# Applied Mathematics | Bachelor's Degree



	FIRST YEAR	MIDDLE YEARS	LAST YEARS
ADVANCE your academic journey	Explore tutoring and computer services offered through Math CATS (Tutoring and more).	Schedule appointments with the COSE <u>Advising Center</u> and follow registration instructions for course guidance.	Check your Degree Audit & meet with your academic advisor.
	Adopt your <u>University Seminar US1100</u> learning as key for first year success.	Visit Math CATS regularly.	Explore next steps including potential <u>graduate</u> <u>programs</u> .
	Meet with a <u>First Year Advisor</u> to develop your academic planning.	Consult your academic advisor and learn about scholarship opportunities.  Explore Mathworks programs and offerings, including undergraduate opportunities	Meet with a faculty mentor or peer advisor.
	Participate in the Experiential Education Certificate Program.	for involvement such as the Mathworks Fellows program and more.  Regularly check the curricula and flowchart pre-requisites and co-requisites for	Complete a capstone project related to major.
		courses may change over time.	Create and update a digital portfolio of academic work and experiences.
<b>EXPAND</b> your personal and social development	Begin expanding your student experience by joining a student organization through the <u>Bobcat Organization HUB</u> .	Get involved with peers by joining the Math Club, SIAM, SUPER in Math, Talk Math to Me and Problem Solvers. Despite the name, membership in Association for Women in Mathematics is open to all.	Participate in the various seminars and events held by the <u>Department of Mathematics</u> .
	Review your degree plan for courses that include the Service-Learning Excellence program.	Learn about <u>scholarship opportunities</u> for math students.	Be sure to check out <u>Pi Mu Epsilon</u> , the Honorary National Mathematics Society if you are not already a member.
		Be sure to check out <u>Pi Mu Epsilon</u> , the Honorary National Mathematics Society.  Participate in <u>Women in STEM initiatives</u> and the <u>Hispanic and Latino STEM Mentoring Program (HLSAMP)</u> .	Attend financial literacy workshops (e.g., budgeting, student loans, taxes).
		Explore external scholarship opportunities such as the Fulbright Scholarship to take your expertise to unique locations abroad.	Select a service activity through <u>Student Involvement</u> to give back to the area community.
ENRICH your practical competence	Attend a talk for students through TalkMath2Me.  Explore the TXST One Stop for more information about the scholarships provided to new and continuing	Share your knowledge with various employment opportunities, such becoming an <u>Undergraduate Instructional Assistant, a Math CATS tutor, a Class Assistant, a</u> <u>Paper Grader, Peer Mentor or Tutor at SLAC.</u>	Explore <u>Undergraduate Research Opportunities</u> to ga hands-on experience and build research skills alongside faculty mentors.
	students.  Attend an IDEA Center workshop to learn more about	Explore the program Logic@TXST designed to encourage research into mathematical logic at Texas State University or Talk Math 2 Me, where students gain great experience communicating mathematics while developing presentation	Attend a conference related to your major (get recommendations from a faculty) or your student organization.
	undergraduate research.  Consider the STEM Communities Learning Assistance	skills in a relaxed environment.  Check out the National Science Foundation (NSF) Research Experiences for	Deliver a presentation in a student conference, workshop, seminar or community organization.
	program.	<u>Undergraduates (REU) Summer Program</u> .	Join a professional organization in your major or passion.
ELEVATE your career and professional life	Create your <u>Handshake</u> profile.	Build <u>Career &amp; Graduate School Fairs</u> into your schedule to ensure your connection maximum opportunities.	Develop a full-time employment or graduate school plan with <u>Career Services</u> and the <u>Graduate College</u> .
	Develop and review your <u>resume</u> with Career Services.	Join <u>Employer Information Sessions</u> at Career Services or your department.	Attend <u>employer info sessions</u> at Career Services.
	Complete your <u>Career Assessments</u> , such as Focus2.	Prepare to <u>ace your job interviews with Career Services</u> or your academic department.	Complete your <u>First Destination Survey</u> to share you post-graduation plans.
	Create your <u>LinkedIn</u> profile and connect with colleagues and leaders.		Identify faculty and professional references.

College of Science and Engineering P: 512.245.2551 math@txstate.edu MEMBER THE TEXAS STATE UNIVERSITY SYSTEM OUTCOMES

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#### **OUTCOMES**

#### Marketable Skills

Think critically

Analyze and solve problems

Communicate clearly and effectively

Read with comprehension

Reason deductively

Reason inductively

Write and understand mathematical proofs

See more marketable skills for this major

### **Experiences in Applied Mathematics**

The bachelor's degree with major in applied mathematics addresses the foundations of advanced mathematics with the flexibility in selection of advanced program courses to tailor to student interests. Students develop expertise in scientific computing methods and technical writing. Selection of a minor is required. Internship and cooperative education programs are available, as well as options to engage in Education Abroad or Study in America for international or national cultural enrichment and membership in student organizations for networking with peers.

#### **Career Opportunities**

Accountant Geolocation engineer

Actuary Global Pricing analyst

Analyst/consultant/manager Guidance and navigation engineer

Applied mathematics researcher Informatics scientist

Biostatistician Information analyst

Budget or business analyst Insurance underwriter

Business intelligence developer Investment analyst

Cost estimator Quantitative investment analyst

Cryptanalyst Math curriculum coach/consultant/

Cryptographer director

Data analyst Mathematics teacher

Data engineer Meteorologist

Data operations associate Modeling engineer

Data processing specialist Operations researcher

Data scientist Operations support specialist

Engineer Pharmacokinetic/pharmacodynamic

Finance manager modeler

Financial analyst Principal Scientist
Financial planner Product Manager
Forecast analyst Program Manager

Functional analyst Programmer

Game designer/game mathematician Purchasing agent

and more