

PATHWAYS | MATERIALS ENGINEERING

Bachelor of Materials Engineering



SAMUEL GINN COLLEGE OF
ENGINEERING

COURSE SELECTION

FRESHMAN

- Familiarize yourself with engineering requirements and explore interest areas
- Pre-engineering required: MATH 1600, 1620, CHEM 1030/1031, CHEM 1040 / 1041, PHYS 1610, COMP 1200 (Matlab), ENGR 1100, ENGR 1110, ECON 2020 (required social science)
- Start considering cross-disciplinary specialization.

SOPHOMORE

- Maintain a good GPA, seek academic support early and often.
- Once in major, meet with MATL advisor.
- Gateway courses: MATH 2630, MATH 2650, PHYS 1610, ENGR 2050/2070, MATL 2100
- Decide on cross-disciplinary specialization. (3 courses required)

JUNIOR

- Gateway courses: MATL 3100/3101, MATL 3200/3201, MATL 3300, ENGR 2200
- Start on cross-disciplinary specialization.
- Complete MATL courses and cross-disciplinary specialization.

SENIOR

- Schedule Graduation Credit Check with ESS advisor one semester prior to graduation.
- Register for UNIV 4AA0 EN1 (the graduation list) for your final semester.

ASK FOR ASSISTANCE

- Meet with your assigned ESS academic advisor each semester to discuss class schedule and academic plan.
- Check out free ESS tutoring to get off to a strong start. (eng.auburn.edu/current-students)



Shelby Center, home of the College of Engineering student advising.

- Academic Support provides several *free* resources to improve performance including Study Partners, Supplemental Instruction and academic coaching. (auburn.edu/academicsupport)
- Visit Engineering Career Connections & the AU Career Center to help build a resume, find out about internships and on-campus recruiting activities.

- Work with staff in Engineering Career Connections and/or AU Career Center to explore company options, receive individualized assistance and update your resume and cover letter.

- Update resume and cover letter. Continue developing interview skills. (see Career Center for mock interviews)
- Meet with faculty in your department to learn about graduate opportunities.

GAIN EXPERIENCE

- Explore extracurricular opportunities such as CO-OP, internship, study abroad, undergraduate research.

- Intern and participate in CO-OP to add valuable work experience to your resume.
- You can pursue internships in any engineering field.
- Explore options for Study Abroad. (auburn.edu/studyabroad)
- Explore undergraduate research.

- Attend the STEM Career Expo
- Consider graduate school opportunities and explore with advisors.
- Get involved with undergraduate research projects.

- Attend the STEM Career Expo, All Majors Career Fair and/or the Graduate and Professional School Fair.
- Seek job opportunities and send out resumes.

GET INVOLVED

- Check out AUIinvolve (auburn.edu/auinvolve) to identify organizations of interest.
- Check out Engineering opportunities like Auburn Materials Society (AMS) or Society of Women Engineers (SWE) (eng.auburn.edu/current-students)



- Join the Auburn Materials Society.

- Utilize AUIinvolve (auburn.edu/auinvolve) to identify organizations of interest to attend meetings and enhance your resume



- Pursue leadership roles in Engineering and University-wide organizations to gain experience and enhance your resume.

- Become involved with departmental alumni as a resource for job opportunities, internships and post-graduate work.

CAREER PLANNING

AUBURN UNIVERSITY CAREER CENTER

303 MARY MARTIN HALL | [AUBURN.EDU/CAREER](http://auburn.edu/career)

Like all engineering fields strong candidates for employment will possess excellent critical thinking and problem solving ability. This program provides students a broad foundation in chemistry, physics, and mathematics. Individuals entering into this field can look forward to opportunities that involve significant amount of design, development, fabrication, and evaluation.

SEMICONDUCTOR PROCESSING ENGINEER

MINIMUM EDUCATION: B.M.E.

ENTRY LEVEL SALARY RANGE: \$62K - \$75K

FAILURE ANALYSIS CONSULTANT

MINIMUM EDUCATION: B.M.E.

ENTRY LEVEL SALARY RANGE: \$50K - \$70K

MATERIALS SCIENTIST

MINIMUM EDUCATION: Ph.D.

ENTRY LEVEL SALARY RANGE: \$74K - \$90K

These are just three options out of many that materials engineering majors pursue. For more career options be sure to check out "What Can I Do With a Major In..." on auburn.edu/career.



Mary Martin Hall, home of the Auburn University Career Center

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