

## Mechanical Engineering, B.S.M.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](http://coe.charlotte.edu)  
coe.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 3.0 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>
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		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	
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		NC Community College Course	UNC Charlotte Equivalent Course	Notes
<b>Semester 3</b> 15 Credit Hrs	4	MAT 273: Calculus III **	MATH 2241: Calculus III **	
	4	CHM 151: General Chemistry I & Lab **	CHEM 1251: Principles of Chemistry I & Lab **	
	3	DFT 170: Engineering Graphics	ENGR 1202: Engineering Graphics	Recommended Elective
	4	PHY 252: General Physics II & Lab **	PHYS 2102: Physics for Science & Engineering II & Lab **	

# UNC Charlotte Baccalaureate Degree Plan

		NC Community College Course	UNC Charlotte Equivalent Course	Notes
<b>Semester 4</b> 15-16 Credit Hrs	3	ECO 251 Principles or Microeconomics	ECON 2102: Principles of Economics-Micro	
	3	MAT 285 Differential Eq	MATH 2171: Differential Equations	Recommended Elective
	3	MAT 280 Linear Algebra	MATH 2164: Matrices & Linear Algebra	Recommended Elective
	3-4	BIO 111, CHM 152, COM 110, 231, GEL 111, HUM 110, PHI 240	General Education Course	BIO 111, CHM 152, or GEL 111 Preferred
	3	EGR 220: Engineering Statics	MEGR 2141: Engineering Statics	Recommended Elective

Additional transferable mechanical engineering classes offered at NC Community Colleges include: EGR 214, EGR 225, and EGR 228. These may not fit into your associates degree, but speak with your community college academic advisor.

Critical Course Indicator	
2 Star (**) Critical Course	Critical Success Course that is a required introductory or prerequisite course within the Meta 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

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

		UNC Charlotte Equivalent Course	Notes
<b>Semester 5</b> 17 Credit Hrs	2	MEGR 2156: Design Projects Laboratory	
	3	MEGR 2180: Manufacturing Systems	
	3	MEGR 2240: Computational Methods for Engineering	or EGR 214
	3	ECGR 2161: Basic Electrical Engineering	
	3	MEGR 2144: Introduction to Solid Mechanics	or EGR 228
	3	MEGR 3121: Dynamic Systems I	or EGR 225

		UNC Charlotte Equivalent Course	Notes
<b>Semester 6</b> 15 Credit Hrs	3	MEGR 3111: Thermodynamics I	
	3	MEGR 3161: Introduction to Engineering Materials	
	2	MEGR 3171: Introduction to Measurements and Instrumentation	
	2	MEGR 3171 Lab: Instrumentation Laboratory	
	3	MEGR 3114: Fluid Mechanics	
	2	MEGR 3156: Design Projects Lab II	

		UNC Charlotte Equivalent Course	Notes
<b>Semester 7</b> 15 Credit Hrs	2	MEGR 3152: Mechanics and Materials Laboratory	
	2	MEGR 3251: Thermal/Fluids Laboratory	
	2	MEGR 3255: Senior Design I	
	3	MEGR 3116: Introduction to Heat Transfer	
	3	MEGR 3112: Thermodynamics II	
	3	MEGR 3122: Dynamic Systems II	

		UNC Charlotte Equivalent Course	Notes
<b>Semester 8</b> 12 Credit Hrs	2	MEGR 3256: Senior Design II	
	3	MEGR 3221: Machine Analysis and Design	
	1	ENGR 3295: Multidisciplinary Professional Development	
	3	Technical elective Choose from a list of approved courses	
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		UNC Charlotte Equivalent Course	Notes
<b>Semester 9 (or summer)</b> 9 Credit Hrs	3	MATH/STAT Elective or STAT 318	
	3	Technical elective Choose from a list of approved courses	
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60	Total NCCCS Credit Hours
65	Total UNC Charlotte Hours
<b>125</b>	<b>Total Credit Hours</b>