

Manufacturing Engineering 2020-2021

| 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 (Credit Restriction: INFR 1100U) | MATH 1020U Calculus II (MATH 1010U) | PHY 1020U Physics II (PHY 1010U) | SSCI 1470U Impact of Science and Technology on Society |
| 2-1 | 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 (ENGR 3200U or ENGR 1025U) | MECE 2640U Thermodynamics and Heat Transfer (MATH 1020U, PHY 1010U) | |
| 2-2 | ELEE 2790U Electric Circuits (PHY 1020U, MATH 1020U, MATH 1850U) | MATH 2070U Numerical Methods (MATH 1020U, MATH 1850U or MATH 2050U) | MECE 2420U Solid Mechanics I (MECE 2230U) | MECE 2430U Dynamics (MATH 1850U, MECE 2230U) | MECE 2860U Fluid Mechanics (PHY 1010U, MATH 1020U) | STAT 2800U Statistics and Probability for Engineers (MATH 1020U) |
| 3-1 | MANE 3120U Thermo-mechanical Processing of Materials (MANE 2220U) | MANE 3190U Manufacturing and Production Processes (MANE 2220U) | MECE 3030U Computer-Aided Design (MECE 2310U, MECE 2420U) | MECE 3270U Kinematics and Dynamics of Machines (MECE 2430U or ENGR 2020U) | MECE 3350U Control Systems (ELEE 2790U or ELEE 2210U, MATH 2860U) | Liberal Studies Elective |
| 3-2 | ENGR 3360U Engineering Economics | MANE 3300U Integrated Manufacturing Systems (MECE 3030U, MANE 3190U) | MANE 3460U Industrial Ergonomics | MANE 4045U Quality Control (STAT 2800U) | MECE 3220U Machine Design (MECE 3270U, MECE 2310U, MECE 2420U) | MECE 3390U Mechatronics (MECE 3270U, MECE 3350U) |
| 4-1 | ENGR 4760U Ethics, Law and Professionalism for Engineers | ENGR 4950U Capstone Systems Design for Mechanical, Automotive, Mechatronics and Manufacturing Engineering I (Successful completion of all non-elective courses in year three) | MANE 4110U Design for Manufacturing (MECE 3300U, MANE 3190U) | MANE 4280U Robotics & Automation (MECE 3350U) | MANE 4380U Life Cycle Engineering (MECE 3030U) | MANE 4390U Modeling Manufacturing Systems (MANE 3300U) |
| 4-2 | ENGR 4951U Capstone Systems Design for Mechanical, Automotive, Mechatronics and Manufacturing Engineering II (ENGR 4950U) | MANE 4015U Reliability and Maintenance (STAT 2800U) | MECE 4250U Advanced Materials Engineering (MANE 2220U, MECE 2420U) | Engineering Elective | Engineering Elective | Liberal Studies Elective |