

COLLEGE OF ARTS & SCIENCES
2021-22 BS MATHEMATICS (WITH PRE-ENGINEERING)
B.S. DEGREE PLAN

FIRST YEAR - FRESHMAN

Fall Semester				Spring Semester			
Dept	Crse#	Course Name	Hrs	Dept	Crse#	Course Name	Hrs
BIB	121	Life of Christ ¹	2	BIB	122	Acts of the Apostles ¹	2
MAT	120	Precalculus ³	4	MAT	122	Analytics and Calculus I ^{1,3}	4
CIS	171	Computer Programming I	3	CIS	172	Computer Programming II ³	3
ENG	101	English Composition I ¹	3	ENG	102	English Composition II ^{1,3}	3
		History ^{1,2}	3	ENS	103	Engineering Graphics	3
ENS	101	Introduction to Engineering	2				
			17				15

SECOND YEAR - SOPHOMORE

Fall Semester				Spring Semester			
Dept	Crse#	Course Name	Hrs	Dept	Crse#	Course Name	Hrs
BIB		Bible Elective	2	BIB		Bible Elective	3
MAT	223	Analytics and Calculus II ³	4	MAT	224	Analytics and Calculus III ³	4
PHS	211	Physics for Science & Engin. I ^{1,3}	4	MAT	330	Linear Algebra ³	3
		Critical and Creative Works ^{1,2}	3	MAT	240	Discrete Mathematics ³	3
COM	140	Speech Communication ¹	3	PHS	212	Physics for Science & Engin. II ³	4
			16				17

THIRD YEAR - JUNIOR

Fall Semester				Spring Semester			
Dept	Crse#	Course Name	Hrs	Dept	Crse#	Course Name	Hrs
BIB		Bible Elective	2	BIB	346	Foundations of Faith ¹	3
MAT	306	Foundations of Geometry ³	3	MAT	345	Differential Equations ³	3
MAT	430	Abstract Algebra ³	3	MAT	351	Probability ³	3
		Behavioral Sciences ^{1,2}	3	MAT	424	Complex Analysis ³	3
CHE	121	General Chemistry I	3	CHE	122	General Chemistry II	3
CHE	121L	General Chemistry I Lab	1	CHE	122L	General Chemistry II Lab	1
			15				16

FOURTH YEAR - SENIOR

Fall Semester				Spring Semester			
Dept	Crse#	Course Name	Hrs	Dept	Crse#	Course Name	Hrs
BIB		Bible Elective	2	BIB	495	Values in Human Thought ^{1,3}	3
MAT	353	Statistical Inference ³	3	MAT	426	Advanced Calculus ³	3
MAT	441	Number Theory ³	3			Electives	6
MAT	495	Mathematics Seminar ³	1	ENS	232	Engin. Mechanics II: Dynamics	3
		Electives	3				
ENS	231	Engin. Mechanics I: Statics	3				
			15				15

¹Liberal Arts Core Requirement

²Liberal Arts Core Requirements in *Undergraduate Catalog*

³Course has prerequisite. See corresponding *Undergraduate Catalog*

ADDITIONAL ITEMS RELATED TO THE MAJOR

- A. MAT 120 Precalculus may be omitted by students who have completed a high school trigonometry or precalculus courses and who have a score of 27 or higher on the math portion of the ACT.
- B. MAT424 Complex Analysis OR MAT426 Advanced Calculus is required for the major; however, it is recommended that majors complete both courses, when scheduling permits.
- C. Note that many upper-division math courses are only offered every other year. To complete the degree requirements in four years, be sure to schedule required courses in the semester they are offered.
- D. When selecting elective courses, be aware that all students must complete a minimum of 42 upper-division hours (300- or 400-level courses) in order to fulfill graduation requirements.
- E. Math majors are encouraged to use elective hours to complete a minor or second major in another field of study.

The following guidelines are important. Failure to follow these guidelines may delay graduation.

1. Plan schedules carefully. Plan to fulfill prerequisites for future courses.
2. Do not alter the sequence of courses without consulting with your academic adviser as not all classes are offered every semester.
3. Before the enrollment period, check to make sure holds will not prevent you from registration.
4. Register for classes early during the registration period to secure classes.

The Four-Year Degree Plan is a suggested plan of study. This plan does not replace the *Undergraduate Catalog*. The *Undergraduate Catalog* provides the official listing of program requirements.

2021-22 Undergraduate Liberal Arts Core Requirements

I. Biblical Values	III. Broadened Perspectives
A. Bible	A. Behavioral Sciences
BIB 121 & 122 & 346 OR 446	BIB/FAM 230 OR PSY 210 OR SOC 241 OR SOC 251
7	3
II. Basic Skills	B. Natural Sciences
A. Written Communication	BIO 100 OR BIO 105 OR BIO 110 OR BIO 111 OR BIO 112 OR BIO 211 OR CHE 121 & CHE 121L OR PHS 111 OR PHS 112 OR PHS 201 OR PHS 211
ENG 101 AND ENG 102	
6	3
B. Oral Communication	C. Arts and Humanities
COM 140	HISTORY: HIS 111 OR HIS 112 OR HIS 221 OR HIS 222 OR HUM 399A OR POL 221
3	3
C. Quantitative Reasoning	CRITICAL AND CREATIVE WORKS:
MAT 100 OR MAT 101 OR MAT 120 OR MAT 122 OR MAT235	ART 110 OR ART 201 OR ART 234 OR ENG 215 OR ENG 225 OR ENG 235 OR ENG 299A/399A OR MUS 110 OR MUS 214 OR PHI 243 OR PHI 245 OR PHI246 OR THE 160 OR THE 265 OR THE 299A/399A
3	3
<i>Complete course names and descriptions for the Liberal Arts Core Requirements are located in the Undergraduate Catalog.</i>	HUMANITIES CAPSTONE: BIB/HUM 495
	3

Total 34