

# 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
<b>General Education Requirements</b> <sup>1</sup>		
MATH 140	College Algebra	4
ENGLISH 101	Composition	3
Social and Behavioral Sciences		3
Fine Arts/Humanities		3
Physical Sciences/Life Sciences		3
<b>Required Program Core</b>		
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
<b>Electives</b>		
Choose one additional course from 340MFGT <sup>2</sup>		3
<b>Total Hours</b>		<b>61</b>

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

<sup>2</sup> 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
<b>Hours</b>	<b>15</b>
<b>Semester 2</b>	
340MFGT 109 Introduction to Manual Machining	3
340MFGT 110 CNC I Operations	3
340MFGT 153 Welding I GMAW or 340MFGT 195 or Manual Machining II	3
BUSINES 269 Principles Of Management	3
ENGLISH 101 Composition <sup>1</sup>	3
<b>Hours</b>	<b>15</b>
<b>Semester 3</b>	
340MFGT 171 Automated Metrology-Quality Assurance	3
340MFGT 188 Industrial Electricity I	3
BUSINES 271 Human Resources Management	3
MATH 140 College Algebra <sup>1</sup>	4
Social and Behavioral Sciences course (HD) <sup>1</sup>	3
<b>Hours</b>	<b>16</b>
<b>Semester 4</b>	
340MFGT 172 Quality Systems I	3
340MFGT 287 Maintenance Technologies I	3
340MFGT Manufacturing Elective ( <a href="https://catalog.ccc.edu/courses-az/340mfgt/">https://catalog.ccc.edu/courses-az/340mfgt/</a> )	3
Fine Arts/Humanities course (HD) <sup>1</sup>	3
Physical Sciences/Life Sciences course <sup>1</sup>	3
<b>Hours</b>	<b>15</b>
<b>Total Hours</b>	<b>61</b>

<sup>1</sup> 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 <sup>th</sup> Percentile	\$41,089
Median 50 <sup>th</sup> Percentile	\$63,652
Senior-Level 90 <sup>th</sup> Percentile	\$99,890

Hourly Wages	
Entry-Level 10 <sup>th</sup> Percentile	\$20
Median 50 <sup>th</sup> Percentile	\$31
Senior-Level 90 <sup>th</sup> Percentile	\$48

## Annual Job Openings

1024 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 <sup>th</sup> Percentile	\$48,999
Median 50 <sup>th</sup> Percentile	\$81,814
Senior-Level 90 <sup>th</sup> Percentile	\$124,955

### Hourly Wages

Entry-Level 10 <sup>th</sup> Percentile	\$24
Median 50 <sup>th</sup> Percentile	\$39
Senior-Level 90 <sup>th</sup> Percentile	\$60

### Annual Job Openings

583 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