Major/Program	Mathematics (Engineering)
College	Science and Mathematics
Department	Mathematics
Contact	Dr. Jennifer Yates, Dean

2025--2026

Lander University
4-Year Major Guide
Odd Year Fall Entry

Can be moved to any semester

First Year

First Semester

Course	Notes	Hours
CHEM 111		4
ENGL 101	*Core Academic Skills (General Education)*	3
HIST 101, HIST 102, HIST 113, ANTH 101, PSYC 101	*Behavioral and Social Perspectives (General Education)*	3
MATH 141	*Core Academic Skills (General Education)*	4
LINK 101	*Leadership, Involvement, Networking and Knowledge (General Education)*	1
	Subtotal	**15**

Second Semester

Course	Notes	Hours
CIS 130		4
ENGL 102	*Core Academic Skills (General Education)*	3
MATH 134		3
MATH 142	*Scientific and Mathematical Reasoning (General Education)*	4
SOC1 101,SOCI 202,POLS 103,ECON 201,ECON 202	*Behavioral and Social Perspectives (General Education)*	3
	Subtotal	**17**

TOTALS

Yearly Totals → **32**

Second Year

First Semester

Course	Notes	Hours
Elective or Math elective		3
MATH 241		4
MATH 308		3
Math Elective or World Cultures	*World Cultures (General Education)*	3
PHYS 211	*Scientific and Mathematical Reasoning (General Education)*	4
	Subtotal	**17**

Second Semester

Course	Notes	Hours
CHEM 112, GEOL 111, or BIOL 101	*as required by engineering field*	3
ENGL 201, 202, 204, 205, ENGL 221, 241, or 251	*Humanities and Fine Arts (General Education) {Clemson Literature Rqmnt]*	3
MATH 242		4
PHYS 212		4
	Subtotal	**14**

Yearly Totals → **31**

Third Year

First Semester

Course	Notes	Hours
CIS 202		3
HUMA 285, 330,THTR 201, MUSI 101, 333, 377, 378, or PHIL 102, 103	*Humanities and Fine Arts (General Education) {Clemson Non Literature Rqmnt]*	3
MATH 421 or MATH 431		3
MATH 311		3
Math Elective or Elective		4
	Subtotal	**16**

Second Semester

Course	Notes	Hours
Elective or Math elective		4
HIST 111R, HIST 112R, or POLS 101R	*Founding Documents (General Education)*	3
MATH 499		1
Math Elective or World Cultures	*World Cultures (General Education)*	3
Math Elective or Elective		3
	Subtotal	**14**

Yearly Totals → **30**

Total Hours Required From Lander: **93**

Summer

Course	Notes	Hours

Course	Notes	Hours
Clemson Course	*Clemson encourages students to take one course at Clemson in the summer prior to entering the engineering program.*	3
	Subtotal	**3**

Yearly Totals → **3**

Course	Notes	Hours

Course	Notes	Hours
Transferred from Clemson		24
	Subtotal	**24**

Yearly Totals → **24**

Total Hours Required: **120**

Civil Engineering requires GEOL 111. Electrical requires CHEM 112. Environmental requires CHEM 112, GEOL 111, and BIOL 101. Industrial may use any one of the three to complete lab science requirements at Clemson.

Students in Mechanical Engineering strongly encouraged to take MATH 300:Numerical Analysis. Students in Electrical Engineering strongly encouraged to take MATH 325 Discrete Mathematics and either MATH 431 Analysis I (even fall) or MATH 432 Complex Analysis (odd spring)

Notes on elective Hours:

CIS 230 is required in the Electrical Engineering program.

CIS 231 (every fall) is recommended for Computer Engineering

SPCH 101 is strongly encouraged for Civil, Electrical and Industrial Engineering programs as it fulfills Clemson's Oral Communication requirement.

WRIT 450 Technical Writing will fulfill a Clemson requirement for Civil, Computer, Electrical, and Mechanical engineering programs.