

BACHELOR OF SCIENCE INDUSTRIAL TECHNOLOGY

GENERAL EDUCATION Courses that are **required** are in bold type. Courses that are recommended are in *italics*.

REQUIRED HOURS.....	48-49
Communication	8
ENGL 1113 English Composition I	
ENGL 1213 English Composition II	
COMM 1312 Basic Speech	
Mathematics	3
MATH 1143 Math Concepts	
MATH 1513 College Algebra OR a	
higher numbered math course	
Computer Applications/Technology.....	2
COMSC 1022 Computers & Information Access	
TECH 1122 Technology & Society	
Economics	3
ECONO 1113 Contemporary Economics	
Health & Physical Education.....	3
HPE R 1133 Wellness Concepts & Exercise	
Applications (includes 1 hr lab)	
Natural Sciences.....	8
BIOL 1004 Biological Concepts	
SCI 1514 Concepts of Physical Science	
SCI 1614 Science & the Environment	
ASTRO 1904 Astronomy	
GEOL 1934 Physical Geology	
Fine Arts & Humanities.....	6
ART 1222 Art Survey	
LIT 2412 Introduction to Literature	
MUSIC 1012 Introduction to Music I	
PHILO 1452 Introduction to Philosophy	
U.S. History & Government.....	6
HIST 1063 U.S. History	
POLSC 1103 American Government & Politics	
International & Cultural Studies.....	6-7
HIST 1033 World History	
GEOG 1103 World Cultural Geography	
POLSC 1153 World Relations & Politics	
Foreign Language (4 hr/ includes 3 hr class & 2 hr lab)	
Behavioral/Social Science.....	3
PSYCH 1003 General Psychology	
SOCIO 1003 Introduction to Sociology	

Industrial Technology Major/Minor Code No. 135

The Industrial Technology major/minor includes a 40-hour core requirement, 12 hours of management, 24 hours from a selected technology, and a balance of 3000/4000 electives approved by the department to total 124 hours.

Core Requirements.....	40 hours
COMSC 1433 Visual Basic Programming	
MATH 1613 College Trigonometry OR	
MATH 3413 Statistical Methods OR	
MATH 3433 Statistics	
TECH 1101 Introduction to Technology	
TECH 1203 Engineering Drafting	
TECH 1313 Wood Materials & Processes	
TECH 2513 Fabrication Processes I	
TECH 3113 Industrial Safety	
TECH 3143 Technical Presentations	
TECH 3203 Computer Aided Drafting I (CAD)	
TECH 3453 Industrial Plastics	
TECH 3463 Manufacturing Operations I	
TECH 3613 Power Systems	
TECH 3873 Applied Electronics	
TECH 4123 Industrial Supervision	

Management electives (by advisement).....	12
ACCTG 2213 Principles of Financial Accounting	
ECONO 2263 Introduction to Macroeconomics	
ACCTG 2313 Principles of Managerial Accounting	
ECONO 2363 Introduction to Microeconomics	
GEBUS 3123 Legal Environment of Business	
MRKTG 3143 Principles of Marketing	
TECH 3173 Environmental Regulations	
MNGMT 3233 Management	
MNGMT 3333 Personnel/Human Resource Mngmt.	
MATH 3413 Statistical Methods OR	
MATH 3433 Statistics I	
TECH 4443 Material Handling and Facility Plng.	
TECH 4433 Quality Control	
TECH 4493 Manufacturing Operations II	
TECH 4900 Orientation to Industrial Internship	
TECH 4916 Industrial Internship	

Majors must select one specialization from the following technology areas.

Electronics Technology.....	24
Required Courses.....	18
TECH 1813 Basic Electronics I	
TECH 2813 Basic Electronics II	
TECH 3823 Industrial Electronics	
TECH 4823 Digital Electronics	
TECH 4833 Microcomputer Electronics	
TECH 4843 Programmable Controllers	
Approved Electives	6

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Environmental Technology	24
Required Courses	21
CHEM 1203 General Chemistry I	
CHEM 1252 General Chemistry I (Lab)	
CHEM 1303 General Chemistry II	
CHEM 1352 General Chemistry II (Lab)	
GEOL 1934 Physical Geology	
BIOL 2204 Introductory Zoology	
TECH 3173 Environmental Regulations	
Approved Electives.....	3

Industrial Supervision	24
Required Courses	15
TECH 3173 Environmental Regulations	
TECH 3413 Manufacturing Processes	
MNGMT 3433 Organizational Theory	
TECH 4433 Quality Control	
TECH 4493 Manufacturing Operations II	
Approved Electives.....	9
(Certification from The American Production and Inventory Control Society (APICS) Recommended)	

Manufacturing Technology	24
Required Courses	20
TECH 3263 Machine Drafting I	
TECH 3413 Manufacturing Processes	
TECH 3513 Materials Testing & Analysis	
TECH 3523 Fabrication Processes II	
TECH 4454 Computer Aided Manuf (CAM)	
TECH 4514 Machine Tool Processes	
Approved Electives.....	4

General Technology	24
Approved Electives.....	24

2000-12 Extracurricular Learning Credit may be awarded for current professional licenses and certificates that have been evaluated and approved for credit by the technology department. Educational credit recommended by the American Council on Education (ACE), ACE/PONSI, and/or completion of a special skills examination may also be evaluated for credit.
(1-12 credits lower division maximum 12)

4000-12 Extracurricular Learning credit may be awarded for current professional licenses and certificates that have been evaluated and approved for credit by the technology department. Educational credit recommended by the American Council on Education (ACE), ACE/PONSI, and/or completion of a special skills examination may also be evaluated for credit.
(1-12 credits upper division maximum 12)
Electives (by advisement) to total124

Industrial Technology articulates industrial management with a specialization in electronics technology, environmental technology, industrial supervision, manufacturing technology, and general technology. Technical concepts and experiences are supported with courses in applied mathematics, science, and management. A supervised industrial internship completes the program. Specific curricular emphases include:

1. The analysis of industrial materials.
2. The identification of production processes.
3. An examination of the concepts of industrial management and human relations.
4. The solving of technical problems found in industry.
5. The development of skills relating to a specific area of specialization.

The mission of the Industrial Technology Program is to provide students the education and experience necessary to successfully perform the functions of an industrial manager.

REGULATIONS PERTAINING TO GRADUATION

Minimum credit hours for graduation.....	124
Minimum credit hours in the liberal arts & sciences	55
Minimum credit hours in upper-division (3000/4000 courses).....	40
Minimum credit hours (3000/4000 courses) in major completed at SWOSU	8
Minimum credit hours at SWOSU (including last 8).....	30
Minimum Grade Point Average in all coursework.....	2.00
Minimum Grade Point Average in major	2.00

INDUSTRIAL TECHNOLOGY (CODE 135)
ELECTRONICS TECHNOLOGY SPECIALIZATION
Suggested Course Sequence

FIRST YEAR		SECOND YEAR	
FIRST SEMESTER	SECOND SEMESTER	FIRST SEMESTER	SECOND SEMESTER
1001 Freshman Orient*1	1213 English Comp II.....3	1433 Visual Basic.....3	2513 Fabrication Proc. I3
1122 Technology & Society ..2	1313 Wood Mat & Proc.....3	1514 Conc. Phy. Science.....4	Electronic Elective3
1101 Intro to Technology.....1	1813 Basic Electronics I.....3	2813 Basic Electr. II.....3	Gen Educ Crses.....11
1113 English Comp I3	Gen Educ Crse3	Gen Educ Crses5	
1203 Engineering Draft.....3	1613 College Trig OR 3	English Proficiency Exam**	
1513 College Algebra3	3413 Stat Methods OR3		
Gen Educ Crses5	3433 Statistics3		
Total:18	Total.....15	Total:15	Total:17

THIRD YEAR		FOURTH YEAR	
FIRST SEMESTER	SECOND SEMESTER	FIRST SEMESTER	SECOND SEMESTER
3203 CAD I.....3	3113 Industrial Safety3	3463 Manufg Ops I3	3143 Technical Present.....3
3823 Industrial Elec3	3453 Industrial Plastics3	4823 Digital Electronics3	4123 Industrial Supv3
Technology Elective3	3613 Power Systems.....3	Gen Educ Crse.....6	4833 Microcomputer Elect...3
Management Elective.....3	4843 Program Controllers...3	Management Elective.....3	Electronic Elective3
Gen Educ Crse.....3	Management Elective3		Management Elective.....3
Total:15	Total:.....15	Total:15	Total:15

* First time entering Freshmen need to take 1001 Freshman Orientation
** If applicable. See English Proficiency Program under the General Academic Information Section.

INDUSTRIAL TECHNOLOGY (CODE 135)
ENVIRONMENTAL TECHNOLOGY SPECIALIZATION
Suggested Course Sequence

FIRST YEAR		SECOND YEAR	
FIRST SEMESTER	SECOND SEMESTER	FIRST SEMESTER	SECOND SEMESTER
1001 Freshman Orient*1	1213 English Comp II.....3	1203 Gen Chem I.....3	1303 Gen Chem II3
1101 Intro to Technology.....1	1313 Wood Mat & Proc.....3	1252 Gen Chem I Lab.....2	1352 Gen Chem II Lab.....2
1113 English Comp I3	1613 College Trig OR 3	1514 Conc Physical Sci.....4	2513 Fabrication Proc I3
1122 Tech & Society.....2	3413 Stat Methods OR3	Gen. Educ. Crses6	Gen Educ Crses.....9
1203 Engineering Draft.....3	3433 Statistics3	English Proficiency Exam**	
1613 College Algebra3	3873 Applied Elec.....3		
Gen Educ Crses5	Gen Educ Crses.....5		
Total:18	Total:.....15	Total:15	Total:17

THIRD YEAR		FOURTH YEAR	
FIRST SEMESTER	SECOND SEMESTER	FIRST SEMESTER	SECOND SEMESTER
1433 Visual Basic.....3	3113 Industrial Safety3	1934 Physical Geology4	3143 Technical Pres3
2204 Intro Zoology4	3453 Industrial Plastics3	3463 Manufacturing Ops I....3	3173 Environmental Regs.....3
3203 CAD I.....3	3613 Power Systems.....3	Management Elective.....3	4123 Industrial Supv3
Management Elective.....3	Management Elective3	Gen Educ Crse.....5	Management Elective.....3
Gen Educ Crse.....3	Gen Educ Crse2		
Total:16	Total:.....14	Total:15	Total:12

* First time entering Freshmen need to take 1001 Freshman Orientation
** If applicable. See English Proficiency Program under the General Academic Information Section.

INDUSTRIAL TECHNOLOGY (CODE 135)
MANUFACTURING TECHNOLOGY SPECIALIZATION
Suggested Course Sequence

FIRST YEAR		SECOND YEAR	
FIRST SEMESTER	SECOND SEMESTER	FIRST SEMESTER	SECOND SEMESTER
1001 Freshman Orient* 1	1101 Intro to Technology 1	1313 Wood Mat & Proc 3	2513 Fabrication Proc I..... 3
1113 English Comp I 3	1203 Engineering Draft..... 3	1433 Visual Basic 3	3873 Applied Elec 3
1122 Technology & Society .. 2	1213 English Comp II..... 3	1514 Conc Physical Sci..... 4	Gen Educ Crses 11
1513 College Algebra 3	Gen Educ Crses..... 6	3203 CAD I..... 3	
Gen Educ Crses..... 5	1613 College Trig OR 3	Gen Educ Crse 3	
	3413 Stat Methods OR 3	English Proficiency Exam**	
	3433 Statistics 3		
Total:..... 14	Total:..... 16	Total:..... 16	Total: 17

THIRD YEAR		FOURTH YEAR	
FIRST SEMESTER	SECOND SEMESTER	FIRST SEMESTER	SECOND SEMESTER
3143 Technical Pres 3	3523 Fabrication Process II... 3	4514 Machine Tool Proc 4	4123 Industrial Supv 3
3463 Manufacturing Ops I ... 3	3263 Machine Drafting I..... 3	Manufactg Electives..... 4	4454 Computer Aided Mfg... 4
3513 Materials Testing 3	3413 Manufactg Processes ... 3	Management Electives..... 6	Managmt Elective 6
3113 Industrial Safety 3	3453 Industrial Plastics..... 3	Gen Educ Crse 2	Gen Educ Crse 3
3613 Power Systems..... 3	Gen Ed Crse..... 3		
Total:..... 15	Total:..... 15	Total:..... 16	Total: 16

* First time entering Freshmen need to take 1001 Freshman Orientation
** If applicable. See English Proficiency Program under the General Academic Information Section.

INDUSTRIAL TECHNOLOGY (CODE 135)
INDUSTRIAL SUPERVISION SPECIALIZATION
Suggested Course Sequence

FIRST YEAR		SECOND YEAR	
FIRST SEMESTER	SECOND SEMESTER	FIRST SEMESTER	SECOND SEMESTER
1001 Freshman Orient* 1	1213 English Comp II..... 3	1433 Visual Basic 3	2513 Fabrication Proc 3
1101 Intro to Technology..... 1	1313 Wood Mat & Proc..... 3	1514 Conc Physical Sci..... 4	Management Elective 3
1113 English Comp I 3	1613 College Trig OR 3	Gen Educ Crses..... 9	Gen Educ Crses 11
1122 Tech & Society 2	3413 Stat. Methods OR..... 3	English Proficiency Exam**	
1203 Engineering Draft..... 3	3433 Statistics 3		
1613 College Algebra 3	3873 Applied Elec..... 3		
Gen Educ Crses..... 4	Gen Educ Crses..... 3		
Total:..... 17	Total:..... 15	Total:..... 16	Total: 17

THIRD YEAR		FOURTH YEAR	
FIRST SEMESTER	SECOND SEMESTER	FIRST SEMESTER	SECOND SEMESTER
3203 CAD I 3	3113 Industrial Safety 3	3173 Env. Regualtions 3	3143 Technical Present 3
3463 Manufacturing Ops I ... 3	3413 Manufactg Processes ... 3	3433 Org. Theory 3	4123 Industrial Supv 3
Managmt Elective..... 3	3453 Industrial Plastics..... 3	4433 Quality Control 3	Management Elective 3
Gen Educ Crse 6	3613 Power Systems..... 3	Management Elective 3	Approved Elective 6
	4493 Manufactg Oper II..... 3	Approved Elective 3	
Total:..... 15	Total:..... 15	Total:..... 15	Total: 15

* First time entering Freshmen need to take 1001 Freshman Orientation
** If applicable. See English Proficiency Program under the General Academic Information Section.