success in the construction industry. Students will learn proper tool use, job site safety, and building codes, while completing OSHA 10 training for industry-recognized certification. Key topics include site preparation, layout, cost estimating, and structural framing. Students will also become familiar with reading blueprints and interpreting floor plans. Hands-on projects will incorporate the use of modern tools and technology, including the Glowforge laser cutter, to bring designs to life. This course provides a strong foundation for advanced training in Construction Trades II and future careers in the skilled trades.

Construction Trades II (Grade 11)

Construction Trades II builds on the foundational skills developed in Construction Trades I, guiding students through more advanced and specialized areas of the construction industry. Students will strengthen their framing skills and gain hands-on experience with essential building systems, including HVAC, plumbing, and electrical. Throughout the course, students will complete real-world projects that reinforce safety practices, code compliance, and technical knowledge. Emphasis is placed on energy-

efficient construction, sustainable materials, and emerging technologies such as renewable energy and water conservation systems. This course prepares students for continued study, industry certifications, and career opportunities in the skilled trades.

Construction Trades III (Grade 12)

Construction Trades III builds advanced skills in project management, sustainable construction, and emerging technologies. Students will learn to budget, schedule, and manage resources using industry-standard tools and software. The course covers green building practices, LEED principles, and Building Information Modeling (BIM). Students will also develop advanced construction techniques through hands-on projects, preparing them for leadership roles, postsecondary programs, or entry into the workforce.

Skills Gained

- Hands-on experience
- Attention to detail and accuracy
- Opportunities to advance within the skilled trades
- Critical thinking and problem solving

Certification

- OSHA-10

Partnership

- Servant's Heart Ministry (<https://www.servantsheartnj.org/>)

Careers

Students completing the Construction Trades sequence will be prepared for a range of entry-level careers such as construction laborer, carpenter apprentice, electrician apprentice, plumbing helper, HVAC technician trainee, drywall installer, roofing installer, flooring installer, painter, and general construction assistant.