

COMPUTER-AIDED DRAFTING & DESIGN



"Millersville's CADD program has provided me with a strong foundation in a variety of industry-relevant software and their applications."

– graduating CADD senior

Computer-aided drafting and design encompasses far more than the ability to use software. Graduates demonstrate a high level of problem-solving ability in the practical application of theoretical principles for both mechanical and architectural design.

DEGREES/MINOR

BACHELOR OF SCIENCE (B.S.)

Applied Engineering & Technology Management Computer-Aided Drafting & Design (AETM-CADD) Concentration

The Computer-Aided Drafting & Design (AETM-CADD) concentration is designed to provide students with theoretical and practical skills in drafting and design. This concentration provides experiences in drafting and design in addition to advanced work in the areas of technical freehand drawing, design methodology, design for manufacture, geometric dimensioning and tolerance, technical illustration and rendering using computer-aided drafting systems, and 3D printing. All courses feature practical laboratory experiences that allow students to work with equipment, materials and processes that will lead to successful careers in the drafting/design field. The ATMAE certification exam in engineering graphics is also available to interested students.

ASSOCIATE OF TECHNOLOGY (A.T.)

Applied Engineering & Technology Computer-Aided Drafting (AET-CAD)

The Computer-Aided Drafting (AET-CAD) concentration within this program provides students with the same basic technical coursework as the AETM program, but without courses in management. We designed the associate degree to get students the education they need in a hurry, and it also seamlessly can be applied towards a bachelor's degree in Computer-Aided Drafting & Design in the future.

MINOR IN COMPUTER-AIDED DRAFTING & DESIGN

Computer-Aided Drafting & Design minor students complete 18 credits of technical courses. One of these is a foundational course in drafting and design, and then students choose five technical courses from topics like production materials and processes, computer-aided engineering drawing, product design, architectural drawing and several others.

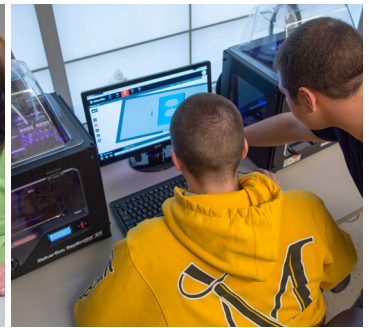
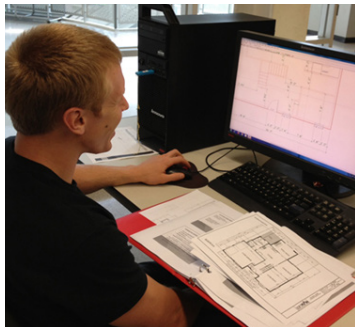
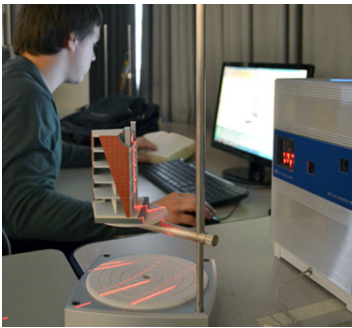


3 REASONS TO CHOOSE COMPUTER-AIDED DRAFTING & DESIGN

1. Enjoy a blend of theoretical, technical and hands-on education.
2. Become highly competent in multiple industry-standard CADD software applications.
3. Create excellent employment opportunities in various engineering-related industries.

ACCREDITATION

Applied Engineering & Technology Management degrees are accredited by the Association of Technology, Management, and Applied Engineering (ATMAE).



CLUBS AND ACTIVITIES

CADD Club is an organization for students interested in all aspects of computer-aided drafting and design, providing internship, networking, community service and competition opportunities.

Epsilon Pi Tau (EPT) – Beta Phi Chapter – Epsilon Pi Tau is an international honor society for professions in technology. At Millersville, this includes Engineering Technology, Technology & Engineering Education, Applied Engineering & Technology Management, and Occupational Safety & Environmental Health majors.

Society of Manufacturing Engineers (SME) is an organization for individuals, students, educators and companies involved in all facets of manufacturing. Founded in 1932, it is dedicated to advancing and educating the manufacturing industry. SME focuses its efforts on several areas of manufacturing: aerospace and defense, energy, medical, and motorized vehicles.

INTERNSHIP OPPORTUNITIES

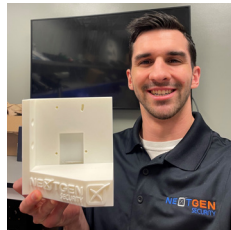
Students are encouraged to seek an industrial internship position to gain practical experience with industrial production procedures. CADD internships typically focus on CADD management, industrial design and support, mechanical design, residential design, 3D design and printing, and technical illustration. Faculty work to ensure that students receive the best possible learning experience from their industrial partnership, in both technical and managerial activities.

FACILITIES

There are three separate laboratory facilities dedicated to the AETM Computer-Aided Drafting & Design concentration:

- Advanced CADD and 3D Printing Lab
- General CADD Lab
- Innovation Laboratory

OUR GRADUATES SAY...



"I am a CAD designer for a security products company. I use AutoCAD to design different levels of security plans, showing device placement and wiring diagrams in our customers' facilities. I am also growing our 3D printing manufacturing operations, designing custom devices for our applications. The courses in my major are all connected and all help me in my daily work."

– John Scott '21, CAD designer



"I design custom signs, create models and fabrication drawings in Solidworks, make router files in AutoCAD, audit the fabrication process and try to improve efficiency and save on cost. I work with other designers, fabricators and project managers to make sure signs are made within budget and in a timely manner."

– Katelynn Rooney '21, design engineer

ABOUT OUR GRADUATES

When AETM-CADD graduates complete their studies at Millersville University, they embark on careers that have limitless potential. Here are some of the job titles AETM-CADD graduates reported in a 2021 survey of recent department graduates:

- CAD Designer
- CADD Draftsman/Estimator
- CFMgE, Toolmaker
- Construction Inspector
- Design Drafter
- Designer
- Digital Printing Specialist
- Drafting Engineer
- Draftsman
- Manufacturing Engineer
- Mechanical Design Engineer
- President
- Product Designer
- Product Specialist
- Project Design Engineer
- Project Engineer
- Sales Engineer
- Senior Design Engineer
- Tooling Design Engineer

FOR INFORMATION, CONTACT ...

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Dr. John Wright is the program coordinator for the Applied Engineering & Technology Management degrees.

If you have any questions about the programs and the possibilities for you, please email John.Wright@Millersville.edu.