



### Computer-Aided Drafting Technology

#### Academic Program Certificate

All manufacturing industry, research and development organizations, and design divisions of major corporations use drafters in the preparation of various stages of formal drawings. Typically companies that hire engineers, architects or designers have a need for people skilled in drafting.

This program is designed to prepare a person for an entry-level position as a junior drafter, drafter trainee or drafter using computer-aided drafting (CAD). The supportive technical course work in manufacturing, materials, science, mathematics and writing will aid students in continuing to advance their careers and assist in strengthening the background of those desiring to continue their education.

Normally, students will complete 29 hours of credit course work and three hours of non-credit mathematics to earn the certificate. However, students with strong backgrounds in mathematics may elect to take the credit course, MAT 110, in place of the non-credit course MAT 016 with the approval of their academic advisors. Depending on the courses taken, students who successfully complete this program may receive one semester or more of credit toward a Mechanical Engineering Technology degree.

### Career Opportunities

Students in this program have found careers as CAD operators.

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### Contact Information

- **Engineering Technologies/  
Engineering Science  
Department**  
973-328-5760
- **Professor Venancio Fuentes**  
973-328-5760  
vfuentes@ccm.edu





## Transfer Opportunities

Many students in this program continue on and earn their Associate in Applied Science (AAS) in the Mechanical Engineering Technology program at County College of Morris.

## Internship Opportunities

Students in this program have internship possibilities with local industry.

## Faculty

These courses are taught by faculty with extensive industrial experience and who are focused on student learning. The department is staffed by full-time faculty that have many years of teaching experience and a dedicated part-time faculty staff.

## Facilities

State-of-the-art computers running the latest version of Computer Aided Drafting (CAD) and Design (CADD) software provides the student with the needed hands-on experience. A fully functional prototyping lab rounds out the student's experience in the manufacturing process, taking an idea from concept to reality.

## Curriculum

English Composition I	3
<b>Mathematics and Science</b>	
Intermediate Algebra	N3
or	
College Algebra	3
Concepts of Physics	4
or	
Technical Physics	4
<b>Specialized Courses</b>	
Basic Engineering Graphics I	1
Computer-Aided Drafting I	2
Computer-Aided Drafting II	2
Technical Computer Applications	1
Instrumentation and Measurements	2
Materials for Engineering Technology	4
Manufacturing Process for Engineering Technology	4
Electronic Fabrication	1
Technical Elective	3/4
<b>Total Certificate Credits</b>	<b>27-31</b>

*Note: You must see a faculty advisor to plan your sequence of courses. For the most up-to-date listing of courses, see the Curriculum Checklist for this program on the CCM website at <https://www.ccm.edu/student-life/campus-services/academic-advisement/curriculum-checksheets/>.*

