

PFEIFFER TECHNOLOGY & INNOVATION LAB

The Pfeiffer Technology and Innovation Lab was designed to foster and support collaborations between education and the advanced technology and manufacturing industry. It is located on the College's main campus in Stone Ridge in Hardenbergh Hall.

The Pfeiffer Technology and Innovation Lab houses training and testing equipment used by SUNY Ulster students in STEM disciplines including engineering, advanced manufacturing, industrial manufacturing, electromechanical technician, AutoCAD, 3D printing and web development.

In addition to providing hands-on learning for STEM students, the lab is designed to serve as a resource to the manufacturing industry, providing valuable real-world interaction for students while supporting the competitive advantage of local manufacturing and technology companies.

In keeping with this mission, courses that advance students in these technologies are offered for both the credit and the non-credit student.

MECHATRONICS

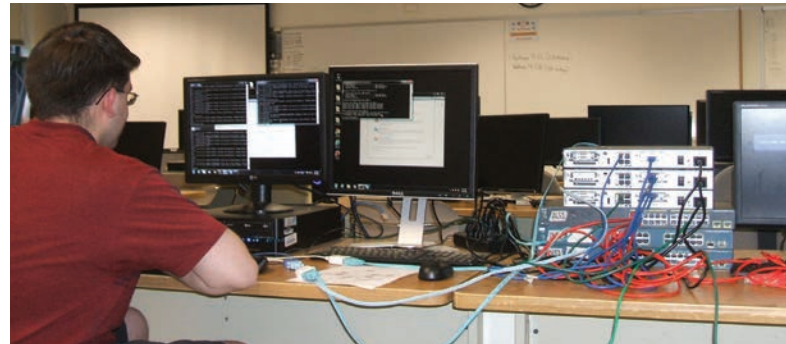
This course covers in depth GD&T, gear calculations, spring calculations, pulley calculations, and thread designations. Topics introduced are welding designations, cam design, electrical symbols, electrical calculations, machine design and precision measurement. See page 11 for full course details.

SOLID MODELING I

This class is an introduction to Solid Modeling using the Autodesk Inventor Professional software. Topics emphasized include: design intent solid modeling, white space layout design, dimensioning, GD&T, GUI customization, sheetmetal design and welding assembly. Students will create parts, assemblies, presentations and drawings throughout the term. See page 11 for full course details.

WEBSITE APPLICATION DEVELOPER

This credential is designed to prepare students for a career in Web Application development. Educational and financial institutions and small businesses of all types have expressed this need. This 16-credit program is designed to fit within SUNY Ulster's Network A.S. Computer Science and A.S. Computer Science (Online) degree programs. The program curriculum is made up of two courses in Computer Science and two courses in Web Development. See page 14 for full course details.



CAD 101 - AUTOCAD

Students are introduced to the AutoCAD drawing platform. AutoCAD commands are taught using the following drafting methods: Geometric Construction, Orthographic Projection, Sectioning and Isometric Views. Special emphasis is placed on dimensioning, white space layout, GUI customization, scaling, and line weight. After successful completion of this course, students will be proficient with the AutoCAD software and have an understanding of the fundamentals of drafting.

CAD 101-51	T	8/28-12/18	5-9:30pm	SRC	\$596
DCB 1600-01	T	8/28-12/18	5-9:30pm	SRC	\$596

INTRODUCTION TO PROGRAMMABLE LOGIC CONTROLLERS (PLCS)

This course will provide the fundamentals of a programmable logic controller (PLC). Hands-on instruction and industrial-type applications of PLCs requiring relay ladder logic control and a study of automated manufacturing and the functions of PLCs in an industrial environment will be provided. Topics include components of a PLC, memory organization, discrete I/O, numbering systems, logic gates, Boolean algebra, relay ladder logic, timers, counters, word level logic and troubleshooting.

This course will be offered Spring 2019.

**Courses on this page
may be taken for credit or non-credit.**

**For more information contact
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