

## Engineering Majors

Last revised: 9/22/2023

Calculus I, II, III  
Differential Equations  
General Physics I, II with calculus  
Introduction to Engineering  
Programming Language\*  
Linear Algebra (for most majors)\*  
General Chemistry I (for most majors)\*

\*see reverse side



**AUBURN UNIVERSITY  
AT MONTGOMERY**

**For more information visit  
[www.eng.auburn.edu](http://www.eng.auburn.edu)  
or call 334.844.4310**

**Engineering Club:** Prestigious! Making Bio-Diesel, building Robots, recycling and lots of fun stuffs!!!

**E-Day:** last Friday in February of each year. The engineering club organizes a car-pool to attend this annual event in the morning of the E-day.

### Transferring from AUM to Auburn

You need to meet the following minimum requirements:

- 1) cumulative GPA  $\geq 2.5$ .
- 2) eligibility to re-enter AUM
- 3) a minimum of 30 credit hours of core course work including at least the following courses:
  - a English (college-level composition or literature, at least C),
  - a History,
  - Calculus I (at least C) and
  - a natural science with a laboratory.

- ✓ Apply to Auburn at least **nine** months in advance.
- ✓ Apply for admission on line at [www.auburn.edu](http://www.auburn.edu).
- ✓ Have **two** official transcripts sent to Auburn Admissions.
- ✓ Send a plan of study.
- ✓ Attend a one-day orientation, after you are accepted at Auburn.



## AUM Pre-Engineering Program

The AUM PreEngineering Program (PEN) offers a strong foundation for students intending to earn bachelor degrees in engineering at the Auburn University Samuel Ginn College of Engineering. The Program takes approximately two years of full-time college work to complete before the student is ready to transfer over to the Auburn main campus. The PEN is coordinated by the Department of Mathematics, AUM.

### Engineering Programs at Auburn

Aerospace (AERO)	Industrial & Systems (INSY)
Biosystems (BSEN)	Materials (MATL)
Chemical (CHEN)	Mechanical (MECH)
Civil (CIVL)	Computer (CMPE)
Software (SENG)	Electrical (ELEC)
Wireless (WREE)	Computer Science (CSCI)
Biological and Agricultural Technology Management (BATM)	

### Contact at AUM

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## Recommended Core Classes

Mathematics, Physics and Engineering	English	Social Sciences	Humanities
Calculus I, II, III <sup>1</sup> MATH 1610, 1620, 2630	English Composition I: ENGL1010	World History I, II: HIST 1010, 1020 <sup>4</sup>	World Literature I/II (take one): ENGL 2600/2610 <sup>7</sup>
Differential Equations MATH 3690 <sup>2</sup>	English Composition II: ENGL 1020	Other Social Science (take one) ECON 2010 <sup>5</sup> , POLS 2020 <sup>6</sup>	Fine Arts (take one) MUSC 2110, THEA 2040, VISU 1000
General Physics I, II with Calculus <sup>3</sup> PHYS 2100-1, 2200-1	Writing: ENGL 3010 or 3030 <sup>10</sup>	PSYC 2110, ANTH 2110, GEOG 2050, SOCI 2000 or SOCI 2007(Honors)	Ethics PHIL 2100 <sup>8</sup>
Introduction to Engineering ENGR 1110 <sup>11</sup>			COMM 1010 or 2212 <sup>9</sup>

1: Calculus II and III not required by BATM; Calculus III not required by CSCI/SENG, but can be a CSCI/SENG math elective. 2: Not required for BATM; Not required for CSCI/SENG, but can be a CSCI/SENG math elective. 3: General Physics II (Calculus-based) is not required for Biosystems and BATM. CSCI and SENG may use any one of the Biology, Chemistry, Geology or Physics sequences. 4. The sequence may be replaced by Civilization HIST 1060 and 1070. The American History sequence (HIST 2010 and 2020) is also accepted. However, this sequence does not meet Auburn SLO8, SLO9 requirements. Students who have taken American History sequence must very carefully determine which additional social science courses should be taken to meet the Auburn SLO 8&9 requirements. CIVL recommends choosing a History sequence instead of a Literature sequence. 5. Biosystems prefers choosing ECON 2010; BATM, and Materials must choose ECON 2010. 6. CIVL must choose POLS2020. 7. The sequence may be replaced by [ENGL 2530 & 2540] Survey of English Literature I & II or [ENGL 2570 & 2580] Survey of American Literature I & II. 8. CMPE, ELEC, WREE, INSY, and Pre-medicine and biomedical specializations in CHEN accept AUM PHIL 2100. 9. Required for CSCI, SENG, BATM. 10. Required for BATM. 11. Not required for BATM.

## Other Recommended Classes by Major

	AERO	BSEN	BATM	CHEN	CIVL <sup>#</sup>	CSCI <sup>+</sup>	CMPE	ELEC	INSY	MATL	MECH	SENG <sup>+</sup>	WREE
Chemistry I: CHEM 1100-1	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓		✓
Chemistry II: CHEM 1200-1		✓		✓	✓					✓			
Organic I, II: CHEM 3100-1, 3200-1				✓									
Linear Algebra: MATH 2660/3660	✓					✓	✓	✓	✓	✓	✓	✓	✓
Biology I: BIOL1010-1		✓	✓	✓									
Biology II: BIOL 1020-1		✓*	✓										
Statistics: STAT 4670									✓				
ENGR 1210 (Matlab)	✓	✓		✓						✓	✓		
Other Math Courses	Math 4600					&One math elective						&Two math electives	

\*: Not for Forest Option. #: CIVL require a science elective. <sup>+</sup>: CSCI, SENG require a 8-hour science sequence (Chemistry I and II or Biology I and II or General Physics I and II).

&: Math electives offered at AUM: MATH 2630, 3690, 3660, 4040, 4230, 4300, 4310, 4320, 4600, and STAT 4670.