

**MY DEGREE MAP  
COLLEGE OF ARTS AND SCIENCES APPROVED ACADEMIC PLAN  
MATHEMATICS MAJOR—OPTION 2 (REAL ANALYSIS SEQUENCE)  
PROGRAM YEAR 2021-2022**

<b>1ST YEAR</b>			
1ST SEMESTER	HRS	2ND SEMESTER	HRS
TROY 1101	1	ENG 1102/04	3
ENG 1101/03	3	AREA II HUM/FA COURSE	3
MTH 1125	4	AREA IV SS COURSE	3
AREA II FINE ARTS COURSE	3	STAT 2210	3
AREA IV SS COURSE	3	MTH 1126	4
<b>TOTAL</b>	<b>14</b>	<b>TOTAL</b>	<b>16</b>
<b>2ND YEAR</b>			
3RD SEMESTER	HRS	4TH SEMESTER	HRS
AREA II LIT COURSE	3	MTH 2220	3
MTH 3318	3	REQ_MTH COURSE	3
MTH 2227	4	MINOR COURSE	3
AREA IV HIS COURSE	3	AREA III SCI/LAB COURSE	3/1
		AREA II HUM/FA COURSE	3
<b>TOTAL</b>	<b>13</b>	<b>TOTAL</b>	<b>16</b>
<b>3RD YEAR</b>			
5TH SEMESTER	HRS	6TH SEMESTER	HRS
REQ_MTH COURSE	3	APPROVED MTH ELEC	3
APPROVED MTH ELEC	3	APPROVED MTH ELEC	3
FREE ELEC	3	AREA IV SS COURSE	3
MINOR COURSE	3	MINOR COURSE	3
AREA III SCI/LAB COURSE	3/1	FREE ELEC	3
<b>TOTAL</b>	<b>16</b>	<b>TOTAL</b>	<b>15</b>
<b>4TH YEAR</b>			
7TH SEMESTER	HRS	8TH SEMESTER	HRS
MTH 4424	3	APPROVED MTH ELEC	3
MTH 4441	3	MINOR COURSE	3
MINOR COURSE	3	MINOR COURSE	3
FREE ELEC	3	FREE ELEC	3
FREE ELEC	3	MTH 4425	3
<b>SUBMIT GRADUATION APPLICATION</b>			
<b>TOTAL</b>	<b>15</b>	<b>TOTAL</b>	<b>15</b>
<b>TOTAL PROGRAM</b>			<b>120</b>



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**COMPLETE ALL REQUIREMENTS**

**(49 HOURS)**

**AREA I**

TAKE THE FOLLOWING COURSES:

ENG 1101	COMP AND MODERN ENGLISH I	3 HOURS
ENG 1102	COMP AND MODERN ENGLISH II	3 HOURS
MINIMUM GRADE OF "C" REQ		

**AREA II**

TAKE ANY 1000 2000 LEVEL COURSE IN LITERATURE	3 HOURS
TAKE ANY 1000 2000 LEVEL COURSE WITH AN EXPANDED HISTORICAL AND CULTURAL SCOPE IN FINE ARTS, INCLUDING THE DISCIPLINES OF ART, MUSIC, THEATRE, FILM, OR OTHER FINE ARTS AREA.	3 HOURS
TAKE ANY TWO 1000 2000 LEVEL COURSES WITH AN EXPANDED HISTORICAL AND CULTURAL SCOPE IN THE HUMANITIES/FINE ARTS DISCIPLINES, INCLUDING ENGLISH, FOREIGN LANGUAGES, RELIGION, PHILOSOPHY, CLASSICS, THEATRE, MUSIC, DANCE, COMMUNICATION, SIGN LANGUAGE, INTERDISCIPLINARY STUDIES, OR OTHER HUMANITIES/FINE ARTS AREAS.	6 HOURS

**NOTE: A SEQUENCE IN LITERATURE OR HISTORY IS REQUIRED. WHEN SELECTING COURSEWORK IN AREAS II OR IV, PLEASE CONSIDER THIS REQUIREMENT.**

**AREA III**

MTH 1125	CALCULUS I	4 HOURS
MINIMUM GRADE OF "C" REQ		
TAKE ANY TWO 1000-2000 LEVEL SCIENCE CLASSES (CLASS AND CORRESPONDING LAB) FROM THE FOLLOWING SCIENCE DISCIPLINES: BIOLOGY, CHEMISTRY, PHYSICS, PHYSICAL SCIENCE, OR OTHER SCIENCE AREAS. SELECT 2: BIO 1100/L100, BIO 1101/L101, BIO 1120/L120, BIO 2229/L229, CHM 1115/L115, CHM 1142/L142, CHM 1143/L143, CHM 2242/L242, PHY 2252/L252, PHY 2253/L253, PHY 2262/L262, PHY 2263/L263, SCI 2233/L233, SCI 2234/L234, SCI 2240/L240.	8 HOURS	

**AREA IV**

TAKE ANY 1000-2000 LEVEL COURSE WITH A PRIMARY FOCUS IN HISTORY.	3 HOURS
TAKE THREE 1000-2000 LEVEL COURSE FROM THE FOLLOWING SOCIAL SCIENCE DISCIPLINES: ANTHROPOLOGY, BUSINESS, CRIMINAL JUSTICE, ECONOMICS, GEOGRAPHY, HISTORY, HUMAN SERVICES, LEADERSHIP, INTERDISCIPLINARY STUDIES, NURSING, POLITICAL SCIENCE, PSYCHOLOGY, RELIGION, SOCIAL WORK, SOCIOLOGY, OR OTHER SOCIAL SCIENCE AREAS.	9 HOURS

**NOTE: A SEQUENCE IN LITERATURE OR HISTORY IS REQUIRED. WHEN SELECTING COURSEWORK IN AREAS II OR IV, PLEASE CONSIDER THIS REQUIREMENT.**

**AREA V**

TROY 1101	THE UNIVERSITY EXPERIENCE	1 HOUR
STAT 2210	INTRODUCTORY STATISTICS	3 HOURS
MTH 2220	COMPUTER PROGRAMMING FOR MATHEMATICS	3 HOURS



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**MATHEMATICS MAJOR: OPTION 2 (REAL ANALYSIS SEQUENCE) (38 HOURS)**

MINIMUM 2.00 OVERALL GPA REQUIRED  
TAKE THE FOLLOWING COURSES:

(MINIMUM GRADE OF 'C' REQUIRED)

MTH 1126	CALCULUS II	4 HOURS
MTH 2227	CALCULUS III	4 HOURS
MTH 3311	DIFFERENTIAL EQUATIONS	3 HOURS
MTH 3318	INTRO TO ADVANCED MATHEMATICS	3 HOURS
MTH 3331	LINEAR ALGEBRA	3 HOURS
MTH 4424	REAL ANALYSIS I	3 HOURS
MTH 4441	ABSTRACT ALGEBRA I	3 HOURS

TAKE MTH 4425 REAL ANALYSIS II OR MTH 4442 NUMERICAL ANALYSIS 3 HOURS

SELECT 12 ADDITIONAL HOURS OF UPPER-LEVEL MATHEMATICS COURSES EXCLUDING MTH 4481 (MINIMUM GRADE OF 'C' REQUIRED) 12 HOURS

**MINOR (18 HOURS)**

AT LEAST ONE 18 SEMESTER HOUR MINOR IS REQUIRED COMPLETE THIS DEGREE PROGRAM. ADDITIONAL MAJORS ARE ALSO ACCEPTABLE. 18 HOURS

**FREE ELECTIVES REQUIREMENT (15 HOURS)**

TAKE 15 SEMESTER HOURS OF FREE ELECTIVE CREDIT. 15 HOURS