

Undergraduate Curriculum in Industrial Technology Manufacturing Option

2023-2024 Catalog – Total Credits 120

First Year (31 cr.)

| Fall Semester 1 (16 cr.) | | | Spring Semester 2 (15 cr.) | | |
|--------------------------|-----------|--------------------------------|----------------------------|-----------|--|
| 1 | TSM 110 | Introduction to Technology (F) | 1 | TSM 111 | Experiencing Technology (FS) |
| 3 | TSM 116 | Design in Technology (FS) | 3 | TSM 115 | Solving Technology Problems (FS) |
| *3 | ENGL 150 | Crit. Think. and Comm.(FSSS) | 3 | MATH 151 | Calculus for Business and Social Sciences (FSSS) |
| 1 | LIB 160 | Library Instruction (FSSS) | 4 | PHYS 131 | General Physics (FSSS) |
| 3 | MATH 145 | Applied Trigonometry (FS) | 1 | PHYS 131L | General Physics Lab (FSSS) |
| 4 | CHEM 163 | College Chemistry (FS) | 3 | TSM 240 | Intro to Manufacturing Processes for Metals (FS) |
| 1 | CHEM 163L | Lab in College Chemistry (FS) | | | |

Second Year (31 cr.)

| Fall Semester 3 (15 cr.) | | | Spring Semester 4 (16 cr.) | | |
|--------------------------|-----------------------------|--|----------------------------|---------------------------|--|
| 1 | TSM 201 | Preparing for Workplace Seminar (FS) | 2 | TSM 216 | Adv Tech Graph, Interpret, & CAD (FS) |
| 1 | TSM 214 | Managing Technology Projects (FS) | 2 | TSM 241 | Intro to Manufacturing Processes for Plastics (FS) |
| 3 | TSM 210 | Fundamentals of Technology (FS) | 3 | STAT 104 | Introduction to Statistics (FSSS) |
| 3 | TSM 270 | Principles of Injury Prevention (FS) | 3 | BIOL 101, 211, 212 or 251 | Life Science Biology Requirement (FSSS) |
| 3 | ECON 101 | Principles of Microeconomics (FSSS) | 3 | | International Perspective - See list (FSSS) |
| *3 | ENGL 250 | Writ/Oral/Vis/Elec Composition (FSSS) | *3 | | Speech Communication - See list (FSSS) |
| 1 | ABE 271, ABE 272 or ABE 273 | SolidWorks (FS) Pro/ENGINEER (FS) or 2D AutoCAD (FS) | | | |

**Must earn a C or better*

Summer – R TSM 397 or 399 Internship in Technology (FSSS)

Must submit paperwork to enroll.

GPA minimum 2.5 sophomore, 2.0 junior and senior.

Third Year (31 cr.)

| Fall Semester 5 (16 cr.) | | | Spring Semester 6 (15 cr.) | | |
|--------------------------|---------|--|----------------------------|-----------------|--|
| 3 | TSM 337 | Fluid Power Systems Technology (FS) | 3 | TSM 310 | Total Quality Improvement (FS) |
| 4 | TSM 363 | Electric Power and Electronics for Agriculture and Industry (FS) | 3 | TSM 340 | Adv Automated Mfg Processes (FS) |
| 3 | TSM 370 | Occupational Safety (FS) [Ethics requirement] | 3 | ACCT 215 or 284 | Legal Environment of Business or Financial Accounting (FSSS) |
| 3 | | Humanities - See list (FSSS) | 3 | | Life Science - See list (FSSS) |
| 3 | | US Diversity - See list (FSSS) | 3 | | Advanced English - See list (FSSS) |

Fourth Year (27 cr.)

| Fall Semester 7 (14 cr.) | | | Spring Semester 8 (13 cr.) | | |
|--------------------------|---------|---|----------------------------|---------|--------------------------|
| 2 | TSM 415 | Applied Project Management in Technology (FS) | 3 | TSM 416 | Technology Capstone (FS) |
| 3 | TSM 440 | Cellular Lean Manufacturing Systems (FS) | 3 | TSM 444 | Facility Planning (FS) |
| 3 | TSM 443 | Statics and Strength of Materials for Technology (FS) | 3 | TSM 465 | Automation Systems (FS) |
| 6 | | Elective (FSSS) | 4 | | Elective (FSSS) |

“See list” – Refer to your Degree Audit (available in AccessPlus) for options for each list.

NOTE: This is a sample four-year plan. Your actual semester schedules may vary.