Lower Division General Education Requirements (39 units)

BLOCK A – Basic Subjects (9 units)
A1: COMM 1100 or HNRS 1100
A2: ENGL 1005B or ENGL 1010
A3: COMM1200/ENGL 1005/PHIL 1600/POLS 1555

American Institutions (6 units)
U.S. History
POLS 1000

1 course each A1, A2, A3
Oral Communication (3)
Written Communication (3)
Critical Thinking and Composition (3)

1 course (3)
U.S. constitution State/Local Gov’t (3)
1 Course each B1, B2
*B3 course can be taken in place of either B1 or B2, but not both

1 course B4
1 course (3)
1 course (3)

1 course (3)

1 course each C1, C2 (6)
2 courses (6)

ENG 1500

University Requirement
Writing Proficiency Exam (WPE) UNIV 4000 (0) Prerequisites: Prior to completing 90 semester units, Satisfactory completion of A3

Foundation Program (21 units): Required Courses for first-time freshmen
ACCT 2100 Principles of Financial Accounting (3)
TECH 1000 Introduction to Automotive Mechanisms (3)
TECH 1100 Introduction to Design Application and 3D Modeling (3)
TECH 1200 Practical Electronics (3)
TECH 1300 Introduction to Graphic Communications (3)
TECH 1600 Introduction to Metalworking (3)
TECH 2000 History of Technology (3)

Prerequisites (6 – 7 units)
* MATH 1081 or 1020 Mathematical Analysis I (3) and
* PHYS 1560 Physics for the Twenty-first Century (2)
* PHYS 1570 Physics for the Twenty-first Century Laboratory (1) or
* CHEM 1010 Fundamentals of Chemistry (4)

Note: *These required courses or their equivalents must be taken as part of the General Education Program and are not counted in the units to take for the major.

Required Core (36 units)
TECH 1010 Industrial Safety (3)
ECON 2090 Applied Business and Economic Statistics I (3)
ECON 3090 Applied Business and Economic Statistics II (3)
TECH 3300 Graphic Communications Processes and Materials (3)
TECH 3600 Lean Manufacturing (3)
TECH 3700 Power, Energy and Transportation (3)
TECH 4000 Written Communication Skills for Industrial Technology (3)
TECH 4210 Internetworking Technology (3)
Required Concentration Courses (15 units): Students must choose one concentration area listed below.

Manufacturing Systems and Processes: Required Courses (9 units)
- TECH 3130 Product Design and Development (3)
- TECH 3820 Metrology and Statistical Process Control (3)
- TECH 4660 Additive Manufacturing (3)

Electives (6 units) Students can select 2 courses from the following course list:
- TECH 3150 Project Design and Document Control (3)
- TECH 4600 Advanced Manufacturing Processes (3)
- TECH 4620 Digital Manufacturing (3)
- TECH 4670 Emerging Manufacturing Technologies (3)

Sustainable Power and Transportation Technologies: Required Courses (9 units)
- TECH 4700 Electric and Hybrid Vehicles (3)
- TECH 4720 Photovoltaic Applications (3)
- TECH 4740 Fuel Cell Applications and Hydrogen Infrastructure (3)

Elective Courses (6 units) Students can select 2 courses from the following course list
- TECH 3130 Product Design and Development (3)
- TECH 4710 Engine Design and Performance (3)
- TECH 4760 Measurement, Instrumentation and Control (3)
- TECH 4780 Emerging Technologies in Power, Energy, and Transportation (3)
- MGMT 3060 Operations Management (3)
- MGMT 4505 Project Management (3)

Operations and Supply Chain Management: Required Courses (9 units)
- MGMT 3060 Operations Management (3)
- MGMT 4500 Case Studies in Operations Management (3)
- MGMT 4501 Process Design and Improvement (3)

Elective Courses (6 units): Students can select 2 courses from the following course list
- MGMT 4502 Production and Inventory Management (3)
- MGMT 4503 Total Quality Management (3)
- MGMT 4504 Supply Chain Management (3)
- MGMT 4505 Project Management (3)
- MGMT 4506 Service Management (3)
- MGMT 4105 Managerial Leadership and Motivation (3)

General Education Upper Division Theme (9 units)
- UPPER DIVISION GE THEME 3 Courses (9 units)

Notes:
- GE requirements must add up to at least 48 semester units. (39 Lower Division, 9 Upper Division units)
- An Introduction to Higher Education course (IHE) is required of all first-time freshmen.
- A minimum C grade in A1, A2, A3, and B4 classes is required. A ‘C-’ grade is not acceptable.
- A minimum C grade average in general education is required.
- Student must pass the Writing Proficiency Exam (WPE)
- Civic Learning/Community Engagement Requirement (6 semester units). One (cl) course must be completed at upper division general education level. These courses are designated as (cl) after the course listing.
- Diversity Requirement (6 semester units). Student must complete one race/ethnicity (re) course and one diversity (d) course or another race/ethnicity (re) course. These courses are designated as (re) and (d) after the course listing.
- Writing Intensive Requirement (6 semester units). Students must complete two writing intensive (wi). Courses, with at least one in their major. These courses are designated as (wi) after the course listing.