

Nuclear Engineering

Minimum credit hour requirements for the Bachelor's Degree in Nuclear Engineering: 130

FIRST YEAR					
	FALL	Credits		SPRING	Credits
ENGR-1100	Introduction to Engineering Analysis	4	ENGR-1200	Engineering Graphics & CAD	1
PHYS-1100	Physics I	4	PHYS-1200	Physics II	4
MANE-1961	Introduction to Nuclear Engineering ²	1	MATH-1020	Calculus II	4
MATH-1010	Calculus I	4	CHEM-1100	Chemistry I	4
HASS	Hum. or Soc. Sci. Elective	4	HASS	Hum. or Soc. Sci. Elective	4
		17			17
SECOND YEAR					
	FALL	Credits		SPRING	Credits
MATH-2400	Introduction to Differential Equations ⁶	4	CSCI- 1190	Beginning Programming for Engineers	1
MANE-2830	Nuclear Phenomena for Eng.	4	MANE-2400	Fundamentals of Nuclear Engineering	4
ENGR-1600	Materials Science	4	MANE-4350	Nuclear Instrumentation & Measurement	3
MATH-2010	Multivariable Calculus and Matrix	4	HASS	Hum. or Soc. Sci. Elective	4
				Free Elective I	4
		16			16
THIRD YEAR					
	Summer Arch Semester	Credits		FALL	Credits
ENGR-2250	Thermal and Fluids Engineering I	4	MANE-4400	Nuclear Power Systems Engineering	4
ENGR-2050	Introduction to Engineering Design ¹	4	MANE-4470	Radiological Engineering	3
ENGR-2600	Modeling and Analysis of Uncertainty	3	MANE-4480	Physics of Nuclear Reactors	4
HASS	Hum. or Soc. Sci. Elective	4		Professional Development II ⁵	2
			HASS	Hum. or Soc. Sci. Elective	4
		15			17
FOURTH YEAR					
	FALL	Credits		SPRING	Credits
MANE-4050	Modeling & Control of Dynamic Systems	4	MANE-4390	NE Senior Design Project II	2
MANE-4370	Nuclear Engineering Lab	4	MANE-4440	Critical Reactor Laboratory	3
MANE 4380	NE Senior Design Project I	1		Technical Elective ⁴	3
ENGR-4010	Professional Development III ³	1		Restricted Elective II ³	3
	Restricted Elective I ³	3		Free Elective III	4
	Free Elective II	4			
		17			15

1. Includes Professional Development I.
2. Other 1-credit Engineering Exploration courses, such as ENGR 1300 may be substituted.
3. May be taken either semester senior year.
4. Any course in engineering or science at 2000 level or higher.
5. This course will be fulfilled from a list published at the start of each semester.
6. MATH 2010 and MATH 2400 may be taken in either semester of the second year.