

Department of Industrial and Engineering Technology

Mohammad Saadeh, *Department Head*

Industrial Technology

The Industrial Technology program is a management-oriented technical curriculum built upon a balanced program of studies drawn from a variety of disciplines related to manufacturing technology. Included are a sound knowledge and understanding of materials and production processes; principles of distribution and concepts of industrial management and human relations; experiences in communication skills, humanities, and social sciences; and a proficiency level in the physical sciences, mathematics, design, and technical skills to permit the graduate to resolve technical-managerial and manufacturing production problems.

The Industrial Technology graduate is a professional with a broad technical and managerial background. Typically included in this background are a functional knowledge and understanding of materials and production processes; industrial management and human relations; communication skills, the physical sciences, mathematics, and current technical skills to enable the graduate to effectively meet technical, managerial, and industrial requirements.

The Industrial Technology program at Southeastern Louisiana University is accredited by the Association of Technology Management and Applied Engineering (ATMAE), <http://www.atmae.org>.

Pre-Professional Program: Pre-Architecture

Students should plan to transfer after two years at Southeastern. Typical requirements include mathematics; physics; courses in design; English composition, and speech. Consult advisor, since specific requirements differ widely among schools of architecture.

Manufacturing Technology Concentrations

Students must elect to study one of the manufacturing technology concentrations: Automated Systems, Drafting/Design, and Supervision. Upon satisfactory completion of the Industrial Technology core curriculum and the concentration area, the student will be awarded a Bachelor of Science degree. Included in this section, are the curriculum sheets for the manufacturing technology concentrations.

Honors Diploma in the Discipline

For information on earning Sophomore Honors Distinction, Upper Division Honors Distinction, or the Honors Diploma, please consult The University Honors Program section of this catalogue, the Director of the Honors Program, and/or your Department Head.

Minors

In order to minor in Industrial Technology, the student must complete twenty-one (21) semester hours from the following:

IT 111 – Engineering Drafting	3 semester hours
IT 112 – Descriptive Geometry	3 semester hours
IT 233 – Introduction to Basic Electricity and Electrons	3 semester hours
IT 242 – Materials and Processes	3 semester hours
IT 264 – Industrial Fluid Power	3 semester hours
IT 308 – Production Planning and Control or IT 402 – Industrial Supervision	3 semester hours
OSHE 111 – Intro to OSH&E or IT 311 – Industrial Design	3 semester hours

Bachelor's Degree Program in Industrial Technology

A minimum of 36 hours of required IT courses (with one course possibly being OSHE 111), 15 hours of IT Concentration Courses, and an additional 6 hours of IT electives are required for a Bachelor of Science degree in Industrial Technology for a total of 57 hours of Industrial Technology.

Curriculum in Industrial Technology Leading to the Degree of Bachelor of Science Automated Systems Concentration

FIRST SEMESTER	S.H.	SECOND SEMESTER	S.H.
First Year			
††Industrial Technology 100	3	††Industrial Technology 112	3
Mathematics 151/161 ^G	3	Mathematics 162 ^G	3
English 101 or 101H ^G	3	English 102 or 102H ^G	3
Biological Science ^G	4	Chemistry 101 ^G	3
††Industrial Technology 111	3	Chemistry Laboratory 103	1
Southeastern 101	2	Computer Science 173	3
	18		16
Second Year			
††Industrial Technology 242	3	††Industrial Technology 233	3
††Industrial Technology 264	3	††Industrial Technology 256	3
Mathematics 241	3	Communication 211 ^G	3
English 230, 231 or 232 ^G	3	Computer Science 273	3
Physics 191	3	Physical Science ^{1,G}	4
Physics Lab 193	1		
	16		16
Third Year			
††Industrial Technology 236	3	Psychology 101 or Sociology 101 ^G	3
††Industrial Technology 351	3	††Industrial Technology 322	3
††OSHE 111	3	††Industrial Technology 331	3
††IT 215	3	Accounting 200 or Management 351	3
English 322	3	History 101, 102, 201 or 202 ^G	3
	15		15
Fourth Year			
††Industrial Technology 405	3	††Industrial Technology 406	3
††Industrial Technology 442	3	††Industrial Technology 407	3
Arts ^{2,G}	3	††Industrial Technology 444	3
Economics 201 ^G	3	††Technical Elective ³	3
	12		12
Total semester hours required		120	

Southeastern 101 is not required of transfer or readmitted Southeastern students with 30 hours or more. Those students will replace Southeastern 101 with 2 hours of electives.

^GGeneral Education Courses

††A "C" or better must be earned in all major courses.

¹Select Chemistry 102/104 or Physics 192/194.

²Select one course in Art, Dance, Music or Theatre.

³Technical electives should be selected by students in consultation with their advisors. Three hours must be selected from Industrial Technology and an additional 3 hours from Computer Science, Engineering Technology, Industrial Technology, Management, Mathematics, or Physical Science. No 100-level course will be accepted without approval of the Department Head.

**Curriculum in Industrial Technology
Leading to the Degree of Bachelor of Science
Drafting Design Concentration**

FIRST SEMESTER		S.H.	SECOND SEMESTER		S.H.
††Industrial Technology 100	3		††Industrial Technology 242	3	
Mathematics 151/161 ^G	3		Mathematics 162 ^G	3	
English 101 or 101H ^G	3		English 102 or 102H ^G	3	
††Industrial Technology 111	3		Chemistry 101 ^G	3	
Southeastern 101	2		Chemistry Laboratory 103	1	
			††DDT 113.....	3	
		14			16
Second Year					
††DDT 211	3		††Industrial Technology 264	3	
Mathematics 241	3		††Computer Science 173	3	
English 230, 231 or 232 ^G	3		Communication 211 ^G	3	
††Industrial Technology 256	3		English 322	3	
††Industrial Technology 112	3		Physics 191	3	
			Physics Lab 193	1	
		15			16
Third Year					
††Industrial Technology 233	3		††Industrial Technology 333	3	
††OSHE 111	3		††DDT 312	3	
††Industrial Technology 351	3		Accounting 200.....	3	
††Industrial Technology 215	3		††Industrial Technology 405	3	
Biological Science ^G	4		History ^G	3	
		16			15
Fourth Year					
††Technical Elective ³	3		††DDT 411.....	3	
††DDT 316	3		Psychology 101 or Sociology 101 ^G	3	
Art ^{2,G}	3		††Industrial Technology 406	3	
Economics 201 ^G	3		Management 351.....	3	
Physical Science ^{1,G}	4				
		16			12
Total semester hours required					120

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²Select one course in Art, Dance, Music or Theatre.

³Design Drafting electives should be selected by students in consultation with their advisors.

**Curriculum in Industrial Technology
Leading to the Degree of Bachelor of Science
Supervision Concentration**

FIRST SEMESTER		S.H.	SECOND SEMESTER		S.H.
††Industrial Technology 100	3		Computer Science 173	3	
Mathematics 151/161 ^G	3		Mathematics 162 ^G	3	
English 101 or 101H ^G	3		English 102 or 102H ^G	3	
Biological Science ^G	4		Chemistry 101 ^G	3	
††Industrial Technology 111	3		Chemistry Laboratory 103	1	
Southeastern 101	2		Psychology 101 or Sociology 101 ^G	3	
	18			16	
Second Year					
††Industrial Technology 242	3		††Industrial Technology 233	3	
††Industrial Technology 264	3		††Industrial Technology 256	3	
Mathematics 241	3		Communication 211 ^G	3	
English 230, 231 or 232 ^G	3		††Industrial Technology 205	3	
Physics 191	3		Physical Science ^{1,G}	4	
Physics Lab 193	1				
	16			16	
Third Year					
††Industrial Technology 236	3		††Industrial Technology 322	3	
††OSHE 111	3		††Industrial Technology 402	3	
††Industrial Technology 351	3		Management 351	3	
English 322	3		Accounting 200	3	
Economics 201 ^G	3		History 101, 102, 201 or 202 ^G	3	
	15			15	
Fourth Year					
††Engineering Technology 492	3		††Industrial Technology 406	3	
††Industrial Technology 405	3		††Industrial Technology 308	3	
††Industrial Technology 407	3		††Management 473	3	
Arts ^{2,G}	3		††Technical Elective ³	3	
	12			12	
Total semester hours required			120		

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**Curriculum in Industrial Technology
Leading to the Degree of Bachelor of Science
Welding Technology Concentration**

FIRST SEMESTER		S.H.	SECOND SEMESTER		S.H.
††Industrial Technology 100	3		Computer Science 173	3	
††Industrial Technology 111	3		Mathematics 162 ^G	3	
Mathematics 151/161 ^G	3		English 102 or 102H ^G	3	
English 101 or 101H ^G	3		Chemistry 101 ^G	3	
Biological Science ^G	4		Chemistry Laboratory 103	1	
Southeastern 101	2		Psychology 101 or Sociology 101 ^G	3	
	18			16	
Second Year					
††Industrial Technology 242	3		††Industrial Technology 211	3	
††Industrial Technology 264	3		††Industrial Technology 233	3	
Mathematics 241	3		††Industrial Technology 256	3	
English 230, 231 or 232 ^G	3		Communication 211 ^G	3	
Physics 191	3		Physical Science ^{1,G}	4	
Physics Lab 193	1				
	16			16	
Third Year					
††Industrial Technology 221	3		††Industrial Technology 322	3	
††Industrial Technology 241	3		††Industrial Technology 341	3	
††OSHE 111	3		Management 351	3	
English 322	3		Accounting 200	3	
Economics 201 ^G	3		History 101, 102, 201 or 202 ^G	3	
	15			15	
Fourth Year					
††Industrial Technology 351	3		††Industrial Technology 403	3	
††Industrial Technology 381	3		††Industrial Technology 405	3	
††Industrial Technology 407	3		††Technical Elective I ³	3	
Arts ^{2,G}	3		††Technical Elective II ³	3	
	12			12	
Total semester hours required				120	

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Associate Degree Program in Industrial Technology

The Associate of Applied Science Degree program in the Department of Computer Science and Industrial Technology is designed to enable graduates to enter various fields of industry after completing two years of study. Graduates may also elect to continue their education in the four-year degree Manufacturing Technology Concentrations. Graduates of the two-year curriculum will be awarded the degree of Associate of Applied Science.

Curriculum in Industrial Technology Leading to the Degree of Associate of Applied Science Construction Technology Concentration

FIRST SEMESTER		S.H.	SECOND SEMESTER		S.H.
English 101 or 101H ^G		3	English 102 or 102H		3
Mathematics 151/161 ^G		3	Mathematics 162		3
^{††} Industrial Technology 111		3	Computer Science 173		3
^{††} OSHE 111		3	^{††} Construction Technology 111		3
^{††} Construction Technology 101		3	^{††} Construction Technology 121		3
Southeastern 101		2	^{††} Technical Elective ²		3
		17			18
Second Year					
Physics 191		3	Chemistry 101 ^G		3
Physics Lab 193		1	Chemistry Lab 103		1
Communication 211 or 215 ^G		3	^{††} Industrial Technology 291 or 292		3
Psychology 101 or Sociology 101 ^{1,G}		3	^{††} Technical Elective ²		6
^{††} Construction Technology 201		3	^{††} Construction Technology 271		3
^{††} Technical Elective ²		3			
		16			16
Total semester hours required					67

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^GGeneral Education Courses

^{††}A "C" or better (2.0 minimum GPA) must be earned in all major courses and professional electives.

¹Social/Behavioral Sciences course must be selected by students in consultation with their advisors.

²Technical electives must be selected by students in consultation with their advisors.

Curriculum in Industrial Technology Leading to the Degree of Associate of Applied Science Design Drafter Technology Concentration

FIRST SEMESTER		S.H.	SECOND SEMESTER		S.H.
English 101 or 101H ^G		3	English 102 or 102H		3
Mathematics 151/161 ^G		3	Mathematics 162		3
^{††} Industrial Technology 100		3	Computer Science 173		3
^{††} Industrial Technology 111		3	^{††} Industrial Technology 112		3
^{††} OSHE 111		3	^{††} DDT 113		3
Southeastern 101		2			
		17			15
Second Year					
Physics 191 ^G		3	Psychology 101 or Sociology 101 ^{1,G}		3
Physics Laboratory 193		1	^{††} Industrial Technology 242		3
Communication 211 or 215 ^G		3	^{††} DDT 212		3
^{††} DDT 211		3	^{††} Technical Elective ²		3
^{††} Technical Elective ²		3			
[†] Industrial Technology 233		3			
		16			12
Total semester hours required					60

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¹Social/Behavioral Sciences course must be selected by students in consultation with their advisors.

²Technical electives must be selected by students in consultation with their advisors.

Curriculum in Industrial Technology

**Leading to the Degree of Associate of Applied Science
Occupational Safety, Health, and Environment Concentration**

First Year		Second Semester	
FIRST SEMESTER	S.H.	SECOND SEMESTER	S.H.
English 101 or 101H ^G	3	English 102 or 102H	3
Mathematics 151/161 ^G	3	Mathematics 162	3
††OSHE 111	3	Computer Science 173	3
††OSHE 112	3	††OSHE 121	3
General Biology 151	3	††OSHE 141	3
Biology 152	1		
Southeastern 101	2		
	18		15
Second Year		Second Year	
Chemistry 101 ^G	3	Physics 191	3
Chemistry Lab 103	1	Physics Lab 193	1
Mathematics 241	3	Communication 211	3
Psychology 101 ^G	3	††OSHE 231	3
††OSHE 251	3	††OSHE 242	3
	13	††OSHE 261	3
			16
Total semester hours required		62	

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**Curriculum in Industrial Technology
Leading to the Degree of Associate of Applied Science
Supervision Concentration**

First Year		Second Semester	
FIRST SEMESTER	S.H.	SECOND SEMESTER	S.H.
English 101 or 101H ^G	3	English 102 or 102H	3
Mathematics 151/161 ^G	3	Mathematics 162	3
††Industrial Technology 100	3	Computer Science 173	3
††Industrial Technology 111	3	††Industrial Technology 112	3
††OSHE 111	3	††Industrial Technology 242	3
Southeastern 101	2		
	17		15
Second Year		Second Year	
Physics 191 ^G	3	††Industrial Technology 264	3
Physics Laboratory 193	1	††Psychology 101 or Sociology 101 ^{1,G}	3
Communication 211 or 215 ^G	3	††Industrial Technology 205	3
††Industrial Technology 233	3	††OSHE 121	3
††Industrial Technology 256	3		
††Industrial Technology 202	3		
	16		12
Total semester hours required		60	

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¹Social/Behavioral Sciences course must be selected by students in consultation with their advisors.