

ENGINEERING: DRAFTING TECHNOLOGY CERTIFICATE

The non-transfer Certificate in Engineering: Drafting Technology is designed to prepare students for entry into careers as an Engineering Technician, Survey Technician, CAD technician, or Geographic Information Systems Technician. The program provides students a strong background in engineering drawing technologies (e.g. CAD), engineering standards and practices, engineering data gathering, analysis, and composition of engineering reports. Students will learn how to apply engineering problem solving and design processes, while working as an individual and collaborating in teams. Field exercises, apprenticeships/internships and practical guidance on special topics and projects provide students with real-world practical experience. Students who want to continue their education for greater salary and career advancement may use this program as a stepping stone toward the related Associates Degree and potential transfer of units to 4-year degree programs in Civil or Mechanical Engineering, Surveying or other Engineering programs.

CT.ENGR

Program Map Design Your Future!

Begin by exploring MSJC program maps to find career or transfer (<https://msjc.emsicc.com/?radius=®ion=All%20Regions>) opportunities. Program maps show the recommended course sequence that leads to graduation or transfer. The maps were developed by program experts to give you the skills and knowledge you need to succeed.

- **Starting in Spring?** Choose Fall Semester 1 courses.
- **Are you a part-time student?** Start Fall Semester 1 courses and follow the course sequence.

Fall Semester 1		Units
ENGR-154	Computer Aided Drafting I	3
PHOT-125	Digital Photography Production I	3
ENGR-180	Introduction to Engineering	2
Units		8
Spring Semester 1		Units
ENGR-155	Computer Aided Drafting II	3
ENGR-756	SolidWorks I (formerly ENGR-156)	3
Units		6
Fall Semester 2		Units
ENGR-757	Microstation I (formerly ENGR-157)	3
Units		3
Total Units		17

Requirements

Course	Title	Credits
Required Core Courses		
ENGR-154	Computer Aided Drafting I	3
ENGR-155	Computer Aided Drafting II	3
PHOT-125	Digital Photography Production I	3
ENGR-180	Introduction to Engineering	2

Elective Courses		Units
Select 6 units from the following:		6
ENGR-756	SolidWorks I (formerly ENGR-156)	
ENGR-757	Microstation I (formerly ENGR-157)	
ENGR-164	Plane Surveying I	
ENGR-565	Plane Surveying II (formerly ENGR-165)	
ENGR-566	Legal Aspects of Surveying (formerly ENGR-166)	
GEOG-115	Introduction to Geographic Information Science	
ENGR-567	Global Positioning Systems for Surveying (formerly ENGR-167 Global Positioning Systems)	
ENGR-181	Statics	
ENGR-182	Strength of Materials (formerly Strength and Materials)	
ENGR-121	Introduction to Engineering Design	
ENGR-122	Electronics for Engineering Technologists (formerly ENGR-522)	
ENGR-523	Computer Integrated Manufacturing (formerly ENGR-123)	
ENGR-124	Civil Engineering and Architecture (formerly ENGR-524)	
ENGR-549	Cooperative Work Experience: Engineering Technology (formerly ENGR-149)	
ENGR-299	Special Projects: Engineering	

Total Units 17

Career Exploration

Discover information about careers that interest you!

1. Take a **Career Quiz** (<https://msjc.emsicc.com/assessment/>) to learn about yourself and receive career suggestions based on your interests.
2. Search available **in-demand jobs** (<https://msjc.emsicc.com/browse-careers/>) in your career areas of interest and find up-to-date salaries and education requirements.
3. Find the **MSJC Program** (<https://msjc.emsicc.com/browse-programs/>) that connects your interests to a career.

Note: There are no guaranteed positions for students completing these programs. Education and work experience required will vary by employer. The salary and benefits for specific occupations will be dependent on work experience, education, background, and employer.

Gainful Employment Disclosures: Engineering: Drafting Technology

Gainful Employment Disclosures – 2024

Program Name ENGINEERING: DRAFTING TECHNOLOGY

This program is designed to be completed in 8 months.

This program will cost \$782 if completed within normal time. There may be additional costs for living expenses. These costs were accurate at the time of posting, but may have changed.

Of the students who completed this program within normal time, the typical graduate leaves with \$0 of debt.

The following States do not have licensure requirements for this profession: California

For more information about graduation rates, loan repayment rates, and post-enrollment earnings about this institution and other postsecondary institutions please click here:

<https://collegescorecard.ed.gov/>

NOTE:

Cost per unit \$46

Nonresident Fees- Tuition: \$318

Capital Outlay: \$58

Parking Permits cost \$90 a year or \$45 a semester

RTA Go Pass cost \$16 a year or \$8 a semester

SGA discount sticker (optional) - \$14 a year or \$7 a semester

Student representation fee (optional) - \$4 a year or \$2 a semester

Student Health Center Fee - \$52 a year or \$26 a semester

*For summer session fees and non-CA resident tuition, please

see: <https://www.msjc.edu/enroll/what-fees-do-i-have-to-pay.html>