

# Electrical Engineering Associate of Science | Degree Map


	Course	Category	Credits	Session
SEMESTER 1	ECF100 First Year Seminar for Engineering & Computer Science	PC	2	I
	ENG101 English Composition I	RC	3	I
	MAT201 Calculus I (see Math note on back)	RC	4	I
	SCC201 General Chemistry I	PC	4	I
	HUM101 Intro. to Music or HUA101 Intro. to Art (recommended)	FC	3	II
	MAT202 Calculus II ( <span style="color: red;">Scientific World: pre-req for MAT203</span> )	FC	4	II

	Course	Category	Credits	Session
SEM. 2	ENG259 Technical Writing	RC	3	I
	MAE101 Engineering Lab I	PC	1	I
	SCP231 General Physics I ( <span style="color: red;">Life and Physical Sciences: pre-req for SCP232</span> )	RC	4	I
	SSA101 Cultural Anthropology (recommended)	FC	3	I
	MAC108 Introduction to Python	PC	3	II

	Course	Category	Credits	Session
SEM. 3	MAT203 Calculus III	PC	4	I
	SCP232 General Physics II ( <span style="color: red;">Scientific World</span> )	FC	4	I
	HUP104 Ethics & Moral Issues (recommended)	FC	3	I
	MAT204 Elementary Differential Equations	PC	4	II

	Course	Category	Credits	Session
SEMESTER 4	MAE219 Thermodynamics (Capstone)	PC	3	I
	MAE213 Electrical Circuits	PC	3	I
	MAT221 Probability	PC	4	I
	MAT212 Linear Algebra & Vector Analysis	PC	3	I
	SSN187 Urban Sociology (Urban Study) (recommended)	FC	3	I
	<b>Register for GRDOOO "Intent to Graduate" in CUNYfirst to apply for graduation in your final semester</b> Students must take at least one Urban Study course			

Start planning now for what comes after graduation! Connect with [Transfer Services](#) and the [Center for Career & Professional Development](#). Also see the back of this map for more information on transfer.

	<b>Credits Required to Graduate</b>		More information at <a href="http://laguardia.edu/engineeringscience" style="color: white;">laguardia.edu/engineeringscience</a>
	<b>Category</b>		
	Pathways Required Core (RC)	14	Effective Fall 2025-Spring 2026 catalog. Updated: 1/6/2025
	Pathways Flexible Core (FC)	20	
	Program Core (PC)	31	Follow the map for the catalog year in which you first enrolled.
Total	65	Check Degree Audit & speak to an advisor for more support.	

## City College Dual Enrollment

Engineering is a “dual enrollment” program. Once students complete their studies at LaGuardia, they will have the opportunity to transition to City College as third year students in pursuit of a bachelor’s degree.

## Pathways Requirements & Transfer

PATHWAYS REQUIRED CORE (RC) Pathways is CUNY’s general education framework. For Required Core, students must take 2 English courses, 1 Mathematics and Quantitative Reasoning course, and 1 Life and Physical Sciences course. For more details visit the [Pathways Required Core website](#).

MATHEMATICS AND QUANTITATIVE REASONING MAT201 Calculus I is the required course but students may need to first take MAT115/117 Algebra & Trigonometry and/or MAT200 Precalculus.

PATHWAYS FLEXIBLE CORE (FC) allows students to choose courses based on interests, transfer or career plans, or for general exploration. Associate of Science students must take one course from each category listed below, plus an additional course from any category. View DegreeWorks or our [Pathways website](#) to see a full range of options, or talk with the program director or an advisor. Note: your program has specific requirements & recommendations listed below. The recommendations facilitate transfer to City College or other 4-year engineering programs.

- Creative Expression: **HUM101 Intro to Music** or **HUA101 Intro to Art**
- Individual & Society: **HUP104 Ethics & Moral Issues**
- Scientific World: **MAT202 Calculus II** required
- U.S. Experience in its Diversity: **SSN187 Urban Sociology**
- World Cultures and Global Issues: **SSA101 Cultural Anthropology**
- Additional (Scientific World): **SCP232 General Physics II** required

TRANSFER AGREEMENTS The Engineering program has an agreement with the following 4-year college. By graduating from LaGuardia and meeting certain requirements, you will be able to complete your studies at a 4-year college and earn a bachelor’s degree. For more information, visit our [Transfer Agreement \(Articulation\) web page](#).

1. City College – Bachelor’s of Engineering (dual enrollment program)