

# Nuclear, Plasma, and Radiological Engineering Curriculum Map

Students should use this curriculum map as a guide to have a more informed discussion with the departmental academic advisor when selecting courses. Students not taking courses as advised may result in a delayed graduation date.

<i>Freshman</i>		<i>Sophomore</i>		<i>Junior</i>		<i>Senior</i>	
15-16 hrs	16-17 hrs	16 hrs	17 hrs	17 hrs	16 hrs	16 hrs	14 hrs
MATH 221 (4)	MATH 231 (3)	MATH 241 (4)	MATH 285 (3)	NPRE 446 (3)	NPRE 421 (3) <sup>6</sup>	NPRE 431 (3)	NPRE 441 (4)
CHEM 102 (3)	CS 101 (3) <sup>3</sup>	TAM 210 (2) <sup>3,5</sup>	TAM 212 (3) <sup>5</sup>	TAM 335/ME 310 (4) <sup>7</sup>	NPRE 447 (3)	NPRE 448 (4)	NPRE 458 (4)
CHEM 103 (1)	PHYS 211 (4)	PHYS 212 (4)	PHYS 214 (2)	Gen Ed Elect (3) <sup>2</sup>	NPRE 451 (3)	Prof Conc Elect (6) <sup>6</sup>	Prof Conc Elect (6) <sup>6</sup>
ENG 100 (0)	Gen Ed Elect (3) <sup>2</sup>	Prof Conc Elect (3) <sup>6</sup>	ME 200 (3)	Free Elect (3)	NPRE 455 (4)	Gen Ed Elect (3) <sup>2</sup>	
RHET 105 (4) <sup>1</sup>	Free Elective (3) <sup>4</sup>	Gen Ed Elect (3) <sup>2</sup>	NPRE 247 (3)	ECE 205 (3)	Prof Conc Elect (3) <sup>6</sup>		
NPRE 100 (1)			Gen Ed Elect (3) <sup>2</sup>	ECE 206 (1)			
Gen Ed Elect (3) <sup>2</sup>							

<sup>1</sup>RHET 105 (or an alternative Composition I sequence) is taken either in the first or second semester of the first year, according to the student's UIN (Spring if your UIN is Odd). A course for free elective is taken the other semester. Composition I guidelines can be found at <http://catalog.illinois.edu/general-information/degree-general-education-requirements/> under Written Communication Requirement.

<sup>2</sup>Students must take 6 hours from the campus General Education Social and Behavioral Sciences list, 6 hours from campus General Education Humanities and the Arts list, and 6 hours from a liberal education list approved by the college or from the campus General Education lists for Social and Behavioral Sciences or Humanities and the Arts. ECON 102 or ECON 103 must be one of the Social and Behavioral Sciences courses. Students must also complete the campus cultural studies requirement by completing (i) one western/comparative culture(s) course, (ii) one non-western culture(s) course, and (iii) one U.S. Minority Culture(s) course from the General Education cultural studies lists. Most students select general education courses that simultaneously satisfy these cultural studies requirements.

<sup>3</sup>Students may elect to take CS 125 in place of CS 101, and TAM 211 in place of TAM 210. The extra hour will be applied toward the Professional Concentration Area electives.

<sup>4</sup>Consideration should be given to NPRE 101 or taking courses help to fulfill a minor

<sup>5</sup>Students in the Plasma and Fusion Science Eng Professional Concentration Area may elect to take PHYS 325 in place of TAM 212. Further, students in this concentration may elect to take both PHYS 325 and PHYS 326 in place of TAM 210 and TAM 212, which helps to facilitate a PHYS minor.

<sup>6</sup>Students must fulfill the NPRE Professional Concentration Area requirement by taking the required technical courses and technical elective courses in one of the three professional concentration areas: Power, Safety and the Environment, Plasma and Fusion Science and ENG, or Radiological, Medical and Instrumentation Applications.

<sup>7</sup>Students in the Power, Safety and Environment and in the Plasma and Fusion Science Eng Professional Concentration Areas must take either TAM 335 OR ME 310 and NPRE 421. Students in the Radiological, Medical and Instrumentation Applications Concentration are not required to take these courses but may instead use the hours to take electives in their chosen area.