

Mathematics (BSA)

Total Hours Required: 120

Plan of Study

The Plan of Study is a suggested four-year course sequence to support academic planning and serves as a helpful guide. Currently enrolled students should meet with their academic advisor to tailor their course selections and timelines to their individual goals and circumstances.

Course	Title	Hours
Year 1		
Semester 1		
M 408N	Differential Calculus for Science	4
<u>Natural Science and Technology, Part I (030)</u>		3
RHE 306	Rhetoric and Writing	3
Free Elective		1
<u>First-Year Signature Course (090)</u>		3
Hours		14
Semester 2		
M 408S	Integral Calculus for Science	4
<u>Natural Science and Technology, Part I (030)</u>		3
<u>Social and Behavioral Sciences (080)</u>		3
GOV 310L	American and Texas Government	3
Language, Arts, and Culture		3
Hours		16
Year 2		
Semester 1		
M 325K	Discrete Mathematics	3
<u>Natural Science and Technology, Part II (093)</u>		3
GOV 312L	Issues and Policies in American Government	3
<u>Transcript-recognized minor or certificate</u>		3
Hours chosen from: Upper-division Math course		3
Hours		15
Semester 2		
M 341	Linear Algebra and Matrix Theory	3
M 362K	Probability I	3
Language, Arts, and Culture		3
<u>U.S. History (060)</u>		3
<u>Transcript-recognized minor or certificate</u>		3
Hours		15
Year 3		
Semester 1		
M 328K	Introduction to Number Theory	3
Hours chosen from: Upper-division Math course		3
Language, Arts, and Culture		3
<u>U.S. History (060)</u>		3
<u>Transcript-recognized minor or certificate</u>		3
Hours		15
Semester 2		
Hours chosen from: Upper-division Math course		3
Language, Arts, and Culture		3
<u>Transcript-recognized minor or certificate</u>		3
<u>Humanities (040)</u>		3
<u>Communication (010)</u>		3
Hours		15
Year 4		
Semester 1		
M 361K	Introduction to Real Analysis	3
<u>Visual and Performing Arts (050)</u>		3
Free Elective		6

Hours chosen from: Majors-level coursework in Astronomy, Biology, Chemistry, Geological Sciences, Marine Science, or Physics	3
Hours	15
Semester 2	
Hours chosen from: Upper-division Math course	3
<u>Transcript-recognized minor or certificate</u>	3
Free Elective	3
Hours chosen from: Majors-level coursework in Astronomy, Biology, Chemistry, Geological Sciences, Marine Science, or Physics	3
Hours chosen from: Majors-level coursework in Astronomy, Biology, Chemistry, Computer Science, Geological Science, Marine Science, or Physics (must be a different field of study from the one above)	3
Hours	15
Total Hours	120

Requirements

All requirements are listed below, starting with the most specialized moving to the most general. Additional requirements may follow the table, so be sure to read the entire page. Some required courses listed below may also satisfy General Education requirements, including Core Curriculum.

Code	Title	Hours
Major		
Mathematics		
Hours chosen from a single sequence below:		8
Sequence 1		
M 408C	Differential and Integral Calculus	
M 408D	Sequences, Series, and Multivariable Calculus	
Sequence 2		
M 408N	Differential Calculus for Science	
M 408S	Integral Calculus for Science	
Sequence 3		
M 408K	Differential Calculus	
M 408L	Integral Calculus	
Primary Science		
M 341	Linear Algebra and Matrix Theory	3
Hours chosen from:		3
M 328K	Introduction to Number Theory	
M 343K	Introduction to Algebraic Structures	
M 373K	Algebraic Structures I	
M 362K	Probability I	3
M 361K	Introduction to Real Analysis	3
or M 365C	Real Analysis I	
Hours chosen from: Approved Upper-division Mathematics		12
Secondary Science		
Hours chosen from majors-level coursework from a single field of study: Astronomy, Biology, Chemistry, Geological Sciences, Marine Science, or Physics		6
Hours chosen from majors-level coursework from a single field of study: Astronomy, Biology, Chemistry, Geological Sciences, Marine Science, or Physics (must be a different field of study from the one above)		3
<i>Subtotal</i>		<i>41</i>
Degree (see details below)		27
Free electives: Additional coursework to reach total hours required.		10
<i>Subtotal</i>		<i>37</i>
General Education		
<u>Core Curriculum</u>		42

Foreign Language other than English, Beginning Proficiency	
Subtotal	42
College Requirements - Natural Sciences	
General University Requirements	
Total Hours	120

Degree-Bachelor of Science and Arts (BSA)

The requirements for the Bachelor of Science and Arts are designed to give each student flexibility in the selection of courses to meet individual needs.

Code	Title	Hours
Language, Arts, and Culture		

Hours selected from at least two of the following four areas:	12
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Fine arts: courses chosen from design, ensemble, fine arts, music, studio art, performance, visual art studies, art history, and theatre and dance

Humanities: courses chosen from American studies, ancient history and classical civilization, classical civilization, comparative literature, creative writing, English, humanities, philosophy, religious studies, and rhetoric and writing

Social and behavioral sciences: courses chosen from anthropology, economics, geography, government, history, linguistics, psychology, and sociology

Foreign language and culture: foreign language courses or culture courses chosen from an approved list available in the college advising centers. Students who elect to pursue a foreign language must complete a beginning level competency. Students who complete intermediate or advanced level foreign language courses rather than courses equivalent to beginning level competency may count only one intermediate or advanced course toward the language, arts, and culture requirement (a maximum of six hours earned through credit by examination may count toward the language arts and culture requirement)

Additional Requirements

Completion of one of the following:	15
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Transcript-recognized minor or certificate (minor outside the College of Pharmacy, Cockrell School of Engineering, Jackson School of Geosciences, and School of Nursing)

Fifteen hours in a single field of study (outside the College of Natural Sciences, College of Pharmacy, Cockrell School of Engineering, Jackson School of Geosciences, and School of Nursing)

Total Hours	27
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Additional Requirements and Policies

1. Students may not use a course counting toward one area of prescribed work to fulfill the requirements of another area of prescribed work unless expressly permitted as follows:
 - a. Courses counting toward the university core curriculum may also count toward the major requirements, the additional requirement, and electives.
 - b. Per university policy, a minimum of nine hours of the transcript-recognized minor may not be also used to satisfy the major.
 - c. Per university policy, a minimum of one course taken in a transcript-recognized certificate to satisfy the additional requirement may not also count toward the major.

2. Students who seek a transcript-recognized minor or transcript-recognized certificate must meet the minimum grade requirements and grade point average requirements of the program.
3. Students must earn a University grade point average of at least 2.00 in all courses taken at the University (including credit by examination, correspondence, and extension), a grade of at least C- in each mathematics and science course counted toward the major, and a grade point average of at least 2.00 in the courses fulfilling the major.
4. Students must complete a minimum of 60 hours in residence at the University, including at least 18 hours of the major. The 18 hours of the major in residence must include at least nine hours of advanced coursework.