



**OGLETHORPE**  
UNIVERSITY

# B.S. Physics-Engineering Track (20-21 Bulletin)

<https://bulletin.oglethorpe.edu/9-major-minor-programs-requirements/>

## CORE Requirements

<u>Freshman Year</u>	<u>Sophomore Year</u>	<u>Junior Year</u>	<u>Senior Year</u>	<u>Required Humanities</u>	<u>Required Math</u>
COR 101 ( 4hrs)	COR 201 ( 4hrs)	COR 301 (4hrs)	COR 400 (4hrs)	<b>Choose One:</b>	COR 314 (4hrs)
COR 102 ( 4hrs)	COR 202 ( 4hrs)	COR 302 (4hrs)		COR 103 ( 4hrs)	
				COR 104 (4hrs)	
				COR 105 ( 4hrs)	

## Major Course Requirements

Completion of all the following courses:

CHM 101	General Chemistry I (and laboratory, CHM 101L)
CHM 102	General Chemistry II (and laboratory, CHM 102L)
MAT 131	Calculus I
MAT 132	Calculus II
MAT 233	Calculus III
MAT 236	Differential Equations
PHY 201	College Physics I (and laboratory, PHY 101L)
PHY 202	College Physics II (and laboratory, PHY 102L)

Completion of all the courses listed in one of the following two options:

Option 1:

MAT 241	Proof and Logic
MAT 372	Linear Algebra

Option 2 (highly recommended for those wishing to pursue the Engineering Track):

MAT 238	Linear Algebra for Engineering and Economics
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Completion of one of the following courses:

CSC 201	Introduction to Computer Programming
PHY 203	Modern Physics (and laboratory, PHY 203L)
PHY 211	Classical Mechanics I (and laboratory, PHY 211L)
PHY 331	Electricity and Magnetism I
PHY 333	Thermal and Statistical Physics
PHY 334	Quantum Mechanics

**Additional Requirements listed on the next page**

## Overall Graduation Requirements

<http://bulletin.oglethorpe.edu/8-degrees-offered-graduation-requirements/8-5-graduation-requirements/8-5-4-bachelor-science/>

**What? Two degrees, two great institutions.**

Oglethorpe’s Dual-Degree Engineering Program enables students to obtain two degrees, from Oglethorpe University and from one of our partnered engineering universities, in a highly structured program. Oglethorpe has dual-degree agreements with Georgia Institute of Technology, Auburn University and Kennesaw State University. The program combines study in the liberal arts and sciences at Oglethorpe with technical work in one of the engineering fields at the engineering school. Upon successful completion of the program, the student receives the Bachelor of Science in Physics - Engineering degree from Oglethorpe and the Bachelor of Science in Engineering degree from the larger university.

**Why? An education that is broad and deep.**

The Dual-Degree Engineering Program provides the student with the best of both worlds. At Oglethorpe you will have the all the advantages of being instructed by highly skilled professors whose primary interest is teaching – small classes taught by professors rather than graduate students, personalized attention, accessibility of faculty. Our Core Curriculum will give you a broad education in the primary fields of knowledge which will equip you to be a lifelong leader and learner, with the ability to adapt easily to the constantly changing modern world. You will hone your ability to read, write, speak, and reason with clarity. Your time at Oglethorpe will also give you the solid foundation in mathematics and science needed to succeed when you arrive at the engineering school. Engineering is a difficult subject. Your foundational preparation in the mathematics and basic science fields is crucial to success as an engineer.



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Completion of other courses as necessary, based on the desired engineering partner school's particular requirements and also based upon the student's desired area of engineering expertise. Close cooperation is required between every student, the Engineering program coordinator and the student's academic advisor.

Satisfactory completion of the entire TU General Education program (see Sec. 7.1.) and a minimum of 96 earned semester hours at Oglethorpe are needed before students can transition to an engineering partner institution. Other requirements may apply. Students must confer regularly with the Engineering program coordinator and their academic advisor.

Additional requirements and things to note:

- It is strongly recommended, but not required, that Engineering students complete CSC 201 Introduction to Computer Programming.
- A cumulative grade-point average of 2.0 or higher is required for all courses contributing to the major.
- Evaluation by, and consultation with, Physics faculty (and especially the Engineering program coordinator) is generally required in order to permit transfer work to count for any of the courses required for the major.
- Engineering students will not receive any Oglethorpe University financial aid once such students transfer to the appropriate engineering partner school.
- Students are cautioned that in order to receive the B.S. in Physics-Engineering Track the student must satisfactorily complete all work specified above at Oglethorpe, then apply to, and be accepted at, one of the engineering partner schools (limited to Georgia Institute of Technology, Auburn University and Kennesaw State University), and then successfully achieve degree conferral at the engineering partner school in an appropriate engineering field. Only after the engineering partner awards the student an engineering degree will Oglethorpe, in turn, award the B.S. in Physics-Engineering Track degree. Students who have no intention or likely ability to successfully transfer to an engineering partner school should not pursue this major. Instead, such students should select one of the other majors available at Oglethorpe.

**The final responsibility for meeting all graduation requirements stated in the Oglethorpe Bulletin rests with the student.**

See the Oglethorpe Bulletin for a complete list of graduation requirements: <http://bulletin.oglethorpe.edu/>