



# UNC Charlotte Baccalaureate Degree Plan

## Systems Engineering, B.S.S.E

North Carolina Community College classes are listed below in left column. The UNC Charlotte equivalent course is listed in the column next to the NCCCS courses.

The University of North Carolina at Charlotte strongly recommends students complete their Associate degree prior to transferring to UNC Charlotte. Pathways are structured for students who have completed all requirements for their Associate degree and qualify for the CAA.

Please Note: BDP's are developed based on the approved curriculum for each catalog year. Based on admitted term of entry and the curriculum posted for the catalog year, programs of study are subject to change.

UNC Charlotte Baccalaureate Degree Plans

[seem.charlotte.edu](http://seem.charlotte.edu)

Additional Requirements / Special Note for Admission to the upper division in major:	Transfer Admission Requirements: for direct admission into the William States Lee College of Engineering <ul style="list-style-type: none"> <li>• 24 transferable credits complete</li> <li>• Cumulative GPA of 2.5 or higher required</li> <li>• College-level Calculus I (MAT 271 at NC Community) must be complete with a grade of C or higher prior to transferring</li> </ul>
--	--

		NC Community College Course	UNC Charlotte Equivalent Course	Notes
<b>Semester 1</b> 13 Credit Hrs	4	MAT 271: Calculus I ** UGETC: Math	MATH 1241: Calculus I **	
	2	EGR 150 Intro to Engineering **	ENGR 1201 Intro to Engineering **	
	3	ENG 111: Writing and Inquiry UGETC: Composition	WRDS 1103 Wrtnng & Inqry Acdmc Ctx I & II	
	3	Student Choice UGETC: Social/Behavioral	General Education Course	
	1	ACA 122: College Transfer Success	TRNF 1ELE: Transfer Elective	

		NC Community College Course	UNC Charlotte Equivalent Course	Notes
<b>Semester 2</b> 17 Credit Hrs	4	MAT 272: Calculus II ** UGETC: Math	MATH 1242: Calculus II **	
	4	PHY 251 General Physics I & Lab ** UGETC: Natural Science	PHYS 2101: Physics for Science & Engineering I & Lab **	
	3	ENG 112: Writing and Research in the Disciplines UGETC: Composition	CTCM 2530: Critical Thinking and Communications	
	3	Student Choice UGETC: Humanities/ Fine Arts	General Education Course	
	3	Student Choice UGETC: Humanities/ Fine Arts	General Education Course	

		NC Community College Course	UNC Charlotte Equivalent Course	Notes
<b>Semester 3</b> 14-15 Credit Hrs	4	MAT 273: Calculus III *	MATH 2241: Calculus III *	
	4	PHY 252: General Physics II & Lab *	PHYS 2102: Physics for Science & Engineering II & Lab *	
	3-4	BIO 110, BIO 111, CHM 121, COM 110, 231, GEL 111	Science Elective *	BIO 110, BIO 111 or GEL 111
	3	Student Choice UGETC: Humanities/ Fine Arts	General Education Course	

## UNC Charlotte Baccalaureate Degree Plan

		NC Community College Course	UNC Charlotte Equivalent Course	Notes
<b>Semester 4</b> 16 Credit Hrs	3	ECO 251 Principles of Microeconomics	ECON 2102: Principles of Economics-Micro	Technical Elective
	3	MAT 285 Differential Eq	MATH 2171: Differential Equations	
	3	MAT 280 Linear Algebra	MATH 2164: Matrices & Linear Algebra	
	4	CHM 151: General Chemistry I & Lab **	CHEM 1251: Principles of Chemistry I **	
	3	CSC 121 or CSC 133 or CSC 134 or CSC 151	SEGR 2105: Computational Methods for Systems Engineering *	

<b>Critical Course Indicator</b>	
2 Star (***) Critical Course	Critical Success Course that is a required introductory or prerequisite course within the Major and/or prerequisite course for UNC Charlotte Upper Division coursework for intended major
1 Star (*) Critical Course	Critical Success Course necessary for seamless transition and required for UNC Charlotte Upper Division coursework for intended major
0 Star (Lt Green color only) Critical Course	Key Success Marker Course that is important for seamless transition but can be secured after transfer

<b>Color Key</b>	<b>Category</b>
Light Green	Success Marker Course (Critical Course)
Light Blue	UGETC: General Education Course



# UNC Charlotte Baccalaureate Degree Plan

		UNC Charlotte Equivalent Course	Notes
<b>Semester 5</b> 17 Credit Hrs	2	ENGR 1202: Introduction to Engineering II	
	3	STAT 3128: Probability and Statistics for Engineering	
	3	SEGR 2106: Engineering Economic Analysis	
	3	SEGR 2110: Systems Engineering Concepts	
	3	SEGR 3105: Computational Methods for Systems Engineering II	
	3	SEGR 3201: Deterministic Operations Research	

		UNC Charlotte Equivalent Course	Notes
<b>Semester 6</b> 18 Credit Hrs	3	SEGR 3202: Stochastic Operations Research	
	3	SEGR 3102: Systems Simulation	
	3	SEGR 3111: Project Management	
	3	SEGR 3110: Systems Design and Deployment	
	3	SEGR 4114: Production Control Systems	
	3	Technical Elective / Concentration	

		UNC Charlotte Equivalent Course	Notes
<b>Semester 7</b> 15 Credit Hrs	2	SEGR 3290: Systems Design Project I	
	3	ENGR 3295: Multi-disciplinary Prof. Development	
	3	SEGR 3107: Decision and Risk Analysis	
	1	SEGR 4141: Engineering Experimental Design	
	3	Technical Elective / Concentration	
	3	Technical Elective / Concentration	

		UNC Charlotte Equivalent Course	Notes
<b>Semester 8</b> 14 Credit Hrs	2	SEGR 3291: Systems Design Project II	
	3	SEGR 4170: Total Quality Systems	
	3	Technical Elective / Concentration	
	3	Technical Elective / Concentration	
	3	Technical Elective / Concentration	

60	Total NCCCS Credit Hours
64	Total UNC Charlotte Hours
<b>124</b>	<b>Total Credit Hours</b>