

Industrial Engineering 2023-2024

| Year | Course | Course | Course | Course | Course | Course |
|------|---|--|--|--|---|---|
| 1-1 | COMM 1050U Technical Communications | ENGR 1015U Introduction to Engineering | MATH 1010U Calculus I | MATH 1850U Linear Algebra for Engineers | PHY 1010U Physics I | |
| 1-2 | CHEM 1800U Chemistry for Engineers (Credit restrictions: CHEM 1010U/CHEM 1020U/CHEM 1110U) | ENGR 1025U Engineering Design (ENGR 1015U) | ENGR 1200U Introduction to Programming for Engineers | MATH 1020U Calculus II (MATH 1010U) | PHY 1020U Physics II (PHY 1010U) | SSCI 1470U Impact of Science and Technology on Society |
| 2-1 | INSE 2110U Health, Safety and Sustainability for Engineers (ENGR 1015U) | MANE 2220U Structure and Properties of Materials (CHEM 1800U) | MATH 2860U Differential Equations for Engineers (MATH 1020U, Coreq: MATH 1850U) | MECE 2230U Statics (MATH 1020U, PHY 1010U) | MECE 2310U Concurrent Engineering and Design (ESNS 1200U or ENGR 1025U) | SOFE 2710U Object Oriented Programming and Design (ENGR 1200U) |
| 2-2 | ELEE 2790U Electric Circuits (PHY 1020U, MATH 1020U, MATH 1850U) | ENGR 2100U Computational Engineering Applications (ENGR 1200U, MATH 1850U, MATH 2860U) | INSE 2210U Operations Research I (Deterministic) (MATH 1010U, MATH 1850U) | MANE 3460U Industrial Ergonomics | MECE 2420U Solid Mechanics I (MECE 2230U) | STAT 2800U Statistics and Probability for Engineers (MATH 1020U) |
| 3-1 | ENGR 3150U (Applied) Artificial Intelligence and Machine Learning (STAT 2800U, SOFE 2710U) | INSE 3110U Operations Research II (Stochastic) (INSE 2210U, STAT 2800U) | INSE 3115U Workplace and Facilities Design (MECE 2310U, MANE 3460U, Coreq: MANE 3190U, INSE 3140U) | INSE 3140U Lean Production Systems Engineering (MECE 2310U, Coreq: MANE 3190U) | INSE 3142U Industrial Internet of Things (ENGR 1200U, SOFE 2710U) | MANE 3190U Manufacturing and Production Processes (MANE 2220U, MECE2420U) |
| 3-2 | ENGR 3215U Engineering Project Management (Coreq: ENGR 3360U) | ENGR 3360U Engineering Economics | INSE 3245U Industrial Data Analytics (STAT 2800U, SOFE 2710U, ENGR 3150U, INSE 3140U) | MANE 3300U Integrated Manufacturing Systems (MANE 3190U) | MANE 4045U Quality Control (STAT 2800U) | METE 4200U Industrial Automation |
| 4-1 | ENGR 4760U Ethics, Law and Professionalism for Engineers | ENGR 4970U Capstone System Design for Industrial Engineering I (Successful completion of all non-elective courses in year three) | INSE 4170U Human-System Integration (MANE 3300U or MANE 3190U, MANE 3460U, METE4200U) | MANE 4390U Modeling Manufacturing Systems (MANE 3300U) | Engineering Elective | Liberal Studies Elective |
| 4-2 | ENGR 4971U Capstone System Design for Industrial Engineering II (ENGR 4970U) | INSE 4248U Industrial Cyber-Physical Systems (MANE 3300U or MANE 3190U, INSE 3142U, ENGR 3150U) | MANE 4015U Reliability and Maintenance (STAT 2800U) | Engineering Elective | Liberal Studies Elective | |