

AUM

**AUBURN UNIVERSITY
AT MONTGOMERY**

PRE-ENGINEERING PROGRAM

The AUM **PRE-ENGINEERING 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 program is coordinated by the Department of Mathematics, AUM.

ENGINEERING MAJORS

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

ENGINEERING PROGRAMS AT AUBURN

Aerospace (AERO)	Industrial & Systems (INSY)
Biosystems (BSEN)	Materials (MATL)
Chemical (CHEN)	Mechanical (MECH)
Civil (CIVL)	Computer (ECPE)
Software (SWEN)	Electrical (ELEC)
Wireless (WIRE/WIRS)	

CAREER ADVICE

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Dr. Tianran Chen
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Engineering Club: Practice your engineering skills by making bio-diesel, building robots, recycling, or other club projects.

E-Day: Last Friday in February of each year. The engineering club organizes a car-pool to attend this annual event.

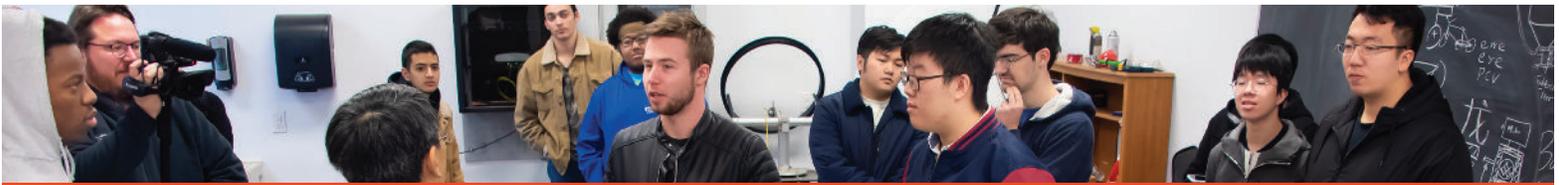
TRANSFERRING FROM AUM TO AUBURN

You need to meet the following minimum requirements:

1. cumulative GPA ≥ 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.

1. Apply for admission on line at www.auburn.edu.
2. Have two official transcripts sent to Auburn Admissions.
3. Send a plan of study.
4. Attend a one-day orientation, after you are accepted at Auburn.



WHAT DOES AN ENGINEER DO?

- Engineers figure out how things work and find practical uses for scientific discoveries.
- Today's engineers not only build huge structures such as the international space station, nuclear power plants, or load bearing buildings, they also build better smaller computer chips, and design better systems and processes to optimize business systems.
- Engineers may design systems using electrical circuits, biology, mechanical components, and newly developed materials.
- Engineers may design infrastructures such as highways, airports, and shipping routes.
- Today's engineers have endless opportunities to put their knowledge and skill to work.

JOB OUTLOOK

Overall employment in engineering occupations is projected to grow 4 percent from 2021 to 2031. In addition, job opportunities will arise from the need to replace workers who retire or leave their jobs. About 200,900 openings each year are projected to come from growth and replacement needs.



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WHY BEGIN YOUR ENGINEERING DEGREE AT AUM?

COMPREHENSIVE

Our curriculum includes a broad range of topics such as introduction to engineering, programming for engineers and scientists, the calculus sequence, linear algebra, differential equations, and statistics.

STATE-OF-THE-ART

Students are trained using state-of-the-art software packages such as MATLAB.

SMALL CLASS SIZE

Most classes have no more than 25 students allowing close supervision and networking with faculty.

CAREER PROSPECTS

Elias Lee

Pre-engineering student at AUM. Graduated in Dec. 2017 with a B.S. in Mechanical Engineering from Auburn University. Currently, he is Assistant Manager at Hyundai Motor Manufacturing Alabama, LLC.

Mike Bartsch

Pre-engineering student at AUM. Graduated in May 2016 with a B.S. in Civil Engineering from Auburn University. Currently, he is a Construction Project Manager at Southern Nuclear, GA.

SCHOLARSHIPS

The Blount Presidential Endowed Scholarship is awarded to outstanding graduating high school seniors in the state of Alabama enrolled in the pre-engineering curriculum and committed to either civil or mechanical engineering. For more information visit <https://www.aum.edu/admissions/freshman-scholarships/>

The Math Department and University Financial Aid Office fund undergraduate scholarships for qualified freshmen and top-performing current students. For more information, visit <https://www.aum.edu/collegeofsciences/departments/scholarships/#1630691260786-a2f5aa42-bab8>.

Mason Nixon

Pre-engineering student at AUM. Obtained his B.S. in Mechanical Engineering from Auburn University in 2011. Currently, he is Senior GN&C and Communications Engineer.

Ishmael Lee

Pre-engineering student at AUM. Graduated in May 2018 with a B.S. in Civil Engineering from Auburn University. Currently he is a Project Engineer at CERM.