

# NC Community College Four-Year Pathway Plan

Schedule for Full-Time Students  
Pursuing AS Degree & transfer into Biomedical 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](#).

**\*\*\*This degree pathway requires a 6<sup>th</sup> semester at NC State. Please consult with your transfer advisor to plan accordingly\*\*\***

NC COMMUNITY COLLEGE FIRST YEAR				
Fall Semester	Credit		Spring Semester	Credit
<b>ENG 111</b> - ENG 101: Academic Writing and Research	3		<b>ENG 112</b> - GEP Requirement	3
<b>MAT 271</b> – MA 141, Calculus I	4		<b>MAT 272</b> – MA 241, Calculus II	4
<b>CHM 151</b> – CH 101: General Chemistry I, CH 102: General Chemistry I Lab	4		<b>PHY 251</b> – PY 205 & PY 206	4
<b>ECO 251</b> – EC 201, Departmental Economics Requirement	3		<b>EGR 150</b> – Departmental Substitution for E 101	2
<b>ACA 122</b> - Free Elective	1		<b>HUM 110</b> – STS 214, GEP Interdisciplinary Perspectives	3
<b>TOTAL CREDIT HOURS</b>	<b>15</b>		<b>TOTAL CREDIT HOURS</b>	<b>16</b>

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

NC COMMUNITY COLLEGE SECOND YEAR				
Fall Semester	Credit		Spring Semester	Credit
<b>PHY 252</b> – PY 208 & PY 209	4		<b>EGR 220</b> – Engineering Elective	3
<b>COM 231</b> – COM 110, GEP Humanities	3		<b>ENG 231</b> – ENG 265, GEP Humanities	3
<b>MAT 273</b> – MA 242, Calculus III	4		<b>POL 130</b> – PS 202, GEP Additional Breadth	3
<b>CHM 251</b> – CH 222: Organic Chemistry, CH 223: Organic Chemistry Lab	4		<b>MAT 285</b> – MA 341, Differential Equations	3
<b>TOTAL CREDIT HOURS</b>	<b>15</b>		<b>PSY 150</b> – PSY 200, GEP Social Science	3
			<b>TOTAL CREDIT HOURS</b>	<b>15</b>

**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 Biomedical Engineering (BS) (14BMEBS)

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

\*\*\*This degree pathway requires a 6<sup>th</sup> semester at NC State. Please consult with your transfer advisor to plan accordingly\*\*\*

NC STATE JUNIOR YEAR				
Fall Semester	Credit		Spring Semester	Credit
BME 201: Computer Methods in Biomedical Engineering	3		BME 203: Introduction to Materials Science of Biomaterials	3
BME 204: BME Measurements	3		BME 252: Biomedical Engineering and Design Manufact. I	1
BIO 183: Intro to Cellular and Molecular Biology	4		BME 210: Biomedical Electronics	3
E 115: Intro to Computing Environments	1		MAE 208: Engineering Dynamics	3
<b>TOTAL CREDIT HOURS</b>	<b>11</b>		<b>TOTAL CREDIT HOURS</b>	<b>10</b>

NC STATE SENIOR YEAR				
Fall Semester	Credit		Spring Semester	Credit
BME 301: Human Physiology for Engineers I	3		BME 302: Human Physiology for Engineers II	3
ST 370: Probability and Statistics for Engineers	3		BME Elective B	3
BME 311: Linear Systems in Biomedical Engineering	3		BME Elective C	3
BME Elective A	3		BME 352: Biomedical Engineering and Design Manufact. II	2
<b>TOTAL CREDIT HOURS</b>	<b>12</b>		<b>TOTAL CREDIT HOURS</b>	<b>11</b>

NC STATE FIFTH YEAR				
Fall Semester	Credit		Spring Semester	Credit
BME 451: Engineering Design I	3		BME 452: Engineering Design II	3
BME Elective D	3		BME Elective F	3
BME Elective E	3		ENG 331: Com. Engr. & Tech. or ENG 333: Com. Sci. & Res.	3
MAE 201: Engineering Thermodynamics I	3		<b>TOTAL CREDIT HOURS</b>	<b>9</b>
MSE 301: Introduction to Thermodynamics of Materials	3			
<b>TOTAL CREDIT HOURS</b>	<b>15</b>			

--	--	--	--	--

Minimum Credit Hours Required for Graduation:	127
---	-----

Hours Remaining in NC State Degree:	68
-------------------------------------	----

--	--