

PATHWAYS | APPLIED MATHEMATICS - ACTUARIAL SCIENCE OPTION

Bachelor of Science in Mathematics and Applied Mathematics



COLLEGE OF
SCIENCES &
MATHEMATICS

COURSE SELECTION

FRESHMAN

- By taking core classes, develop a basic understanding how mathematics can be useful in other courses.
- Take Pre-Cal course if you have not already taken it so as to be ready to start with the Calculus sequence.

SOPHOMORE

- Develop a more advanced understanding of Calculus in Differential Equation and Linear Algebra. Take MATH 2790 to be introduced to interest theory.
- If not already completed, take MATH 3100 to prepare for advance courses like MATH 5000 Modeling.

JUNIOR

- Take MATH 4790 and MATH 4820 to prepare for SOA Exams FM and P, respectively.
- At the end of the year obtain graduation check from COSAM Advising.

SENIOR

- Bring together your understanding of mathematical concepts including modeling, applications, and proof techniques by taking MATH 5000.
- Take the MATH 5800/5810 sequence to learn the concepts and methods of Mathematics of Life Contingencies and get started on your preparation for Exam MLC.
- Take the GRE test (and the GRE subject test if necessary) during the fall semester if you plan on going to graduate school.

ASK FOR ASSISTANCE

- Meet with your academic advisor regularly for individual planning and guidance.
- Mathematics department provides free tutoring services in Parker Hall for most MATH courses up to 2000 level.
- Free tutoring is also available in the university library through the Study Partners program.
- Talk to your faculty advisor about selecting a minor that fits your academic and professional goals.
- Discuss with your Math advisor your interest in graduate studies and/or industry.
- Consider participating in a study abroad program.
- Meet with someone in the Career Center to explore career options and get feedback on your resume.
- Talk to your faculty advisor about opportunities for an internship.
- If interested in graduate study, start preparing for GRE or GMAT. Also, find out if your intended program requires a subject specific GRE to be taken.
- Ask the Career Center for help in preparing your resume (CV), interviewing skills, and letter of intent.
- Identify your reference letter writers early and provide plenty of notice.

GAIN EXPERIENCE

- Volunteer in student organizations such as the Math Club, CUMSA (Council of Undergraduate Students at Auburn), and the SIAM Chapter.
- Seek research opportunities with faculty and apply for an AU or COSAM Undergraduate Research Fellowship.
- Attend the Wednesday Graduate Students Seminar in Parker Hall to hear from Math Faculty and Graduate Students about in-department research.
- Register to sit for Exams P and FM at the end of semesters in which you take respective exam prep courses.
- Apply for Undergraduate Teaching Assistantship (UTA) in order to gain experience in teaching.
- Apply for an AU or COSAM Undergraduate Research Fellowship.
- Pursue an internship related to your career goals while earning academic credit.
- Attend career events like the Auburn Career Fair and STEM Career Expo.
- Sit in for Exams P and FM if you have not already passed them. Prepare for Exam MFE by taking Math 5870.
- Continue working as UTA to enhance your chances of being awarded an assistantship for your graduate work.
- Attend career events like the All Majors Career Expo.
- Present your research at AU Research Week, Actuarial Research Conference, Alabama Academy of Sciences, SIAM, or the America Math Society meetings.

GET INVOLVED

- Join the AU Math Club
- Attend meetings of the Council of Undergraduate Mathematics Students at Auburn (CUMSA).
- Utilize AUInvolve (auburn.edu/auinvolve) to identify organizations of interest to attend meetings and enhance your resume.
- Take advantage of visits to the department by practicing actuaries who come to give presentations about the actuarial profession and interview students for internship positions at their companies.
- Continue to attend the meetings of the AU Math Club and CUMSA. Share your suggestions and network with seniors.
- Explore leadership opportunities within AU Math Club, CUMSA, Auburn University Journal of Undergraduate Scholarship (AUJUS) and other organizations to develop practical skills and abilities. Leadership can serve as a great way to gain related experience.
- Become a student member of a professional organization such as SIAM, AMS, MAA and attend their meetings to take advantage of networking opportunities.
- Sometimes, there is financial support available to attend their conferences.

CAREER PLANNING

AUBURN UNIVERSITY CAREER CENTER

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

Traditionally, the majority of actuaries work in careers associated with the insurance industry. An increasing number of actuaries work in the broader financial services sector including commercial and investment banking and retirement funds. Actuaries are also employed by corporations, as well as by state and federal governments.

ACTUARY

MINIMUM EDUCATION: B.S.

ENTRY LEVEL SALARY RANGE: \$58.1K - \$96.7K

FINANCIAL ANALYST

MINIMUM EDUCATION: B.S.

ENTRY LEVEL SALARY RANGE: \$48.2K - \$78.6K

UNDERWRITER

MINIMUM EDUCATION: B.S.

ENTRY LEVEL SALARY RANGE: \$39.3K - \$64.2K

These are just three options out of many that math 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

Updated: October 3, 2016