



## Digital Art & Design

*2-Year Program* Plattsburgh Main Campus

In Digital Art and Design, students will be introduced to several topics during their first year, including: Graphic Design, Technical and Residential Drafting, 3D Modeling and Animation, Web Design and Computer Programming. During the second year, students are given more specialized training and practice in the field of their choosing.

The Digital Art and Design curriculum is designed to give students the opportunity to learn and practice skills on software used within the above-mentioned industries. Each topic is taught through a series of carefully chosen tutorials to learn necessary skills within the software packages. After several skills have been learned, students will complete an original and creative project while utilizing these new abilities.



## Program Highlights

- 3D Animation
- Architecture
- Pre-Mechanical Engineering
- Web Design
- Graphic Design
- Computer Programming

## Career Connections

- Animator
- Architectural Draftsman
- Mechanical Draftsman
- Web Designer
- Web Developer
- Database Administrator
- Graphic Designer
- Architect
- Game Designer
- Game Developer
- Software Developer
- Computer Programmer

## Articulation Agreements

- Art Institute of Pittsburgh
- Clinton Community College  
Computer Information Systems  
Mechanical Technology
- SUNY Canton
- SUNY Delhi Community College
- Alfred State (Pending)
- SUNY Cobleskill
- North Country Community College
- SUNY Plattsburgh

## Certifications

- NWRC/21st Century Skills

## Course of Study

### Graphic Design

#### *Using Adobe Illustrator and Photoshop*

- Layers and Groups
- Selecting and Manipulating Objects
- Color Theory
- Typography
- Pen Tool
- Line, Shape and Eraser Tools
- Pencil and Paintbrush Tools
- Image File Types
- Elements of Design
- Principles of Design

### Computer Science

- Web Design with HTML and CSS
- Client-Side Scripting (JavaScript)
- Server-Side Scripting (PHP)
- Database Design
- SQL
- Web Applications
- Responsive and Adaptive Web Design
- Mobile Apps
- Game Design and Development

### Architectural Engineering

- Residential Drawing
- Residential Design
- Architectural Fundamentals
- Site Planning
- AutoCAD Architectural Fundamentals
- AutoCAD Architectural Advanced
- 3DS Max with respect to Architecture
- Civil Engineering Concepts and Topics

### Mechanical Engineering

- AutoCAD Fundamentals
- AutoCAD Solid Modeling
- Solid Edge 2D & 3D
- Mastercam Fundamentals
- Mechanical Engineering Drawing
- Geometric Dimensioning and Tolerancing
- Introduction to Engineering Technology
- Computer Aided Manufacturing (CAM)
- CNC Computer Interface
- 3D Printing

### 3D Modeling and Animation

#### *Using 3ds Max and Maya*

- Sketching Reference Images
- Storyboarding
- Primitive, Box and Organic Modeling with Proper Topology
- Creating and Applying Textures and Materials
- Key Frame Animation
- Rigging (FK and IK)
- Animation Mechanics
- Animation Principles
- Using Lights
- Setting Cameras
- Rendering
- Compositing and Editing Frames