

DEPARTMENT OF INDUSTRIAL & ENGINEERING TECHNOLOGY

BACHELOR OF SCIENCE IN EDUCATION

INDUSTRIAL EDUCATION

The Industrial Education program is designed to prepare individuals to teach comprehensive, action-based industrial/technology education programs in the ninth through twelfth grades. The students will develop technical and teaching competencies in communications technology, energy and power technology, and materials and processes technology.

CURRICULUM CHECKLIST

UNIVERSITY STUDIES (53 hours)

___ UI 100 First Year Seminar	3
___ Artistic Expression	3
___ Literary Expression	3
___ SC 105 Fundamentals of Oral Communication (Oral Expression)	3
___ EN 100 English Composition	3
___ EN 140 Rhetoric & Critical Thinking (Written Expression)	3
___ PY 222 (Behavioral Systems)	3
___ BI/BS Course (Living Systems)	3
___ MA 134 College Algebra (Logical Systems)	3
___ CH 181 Basic Principles of Chemistry (Physical Systems)	5
___ US 105 or US 107 (Development of a Major Civilization)	3
___ Economic Systems	3
___ PS 103 OR PS 104 (Political Systems)	3
___ Social Systems	3
___ UI 3xx Interdisciplinary University Studies Course (UI319 recommended)	3
___ UI 3xx Interdisciplinary University Studies Course	3
___ UI xxx University Studies Senior Seminar	3
___ WP 003 Writing Proficiency Test (to be taken after completing 75 hours)	0
___ CCTST Critical Thinking Test (to be taken after completing 75 hours)	0
___ CL001 ___ CL002 ___ CL003 ___ CL004 Career Linkages Requirements	0

SECONDARY PROFESSIONAL EDUCATION REQUIREMENTS (37 Hours)

Block I:

___ ED 251 Intro to MSE Technology	2
___ ED 250 Intro to MSE Teaching	2

Block II: 14 hours*

___ EF 304 School & Society	2
___ SE 305 Secondary Block II Field Experience	2
___ SE 306 Theories of Learning & Management	2
___ SE 307 Teaching Reading/Secondary School	2
___ SE 308 Fund of High School Education	3
___ SE 275 Diversity in American Schools	3

Block III: 10 hours**

___ EX 390 Psychology & Education of the Exceptional Child	3
___ SE 300 Technology to Enhance Learning	2
___ SE 316 Techniques of Teaching Technology Education	3
___ SE 370 Secondary Block III Field Experience	2

Block IV: 13 hours

___ EF 400 Seminar/Education Issues for Student Teachers	1
___ SE 463 Student Teaching Secondary (1 st)	6
___ SE 464 Student Teaching Secondary (2 nd)	6

*Enrollment in Block II requires admittance to Teacher Education Program

**Portions of Block III (SE 316 and SE 370) are fall only

INDUSTRIAL EDUCATION (45 Hours)

Communications Technology

Required:

___ TG 120 Computer Aided Engineering Graphics	3
___ TG 180 Introduction to Industrial Graphics	3

Select 2 courses:

___ TG 220 Solid Modeling & Rapid Prototyping	6
___ TG 226 Residential Architectural Drafting	
___ TG 282 Electronic Publishing	
___ TG 284 Photography Fundamentals	
___ TG 386 Interactive Multimedia and Animation	

Industrial Education Requirements Continued on back of page...

Energy and Power Technology

Required:

- ET 162 DC Principles and Circuits 3
- ET 164 AC Principles and Circuits 3

Select 2 courses:

- ET 100 Networking Fund & Router Tech 6
- ET 101 Network Design & Advanced Routing
- ET 365 Industrial Electrical Power
- MN 383 Fluid Power

Materials and Process Technology

- MN 170 Engineering Materials & Testing 3
- MN 203 Industrial Materials & Processes I 3
- MN 204 Industrial Materials & Processes II 3

Select 2 courses:

- CM 243 Construction Methods & Materials 6
- MN 354 Computer Aided Manufacturing
- MN 356 Robotics Fundamentals

Professional:

Required:

- IM 102 Technical Communication 3
- IE 401 Technology Education Management 3

EXAMPLE PROGRAM OF STUDY BSE - Industrial Education

FRESHMAN FALL SEMESTER (15 hrs)

EN 100 English Comp
MA 134 College Algebra
Living Systems (Choose a BS/BI course)
ET 162 DC Principles & Circuits
U 100 First Year Seminar
CL001 Career Linkages 1st Requirement

SOPHOMORE FALL SEMESTER (18 hrs)

TG 120 Computer Assisted Eng Graphics
TG 180 Intro to Industrial Graphics
Artistic Expression
Industrial Education Elective
SC 105 Fundamentals Oral Communication
Industrial Education Elective

JUNIOR FALL SEMESTER (18 hrs)

Literary Expression
US 105 or US 107 (Dev of Major Civilization)
PS 103 or PS104 (Political Systems)
MN 203 Industrial Materials & Processes I
Industrial Education Elective
***IE 401 Technology Education Management
CL003 Career Linkages 3rd Requirement

SENIOR FALL SEMESTER (16 hrs)

EX 390 Psy & Ed Exceptional Child
**SE 316 Tech of Teaching Techn Education
**SE 370 Secondary Block III Field Exp
UI 3xx (UI 319 Recommended)
UI 4xx University Studies
SE 300 Technology to Enhance Learning
CL004 Career Linkages 4th Requirement

FRESHMAN SPRING SEMESTER (21 hrs)

EN 140 Rhetoric & Critical Thinking
IM 102 Technical Communication
PY 222 Dev of the Adolescent
ED251 Intro. to MSE Technology
ED250 Intro. to MSE Teaching
CH181/081/001 Basic Principles of Chemistry
ET 164 AC Principles & Circuits
CL002 Career Linkages 2nd Requirement

SOPHOMORE SPRING SEMESTER (17 hrs)

EF 304 School & Society
*SE 305 Sec Block II Fld Exp
SE 306 Theory of Learning & Mgt
SE 307 Teaching Reading Sec School
SE 308 Instr Comp of HS Teachers
SE 275 Diversity in American Schools
MN 170 Industrial Materials and Testing

JUNIOR SPRING SEMESTER (18 hrs)

Social Systems
UI 3xx University Studies
Economic Systems
MN 204 Industrial Materials & Processes II
Industrial Education Elective
Industrial Education Elective
WP 003 Writing Proficiency Exam
CCTST California Critical Thinking Skills Test

SENIOR SPRING SEMESTER (16 hrs)

SE 463 Student Teaching Exp I
SE 464 Student Teaching Exp II
EF 400 Seminar/Educ Issues for Student
Teachers
Industrial Education Elective

139 Hours

*Enrollment in Secondary Block II requires admittance to teacher education program.

** SE-316 and SE-370 are fall – only courses. Please plan accordingly

*** IE-401 is taught in fall/alternating years