

## STEINMETZ CAREER AND LEADERSHIP ACADEMY

It is essential that students acquire skills that support digital literacy, inventive thinking, effective communication, and high productivity in order to ensure that they are qualified to succeed in work and life in our global economy. The Steinmetz Career and Leadership Academy is a school in which students and teachers use technology to learn, create and to prepare for leadership. Technology has a fundamental role in the school environment, and students will be engaged in active inter-disciplinary projects that question and solve 21st century challenges.

SCLA provides an innovative approach to instructional delivery for students who have preferences for non-traditional access to learning. Students play an essential role in preparing themselves for career opportunities. Incoming students explore curriculum with a personal laptop computer for use both in the classroom and at home. This digital academy utilizes project-based learning and problem solving in the classroom with less reliance on traditional methods of instruction.

SCLA also offers students the opportunity to pursue a program of study in our career pathways classes including Office Management, Culinary Arts, Computer Aided Design and the Media Arts programs.

### PROGRAM HIGHLIGHTS

- One to one laptop initiative
- Project-Based Learning Instruction and Web 2.0 Tools
- Technology infused classrooms (School Wide Wifi, SMARTBoard, Ceiling Mounted Projection, Document Cameras)
- Promotion of Digital Citizenship and 21st Century Learning Schools

## SCLA CTE PROGRAMS

### CULINARY CTE APPROVED PROGRAM

- Career and Financial Management (1/2 unit)
- Computer Skills (1/2 unit)
- Introduction to Culinary Arts (1 unit)
- Intermediate Culinary Arts (1 unit)
- Advanced Culinary Arts (1 unit)
- ProStart (ServSafe UHS Credit)
- **Industry Recognized Certification: ProStart Written and Performance**

### CULINARY/MANAGEMENT PROGRAM (CTE APPROVAL PENDING)

- Career and Financial Management (1/2 unit)
- Advanced Culinary Arts (1 unit)
- ProStart (ServSafe UHS Credit)
- Introduction to Microsoft Office 2013 (UHS) (1 unit)
- **Industry Recognized Certifications: Microsoft Office Word and PowerPoint and ProStart written and performance**

### CAD CTE APPROVED PROGRAM

- Career and Financial Management (1/2 unit)
- Computer Aided Design (1 unit) (CHS Credit)
- **Must take 2 of the 3 following courses:**
- Design & Drawing For Production (I unit)
- CAD/Residential Construction (1 unit)
- CAD/Manufacturing Systems (1 unit)
- **Industry Recognized Certification: NOCTI CAD**

### DRAFTING AND DESIGN MANAGEMENT PROGRAM (CTE APPROVAL PENDING)

- Career and Financial Management (1/2 unit)
- Design & Drawing For Production (I unit) (Art Credit)
- Computer Aided Design (1 unit) (CHS Credit)
- Introduction to Microsoft Office 2013 (UHS) (1 unit)
- **Industry Recognized Certifications: NOCTI Computer-Aided Design and Microsoft Office Word and PowerPoint**



**REQUIRED COURSES FOR A SEQUENCE IN ANY CAREER AND TECHNICAL EDUCATION PROGRAM**

**CAREER AND FINANCIAL MANAGEMENT**

**(1/2 CREDIT)**

This course is required by the NYS State Education Department for any student pursuing a sequence in career and technical education. The emphasis is on business and economic systems, career planning, selection and success, and financial literacy.

**COMPUTER SKILLS AND APPLICATIONS**

**(1/2 UHS CREDIT)**

**Recommended for 9th and 10th graders.**

This course is designed to introduce students to computer applications using Microsoft Office Suite 2013. Students will learn keyboarding skills through drill practice and reinforcement of correct techniques. Students will create, format and edit academic and business documents. This course provides students with the foundation skills necessary to complete college assignments and/or word in a business office environment. =

**MICROSOFT OFFICE 2013: INTRODUCTORY CONCEPTS AND TECHNIQUES**

**3 UHS CREDITS, SCCC (CIS 121) (1 CREDIT)**

This course provides students with an in depth introduction to the Microsoft Office 2013 suite including Word, Excel, Access and PowerPoint. It exposes students to practical examples of the computer as a useful tool and acquaints students with the proper procedures to create documents, worksheets, and presentations suitable for coursework, professional purposes and personal use. This course uses an exercises-oriented approach that allows learning by doing.

**BUSINESS COMMUNICATIONS**

**3 UHS CREDITS, SCCC (BUS 212) (1 CREDIT) ENGLISH CREDIT**

**Recommended for 12th graders.**

This course teaches the principles of effective communication in business, both written and oral. It focuses attention on the communication process including effective listening, writing and speaking. Students analyze business letters, reports and memos for organization of ideas, conciseness and clarity. Students are required to write business letters and memos. A business report and oral presentation will also be completed.

Students will create a professional portfolio including a cover letter and resume.

**CULINARY ARTS**

Put the Culinary Arts Program to work for you. Students will develop the real-world skills and knowledge needed to get ahead in the food service business. Student in the Culinary Arts Program learn how to prepare a variety of food products. They develop the essential skills of responsibility, self-confidence and decision making while preparing and serving lunch to the stall at Steinmetz Educational Center, surrounding schools and catered events. Upon completion of the program, students have an opportunity to receive nationally recognized proStart certification, earn college credit for high school classes and scholarships for the National Restaurant Association Educational Foundation.

**INTRODUCTION TO CULINARY ARTS**

**(1 CREDIT)**

This curriculum focuses on students learning about the food service kitchen. Students create food products using commercial equipment in a work-like environment while adhering to NYS food sanitation and safety laws. Students focus on team work by using the kitchen brigade system to complete production of menus.

Curriculum emphasizes successful teamwork and employee relations, cooking methods, salad production, sandwich production, soup production, quick breads, yeast breads, and cookies.

**INTERMEDIATE CULINARY ARTS**

**(1 CREDIT)**

Curriculum builds on the information learned in Introduction to Culinary Arts. Students focus on the art of service while further advancing cooking techniques. Students serve customers using a variety of service styles through the lunch program or catering events. Students learn about poultry, stocks and sauces, potatoes and grains, and breakfast production. NYS Food Sanitation and Safety Laws are strictly reinforced.

**ADVANCE CULINARY ARTS**

**(1 CREDIT)**

Menu planning and marketing skills are emphasized in this course. Through a digital restaurant simulation, students create a virtual restaurant while learning about restaurant management. Students add to their culinary skill base by learning cake production, specialty desserts, dairy cooking and egg products. NYS Food Sanitation and Safety Laws are strictly reinforced.

**CULINARY PROSTART**

**2 UHS CREDITS, SCCC (1 CREDIT)**

Curriculum builds on the information learned in Intermediate/Advance Culinary Arts. Students complete the National Restaurant Association ServSafe certification program. Curriculum includes meats and seafood, charcuteries and Grande Manger, pies and pastries, chocolate, and global cuisine. Students plan nutritious menus for the lunch program learning about sustainability and cost controls. NYS Food Sanitation and Safety Laws are strictly reinforced.

**SENIOR SEMINAR**

**(CAREER EXPLORATION INTERNSHIP PROGRAM (1 CREDIT EACH))**

The Career Connection Program is a half-year or full year non-paid internship experience. Career Connections provides a link between school and possible career options. A student completing 54 hours will earn ½ credit and a student completing 108 hours will earn 1 credit towards a Regents Diploma. The program provides hands-on experience in a variety of career choices. On-site time may be afterschool. All Federal and NYS Child Labor Laws are strictly enforced. This course is recommended for ALL Steinmetz students regardless of their career pathway.

**MEDIA ARTS**

The Media Arts career pathway at SCLA is a program designed to give students technical skills and training in multiple areas within the genre of media arts. Students, through problem solving within areas of color and design, graphic design, digital photography and computer art, will explore the many career and job opportunities within advertising, design, print and web media. They will be prepared for entry-level jobs in these fields or entrance into a college program specializing in media arts. Students will complete the Media Arts sequence of courses having compiled several reference notebooks and a senior portfolio.

**STUDIO IN ART**

**(1 CREDIT)**

Studio in Art is an introduction to the high school art program designed to help the student discover why and how art is made. Aesthetics, art criticism, and art history (both western and non-western) are integrated with the development of concepts based on the elements of art and principles of design. Two-dimensional activities may include drawing, painting, printmaking, collage and lettering using a variety of media. Additionally, three-dimensional design projects require

the manipulation of various media in order to create spacial structures. Art appreciation and/or historical references are integrated into each activity to expand how a student observes, critiques, and enjoys art. This course fulfills the studio art requirement for graduation.

**INTRODUCTION TO DRAWING**

**(1/2 CREDIT)**

**Prerequisite: students must have completed or be simultaneously enrolled in Studio Art or instructor's approval.**

This is an introductory drawing course, which focuses on the visual understanding of the environment (figures, still life, natural forms, perspective, etc.) as a tool to allow the student to interpret accurately and creatively. This course focuses on developing observational drawing skills. Students will draw in a variety of media, which may include pencil, brush & ink, pen & ink, charcoal, conte crayon, pastels, and marker. This course is a basic preparation for all intermediate and advanced art classes. Students will critique their work as well as the work of others. Art historical references will be used throughout.

**INTRODUCTION TO COMPUTER ART**

**(1/2 CREDIT)**

**Prerequisite: Students must have completed or be simultaneously enrolled in Studio Art or have instructor's approval.**

This course is an introduction to the use of the computer as a tool for making art. Drawing, painting, illustration, design, and page layout will be explored through the use and knowledge of several software applications. Students will develop problem-solving skills as they find unique solutions to class challenges. Scanners and digital cameras may be explored.

**GRAPHIC DESIGN**

**(1 CREDIT)**

This course is designed to highlight color and design concepts and extend practical use to the world of media arts. From advertising and typography, to game, toy and product design, students will learn the fundamentals of graphic design from real-life examples. Students will use a variety of techniques in their design solutions, focusing on computers and digital photography and video. Solutions to design problems will be discussed in both group and individual critiques.



**COMPUTER ART**

(1 CREDIT)

**Prerequisite:** Studio Art, Introduction to Drawing and Introduction to Computer Art, or instructor's approval

Computer Art serves to broaden students' knowledge of software and equipment used in Introduction to Computer Art as well as introduce new processes. Students will begin completing and compiling projects to be used within their senior portfolios. Students will be expected to create a comprehensive notebook containing all assignments and exercises. This will include work done for community agencies and the Schenectady City School District. This notebook will serve as a resource guide for the student and will house the beginning of their portfolio. The focus of the course is using technological resources as the tools for creating visual art. Filmmaking will be introduced during the 4th quarter.

**COLLEGE LEVEL DRAWING**

**3 UHS CREDITS, SCCC (1 CREDIT)**

**Prerequisite:** Studio Art, Introduction to Drawing, Introduction to Computer Art, Graphic Design, Advanced Graphic Design, Computer Art A & B, Senior Portfolio or instructor's approval.

College Level Drawing is a full-credit course taught in the high school classroom that allows students to earn Introduction to Drawing credit through SCCC. Students may take the course solely for high school credit or may earn 3 college credits transferable to any SUNY or CUNY school and most other colleges.

**SENIOR PORTFOLIO REVIEW**

(1 CREDIT)

**Prerequisite:** Studio Art, Introduction to Drawing, Introduction to Computer Art, Computer Art A & B, Graphic Design and Advanced Graphic Design or instructor's approval.

This is a full-credit course that helps students prepare a comprehensive portfolio reflecting their work over the past three years. The course is structured for each student individually based upon their career and educational goals. This portfolio is designed for use for employment and college applications.

**CTE TECHNOLOGY PATHWAYS**

**Drafting and Design Management Pathway – 3 ½ credit sequence**

The DDM program is designed to train and prepare students for various careers in which the software skills learned through the CAD program and the Office Management Program can help to open career paths. Students who complete the program will find themselves leaving high school with the skills necessary to find entry level drafting positions at many companies. They also will be able to continue their education in a host of various related degree programs at many colleges and universities. The student's enrolled in this program greatly increase their marketability. Enrolled students will also have the opportunity to earn six college credits through the CHS CAD class and the CHS Microsoft class. The DDM program is a combination of classes from the CAD Program and the Office Management Program. It has a total of 4 different classes for a total of 3.5 credits. As a part of the program students will take the NOCTI CAD exams, as well as the Microsoft Office Certifications. Students will work on the Autodesk (2013) suite of software, including Inventor, AutoCAD, and Architectural Desktop, and Microsoft Office 2013, including MS Word, MS Excel, and MS PowerPoint.

**DRAFTING AND DESIGN MANAGEMENT PROGRAM (CTE APPROVAL PENDING)**

- Career and Financial Management (1/2 unit)
- Design & Drawing For Production (1 unit) (Art Credit)
- Computer Aided Design (1 unit) (3 UHS Credits from SCCC)
- Introduction to Microsoft Office 2013 (1 unit) (3 UHS Credits from SCCC)
- **Industry Recognized Certifications: NOCTI Computer-Aided Design and Microsoft Office Word and PowerPoint**

**COMPUTER AIDED DESIGN PATHWAY**

- Career and Financial Management (1/2 unit)
- Computer Aided Design (1 unit) (3 UHS Credits from SCCC)
- **Must take 2 of the 3 following courses:**
- Design & Drawing For Production (1 unit) (Art Credit)
- CAD/Residential Construction (1 unit)
- CAD/Manufacturing Systems (1 unit)
- **Industry Recognized Certification: NOCTI CAD**

**COMPUTER AIDED DESIGN PROGRAM OVERVIEW**

The CAD program is designed to train and prepare students for various careers in which computer design is a part of the job, such as the “Nanotech” field, and all of the building trades. Students who complete the four-year program will find themselves leaving high school with the skills necessary to find entry level drafting positions at many companies. They also will be able to continue their education in a host of various related degree programs at many colleges and universities, especially including Hudson Valley’s Associates Degree in CAD. Enrolled students will also have the opportunity to earn three college credits through the UHS CAD class. The CAD program is an update of the former Property Management Program. It has a total of 8 different classes for a total of 6 credits. As a part of the program students will take the NOCTI CAD exams, as well as the CareerSafe OSHA certifications. Students will work on the AutoDesk suite of software, including Inventor, AutoCAD, and Architectural Desktop.

**DESIGN & DRAWING FOR PRODUCTION (DDP)**

**(1 CREDIT) (FINE ART CREDIT)**

Open to grades 9, 10, 11, and 12. This is a Core Technology course. There are no prerequisites.

Have you ever wondered how your cell phone went from an idea to a product? Design and Drawing for Production (DDP) is an activity-based course which will teach you how products are created from start to finish. Students in DDP will develop solutions to various design or product problems using research, sketching, drawing and presentation techniques. Individual and group projects will emphasize the development of the critical thinking and encourage you to think creatively. The computer will be used to create original 3-D solutions. DDP may be used to satisfy the art requirement for graduation.

**COMPUTER AIDED DESIGN/ MANUFACTURING SYSTEMS**

**(1 CREDIT)**

Did you ever look at a product and think, “I could make that much better?” This course focuses on assembling products in an assembly line, factory type setting. Students will organize themselves as a real company making real products. They will utilize the CAD lab and wood shop to take their product from design through production. Some of the

tools that are available for them to use are mini-lathes with duplicators, table and panel saw, drill presses, and routers.

**COMPUTER AIDED DESIGN/ RESIDENTIAL CONSTRUCTION**

**(1 CREDIT)**

The lights are out, and National Grid tells you it is your problem. Or you mistakenly threw your homework down the drain, and now your sink is clogged. Or maybe you just want to have your computer and your 360 both networked in your house. This class is hands on and introduces students to various building trades. This class also allows the students to earn a lifetime OSHA certification through the CareerSafe Online platform of exams. Students will utilize the CAD lab to model and prototype, and then build in the wood shop using the most modern tools and equipment available.

**COMPUTER AIDED DESIGN**

**3 UHS CREDITS, SCCC (CIS 140) (1 CREDIT)**

Prerequisite: Grade 11 or 12, or permission from instructor

College credit in high school for free! This course teaches the basics of computer aided drafting as applied to engineering drawings using the AutoCAD 2013 drafting package. Student will learn various topics in CAD that map to the SCCC CAD class at Schenectady County Community College. Upon successful completion of the class with a “B” or better, the student will receive a SCCC transcript. Did I mention the cost? ITS FREE!