

**Curriculum Leading to the Degree of Bachelor of Science  
in Nuclear Engineering in Partnership with the  
University of Wisconsin-Madison &  
North Carolina State University  
(140/139 Credit Hours)**

**FRESHMAN**

<b>First Semester</b>	<b>Credits</b>	<b>Second Semester</b>	<b>Credits</b>
E 150 English I	3	E 151 English II	3
M 158 Calculus I	4	M 168 Calculus II	4
UNIV 101 Intro. to Comm.	2	P 254/251 General Physics I	3/1
C 150/151 General Chemistry I	3/1	ET 150 Mech. Draw & Basic CAD	3
ENGR/ET 170 Intro to Engr.	3	C 152/153 General Chemistry II	3/1
**PEO 150 or HED 151 or MS 101	2		
18		18	

**SOPHOMORE**

<b>First Semester</b>	<b>Credits</b>	<b>Second Semester</b>	<b>Credits</b>
M 278 Calculus III	4	NEEP 271 Engr. Prob. Solving I	3
P 255/253 General Physics II	3/1	EET 230 Circuit Analysis	3
ENGR 212 Statics	3	M 403 Differential Equations	3
NE 397 Nuclear Energy	3	P 406 Intro to Modern Physics	3
+Computing Elective	3	ENGR 213 Strength of Materials	3
E 250 or E 251 Literature	3	NE 305 Intro to Nuclear Engr.	3
20		18	

**JUNIOR**

<b>First Semester</b>	<b>Credits</b>	<b>Second Semester</b>	<b>Credits</b>
M 208 Introduction to Statistics	3	ENGR 425 Fluid Dynamics	3
ENGR 313 Dynamics	3	C314 Nucl. Engr. & Radchem Inst.	3
M 350 Applied Mathematics	3	ENGR 417 Mech. of Materials Lab	3
ENGR 421 Thermodynamics	3	ET 250 Tech. Comm. or S 250 Public Spe.	3
ENGR 435 Heat Transfer	3	H 250 or H 251 History	3
~Liberal Studies Elective	3	NEEP 405 Nuclear Reactor Theory	3
18		18	

**SENIOR**

<b>First Semester</b>	<b>Credits</b>	<b>Second Semester</b>	<b>Credits</b>
~Liberal Studies Elective	3	^NEEP 412 Reactor Design	5
NE 411 Nuclear Reactor Engr.	3	^NEEP 428 Nuclear Reactor Lab	2
ENGR 450 Engineering Materials	3	^NEEP/*NE Approved Elective	3
NEEP 471/^571 Econ. & Env. Asp. of NE	3	*NE 408 Senior Design	3
*NE 406 Senior Design Prep.	1	*NE 491/NE 301 Reactor Lab	2
NE 408 Ionizing Radiation	3	~Liberal Studies Elective	3
NE 499 Special Topics in NE	2		

(17cr UWM Track / 18cr NC State Track)

(13cr UWM Track / 11cr NC State Track)

**+Required Computing Elective**

CS 161 – Intro. to Programming or EET 320 – Intro. to Computer Programming

**~Required Liberal Studies Elective**

- (1) PSY 250 – Intro. to Psychology or SOC 250 – Intro. to Sociology
- (2) ETS 250 – African American History or HHU 250 – The African American Experience
- (3) ARTS 250 – Art Appreciation or MU 250 – Music Appreciation or D 254 – Drama

*^Courses taken at the University of Wisconsin-Madison (UWM)*

*\*Courses taken at North Carolina State University (NCSU)*

*\*\* students may take any of the following courses (below) within the Physical Education 150 series*

*(PEA, PEB, PEC, PEF, PEG, PEH, PEI, PEJ, PEK, PEL, PEM, PEN, PEO, PEP, PEQ, PER, PES, PET, PEU, PEV)*