INDUSTRIAL TECHNOLOGY - CONSTRUCTION
ASSOCIATE IN APPLIED SCIENCE [*5880*]

60-61 CREDIT HOURS

STUDENTS ALSO RECEIVE THE FOLLOWING CERTIFICATES:

- Construction Skills – 16 credit hours
- Industrial Technology Core Certificate – 30 credit hours

Students completing the recommended course sequence below can also earn:

- Design and Fabrications Skills Certificate

This recommended sequence is based on a full-time, 6-semester schedule beginning in the fall. This program can also be started in the Summer or Spring semesters. See your academic advisor to adjust your plan of study.
Core classes are offered in day, online and open learning formats

FIRST YEAR	COURSE NAME	CREDIT HOURS FALL	CREDIT HOURS SPRING
BUSN 145	Employment Success Strategies	1	
CNST 101*	Construction Materials & Methods	3	
CNST 113*	Construction Documentation, Estimation & Scheduling	3	
CSCI 101	Introduction to Computer Information Science	4	
TECH 171/172	OSHA Construction or General Industry Safety	1	
Technical Elective#	Any course(s) from list below – 24 total hours needed; [*ENGR 110 - Engineering Graphics* suggested]	3	
CAD 101	Introduction to AutoCAD		3
TECH 114	Introduction to Technical Graphics		3
Technical Elective#	Any course(s) from list below – 24 total hours needed; [*MTT 101 – Machining Skills* suggested]		4
Technical Elective#	Any course(s) from list below – 24 total hours needed; [*WELD 110 – Intro to Welding Processes* suggested]		3
ENGL 101	Critical Reading and Writing		3
Total Credit Hours		**15**	**16**

Students wishing to take a summer course are encouraged to complete a required general education course

SECOND YEAR	COURSE NAME	CREDIT HOURS FALL	CREDIT HOURS SPRING
CAD 235*	CAD for Construction	3	
General Elective	Any ART, COMM, MATH, SCED or additional physical science general education course	3	
Technical Elective#	Any course(s) from list below – 24 total hours needed; [*MFTG 115 – Manufacturing & Production Processes* suggested]	3	
Technical Elective#	Any course(s) from list below – 24 total hours needed; [*REEC 120 – Sustainability & Renewable Energy* suggested]	3	
Physical Science	Any physical science general education course	3	
Technical Elective#	Any course(s) from list below – 24 total hours needed; [*CAD 110 – CAD Software Applications* suggested]		3
Technical Elective#	Any course(s) from list below – 24 total hours needed; [*REEC 110 – Green Building Technology* suggested]		3
Technical elective(s) #	Any course(s) from list below (24 hours total needed)		3
TMAT 103 or MATH 109	Technical Math or College Algebra for Math and Science		4
Social Science	Any social science general education course		3
Total Credit Hours		**15**	**16**

** denotes a fall only class*
***denotes a spring only class*
¥proficiency exam available

INDUSTRIAL TECHNOLOGY – DESIGN & FABRICATION
ASSOCIATE IN APPLIED SCIENCE [*5880*]

60-61 CREDIT HOURS

STUDENTS ALSO RECEIVE THE FOLLOWING CERTIFICATES:

- Design & Fabrication Skills –17 credit hours

This recommended sequence is based on a full-time, 6-semester schedule beginning in the fall. You can also begin this program in the spring or summer. See your academic advisor to adjust your plan of study. *Core classes are offered at night, online or in open learning format.*

FIRST YEAR	COURSE NAME	CREDIT HOURS		
		FALL	SPRING	SUMMER
CSCI 101	Introduction to Computer Information Science	4		
ENGR 110	Engineering Graphics	3		
ENGL 101	Critical Reading & Writing	3		
TECH 171/172	OSHA Construction or General Industry Safety	1		
WELD 110	Introduction to Welding Processes	3		
MFTG 115	Manufacturing Production & Processes		3	
MTT 101	Machining Skills		4	
TMAT 103¥ or	Technical Math or		4	
MATH 109	College Algebra for Math and Science			
Social science	Any social science general education course		3	
General Elective	Any ART, COMM, MATH, SCED or additional physical science general education course			3
Total Credit Hours		**14**	**14**	**3**

SECOND YEAR	COURSE NAME	CREDIT HOURS		
		FALL	SPRING	SUMMER
CAD 101	Introduction to AutoCAD	3		
TECH 114	Introduction to Technical Graphics	3		
Program elective(s) #	Any course(s) from list below (20 hours total needed)	3		
Program elective(s) #	Any course(s) from list below (20 hours total needed)	3		
Program elective(s) #	Any course(s) from list below (20 hours total needed)	3		
BUSN 145	Employment Success Strategies		1	
Program elective(s) #	Any course(s) from list below (20 hours total needed)		3	
Program elective(s) #	Any course(s) from list below (20 hours total needed)		3	
Program elective(s) #	Any course(s) from list below (20 hours total needed)		3	
Program elective(s) #	Any course(s) from list below (20 hours total needed)		3	
Physical Science	Any physical science general education course			3
Total Credit Hours		**15**	**13**	**3**

&Completion of TMAT 103 or placement at MATH 092 is required for MAIN 101. Students can choose to take TMAT 103 the summer before starting MAIN coursework.

** denotes a fall only class*
***denotes a spring only class*
¥proficiency exam available

#**Electives**: 20 total hours needed. Choose any combination of courses from below. Students can also choose another emphasis option to complete (an) additional certificate(s) in *Construction Skills, Electronics Skills, Automation Technology, Facilities Maintenance Skills, Renewable Energy Skills or Welding Skills*:

- CAD 101, CAD 235
- CNST 101, CNS 113
- DMED 120, DMED 260
- ELTC 102, ELTC 103, ELTC 206, ELTC 212
- MAIN 201, MAIN 220, MAIN 222, MAIN 245
- NETW 160, NETW 208
- REEC 110, REEC 120, REEC 140, REEC 234, REEC 240
- TECH 114, TECH 171, TECH 172, TECH 296, TECH 297, TECH 299
- WELD 116, WELD 217, WELD 218, WELD 219, WELD 220

INDUSTRIAL TECHNOLOGY - ELECTRONICS
ASSOCIATE IN APPLIED SCIENCE [*5880*]

60-61 CREDIT HOURS

STUDENTS ALSO RECEIVE THE FOLLOWING CERTIFICATES:

- Electronics Skills – 16-17 credit hours
- Industrial Technology Core – 30-31 credit hours

STUDENTS FOLLOWING THE SUGGESTED TECHNICAL ELECTIVES WILL ALSO EARN:

- Renewable Energy Skills Certificate – 19 credit hours

This recommended sequence is based on a full-time, 4-semester schedule beginning in the fall. This program can also be started in the Summer or Spring semesters. See your academic advisor to adjust your plan of study. *Core classes are offered in day, online and open learning formats*

FIRST YEAR	COURSE NAME	CREDIT HOURS	
		FALL	SPRING
BUSN 145	Employment Success Strategies	1	
CSCI 101	Introduction to Computer Information Science	4	
ELTC 102*&	DC Electronics *(8W1)*	3	
ELTC 103*	AC Electronics *(8W2)*	3	
TECH 171/172	OSHA Construction or General Industry Safety	1	
TMAT 103¥ or MATH 109	Technical Math or College Algebra for Math and Science	3-4	
CAD 101	Introduction to AutoCAD		3
ELTC 206**	Digital Electronics and Microprocessors *(8W1)*		3
ELTC 212**	Automation Control & Electronics *(8W2)*		3
Technical Elective	Choose from approved list below [*REEC 110 – Green Building Technology* suggested]		3
TECH 114	Introduction to Technical Graphics		3
Total Credit Hours		**15-16**	**15**

Students wanting to take a summer class are encouraged to take one of the required general education courses

SECOND YEAR	COURSE NAME	CREDIT HOURS	
		FALL	SPRING
ENGL 101	Critical Reading & Writing	3	
Technical Elective	Choose from approved list below [*MAIN 101 – Industrial & Building Electricity* suggested]	3	
Technical Elective	Choose from approved list below [*MAIN 202 – Fluid Power & Mechanical Systems* suggested]	3	
General Elective	Any ART, COMM, MATH, SCED or additional physical science general education course	3	
Technical Elective	Choose from approved list below [*REEC 120 – Sustainability & Renewable Energy* suggested]	3	
Physical Science	Any physical science general education course		3
Social Science	Any social science general education course		3
Technical Elective	Choose from approved list below [*MAIN 222 –Programmable Controllers* suggested]		3
Technical Elective	Choose from approved list below [*REEC 140 (8W1) – Renewable Energy Concepts* suggested]		3
Technical Elective	Choose from approved list below [*REEC 240 (8W2) – Renewable Energy Applications* suggested]		3
Total Credit Hours		**15**	**15**

& Completion of TMAT 103 or placement at MATH 092 is required for ELTC 102. Students can choose to take TMAT 103 the summer before starting ELTC coursework.

** denotes a fall only class*
***denotes a spring only class*

INDUSTRIAL TECHNOLOGY – FACILITIES MAINTENANCE
ASSOCIATE IN APPLIED SCIENCE [*5880*]

60-61 CREDIT HOURS

STUDENTS ALSO RECEIVE THE FOLLOWING CERTIFICATES:

- Facilities Maintenance Skills – 16-17 credit hours

This recommended sequence is based on a full-time, 6-semester schedule beginning in the fall. You can also begin this program in the spring or summer. See your academic advisor to adjust your plan of study. *Core classes are offered at night, online or in open learning format.*

FIRST YEAR	COURSE NAME	CREDIT HOURS		
		FALL	SPRING	SUMMER
CSCI 101	Introduction to Computer Information Science	4		
MAIN 101*&	Industrial and Building Electricity	3		
MAIN 202*	Fluid Power and Mechanical Systems	3		
ENGL 101	Critical Reading & Writing	3		
TECH 171/172	OSHA Construction or General Industry Safety	1		
MAIN 104**	Air Conditioning and Refrigeration		3	
MAIN 221**	Heating Systems		3	
TMAT 103¥ or	Technical Math or		4	
MATH 109	College Algebra for Math and Science			
Social science	Any social science general education course		3	
General Elective	Any ART, COMM, MATH, SCED or additional physical science general education course			3
Total Credit Hours		**14**	**13**	**3**

SECOND YEAR	COURSE NAME	CREDIT HOURS		
		FALL	SPRING	SUMMER
CAD 101	Introduction to AutoCAD	3		
TECH 114	Introduction to Technical Graphics	3		
Program elective(s) #	Any course(s) from list below (21 hours total needed)	3-4		
Program elective(s) #	Any course(s) from list below (21 hours total needed)	3-4		
Program elective(s) #	Any course(s) from list below (21 hours total needed)	3-4		
BUSN 145	Employment Success Strategies		1	
Program elective(s) #	Any course(s) from list below (21hours total needed)		3	
Program elective(s) #	Any course(s) from list below (21 hours total needed)		3	
Program elective(s) #	Any course(s) from list below (21 hours total needed)		3	
Program elective(s) #	Any course(s) from list below (21 hours total needed)		3	
Physical Science	Any physical science general education course			3
Total Credit Hours		**15**	**13**	**3**

&Completion of TMAT 103 or placement at MATH 092 is required for MAIN 101. Students can choose to take TMAT 103 the summer before starting MAIN coursework.

** denotes a fall only class*
***denotes a spring only class*
¥proficiency exam available

#**Electives**: 18 total hours needed. Choose any combination of courses from below. Students can also choose another emphasis option to complete (an) additional certificate(s) in *Construction Skills, Electronics Skills, Facilities Maintenance Skills, Design and Fabrication Skills, Renewable Energy Skills or Welding Skills*:

- CAD 101, CAD 235
- CNST 101, CNS 113
- DMED 120, DMED 260
- ELTC 102, ELTC 103, ELTC 206, ELTC 212
- ENGR 110
- MAIN 201, MAIN 220, MAIN 222, MAIN 245
- MFTG 115
- MTT 101
- NETW 160, NETW 208

INDUSTRIAL TECHNOLOGY - ELECTRONICS
ASSOCIATE IN APPLIED SCIENCE [*5880*]

60-61 CREDIT HOURS

Students completing this degree will also earn at least one Skills Certificate in:
- Automation Technology
- Construction Technology
- Design and Fabrication
- Electronics
- Facilities Maintenance
- Renewable Energy
- Welding

This recommended sequence is based on a full-time, 4-semester schedule beginning in the fall. This program can also be started in the Summer or Spring semesters. See your academic advisor to adjust your plan of study. *Core classes are offered day and night, online and open learning formats. *Students choosing a night-only schedule may require additional semesters for completion*

FIRST YEAR	COURSE NAME	CREDIT HOURS	
		FALL	SPRING
BTEC 145	Employment Success Strategies	1	
CSCI 101	Introduction to Computer Information Science	4	
Emphasis Requirement	Choose from emphasis option requirement below	3	
Emphasis Requirement	Choose from emphasis option requirement below	3	
TECH 171/172	10 Hour OSHA Construction or General Industry Safety	1	
TMAT 103[¥] or MATH 109	Technical Math I or College Algebra for Math and Science	3-4	
CAD 101	Introduction to AutoCAD		3
Emphasis Requirement	Choose from emphasis option requirement below		3
Emphasis Requirement	Choose from emphasis option requirement below		3
Emphasis Requirement	Choose from emphasis option requirement below		3
TECH 114	Introduction to Technical Graphics		3
Total Credit Hours		**15-16**	**15**

Students wanting to take a summer class are encouraged to take one of the required general education courses

SECOND YEAR	COURSE NAME	CREDIT HOURS	
		FALL	SPRING
ENGL 101	Critical Reading & Writing	3	
Emphasis Requirement	Choose from emphasis option requirement below	3	
Emphasis Requirement	Choose from emphasis option requirement below	3	
Emphasis Requirement	Choose from emphasis option requirement below	3	
General Education Elective	Any ART, COMM, MATH, SCED or additional physical science course	3	
Physical Science	Any physical science general education course		3
Social Science	Any social science general education course		3
Emphasis Requirement	Choose from emphasis option requirement below		3
Emphasis Requirement	Choose from emphasis option requirement below		3
Emphasis Requirement	Choose from emphasis option requirement below		3
Total Credit Hours		**15**	**15**

[&] Completion of TMAT 103 or placement at MATH 092 is required for ELTC 102. Students can choose to take TMAT 103 the summer before starting ELTC coursework.

** denotes a fall only class*
***denotes a spring only class*
[¥]proficiency exam available

INDUSTRIAL TECHNOLOGY – RENEWABLE ENERGY
ASSOCIATE IN APPLIED SCIENCE [*5880*]

60-61 CREDIT HOURS

STUDENTS ALSO RECEIVE THE FOLLOWING CERTIFICATES:

- Renewable Energy Skills – 19 credit hours

This recommended sequence is based on a full-time, 6-semester schedule beginning in the fall. You can also begin this program in the spring or summer. See your academic advisor to adjust your plan of study. *Core classes are between day and night, online or in open learning format.*

FIRST YEAR	COURSE NAME	CREDIT HOURS		
		FALL	SPRING	SUMMER
MAIN 101*&	Industrial and Building Electricity (day/night)	3		
MAIN 202*	Fluid Power and Mechanical Systems (night)	3		
ENGL 101	Critical Reading & Writing	3		
REEC 120	Sustainability & Renewable Energy (day)	3		
TECH 171/172	OSHA Construction or General Industry Safety (online)	1		
MAIN 222**	Automation Control & Electronics (night)		3	
REEC 140**	Renewable Energy Concepts (day, 8W1)		3	
REEC 240**	Renewable Energy Concepts II (day, 8W2)		3	
Program elective(s) #	Any course(s) from list below (15 hours total needed) [MAIN 220 suggested]		3	
Social science	Any social science general education course		3	
TMAT 103¥ or MATH 109	Technical Math or College Algebra for Math and Science			4
Total Credit Hours		**13**	**15**	**4**

SECOND YEAR	COURSE NAME	CREDIT HOURS		
		FALL	SPRING	SUMMER
BUSN 145	Employment Success Strategies	1		
CAD 101	Introduction to AutoCAD (day/night)	3		
TECH 114	Introduction to Technical Graphics (day/night)	3		
General Elective	Any ART, COMM, MATH, SCED or additional physical science general education course	3		
Program elective(s) #	Any course(s) from list below (15 hours total needed) [MAIN 221 suggested]	3-4		
CSCI 101	Introduction to Computer Information Science		4	
Program elective(s) #	Any course(s) from list below (15 hours total needed) [MAIN 104 suggested]		3	
Program elective(s) #	Any course(s) from list below (15 hours total needed)		3	
Program elective(s) #	Any course(s) from list below (15 hours total needed)		3	
Physical Science	Any physical science general education course			3
Total Credit Hours		**13**	**13**	**3**

&Completion of TMAT 103 or placement at MATH 092 is required for MAIN 101. Students can choose to take TMAT 103 the summer before starting MAIN coursework.

** denotes a fall only class*
***denotes a spring only class*
¥proficiency exam available

#**Electives**: 15 total hours needed. Choose any combination of courses from below. Students can also choose another emphasis option to complete (an) additional certificate(s) in *Construction Skills, Electronics Skills, Automation Technology, Facilities Maintenance Skills, Design and Fabrication Skills, or Welding Skills*:

- CAD 101, CAD 235
- CNST 101, CNS 113

Catalog year Summer 2021 – Spring 2022

INDUSTRIAL TECHNOLOGY – WELDING
ASSOCIATE IN APPLIED SCIENCE [*5880*]

60-61 CREDIT HOURS

STUDENTS ALSO RECEIVE THE FOLLOWING CERTIFICATES:

- Welding Skills – 16 credit hours

This recommended sequence is based on a full-time, 6-semester schedule beginning in the fall. You can also begin this program in the spring or summer. See your academic advisor to adjust your plan of study. *Core classes are offered both during the day and at night, online, and in open learning format.*

FIRST YEAR	COURSE NAME	CREDIT HOURS		
		FALL	SPRING	SUMMER
CSCI 101	Introduction to Computer Information Science	4		
WELD 110	Introduction to Welding Processes (8W1)	3		
WELD 116	Shielded Metal Arc Welding I (8W2)	3		
ENGL 101	Critical Reading & Writing	3		
TECH 171/172	OSHA Construction or General Industry Safety (online)	1		
WELD 217	Introduction to Welding Processes (8W1)		3	
WELD 218	Shielded Metal Arc Welding I (8W2)		3	
Program elective(s) #	Any course(s) from list below (21 hours total needed)		3	
Program elective(s) #	Any course(s) from list below (21 hours total needed)		3	
Social science	Any social science general education course		3	
TMAT 103¥ or MATH 109	Technical Math or College Algebra for Math and Science			4
Total Credit Hours		**14**	**15**	**4**

SECOND YEAR	COURSE NAME	CREDIT HOURS		
		FALL	SPRING	SUMMER
BUSN 145	Employment Success Strategies	1		
CAD 101	Introduction to AutoCAD	3		
TECH 114	Introduction to Technical Graphics (day/night)	3		
Program elective(s) #	Any course(s) from list below (21 hours total needed)	3		
Program elective(s) #	Any course(s) from list below (21hours total needed)	3		
General Elective	Any ART, COMM, MATH, SCED or additional physical science general education course		3	
Program elective(s) #	Any course(s) from list below (21 hours total needed)		3	
Program elective(s) #	Any course(s) from list below (21 hours total needed)		3	
Program elective(s) #	Any course(s) from list below (21 hours total needed)		3	
Physical Science	Any physical science general education course			3
Total Credit Hours		**13**	**12**	**3**

** denotes a fall only class*
***denotes a spring only class*
¥proficiency exam available

#**Electives**: 15 total hours needed. Choose any combination of courses from below. Students can also choose another emphasis option to complete (an) additional certificate(s) in *Construction Skills, Electronics Skills, Automation Technology, Facilities Maintenance Skills, Design and Fabrication Skills, or Renewable Energy Skills*:

- CAD 101, CAD 235
- CNST 101, CNST 113
- DMED 120, DMED 260
- ELTC 102, ELTC 103, ELTC 206, ELTC 212
- ENGR 110
- MAIN 104, MAIN 220, MAIN 221, MAIN 245
- MFTG 115
- MTT 101
- NETW 160, NETW 208
- REEC 110, REEC 120, REEC 140, REEC 234, REEC 240
- TECH 114, TECH 171, TECH 172, TECH 296, TECH 297, TECH 299