

INDUSTRIAL SUPERVISION ENGINEERING TECHNOLOGY, ASSOCIATE IN APPLIED SCIENCE



College(s): DA

Program Code: 0455

Supervisors are the manufacturing company leaders that organize the production operations to achieve production goals, improvements and targets. Students in this program will gain a solid overview of production process, robotics, and quality assurance process and maintenance techniques commonly found in industrial manufacturing plants to be knowledgeable of the operations they may be responsible for in their career. Students take courses in production process with hands on labs as well as in management, human resources, project management and supervision to be knowledgeable of the many facets involved with leading a production team. Students are also able to continue their studies to pursue a Bachelor's Degree at other institutions to further advance their skills in this exciting aspect of manufacturing and production.

Program Requirements

Code	Title	Hours
General Education Requirements ¹		
MATH 140	College Algebra	4
ENGLISH 101	Composition	3
Social and Behavioral Sciences		3
Fine Arts/Humanities		3
Physical Sciences/Life Sciences		3
Required Program Core		
340MFGT 105	Introduction to Advanced Manufacturing I	3
340MFGT 106	Introduction to Advanced Manufacturing II	3
340MFGT 107	Introduction to Advanced Manufacturing III	3
340MFGT 108	Robotics I	3
340MFGT 109	Introduction to Manual Machining	3

340MFGT 110	CNC I Operations	3
340MFGT 153	Welding I GMAW	3
or 340MFGT 19 Manual Machining II		
340MFGT 171	Automated Metrology-Quality Assurance	3
340MFGT 188	Industrial Electricity I	3
340MFGT 272	QUALITY SYSTEMS II	3
340MFGT 287	Maintenance Technologies I	3
BUSINES 111	Introduction To Business	3
BUSINES 269	Principles Of Management	3
BUSINES 271	Human Resources Management	3
Electives		
Choose one additional course from 340MFGT ²		3
Total Hours		61

¹ At least one course must meet the Human Diversity (HD) (<https://catalog.ccc.edu/hd/>) requirement.

² 340MFGT Manufacturing courses can be found here (<https://catalog.ccc.edu/courses-az/340mfgt/>)

Pathway

This is an **example course sequence** for students interested in pursuing Industrial Supervision Engineering Technology. This does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn Basic Certificates (BC) in Manufacturing Technology and CNC Technology, and an Advanced Certificate (AC) and Associate in Applied Science (AAS) in Industrial Supervision Engineering 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
340MFGT 105	Introduction to Advanced Manufacturing I	3
340MFGT 106	Introduction to Advanced Manufacturing II	3
340MFGT 107	Introduction to Advanced Manufacturing III	3
340MFGT 108	Robotics I	3
BUSINES 111	Introduction To Business	3
Hours		15
Semester 2		
340MFGT 109	Introduction to Manual Machining	3
340MFGT 110	CNC I Operations	3
340MFGT 153 or 340MFGT 195	Welding I GMAW or Manual Machining II	3
BUSINES 269	Principles Of Management	3
ENGLISH 101	Composition ¹	3
Hours		15
Semester 3		
340MFGT 171	Automated Metrology-Quality Assurance	3
340MFGT 188	Industrial Electricity I	3
BUSINES 271	Human Resources Management	3
MATH 140	College Algebra ¹	4
Social and Behavioral Sciences course (HD) ¹		3
Hours		16
Semester 4		
340MFGT 172	Quality Systems I	3
340MFGT 287	Maintenance Technologies I	3
340MFGT Manufacturing Elective (https://catalog.ccc.edu/courses-az/340mfgt/)		3
Fine Arts/Humanities course (HD) ¹		3
Physical Sciences/Life Sciences course ¹		3
Hours		15
Total Hours		61

¹ General Education course

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>).

First-Line Supervisors of Production and Operating Workers

Job Description

Directly supervise and coordinate the activities of production and operating workers, such as inspectors, precision workers, machine setters and operators, assemblers, fabricators, and plant and system operators. Excludes team or work leaders.

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 10 th Percentile	\$45,263
Median 50 th Percentile	\$66,101
Senior-Level 90 th Percentile	\$101,838

Hourly Wages

Entry-Level 10 th Percentile	\$22
Median 50 th Percentile	\$32
Senior-Level 90 th Percentile	\$49

Annual Job Openings

992 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	47.00%
A certificate	11.60%
Some college	14.96%
An Associate degree	13.62%
A Bachelor's degree	11.96%
A Master's or Professional degree	0.86%
A Doctoral degree or more	0.00%

12.82% continue their education beyond an associate degree

First-Line Supervisors of Mechanics, Installers, and Repairers

Job Description

Directly supervise and coordinate the activities of mechanics, installers, and repairers. May also advise customers on recommended services. Excludes team or work leaders.

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 10 th Percentile	\$50,924
Median 50 th Percentile	\$83,869
Senior-Level 90 th Percentile	\$126,816

Hourly Wages

Entry-Level 10 th Percentile	\$24
Median 50 th Percentile	\$40
Senior-Level 90 th Percentile	\$61

Annual Job Openings

537 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	57.20%
A certificate	13.08%
Some college	16.91%
An Associate degree	3.20%
A Bachelor's degree	7.57%
A Master's or Professional degree	0.00%
A Doctoral degree or more	2.05%

9.62% continue their education beyond an associate degree