North Carolina Community College Transfer Guide into
The William States Lee College of Engineering

Degree: Bachelor of Science in [Major]
Majors: Civil Engineering
Computer Engineering
Electrical Engineering
Mechanical Engineering
Systems Engineering

Admission Requirements: Admission to civil, computer, electrical, and systems engineering requires an overall transfer GPA of 2.5 for all college courses. The transfer GPA required for admission to mechanical engineering is 3.0. Admission to an engineering program also requires completion of pre-calculus with a grade of C or higher. The pre-calculus course must be equivalent to UNC Charlotte's MATH 1103 or a higher level course for which pre-calculus is a pre-requisite (MAT 172).

Recommended Transfer Courses: Students should use the UNC Charlotte Transfer Credit Advisor to verify that courses taken at their institution will count for an equivalent course here. Refer to the Academic Plan of Study for courses required for the major. Students are also encouraged to complete University General Education requirements in addition to the following courses.

Community College Course	UNC Charlotte Equivalent Course Title	UNC Charlotte Equivalent Course Number	Civil	Computer	Electrical	Mechanical	Systems
CHM 151*	General Chemistry I	CHEM 1251 and 1251L	X	X	X	X	X
CSC 134	Computer Utilization in C++	ECGR 2103	X	X	X		
CSC 234**	Computer Engineering Programming II	ECGR 2104		X			
DFT 151**	CAD I	CEGR 2101	X				
DFT 170	Engineering Graphics	ENGR 1202				X	
ECO 151	Economics of Social Issues	ECON 1101					X
ECO 251 or 252	Principles of Economics – Macro or Micro	ECON 2101 or 2102	X	X	X	X	
EGR 150	Intro to Engineering Practices & Principles I	ENGR 1201	x	x	x	x	x
MAT 271	Calculus I	MATH 1241	X	X	X	X	X
MAT 272	Calculus II	MATH 1242	X	X	X	X	X
MAT 273	Calculus III	MATH 2241	X		X	X	X
MAT 285	Differential Equations	MATH 2171	X	X	X	X	
PHY 251*	Physics for Science and Engineers I	PHYS 2101 and 2101L	X	X	X	X	X
PHY 252*	Physics for Science and Engineers II	PHYS 2102 and 2102L	X	X	X – Lab not required	X	X

*Note: Unless otherwise specified, these courses **must** include labs.*
**Note: These courses are not in the AE curriculum but will count toward a student's degree at UNC Charlotte

Associates of Engineering Degree

Student earning the AE degree will select 15 credits from the elective portion of their AE degree. Each engineering major at UNC Charlotte has made specific recommendations for these elective credits. We understand that not all suggested courses are offered at all community colleges. Please work with an academic advisor at your community college to select the most appropriate coursework that meets both your AE requirements and the program curriculum of your intended engineering major at UNC Charlotte. To be eligible for admission into the engineering programs at UNC Charlotte, students earning the AE must obtain a grade of "C" or better in each course and an overall GPA of at least 2.5.

Note: **The transfer GPA required for admission to Mechanical Engineering is 3.0.**

Other General Education and Pre-major Elective Hours: (15 credits)

Community College Course	Community College Course Title	UNC Charlotte Equivalent Course Number	Civil	Computer	Electrical	Mechanical	Systems
BIO 111	General Biology	BIOL 1110	X			Science Elec Option	X
CHM 152	General Chemistry II	CHEM 1252	X			Science Elec Option	X
CSC 134	C++ Programming	ITSC 1212	ENGR 1202	ECGR 2103	ECGR 2103		
DFT 170	Engineering Graphics	TRNF 0001				ENGR 1202*	
EGR 212	Logic System Design I	TRNF 0001		ECGR 2181	ECGR 2181		
EGR 215	Network Theory I	TRNF 0001		ECGR 2111	ECGR 2111		
EGR 216	Logic & Networks Lab I	TRNF 0001 (1 CHR)		ECGR 2155	ECGR 2155		
EGR 220	Engineering Statics	MEGR 2141 Engineering Mechanics	Required Tech Elec			X	Required Tech Elec
EGR 225	Engineering Dynamics	MEGR 3121 Dynamics 1	Required Tech Elec			X	
EGR 228	Intro. to Solid Mechanics	MEGR 2144 Intro to Solid Mechanics				X	
MAT 280	Linear Algebra	MATH 2164 Matrices & Linear Algebra	X	X	X	X	X
MAT 285	Differential Equations	MATH 2171 Differential Equations	X	X	X	X	X

*DFT-170/ENGR 1202: Requires a design project and use of Creo or Solidworks