# DEPARTMENT OF COMPUTER SCIENCE AND INDUSTRIAL TECHNOLOGY

# DEPARTMENT OF COMPUTER SCIENCE

The Department of Computer Science offers a four-year program leading to the Bachelor of Science degree in Computer Science. The program is accredited by the Computing Accreditation Commission ABET, 111 Market Place Suite 1050, Baltimore, MD 21202-4012--telephone 410-347-7700. This program is designed to provide the foundation necessary for computer science graduates to succeed in the computing profession as well as in graduate school.

The department also offers courses in computing applications designed to meet the needs of students in other disciplines.

## MAJORS

Students wishing to major, or co-major, in Computer Science must complete following:

- 1. Forty-three or more semester hours of Computer Science course work as specified in the curriculum, below,
- 2. Sixteen or more semester hours of mathematics course work, as specified in the curriculum, below,
- 3. Twelve or more semester hours of science course work, as specified in the curriculum, below, and
- 4. Thirty or more semester hours of broad, general education course work.

In addition, students must complete a departmentally specified, comprehensive computer science examination in their final semester.

# HONORS DIPLOMA IN THE DISCIPLINE

The department also offers an upper-division honors curriculum allowing its students to earn an honors diploma in the major at graduation. For information about requirements and honors courses in this department, please contact the Department Head.

# MINORS

A Computer Science minor consists of the following eighteen semester hours of coursework in Computer Science: CMPS 161, 257, 280, either 262, 285, or 293, and two 300- or 400-level computer science electives, which must be approved by the department head.

An Applied Computing minor consists of eighteen semester hours of coursework in Computer Science: twelve credits from CMPS 120, 225, 233, 234, 235, and 262, and six credits from CMPS 309, 335, and 409.

#### CURRICULUM IN COMPUTER SCIENCE LEADING TO THE DEGREE OF BACHELOR OF SCIENCE INFORMATION SYSTEMS CONCENTRATION

FIRST SEMESTER †Mathematics 200 English 101 History Elective †Computer Science 161 Orientation 101 14	s.н. 5 3 3 3 0-1 - 15	FIRST YEAR SECOND SEMESTER †Mathematics 201 English 102 †Computer Science 257 <sup>3</sup> †Computer Science 280	s.н. 5 3 3 3
†Computer Science 262 †Computer Science 285 †Computer Science 293 Communications 211 Science Sequence I <sup>5</sup>	3 3 3 4 16	SECOND YEAR †Computer Science 375 †Computer Science 390 Social Science Elective <sup>2</sup> English 230, 231, or 232 Science Sequence II <sup>5</sup>	3 3 3 4 16
†Computer Science 401 †Computer Science Elective(300-400 level) English 322 Accounting 200 Biology Elective <sup>5</sup>	3 3 3 4 16	THIRD YEAR †Computer Science 383 †Computer Science 431 Economics 201 or 202 Art/Music Elective <sup>1</sup> Elective	3 3 3 3 3 15
†Computer Science 411 †Computer Science Elective(300-400 level) Arts/Social Science Elective <sup>1,2</sup> Finance 381 Mathematics 380	3 3 3 3 3 15	FOURTH YEAR †Computer Science 439 †Computer Science 481 Mathematics Elective <sup>4</sup> Management 362 Electives	3 1 3 4 14

Total semester hours required

120-121

Orientation 101 is not required of transfer or readmitted Southeastern students with 30 hours or more. Students must earn a grade of "C" or better in all Computer Science courses and in Math 200 and 201. <sup>1</sup>Choose one from the following: Visual Arts, Music, Dance, or Theatre

<sup>2</sup>Choose one from the following: Anthropology, Geography, Psychology, Political Science, or Sociology.

<sup>3</sup>Mathematics 223 may be substituted for Computer Science 257

<sup>4</sup>Choose from Mathematics 312, 350, 360, 370, 410, or 414

<sup>5</sup>Science sequence: Choose from (Physics 221/223 & 222/224) or (Biology 151/152 & 153/154) or (Chemistry 121/123 & 122/124)

Note: Because Biology 151 and 153 satisfy the Biological Science requirement, students taking biology as their science sequence must take a physics or chemistry course, with a lab, to replace it.

### INFORMATION SYSTEMS CONCENTRATION ELECTIVES

†Computer Science 262	3 hours
†Computer Science 383	3 hours
†Computer Science 439	3 hours
Accounting 200	3 hours
Management 362	3 hours
Finance 381	3 hours

# CURRICULUM IN COMPUTER SCIENCE LEADING TO THE DEGREE OF BACHELOR OF SCIENCE SCIENCE CONCENTRATION

†Mathematics 200 English 101 History Elective †Computer Science 161	s.н. 5 3 3 3 0-1 - 15	FIRST YEAR SECOND SEMESTER †Mathematics 201 English 102 †Computer Science 257 <sup>3</sup> †Computer Science 280	s.н. 5 3 3 3
†Computer Science 285 †Computer Science 293 Communications 211 Economics 201 or 202 Science Sequence I <sup>5</sup>	3 3 3 4 16	SECOND YEAR †Computer Science 375 †Computer Science 390 Social Science Elective <sup>2</sup> English 230, 231, or 232 Science Sequence II <sup>5</sup>	3 3 3 4 16
†Computer Science 401 †Computer Science Elective(300-400 level) English 322 Mathematics 380 Biology Elective <sup>5</sup>	3 3 3 4 16	THIRD YEAR †Computer Science 431 †Computer Science Elective(300-400 level) Mathematics Elective <sup>4</sup> Art/Music Elective <sup>1</sup> Elective	3 3 3 3 15
†Computer Science 391 †Computer Science 411 Arts/Social Science Elective <sup>1.2</sup> Elective Elective	3 3 3 3 3 15	FOURTH YEAR †Computer Science 479 †Computer Science 481 Mathematics Elective <sup>4</sup> Phys/Biol Science Elective <sup>5</sup> Electives	3 1 3 4 4 15
Total compater hours required		404	100

Total semester hours required

121-122

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

Students must earn a grade of "C" or better in all Computer Science courses and in Math 200 and 201.

<sup>1</sup>Choose one from the following: Visual Arts, Music, Dance, or Theatre

<sup>2</sup>Choose one from the following: Anthropology, Geography, Psychology, Political Science, or Sociology.

<sup>3</sup>Mathematics 223 may be substituted for Computer Science 257

<sup>4</sup> Choose from Mathematics 312, 350, 360, 370, 410, or 414

<sup>5</sup>Science sequence: Choose from (Physics 221/223 & 222/224) or (Biology 151/152 & 153/154) or (Chemistry 121/123 & 122/124)

Note: Because Biology 151 and 153 satisfy the Biological Science requirement, students taking biology as their science sequence must take a physics or chemistry course, with a lab, to replace it.

## **SCIENCE CONCENTRATION ELECTIVES**

†Computer Science 391	3 hours
†Computer Science 479	3 hours
†Second mathematics elective	3 hours
Additional Physical or Biological Science	4 hours
General Electives	6 hours

# DEPARTMENT OF INDUSTRIAL TECHNOLOGY

### **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.

### **Pre-Professional Programs**

PRE-ARCHITECTURE Department of Industrial Technology

Students should plan to transfer after two years at Southeastern. Typical requirements include mathematics; physics; courses in design; English compositions, 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, Industrial Internship, 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. The Industrial Technology program at Southeastern Louisiana University is accredited by the National Association of Industrial Technology (NAIT). Included in this section, are the curriculum sheets for the manufacturing technology concentrations.

#### 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.

#### MAJOR

A minimum of 33 hours of required I.T. courses, 18 hours of I.T. Concentration 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.

# HONORS DIPLOMA IN THE DISCIPLINE

The department also offers an upper-division honors curriculum allowing its students to earn an honors diploma in the major at graduation. For information about requirements and honors courses in this department, please contact the Department Head.

## MINORS

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

IT 115 - Occupational Safety and Health3 sIT 233 - Introduction to Basic Electricity and Electronics3 sIT 242 - Materials and Processes3 s	semester hours semester hours semester hours semester hours semester hours
IT 308 – Production Planning and Control or	semester hours semester hours

### **CURRICULUM IN INDUSTRIAL TECHNOLOGY** LEADING TO THE DEGREE OF BACHELOR OF SCIENCE AUTOMATED SYSTEMS CONCENTRATION (ACCREDITED BY NAIT)

FIRST SEMESTER †Industrial Technology 111 Mathematics 161 English 101 Biological Science Sociology 101or Psychology 101 Orientation 101	s.н. 3 3 4 3 0-1 16-17	FIRST YEAR SECOND SEMESTER †Industrial Technology 112 Mathematics 162 English 102 Chemistry 101 Chemistry Laboratory 103 Computer Science 173	<sup>S.H.</sup> 3 3 3 1 3 16
†Industrial Technology 242 †Industrial Technology 264 Mathematics 165 or 241 English 230, 231 or 232 Physics 191 Physics Lab 193	3 3 3 3 1 16	SECOND YEAR †Industrial Technology 233 †Industrial Technology 256 Communication 211 Computer Science 273 Physical Science <sup>1</sup>	3 3 3 4 16
†Industrial Technology 236 †Industrial Technology 302 or Occupational Safety & Health 115 †Industrial Technology 351 English 322 Economics 201	3 3 3 3 3 15	THIRD YEAR †Industrial Technology 215 †Industrial Technology 322 †Industrial Technology 331 Accounting 200 History 101, 102, 201 or 202	3 3 3 3 3 3
†Industrial Technology 405 †Industrial Technology 442 Management 351 Arts <sup>,</sup> †Technical Elective <sup>,</sup>	3 3 3 3 3 15	FOURTH YEAR †Industrial Technology 406 †Industrial Technology 407 †Industrial Technology 444 †Technical Elective	3 3 3 3 12
Total semester hours required			121-122

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

<sup>3</sup>Select Chemistry 102/104 or Physics 192/194.

<sup>2</sup>Select one course in Art, Dance, Music or Theatre.

<sup>3</sup>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, Industrial Technology, Management, Mathematics, or Physical Science. No 100-level course will be accepted without approval of the Department Head. †A "C" (2.0 minimum adjusted) must be earned in all major courses and technical electives.

## **CURRICULUM IN INDUSTRIAL TECHNOLOGY** LEADING TO THE DEGREE OF BACHELOR OF SCIENCE DRAFTING DESIGN CONCENTRATION (ACCREDITED BY NAIT)

FIRST SEMESTER †Industrial Technology 111 Mathematics 161 English 101 Biological Science Sociology 101or Psychology 101 Orientation 101	S.H. 3 3 4 3 0-1 16-17	FIRST YEAR SECOND SEMESTER †Industrial Technology 112 Mathematics 162 English 102 Chemistry 101 Chemistry Laboratory 103 Computer Science 173	s.H. 3 3 3 3 1 3 16
†Industrial Technology 242 †Industrial Technology 264 Mathematics 165 or 241 English 230, 231 or 232 Physics 191 Physics Lab 193	3 3 3 3 1 16	SECOND YEAR †Industrial Technology 233 †Industrial Technology 256 Communication 211 Computer Science 273 Physical Science <sup>1</sup>	3 3 3 4 16
†Industrial Technology 236 †Industrial Technology 302 or Occupational Safety & Health 115 †Industrial Technology 351 English 322 Economics 201	3 3 3 3 15	THIRD YEAR †Industrial Technology 215 †Industrial Technology 322 Management 351 Accounting 200 History 101, 102, 201 or 202	3 3 3 3 3 15
†DDT 113, 114, 211, 212, 215, 218, or Industrial Technology 216 †Industrial Technology 405 Arts <sup>,</sup> †Technical Elective <sup>,</sup>	6 3 3 3 15	FOURTH YEAR †DDT 113, 114, 211, 212, 215, 218, or Industrial Technology 216 †Industrial Technology 311 †Industrial Technology 406 †Technical Elective <sup>9</sup>	3 3 3 3 12
Total semester hours required			121-122

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

<sup>1</sup>Select Chemistry 102/104 or Physics 192/194.

<sup>2</sup> Select one course in Art, Dance, Music or Theatre.

<sup>3</sup>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, Industrial Technology, Management, Mathematics, or Physical Science. No 100-level course will be accepted without approval of the Department Head. †A "C" (2.0 minimum adjusted) must be earned in all major courses and technical electives.

# **CURRICULUM IN INDUSTRIAL TECHNOLOGY**

LEADING TO THE DEGREE OF BACHELOR OF SCIENCE INTERNSHIP CONCENTRATION (ACCREDITED BY NAIT)

fIndustrial Technology 112 Mathematics 162 English 102 Chemistry 101 Chemistry Laboratory 103 Computer Science 173	s.H. 3 3 3 1 3 16
SECOND YEAR †Industrial Technology 233 †Industrial Technology 256 Communication 211 Computer Science 273 Physical Science <sup>1,</sup>	3 3 3 4 16
THIRD YEAR †Industrial Technology 322 †Industrial Technology Elective Management 351 Accounting 200 History 101, 102, 201 or 202	3 3 3 3 3 15
FOURTH YEAR †Industrial Technology 391 †Industrial Technology 406 † Technical Elective	6 3 3 12 121-122
	Mathematics 162 English 102 Chemistry 101 Chemistry Laboratory 103 Computer Science 173 SECOND YEAR †Industrial Technology 233 †Industrial Technology 256 Communication 211 Computer Science 273 Physical Science <sup>1,</sup> THIRD YEAR †Industrial Technology 322 †Industrial Technology 322 †Industrial Technology Elective Management 351 Accounting 200 History 101, 102, 201 or 202 FOURTH YEAR †Industrial Technology 391 †Industrial Technology 391 †Industrial Technology 406

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

<sup>1</sup>Select Chemistry 102/104 or Physics 192/194.

 $^2\mbox{Select}$  one course in Art, Dance, Music or Theatre.

<sup>3</sup>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, Industrial Technology, Management, Mathematics, or Physical Science. No 100-level course will be accepted without approval of the Department Head. †A "C" (2.0 minimum adjusted) must be earned in all major courses and technical electives.

# **CURRICULUM IN INDUSTRIAL TECHNOLOGY**

### LEADING TO THE DEGREE OF BACHELOR OF SCIENCE SUPERVISION CONCENTRATION (ACCREDITED BY NAIT)

FIRST SEMESTER †Industrial Technology 111 Mathematics 161 English 101 Biological Science Sociology 101or Psychology 101 Orientation 101	S.H. 3 3 4 3 0-1 16-17	FIRST YEAR SECOND SEMESTER †Industrial Technology 112 Mathematics 162 English 102 Chemistry 101 Chemistry Laboratory 103 Computer Science 173	S.H. 3 3 3 1 3 16
†Industrial Technology 242 †Industrial Technology 264 Mathematics 165 or 241 English 230, 231 or 232 Physics 191 Physics Lab 193	3 3 3 3 3 1 16	SECOND YEAR †Industrial Technology 233 †Industrial Technology 256 Communication 211 Computer Science 273 Physical Science <sup>1,</sup>	3 3 3 4 16
†Industrial Technology 236 †Industrial Technology 302 or Occupational Safety & Health 115 †Industrial Technology 351 English 322 Economics 201	3 3 3 3 3 15	THIRD YEAR †Industrial Technology 322 †Industrial Technology 402 Management 351 Accounting 200 History 101, 102, 201 or 202	3 3 3 3 3 15
†Industrial Technology 331 †Industrial Technology 405 †Industrial Technology 407 Arts <sup>,</sup> †Technical Elective <sup>,</sup>	3 3 3 3 3 15	FOURTH YEAR †Industrial Technology 406 †Industrial Technology 308 †Industrial Technology 442 †Technical Elective	3 3 3 3 12
Total semester hours required			121-122

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

<sup>1</sup>Select Chemistry 102/104 or Physics 192/194.

 $^{2}\mbox{Select}$  one course in Art, Dance, Music or Theatre.

<sup>3</sup>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, Industrial Technology, Management, Mathematics, or Physical Science. No 100-level course will be accepted without approval of the Department Head. †A "C" (2.0 minimum adjusted) must be earned in all major courses and technical electives.

# CURRICULUM IN OCCUPATIONAL SAFETY, HEALTH AND ENVIRONMENT LEADING TO THE DEGREE OF BACHELOR OF SCIENCE

The Bachelor of Science Degree program in Occupational Safety, Health, and Environment is designed to enable graduates to enter business and industry as safety, industrial hygiene and environmental professionals.

FIRST SEMESTER English 101 Mathematics 161 †OSHE 111 General Biology 151 Biology Lab 152 Computer Science 173 Orientation 101	S.н. 3 3 3 1 3 0-1 16-17	FIRST YEAR SECOND SEMESTER English 102 Mathematics 162 †OSHE 112 †OSHE 121 Psychology 101	S.H. 3 3 3 1 15
Chemistry 101 Chemistry Lab 103 Mathematics 241 Zoology 241 †OSHE 241 †OSHE 261	3 1 3 3 3 3 16	SECOND YEAR Physics 191 Physics Lab 193 Chemistry 261 Communication 211 †OSHE 251 †OSHE 242	3 1 3 3 3 3 16
Economics 201 English 230 or 231 or 232 †OSHE 231 †OSHE 281 †OSHE 282	3 3 3 3 3 15	THIRD YEAR Physical Science <sup>1</sup> History 101 or 102 or 202 †Industrial Technology 242 †Industrial Technology 322	4 3 3 3 13
†OSHE 371 Management 351 Arts <sup>2</sup> †Professional Elective <sup>3</sup> †Professional Elective <sup>3</sup>	3 3 3 3 3 3 15	FOURTH YEAR †OSHE 321 †OSHE 324 †OSHE 341 †Industrial Technology 391, †Professional Elective <sup>3</sup>	3 3 3 3 3 15

Total semester hours required

121-122

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

<sup>1</sup>Select Chemistry 102/104 or Physics 192/194.

 $^{2}\mbox{Select}$  one course in Art, Dance, Music or Theatre.

<sup>3</sup>Professional electives should be selected in consultation with advisors.

†A "C" (2.0 minimum adjusted) must be earned in all major courses and professional 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 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 (ACCREDITED BY NAIT)

		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 173	3
Occupational Safety & Health 115		+Construction Technology 111	3
or Industrial Technology 302	3	Construction Technology 121	3
†Construction Technology 101	3	Technical Elective	3
Orientation 101	0-1	1	-
	15-16		18
		SECOND YEAR	
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
Psychology 101 or Sociology 101 <sup>2</sup>	3	Technical Elective	6
†Construction Technology 201	3	+Construction Technology 271	3
Technical Elective	3		5
	16		16
	10		10
Total semester hours required			65-66

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

<sup>1</sup>Technical electives must be selected by students in consultation with their advisors.

<sup>2</sup>Social/Behavioral Sciences course must be selected by students in consultation with their advisors.

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

### CURRICULUM IN INDUSTRIAL TECHNOLOGY LEADING TO THE DEGREE OF ASSOCIATE OF APPLIED SCIENCE DESIGN DRAFTER TECHNOLOGY CONCENTRATION (ACCREDITED BY NAIT)

		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 173	3
Occupational Safety & Health 115	3	†Industrial Technology 112	3
or Industrial Technology 302		†Industrial Technology 215	3 3 3 3
Psychology 101 or Sociology 101 <sup>1</sup>	3	Technical Elective	3
Orientation 101	0-1	•	
	15-16		18
		SECOND YEAR	
Physics 191	3	Chemistry 101	3
Physics Laboratory 193	1	Chemistry Lab 103	1
Communication 211 or 215	3	†Design Drafter Technology 211	3
†Design Drafter Technology 113 or 114	3	†Industrial Technology 291 or 292	3 3
†Industrial Technology 216	3	<sup>†</sup> Technical Elective <sup>2</sup>	6
<sup>†</sup> Technical Elective <sup>2</sup>	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.

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

<sup>2</sup>Technical electives must be selected by students in consultation with their advisors.

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

### **CURRICULUM IN INDUSTRIAL TECHNOLOGY** LEADING TO THE DEGREE OF ASSOCIATE OF APPLIED SCIENCE OCCUPATIONAL SAFTY, HEALTH AND ENVIRONMENT (ACCREDITED BY NAIT)

		FIRST YEAR	
FIRST SEMESTER	S.H.	SECOND SEMESTER	S.H.
English 101	3	English 102	3
Mathematics 161	3	Mathematics 162	3
†OSHE 111	3	†OSHE 112	3
General Biology 151	3	+OSHE 121	3 3 3 3
Biology 152	1	Psychology 101 <sup>1</sup>	3
Computer Science 110 or 173	3	, ,,	
Orientation 101	0-1		
	16-17		15
		SECOND YEAR	
Chemistry 101	3	Physics 191	3
Chemistry Laboratory 103	1	Physics Lab 193	1
Mathematics 241	3	Chemistry 261	3
Zoology 241 <sup>2</sup>	3	Communication 211	3 3 3 3
†OSHE 241	3	†OSHE 251	3
†OSHE 261	3	†OSHE 242	š
	16		16
	10		10
Total semester hours required			63-64

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

<sup>1</sup>†A grade of "C" must be earned in all major courses; a cumulative GPA of 2.0 is required to graduate.

### **CURRICULUM IN INDUSTRIAL TECHNOLOGY** LEADING TO THE DEGREE OF ASSOCIATE OF APPLIED SCIENCE SUPERVISION CONCENTRATION (ACCREDITED BY NAIT)

		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 173	3
Psychology 101 or Sociology 101 <sup>1</sup>	3	†Industrial Technology 112	3
†Occupational Safety & Health 115		†Industrial Technology 242	3
or Industrial Technology 302	3	<sup>†</sup> Technical Elective <sup>2</sup>	3
Orientation 101	0-1	1	-
	15-16		18
	10 10		10
		SECOND YEAR	
Physics 191	3	Chemistry 101	3
Physics Laboratory 193	1	Chemistry Lab 103	1
Communication 211 or 215	3	†Industrial Technology 264	3
†Industrial Technology 233	3	†Industrial Technology 291 or 292	3
†Industrial Technology 256	3	†Technical Elective <sup>2</sup>	6
Technical Elective <sup>2</sup>	3		0
Technical Elective	-		4.0
	16		16
Total semester hours required			65-66

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

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

 $^{2}\ensuremath{\,{\rm Technical}}$  electives must be selected by students in consultation with their advisors.

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