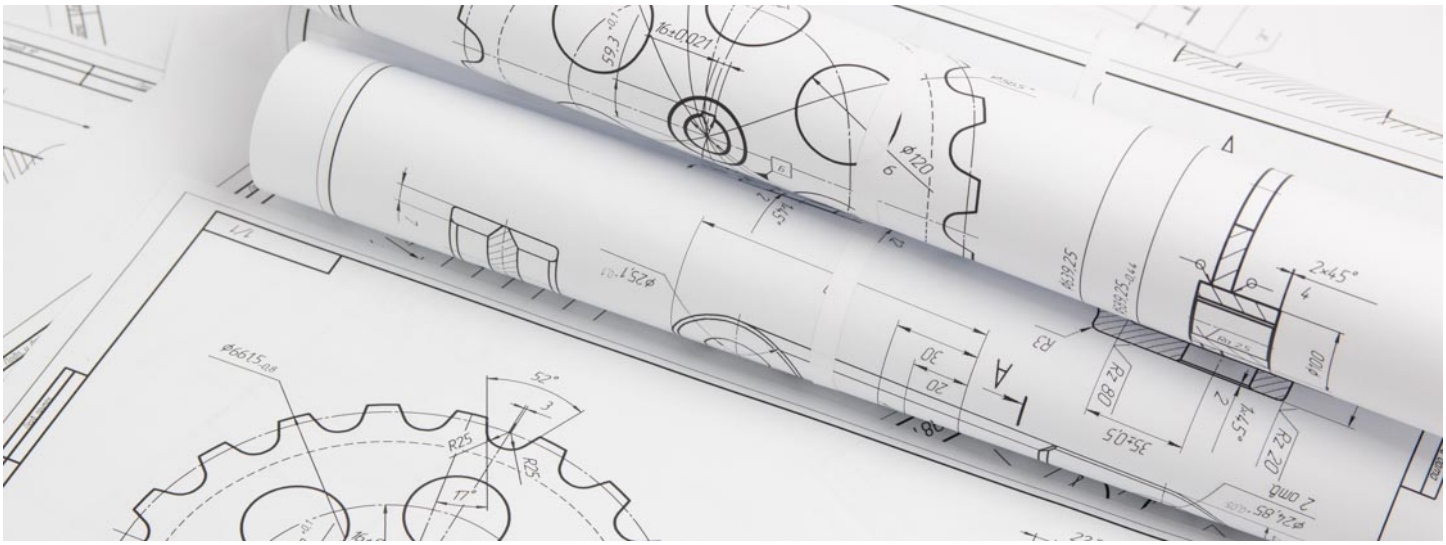
COMPUTER-AIDED DRAFTING (CAD) TECHNOLOGY, ADVANCED CERTIFICATE



College(s): TR

Program Code: 0138

The Advanced Certificate program in Computer-Aided Design (CAD) Technology provides the technical instruction and skill development for the graduate to become successfully employed in the drafting fields of the mechanical, architectural, and construction industry. Instruction is directed toward theoretical and technical skills in the use of modern drafting tools and equipment with emphasis placed on the training of CAD techniques.

Program Requirements

Code	Title	Hours
Required Program Core		
ENGR 100	Elements of Engineering Drawing	3
ENGR 131	Engineering Graphics & Intro to Design	3
ENGR 132	Descriptive Geometry	3
ENGR 190	Computer Programming for Engineers	3
ENGR 202	Advanced Drafting & Basic Machine Design	3
MATH 140	College Algebra	4
MATH 141	Plane Trigonometry	3
CAD TEC 130	CAD Technology I	3
CAD TEC 170	CAD Technology II	3
CAD TEC 171	CAD Technology III	3
CAD TEC 172	CAD Technology IV	3
Total Hours		**34**

Pathway

This is an **example** course sequence for students interested in earning an advanced certificate in Computer-Aided Design (CAD) Technology. It does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn a Basic Certificate (BC) and an Advanced Certificate (AC) in CAD Technology.

Semester-By-Semester Program Plan for Full-Time Students

All plans can be modified to fit the needs of part-time students by adding more semesters.

Semester 1		**Hours**
CAD TEC 130	CAD Technology I	3
MATH 140	College Algebra	4
ENGR 100	Elements of Engineering Drawing	3
	Hours	**10**
Semester 2		
MATH 141	Plane Trigonometry	3
ENGR 131	Engineering Graphics & Intro to Design	3
CAD TEC 170	CAD Technology II	3
	Hours	**9**
Semester 3		
CAD TEC 171	CAD Technology III	3
ENGR 202	Advanced Drafting & Basic Machine Design	3
ENGR 132	Descriptive Geometry	3
	Hours	**9**
Semester 4		
CAD TEC 172	CAD Technology IV	3
ENGR 190	Computer Programming for Engineers	3
	Hours	**6**
	Total Hours	**34**

Choose your courses with your College Advisor.

Careers

This program can prepare students for the jobs listed below. Click on each one to learn more, including average earnings, annual job openings, and how much education people in that field have. For additional guidance and resources on career options, current City Colleges students and alumni can contact the Career Services Office (https://www.ccc.edu/departments/Pages/Career-Services.aspx).

Architectural and Civil Drafters

Job Description

Prepare detailed drawings of architectural and structural features of buildings or drawings and topographical relief maps used in civil engineering projects, such as highways, bridges, and public works. Use knowledge of building materials, engineering practices, and mathematics to complete drawings.

Salary Based on Experience Level

Take a look at the average hourly/annual earnings for this career in Cook County

Lightcast earnings figures are based on OES data from the BLS and include base rate, cost of living allowances, guaranteed pay, hazardous-duty pay, incentive pay (including commissions and bonuses), on-call pay, and tips.

Annual Wages

Entry-Level 10th Percentile	$46,257
Median 50th Percentile	$63,789
Senior-Level 90th Percentile	$101,186

Hourly Wages

Entry-Level 10th Percentile	$22
Median 50th Percentile	$31
Senior-Level 90th Percentile	$49

Annual Job Openings

123 annual openings in Cook County

National Education Attainment

Here, you can see the level of education that people in this career complete.

Degree Program	% of Jobs
A high school diploma or less	0.41%
A certificate	0.91%
Some college	0.41%
An Associate degree	17.85%
A Bachelor's degree	54.59%
A Master's or Professional degree	25.84%
A Doctoral degree or more	0.00%

80.43% continue their education beyond an associate degree