

Nuclear 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	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	ELEE 2790U Electric Circuits (MATH 1020U, MATH 1850U, PHY 1020U)	ESNS 2140U Problem Solving, Modelling & Simulation (MATH 1020U, CSCI 1040U or ENGR 1200U, ENSY 2210U or PHY 1010U)	MANE 2220U Structure & Properties of Materials (CHEM 1800U or CHEM 1020U)	MATH 2860U Differential Equations for Engineers (MATH 1020U Coreq: MATH 1850U or MATH 2050U)	NUCL 2500U Interaction of Radiation with Matter (MATH 1020U, PHY 1020U)	NUCL 2860U Fluid Mechanics (MATH 1020U, PHY 1010U)
2-2	ENGR 2100U Computational Engineering Applications (ENGR 1200U, MATH 1850U, MATH 2860U)	NUCL 2010U Thermodynamic Cycles (MATH 1020U, PHY 1010U)	NUCL 2240U Nuclear Engineering Fundamentals (ESNS 2140U)	NUCL 2950U Radiation Protection (NUCL 2500U or ENGR 2500U)	STAT 2800U Statistics & Probability for Engineers (MATH 1020U)	Liberal Studies Elective
3-1	ESNS 3380U Strength of Materials (PHY 1010U, MANE 2220U)	NUCL 3740U Scientific Instrumentation (ELEE 2790U, STAT 2800U)	NUCL 3820U Nuclear Reactor Physics (NUCL 2500U, MATH 2860U)	NUCL 3930U Heat Transfer (NUCL 2010U)	NUCL 4640U Nuclear Plant Operation (PHY 1020U or NUCL 3820U or ENGR 3820U)	
3-2	ENGR 3360U Engineering Economics	ESNS 3750U Integrated Engineering Laboratory (ENGR 2140U or ESNS 2140U, NUCL 2860U or ESNS 2200U, ESNS 3380U or ENGR 3380U)	NUCL 4610U Corrosion for Engineers (CHEM 1020U or CHEM 1800U)	NUCL 4780U Nuclear Reactor Design (NUCL 2500U, NUCL 2860U, NUCL 3820U, NUCL 3930U)	Liberal Studies Elective	
4-1	NUCL 4625U Radioactive Waste Management Design (ENGR 3570U or RAD 3570U, ENGR 3930U or NUCL 3930U, ENGR 4610U or NUCL 4610U)	NUCL 4700U Nuclear Plant Design & Simulation (NUCL 2010U, NUCL 4640U, NUCL 4780U)	NUCL 4730U Reactor Control (NUCL 3820U)	NUCL 4994U Capstone Design I (all courses above completed)	Engineering Elective	
4-2	ENGR 4760U Ethics, Law and Professionalism for Engineers	ESNS 4660U Risk Analysis Methods (STAT 2800U)	NUCL 4460U Nuclear Power Systems (NUCL 2010U, ENGR 3930U or NUCL 3930U)	NUCL 4525U Nuclear Plant Safety Design (ENGR 4640U or NUCL 4640U, ENGR 4660U or ESNS 4660U, ENGR 4700U or NUCL 4700U)	NUCL 4998U Capstone Design II (NUCL 4994U)	Engineering Elective