

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

Transfer Admission Requirements: *for direct admission into the William States Lee College of Engineering*

- 24 transferable credits complete
- Cumulative GPA of 2.5 or higher required for Civil, Computer, Electrical and Systems Engineering
- Cumulative GPA of 3.0 or higher required for Mechanical Engineering
- College-level Calculus I (MAT 271 at NC Community) must be complete with a grade of C or higher prior to transferring

Recommended Transfer Courses: Students can refer to the [Undergraduate Academic Programs](#) for courses required for each engineering major. Students are also encouraged to complete University [General Education requirements](#) in addition to the major-specific suggested courses below:

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
CSC 134	Computer Utilization in C++	ECGR 2103	X	X	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	
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	X
MAT 280	Matrices & Linear Algebra	MATH 2164	X	X	X	X	X
MAT 285	Differential Equations	MATH 2171	X	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*	X	X

*Note: all science courses require labs unless notated with **

Associates of Engineering Degree

Students 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.**

Pre-major Suggestions to select within AE degree:

Community College Course	Community College Course Title	UNC Charlotte Equivalent Course <i>(unless otherwise specified by discipline)</i>	Civil	Computer	Electrical	Mechanical	Systems
BIO 111	General Biology	BIO 1110	X			Fulfills Science Elec. Option	X
CHM 152	General Chemistry II	CHEM 1252	X			Fulfills Science Elec. Option	X
CSC 134	C++ Programming	ECGR 2103	X- ENGR 1202	X	X		
CSC 234	Computer Engr. Programming II	ITCS 2ELE		X- ECGR 2104			
DFT 170*	Engineering Graphics	TRNF 1ELE				X-ENGR 1202*	
EGR 212	Logic System Design I	ECGR 2181		X	X		X
EGR 214	Num. Methods for Engineers	TRNF 2ELE				X- MEGR 2240	
EGR 215	Network Theory I	TRNF 2ELE		X- ECGR 2111	X- ECGR 2111		X
EGR 216	Logic & Networks Lab I	TRNF 2ELE (1 CHR)		X- ECGR 2155	X- ECGR 2155		
EGR 220	Engineering Statics	MEGR 2141 ENGR Mechanics I	X			X	X
EGR 225	Engineering Dynamics	TRNF 2ELE	X- MEGR 3121			X- MEGR 3121	X- MEGR 3121
EGR 228	Intro to Solid Mechanics	TRNF 2ELE	X- MEGR 2144			X- MEGR 2144	
MAT 167	Discrete Math	MATH 1165 Intro to Discrete Structures		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