

NC Community College Four-Year Pathway Plan

Schedule for Full-Time Students
Pursuing AS Degree & transfer into Nuclear Engineering (BS) at NCSU.
(Placed Out Of All Developmental Courses)

North Carolina Community College classes are listed below in bold with the NC State degree requirements fulfilled listed next to the classes.

North Carolina State University **strongly recommends** students complete their Associate's degree prior to transferring to NCSU. Pathways are structured for students who have completed all requirements for their Associate's degree and [qualify for the CAA](#).

NC COMMUNITY COLLEGE FIRST YEAR				
Fall Semester	Credit		Spring Semester	Credit
ENG 111 - ENG 101: Academic Writing and Research	3		ENG 112 - GEP Requirement	3
MAT 271 – MA 141, Calculus I	4		MAT 272 – MA 241, Calculus II	4
CHM 151 – CH 101: General Chemistry I, CH 102: General Chemistry I Lab	4		DFT 170 – GC 120, GEP Requirement	3
ECO 251 – EC 201, Departmental Economics Requirement	3		PHY 251 – PY 205 & PY 206	4
ACA 122 - Free Elective	1		EGR 150 – Departmental Substitution for E 101	2
TOTAL CREDIT HOURS	15		TOTAL CREDIT HOURS	16

Students must take ACA 122 in the first or second semester.

NC COMMUNITY COLLEGE SECOND YEAR				
Fall Semester	Credit		Spring Semester	Credit
PHY 252 – PY 208 & PY 209	4		PSY 150 – PSY 200, GEP Social Science	3
ENG 231 – ENG 265, GEP Humanities	3		COM 231 – COM 110, Advanced Communication Elective	3
MAT 273 – MA 242, Calculus III	4		PHI 215 – PHI 205, GEP Humanities	3
MA 285 – MA 341, Differential Equations	3		EGR 220 – MAE 206	3
HUM 110 – STS 214, GEP Interdisciplinary Perspectives	3		TOTAL CREDIT HOURS	12
TOTAL CREDIT HOURS	17			

THIS SHEET IS FOR ADVISING PURPOSES ONLY. Students should work with their Advisor to determine course selections that will result in the greatest transferrable credit, for the intended program, upon transfer to the four-year school.

Note 4-semester outline based upon no pre-requisites classes required.

- Students should seek academic advising to determine the best courses and sequence to meet their educational goals and degree requirements.
- Following the Pathway to Degree does not guarantee admission to NC State University or guarantee an AS degree or BS degree will be conferred.
- Please refer to NC State Undergraduate Admissions for more information on admission to NC State and the transfer of credits to NC State: <http://admissions.ncsu.edu/transfer-students/>

NC STATE UNIVERSITY

Schedule of Courses for the Nuclear Engineering (BS) (14EEBS)

Before applying please consult the [Transfer Admission Review Standards](#) for admission into the College of Engineering.

NC STATE JUNIOR YEAR			
Fall Semester	Credit		Spring Semester
E 115: Computing Environments	1		NE 202: Radiation Sources, Interaction & Detection
NE 201: Intro to Nuclear Engineering	2		MAE 301: Thermodynamics I
NE 301: Fundamental of Nuclear Engineering	4		Tech Elective
CSC 113: MATLAB	3		NE 401: Reactor Analysis & Design
MAE 208: Dynamics	3		NE 400: Nuclear Reactor Energy & Conversion
MA 401: Differential Equations II	3		
TOTAL CREDIT HOURS	16		TOTAL CREDIT HOURS
			18
NC STATE SENIOR YEAR			
Fall Semester	Credit		Spring Semester
NE 402: Reactor Engineering	4		NE 405: Reactor Systems
NE 404: Radiation Safety & Shielding	3		NE 408: Nuclear Desing Project
NE 406: Senior Design Prep	1		ENG Tech Elective
NE Elective	3		MSE 201: Structure & Properties of Engineering Materials
MAE 308: Fluid Mechanics I	3		ISE 311: Engineering Economic Analysis
TOTAL CREDIT HOURS	14		TOTAL CREDIT HOURS
			15
Minimum Credit Hours Required for Graduation:			123
Hours Remaining in NC State Degree:			63