PATHWAYS | Applied Mathematics - Discrete Option

Bachelor of Science in Mathematics and Applied Mathematics

COURSE SELECTION

FRESHMAN
• Develop a more advanced understanding of the calculus concepts and skills in differential equation and linear algebra.
• Talk to your Math advisor about the many choices you will soon have in regard to your math courses.
• Complete MATH 3710 and STAT 3600.

SOPHOMORE
• Talk to your faculty advisor about the many choices you now have in regard to your math courses.
• 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.

JUNIOR
• Bring together your understanding of mathematical concepts including modeling, proofs, and applications.
• Take the GRE/subject GRE during the fall semester if you plan on going to graduate school.

SENIOR
• 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 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 faculty advisor your interest in graduate studies and/or industry.
• Consider participating in a study abroad program.

ASK FOR ASSISTANCE

GAIN EXPERIENCE

• Meet with someone in the University Career Center (UCC) to explore career options and receive individual assistance.
• Meet with your academic advisor for the Possibilities of getting an internship.
• Begin exploring graduate program options and preparing for Graduate Record Examinations (GRE). Also, find out if your intended program requires a subject specific GRE.
• Ask the UCC for help in preparing your resume (CV), interviewing skills, and statement of intent.
• Identify your reference letter writers early and provide plenty of notice for writing your letters.

• Volunteer in student organizations such as the Math Club, CUMSA (Council of Undergraduate Mathematics Students at Auburn), and the SIAM Chapter.
• Use LinkedIn (linkedin.com/alumni) to connect with alumni in your field.
• Use Handshake to explore employers actively hiring in your field and search part-time jobs that can add experience to your resume.

• Volunteer to help a professor with a research project and talk the professor for the possibilities about conducting your own research. Apply for an AU Undergraduate Research Fellowship.
• Attend the Wednesday Graduate Students Seminar in Parker Hall to hear from Math Faculty and Graduate Students about research being done in the department.
• Attend math department colloquia. Go to Discrete Math and Undergraduate Research conferences.
• Apply for Undergraduate Teaching Assistantship (UTA) in the tutoring center or in some mathematics courses.
• Apply for Undergraduate Research Fellowship.
• Attend Career Fairs such as the Engineering & Technology Career Fair. Continue working as UTA (this may help you receive a teaching assistantship for your graduate work).
• Present your research at AU Research Week, Discrete Math Conferences, AAS, SIAM, or AMS meetings.

GET INVOLVED

• Join the AU Math Club.
• Attend CUMSA meetings.

• Utilize AUinvolve (auburn.edu/auinvolve) to identify organizations of interest to attend meetings and enhance your resume.
• Contact campus career services to attend the meetings of the AU Math Club and CUMSA where you can learn of interesting mathematics and seek advice from your peers.

• Continue to attend the meetings of the AU Math Club and of 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.

• Become a student member of a professional organization, such as The Institute for Combinatorics and Its Applications (ICA), or SIAM. Attendance will keep you current in the field and take advantage of networking opportunities.
• Sometimes, there is financial support available to attend their conferences.

University Career Center
303 Mary Martin Hall | career.auburn.edu

This program prepares students for entrance into a variety of fields including computer science and software engineering. Competition can be high for certain positions, so maintaining a strong academic performance will be important. The program also equips individuals with the skills necessary for graduate education.

College of Sciences & Mathematics
239 Sciences Center Classroom | 334.844.4269 | math.auburn.edu

Programmer
Minimum Education: B.S.
Entry Level Salary Range: $47.2K - $75.9K

Mathematician
Minimum Education: M.S./Ph.D.
Enter Level Salary Range: $54.8K - $103.7K

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.