# Industrial Technology, B.S. *major*Manufacturing Technology Emphasis

Required Credits: 81 Required GPA: 2.25

# I REQUIRED TECHNICAL CORE COURSES

#### COMPLETE THE FOLLOWING COURSES:

- IT1100
- IT 1210 Materials And Processes Forming (4 credits)
- IT 1220 Materials And Processes Separating (4 credits)
- IT 1310 Mechanical Power (2 credits)
- IT 1350 Electronic Technology (4 credits)
- IT1410
- IT 1460 Technical Graphics (3 credits)
- IT 2250 Construction Technology (2 credits)
- IT 2370 Automation Technology (3 credits)
- IT 3310 Fluid Power (3 credits)
- IT 4537 Industrial Design (3 credits)

# II REQUIRED PROFESSIONAL CORE COURSES

#### COMPLETE THE FOLLOWING COURSES:

- IT 3870 Technical Sales/Presentations (2 credits)
- IT 3880 Human Resource Development (2 credits)
- IT 3890 Material Handling And Plant Layout (2 credits)
- IT 4877 Industrial Maintenance And Safety (3 credits)
- IT 4878 Quality Assurance (3 credits)
- IT 4890 Industrial Organization And Leadership (3 credits)
- IT 4897 Project Management (3 credits)

# III REQUIRED FOUNDATION COURSES

TAKE 6 SEMESTER CREDITS OF MATH AT THE 1100 OR HIGHER LEVEL. STUDENTS ARE ENCOURAGED TO TAKE STATISTICS AND CALCULUS.

TAKE 7 SEMESTER CREDITS FROM AMONG THE PHYSICS, CHEMISTRY, OR PHYSICAL SCIENCE (SPECIFICALLY, SCI 1110 AND SCI 1120) COURSES THAT ARE APPROVED TO FULFILL LIBERAL EDUCATION CATEGORY 3. OTHER CATEGORY 3 COURSES

MAY BE SUBSTITUTED IF APPROVED BY THE CHAIR OF THE DEPARTMENT OF TECHNOLOGICAL STUDIES.

# MANUFACTURING TECHNOLOGY EMPHASIS

#### BLOCK I-SELECT 12 SEMESTER CREDITS FROM THE FOLLOWING

## **COURSES:**

- IT 2608 Computer-Controlled Machining (3 credits)
- IT 3217 Materials Science And Metallurgy (3 credits)
- IT 3218 Advanced Machining Processes (3 credits)
- IT 3460 Parametric 3-D Modeling (3 credits)
- IT 3877 Engineering Problem Solving (3 credits)

# BLOCK II-SELECT 6 SEMESTER CREDITS FROM THE FOLLOWING

## **COURSES:**

IT 4970; courses applicable toward a minor in Computer Science (non-teaching); Physics (may include lower



sequence); Chemistry (not CHEM 2925); or MATH (non-Teaching).

# SUGGESTED SEMESTER SCHEDULE FOR INDUSTRIAL TECHNOLOGY MAJOR, B.S.

The following is a list of required Industrial Technology Major, B.S. courses arranged by year. This schedule is intended to help students plan their courses in an orderly fashion; however, these are only suggestions and this schedule is flexible.

#### Freshman

- IT1100
- IT 1210 Materials And Processes Forming (4 credits)
- IT 1220 Materials And Processes Separating (4 credits)
- IT 1460 Technical Graphics (3 credits)
- Liberal Education Courses

#### Sophomore

- IT 1310 Mechanical Power (2 credits)
- IT 1350 Electronic Technology (4 credits)
- IT1410
- IT 2250 Construction Technology (2 credits)
- IT 2370 Automation Technology (3 credits)
- Liberal Education Courses

#### Junior

- IT 3310 Fluid Power (3 credits)
- IT 3870 Technical Sales/Presentations (2 credits)
- IT 3880 Human Resource Development (2 credits)
- IT 3890 Material Handling And Plant Layout (2 credits)
- Major Specialization Courses
- Liberal Education Courses

#### Senior

- IT 4537 Industrial Design (3 credits)
- IT 4877 Industrial Maintenance And Safety (3 credits)
- IT 4878 Quality Assurance (3 credits)
- IT 4890 Industrial Organization And Leadership (3 credits)
- IT 4897 Project Management (3 credits)
- Major Specialization Courses
- Liberal Education Courses