



Architectural Design/CAD

accredited by the American Design Associates (ADA)



Architectural Design/CAD prepares students for entry level positions in an architectural firm and other related fields. The course develops the basic skills necessary for both architecture and building construction. Students will learn a variety of methods for developing residential and commercial projects. The students will learn the proper techniques for the preparation of design presentation and construction drawings. Detailed floor plans, foundation plans, building sections and elevations are covered in the coursework. In addition to mastering the skills needed to understand Architecture and CAD, instruction also includes lessons about architectural history and “green” renewable technologies. Students will become proficient at computer aided drafting using the AutoCAD software program.

Work Environment

Architects and their associates prepare clear and accurate working plans and detailed drawings from rough sketches. Those associates who specialize in AutoCAD are employed in a variety of firms including architectural, engineering, manufacturing, electronic, aeronautical and landscape companies as well as municipalities and government agencies. They work closely with engineers and other professionals in comfortable, well-lit environments. Travel to job sites may be required to provide accurate measurements for drafting, as well as inspections when construction occurs.

Career Opportunities

Architect
Business Owner (drafting, home improvement, technical consulting)
CAD Operator
Green Technology Consultant
Construction Company Owner
Detailer
Engineer
Estimator
Expeditor
Interior Designer
Landscape Designer
Manufacturers Representative
Project Manager
Salesperson
Specifications Writer

Advanced Standing Available*

Art Institute of Pittsburgh
Island Drafting & Technical Institute

New England Institute of Technology
Pennsylvania College of Technology
SUNY Canton
SUNY Delhi
SUNY Farmingdale

*Advanced Standing may be available to those who successfully complete this Tech course. See Articulation Agreements on page 41.

Employment Outlook

Employment opportunities for Architects/CAD Operators are expected to expand to meet the needs of a growing population. In building our future, alterations and modernization of existing structures will create plentiful job opportunities.

Starting Weekly Salary:

\$400–\$480 in Nassau/Suffolk
\$440–\$520 in NYC

Student Supplies:

No student-purchased supplies necessary.

Academic credits integrated:

See chart, page 26

CTE Endorsement

In order to be granted the Technical Diploma endorsement, students must successfully meet the academic and attendance criteria for a two-year Wilson Tech Certificate of Completion, including Career and Financial Management (CFM), and pass the following national certification exam: Nat'l Occupational Competency Testing Exam (NOCTI) - Architectural Drafting.

Course Outline

- Careers in Architecture
- Equipment & Supplies
- Construction Drawings
- Presentation Drawings
- Residential Design
- Commercial Design
- Site Planning
- Model Making
- Computer Aided Drafting
- Renewable Green Technology Building Systems

Consider these classes at Tech

- Building Trades*
- Carpentry
- Computer Networking & Repair/Technical Electronics
- Construction Electricity
- Heating/Ventilation/AC (HVAC)
- Printing*
- Welding

All placements are based upon individual needs and approval from the district and parent/guardian.

*Smaller class size.