

Energy Engineering (2023)

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)	ESNS 2140U Problem Solving, Modelling & Simulation (MATH 1020U, PHY 1010U or ENSY 2210U, ENGR 1200U or CSIC 1040U)	ENEE 2160U Energy and Environmental Impacts (PHY1020U)	NUCL2860U Fluid Mechanics (PHY 1010U, MATH 1020U)	Liberal Studies Elective
2-2	ELEE 2790U Electric Circuits (MATH 1020U, MATH 1850U, PHY 1020U)	ENGR 2100U Computational Engineering Applications (ENGR 1200U, MATH 1850U, MATH 2860U)	NUCL 1530U Radiation and Nuclear Technologies	STAT 2800U Statistics and Probability for Engineers (MATH 1020U)	NUCL2010U Thermodynamic Cycles (PHY 1010U, MATH 1020U)	
3-1	MECE 3260U Introduction to Energy Systems (NUCL2010, ENGR 1015U)	NUCL 3930U Heat Transfer (NUCL2010)	ENEE 3030U Computer-Aided Design (ENGR1025U, Coreq: ESNS 3380U)	MECE 3410U Electro-Mechanical Energy Conversion (ELEE 2790U, MECE 2320U or MECE 2640U or NUCL 2010U)	MECE 3350U Control Systems (ELEE 2790U or ELEE 2210U, MATH 2860U)	ESNS 3380U Strength of Materials (PHY1010, MANE2220)
3-2	ENGR 3360U Engineering Economics	MANE4160U Artificial Intelligence in Engineering (MECE3350U, MATH2070U or ENGR 2100U)	ELEE 3260U Power Systems (ELEE 3250U or MECE 3410U)	ENEE 3265U Hydrogen and Fuel Cells (MECE2320 or NUCL 2010U)	Liberal Studies Elective	
4-1	ELEE 4115U Fundamentals of Smart Grid (ELEE 3260U)	ENEE4160U Capstone Systems Design I (Successful completion of all non-elective courses in year three)	MANE4380U Life Cycle Engineering (MECE 3030U)	ENEE 4161U Solar Energy MECE 3260U and (MECE 3930 or NUCL3930)	ENEE 4163U Wind and Hydro Energy MECE 3410U and MECE 3260U and (MECE 2860U or NUCL 2860U)	ENGR4760U Ethics, Law and Professionalism for Engineers
4-2	ENEE4265U Capstone Systems Design II (ENEE 4160U)	ENEE4260U Integrated Energy Systems (MECE 3260U)	Energy Engineering Elective	Energy Engineering Elective	Energy Engineering Elective	

Energy Engineering and Management (2023)

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)	ESNS 2140U Problem Solving, Modelling & Simulation (MATH 1020U, PHY 1010U or ENSY 2210U, ENGR 1200U or CSIC 1040U)	ENEE 2160U Energy and Environmental Impacts (PHY1020U)	NUCL2860U Fluid Mechanics (PHY 1010U, MATH 1020U)	Liberal Studies Elective
2-2	ELEE 2790U Electric Circuits (MATH 1020U, MATH 1850U, PHY 1020U)	ENGR 2100U Computational Engineering Applications (ENGR 1200U, MATH 1850U, MATH 2860U)	NUCL 1530U Radiation and Nuclear Technologies	STAT 2800U Statistics and Probability for Engineers (MATH 1020U)	NUCL2010U Thermodynamic Cycles (PHY 1010U, MATH 1020U)	
3-1	MECE 3260U Introduction to Energy Systems (NUCL2010, ENGR 1015U)	NUCL 3930U Heat Transfer (NUCL2010)	ENEE 3030U Computer-Aided Design (ENGR1025U, Coreq: ESNS 3380U)	MECE 3410U Electro-Mechanical Energy Conversion (ELEE 2790U, MECE 2320U or MECE 2640U or NUCL 2010U)	MECE 3350U Control Systems (ELEE 2790U or ELEE 2210U, MATH 2860U)	ESNS 3380U Strength of Materials (PHY1010, MANE2220)
3-2	ENGR 3360U Engineering Economics	MANE4160U Artificial Intelligence in Engineering (MECE3350U, MATH2070U or ENGR 2100U)	ELEE 3260U Power Systems (ELEE 3250U or MECE 3410U)	ENEE 3265U Hydrogen and Fuel Cells (MECE2320 or NUCL 2010U)	Liberal Studies Elective	
4-1	BUSI 1130U Introduction to Financial Accounting	BUSI 2050U Managerial Economics	BUSI 2311U Organizational Behaviour	BUSI 3700U Strategic Management for Professionals	ENGR 3160U Engineering Operations and Project Management	
4-2	BUSI 2180U Introduction to managerial Accounting	BUSI 2205U Principles of Marketing	BUSI 2410U Managerial Finance	BUSI 2603U Introduction to Operations Management	Business Elective	
5-1	ELEE 4115U Fundamentals of Smart Grid (ELEE 3260U)	ENEE4160U Capstone Systems Design I (Successful completion of all non-elective courses in year three)	MANE4380U Life Cycle Engineering (MECE 3030U)	ENEE 4161U Solar Energy MECE 3260U and (MECE 3930 or NUCL3930)	ENEE 4163U Wind and Hydro Energy MECE 3410U and MECE 3260U and (MECE 2860U or NUCL 2860U)	ENGR4760U Ethics, Law and Professionalism for Engineers
5-2	ENEE4265U Capstone Systems Design II (ENEE 4160U)	ENEE4260U Integrated Energy Systems (MECE 3260U)	Energy Engineering Elective	Energy Engineering Elective	Energy Engineering Elective	