

Energy Engineering 2024-2025

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	ENEE 2160U Energy and Environmental Impacts (PHY 1020U)	ENEE 2210U Introduction to Alternative Fuels (CHEM 1800U, ENGR 1025U)	MANE 2220U Structure and Properties of Materials (CHEM 1800U)	MATH 2860U Differential Equations for Engineers (MATH 1020U, Coreq: MATH 1850U)	NUCL 2860U Fluid Mechanics (PHY 1010U, MATH 1020U)	
2-2	ELEE 2790U Electric Circuits (MATH 1020U, MATH 1850U, PHY 1020U)	ENGR 2100U Computational Engineering Applications (ENGR 1200U, MATH 1850U, MATH 2860U)	NUCL 2010U Thermodynamic Cycles (PHY 1010U, MATH 1020U)	STAT 2800U Statistics and Probability for Engineers (MATH 1020U)	Liberal Studies Elective	
3-1	ENEE 3030U Computer-Aided Design (ENGR 1025U, Coreq: ESNS 3380U)	ESNS 3380U Strength of Materials (PHY 1010U, MANE 2220U)	MECE 3260U Introduction to Energy Systems (NUCL 2010U or MECE 2320U or MECE 2640U, ENVS 1000U or ENGR 1015U)	MECE 3350U Control Systems (ELEE 2790U or ELEE 2210U or METE 2010U, MATH 2860U, MECE 2430U)	MECE 3410U Electro-Mechanical Energy Conversion (ELEE 2790U, MECE 2320U or MECE 2640U or NUCL 2010U)	NUCL 3930U Heat Transfer (NUCL 2010U)
3-2	ELEE 3260U Power Systems (ELEE 3250U or MECE 3410U)	ENEE 3265U Hydrogen and Fuel Cells (MECE 2320U or NUCL 2010U)	ENGR 3360U Engineering Economics	MANE 4160U Artificial Intelligence in Engineering (MECE 3350U, MATH 2070U or ENGR 2100U)	Liberal Studies Elective	
4-1	ELEE 4115U Fundamentals of Smart Grid (ELEE 3260U)	ENEE 4161U Solar Energy (MECE 3260U, (MECE 3930U or NUCL 3930U))	ENEE 4163U Wind and Hydro Energy (MECE 3410U, MECE 3260U, (MECE 2860U or NUCL 2860U))	ENGR 4760U Ethics, Law and Professionalism for Engineers	ENGR 4960U Capstone Systems Design for Energy Engineering I (Successful completion of all non-elective courses in year three)	MANE 4380U Life Cycle Engineering
4-2	ENEE 4260U Integrated Energy Systems (MECE 3260U)	ENGR 4961U Capstone Systems Design for Energy Engineering II (ENGR 4960U)	Engineering Elective	Engineering Elective	Engineering Elective	