

College of Business and Technology

DEPARTMENT OF INDUSTRIAL TECHNOLOGY

- Industrial Technology

Concentration in Construction Technology

Concentration in Design Drafter Technology

Concentration in Supervision

Concentration in Occupational Safety and Health

Definition of Industrial Technology

Industrial Technology is a profession, which requires such education and experience as is necessary to understand and apply technological and managerial sciences to industry.

Typical Elements

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

The Industrial Technology Graduate is a professional industrial technologist 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.

Manufacturing Technology Concentrations

Students must elect to study one of the manufacturing technology concentrations. Upon satisfactory completion of the Industrial Technology core curriculum and the specialty area, the student will be awarded a Bachelor of Science degree. The Industrial Technology program at Southeastern

Louisiana University is accredited by the National Association of Industrial Technology (NAIT).

Supervision (15 Semester Hours)

IT 402 - Industrial Supervision
IT 407 - Statistical Quality Assurance
IT 408 - Production Planning and Control
IT 442 - Computer-Aided Manufacturing
IT 444 - Industrial Robotics

Automated Systems (15 Semester Hours)

IT 215 - Computer-Aided Drafting
IT 331 - Microcomputer Hardware
IT 407 - Statistical Quality Assurance
IT 442 - Computer-Aided Manufacturing
IT 444 - Industrial Robotics

Drafting/Design (15 Semester Hours)

IT 215 - Computer-Aided Drafting
IT 311 - Industrial Design
9 hours to be selected from the following:
DDT 113 - Architectural Drafting
DDT 114 - Technical Illustration
DDT 211 - Piping Drafting
DDT 212 - Machine Drafting and Design
DDT 215 - Light Commercial Building Drafting
DDT 218 - Special Topics in Drafting
IT 216 - Advanced Computer-Aided Drafting and Design

Industrial Internship (15 Semester Hours)

IT 391 - Industrial Internship (12 semester hours required)
IT Elective

Industrial Internship

Students majoring in Industrial Technology may elect to participate in the Industrial Internship Program. This program is a cooperative venture between Southeastern Louisiana University and a variety of industries. It combines the student's academic and technical preparation at the University with actual on-the-job experiences in modern industrial enterprises. The program is designed to provide study on-campus and training off-campus as formal education and theory are blended with practice. In addition to regular classroom and laboratory experiences, the student gains valuable experiences in the world of work in a professional environment. The Industrial Internship Program serves three primary functions:

(1) provide students with an opportunity to observe and participate in industry by applying the principles learned in university courses;(2) provide students deeper insight into the courses they will take after each work experience period; and (3) establish evidence of the students' employability.

The student, the employer, and the University departmental faculty work as a team in making the work experiences attain optimal learning value to prepare the students for taking their place as productive members in the industrial world. To earn three (3) semester hours of credit, a student must be employed by an approved employer for a minimum of twenty (20) hours per week during a fall or spring semester or for a minimum of forty (40) hours per week during a summer session. For six (6) semester hours of credit, a student must be employed by an approved employer for a minimum of forty (40) hours per week during a fall or spring semester. A maximum of twelve (12) semester hours of credit may be earned in Industrial Internship. To be eligible for the Industrial Internship Program the student must meet the following minimum criteria:

1. Have earned a minimum of thirty (30) semester hours of credit toward a degree in Industrial Technology.
2. Have a 2.5 minimum adjusted GPA (cumulative and major).
3. Make application (I.T. Form #107) to the Department Head of Industrial Technology.
4. Have application approved by the Industrial Technology Internship Committee. A limited number of Industrial Internship positions are available each semester.

Majors

A minimum of 33 hours of required I.T. courses, 18 hours of I.T. Specialty Courses, and an additional 3 hours of I.T. electives are required for a Bachelor of Science degree in Industrial Technology for a total of 54 hours of Industrial Technology.

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 hours
IT 112 - Descriptive Geometry	3 hours
IT 233 - Introduction to Basic Electricity and Electronics	3 hours
IT 242 - Materials and Processes	3 hours
IT 264 - Industrial Fluid Power	3 hours
IT 302 - Loss Prevention or IT 311 - Industrial Design	3 hours
IT 402 - Industrial Supervision or IT 408 - Production Planning and Control	3 hours

Curriculum in Industrial Technology

Leading to the Degree of Bachelor of Science (Accredited by NAIT)

FIRST YEAR

First Semester	S.H.	Second Semester	S.H.
†Industrial Technology 111	3	†Industrial Technology 112	3
Mathematics 161	3	Mathematics 162	3
English 101	3	English 102	3
Biological Science	4	Chemistry 101	3
Soc 101 or Psyc 101	3	Chemistry Laboratory 103	1
Orientation	0-1	Computer Science 161	3
	16-17		16

SECOND YEAR

First Semester	S.H.	Second Semester	S.H.
†Industrial Technology 242	3	†Industrial Technology 233	3
†Industrial Technology 264	3	†Industrial Technology 256	3
Mathematics 165 or 241	3	Communication 211	3
English 230, 231, or 232	3	Computer Science 1	3
Physics 191	3	Natural Science 2	4
Physics Lab 193	1		
	16		16

THIRD YEAR

First Semester	S.H.	Second Semester	S.H.
†Industrial Technology 236	3	†Manufacturing Technology Concentration	3
†Industrial Technology 302 or Occupational Safety and Health 115	3	†Industrial Technology 322	3
†Industrial Technology 351	3	†Manufacturing Technology Concentration	3
†Manufacturing Technology Concentration	3	Accounting 211	3
Economics 201	3	History 101, 102, 201, or 202	3

FOURTH YEAR

First Semester	S.H.	Second Semester	S.H.
†Industrial Technology 306	3	†Industrial Technology 304	3
† Technical Elective 3	3	†Manufacturing Technology Concentration	3
English 322	3	†Manufacturing Technology Concentration	3
Arts 4	3	†Technical Elective 3	3
Management 351	3		
	15		12

Total Semester Hours Required= 122-124

Orientation 101 is not required of transfer or readmitted Southeastern students with 30 hours or more.

1 Select any 200 level Computer Science course.

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

3 Technical 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, Design Drafter Technology, Industrial Technology, Management, Mathematics, Occupational Safety and Health, or Physical Science. No 100-level course will be accepted without approval of the Department Head.

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

† A "C" (2.0 minimum adjusted) must be earned in all major courses and technical electives.

ASSOCIATE DEGREE PROGRAM IN INDUSTRIAL TECHNOLOGY

The Associate of Applied Science Degree program in the Department of 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 Specialties. 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

FIRST YEAR

First Semester	S.H.	Second Semester	S.H.
English 101	3	English 102	3
Mathematics 161	3	Mathematics 162	3
†Industrial Technology 111	3	Computer Science 110 or 161 1	3
†Occupational Safety and Health 115 or Industrial Technology 302	3	†Concentration	3
†Concentration	3	†Concentration	3
Orientation 101	0-1	†Technical Elective 2	3
	15-16		18

SECOND YEAR

First Semester	S.H.	Second Semester	S.H.
Physics 191	3	Chemistry 101	3
Physics Laboratory 193	1	Chemistry Lab 103	1
Communication 211 or 215	3	†Industrial Technology 291 or 292	3
Psych 101 or Soc 101 3	3	†Technical Elective 2	3
†Concentration	3	†Technical Elective 2	3
†Technical Elective 2	3	†Concentration	3
	16		16

Total Semester Hours Required= 65-66

Orientation 101 is not required of transfer or readmitted Southeastern students with 30 hours or more.

1 Computer Science 161 is required in the four-year Industrial Technology degree program.

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

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

† A grade of "C" (2.0 minimum adjusted) must be earned in all major courses; a cumulative GPA of 2.0 is required to graduate.

Concentration in Construction Technology

Construction Technology 101	3 hours
Construction Technology 111	3 hours
Construction Technology 121	3 hours
Construction Technology 210	3 hours
Construction Technology 271	3 hours

Total **15 hours**

Concentration in Design Drafter Technology

Industrial Technology 112	3 hours
Design Drafter Technology 211	3 hours
Industrial Technology 215	3 hours
Industrial Technology 216	3 hours
Industrial Technology 242	3 hours

Total **15 hours**

Concentration in Supervision

Industrial Technology 112	3 hours
Industrial Technology 233	3 hours
Industrial Technology 242	3 hours
Industrial Technology 256	3 hours
Industrial Technology 264	3 hours

Total **15 hours**

Concentration in Occupational Safety and Health

Occupational Safety and Health 120	3 hours
Occupational Safety and Health 121	3 hours
Occupational Safety and Health 122	3 hours
Occupational Safety and Health 123	3 hours
Occupational Safety and Health 221	3 hours

Total

15 hours