

UCC Document # 1	110
<b>College Document #</b>	<u> 26</u>

Review Type: \_\_\_Edit \_\_\_ Exp XX Full

## **CATALOG YEAR 2014-2015**

Program: Delete: \_\_\_ Add: \_\_\_ Change: \_x\_\_ Attach new/changed Program of Study description and 4-year plan. If in current online catalog, provide change and attach text with changes in red.

Minor: Add: \_\_\_ Delete: \_\_ Change: \_\_\_ Attach new/changed minor. If in current online catalog, provide change and attach text with changes in red.

College Introductory Pages: Add information: \_\_\_ Change information: \_\_\_ Attach new/changed information. If in current online catalog, provide change and attach text with changes in red.

Other: Add information: \_\_\_ Change information: \_\_\_ Attach new/changed information. If in current online catalog, provide change and attach text with changes in red.

## BACHELOR OF ARTS MAJOR IN MATHEMATICS

Following is a suggested four-year degree plan. Students are encouraged to see their advisor each semester for help with program decisions and enrollment; responsible for reviewing the **Program of Study Requirements**; and must meet **foreign language** and **writing intensive course** requirements for graduation. See Academic Regulations-Undergraduate online.

\*\*See *Appendix C* for approved list of minors and requirements. Instead of a minor, students may complete 18 SCH of electives, 12 SCH of which must be at the 3000-4000 level, from any discipline, except the major field, outside the College of Nursing and Health Sciences.

FALL	ege or	H	OURS	SPRING		HOURS	
FRESH	MAN	YEAR		FRESHMAN	YEAR		
<b>ENGL</b>	1301	English Composition I	3	ENGL 1302	English Composition II	3	
HIST	1301	The U.S. To 1877	3	HIST 1302	The U.S. Since 1877	3	
MATH	2413	Calculus I	4	MATH 2414	Calculus II	4	
		Life&Physical Science*	3		Life&Physical Science *	3	
		Life&Physical Science Lab*	1		Life&Physical Science Lab	1	
UNIV	1101	Learning in a Global Context I	<u>1</u>	<b>UNIV 1102</b>	Learning in a Global Context II		
					Creative Arts*	<u>3</u>	
Total			15			18	
SOPHO	OMOR	E YEAR		SOPHOMORE YEAR			
		Language, Philosophy & Culture	* 3	CAO	Communication*	3	
		Funds of Progr Lab	1		Statistical Analysis	3	
		Fundamentals of Progr	3		Discrete Mathematics	3	
		Communications in Math	3	PSCI 2306	American State Govt	3	
		Calculus III	4		Foreign Language/Study Abroa	<u>d</u> <u>3</u>	
PSCI	2305	American National Govt	<u>3</u>				
Total			17			15	
JUNIOR YEAR		JUNIOR YEAR					
MATH	4335	Advanced Calculus	3	MATH 4310	Abstract Algebra	3	
MATH	3310	Intro to Linear Algebra	3	Advanced	Liberal Arts Elective 1	3	
<b>MATH</b>	3330	<b>Ord Diff Equations</b>	3	Advanced	Liberal Arts Elective 1	3	
		Soc/Behavioral Science*	3	Tavaneea	Minor/General Elective**	3	
		Foreign Language/Study Abroa	1d <u>3</u>		Minor/General Elective**	3	
Total			15			15	
SENIOR YEAR			SENIOR YE	AR			
		Elective	4	MATH 4345	Complex Variables	3	
		Adv Liberal Arts Elective <sup>1</sup>	3	MATH 3195	Seminar (Free Elective)	<del>1</del>	
		Adv Minor/Gen Elective**	3		Adv Liberal Arts Elective <sup>1</sup>	3	
		Adv Minor/Gen Elective**	3		Adv Minor/Gen Elective**	3	
MATH	3195	Seminar (Free Elective)	<u>±</u>		Adv Minor/Gen Elective**	3 3 12	
Total			13			12	
TOTAL SEMESTER CREDIT HOURS: 120							

<sup>1</sup>Liberal Arts Electives, select 12 SCH with at least six at the 3000-4000 level from arts, economics, humanities, natural sciences and social sciences. Courses must be outside the major and minor unless seeking a double major. <sup>2</sup>Foreign Language/Study Abroad: 6 SCH in course work (not credit by exam) above the university's foreign language admission requirement. Thus students who meet the university's foreign language admission requirement by earning 6 hours of credit by exam, may take 6 SCH in the same language but at the intermediate level or above, or they may take 6 SCH of another foreign language at the introductory level. This requirement may also be met by earning 6 SCH in any subject while participating in a TAMIU-approved Study Abroad program while living for at least 5 weeks in a non-English speaking country.

Changes in green to meet 45 advanced hours required for the degree. See page 5.

Actual degree plans may vary depending on availability of courses in a given semester. Some courses may require prerequisites not listed.

<sup>\*</sup>See Appendix A Core Curriculum and Optional Course Information.

## Degree Requirements for the BA with a Major in Mathematics

- **1. Hours Required:** A minimum of **120** semester credit hours (SCH): 45 hours must be advanced, and fulfillment of degree requirements as specified in the "Requirements for Graduation" section of this catalog.
- **2. University Core Curriculum: 42** SCH as outlined in the suggested plans and as specified in the "Requirements for Graduation". MATH <u>2371</u> must be taken as part of the core.
- **3. Foreign Language/Study Abroad:** 6 SCH in course work (not credit by exam) above the university's foreign language admission requirement. Thus, students who meet the university's foreign language admission requirement by earning 6 hours of credit by exam, may take 6 SCH in the same language but at the intermediate level or above, or they may take 6 SCH of another foreign language at the introductory level. This requirement may also be met by earning 6 SCH in any subject while participating in a TAMIU-approved Study Abroad program while living for at least 5 weeks in a non-English speaking country.
- 4. Computer Science: 4 SCH in COSC 1136, COSC 1336.
- **5.** Major: 33 SCH including 1 SCH excess in the core, MATH 2371, MATH 2414, 2415, 3310, 3330, 3360, 3365, 4310, 4335, 4345 and 3 SCH from any 4000 level MATH course.
- **6. Minor:** A minimum of **18** SCH from one discipline at least twelve of which must be at the 3000-4000 level. See <u>Appendix C.</u> Instead of a minor, students may complete 18 SCH of electives, 12 SCH of which must be at the 3000-4000 level, from any discipline, outside the College of Nursing and Health Sciences.
- **7. General Electives: 12** SCH, <u>at least 6 of which must be</u> at the 3000-4000 level, selected from arts, economics, humanities, natural sciences and social sciences. Courses must be outside the major and minor unless seeking a double major.
- 8. -Electives: 5 SCH to include 1 SCH Science Lab.

Approvals:	Signature	Date	
Chair	Qingwen Ni	Engrafy signed by On Javan in Distancipages No. or 18 Mill cur 18 Mill emilipages Yu. pd s. c. Mill Ones 2018 12 82 15 15 42 76 00	
Department Curriculum Committee			
Chair	Rohitha Goonatilake, Ph.D.	Digitally signed by RePth a Sonnathias End in Association (A. 1994). ON an individual department of the institution is an information of the institution of the insti	
Department			
Chair	Lynne L. Mangan	Digitally signed by Lynne L. Manganaro  ON: cn-Lynne L. Manganaro, o, ou, email-lynne manganaro atamiu edu, c=U5  Date: 2014.01.27.16:38:00.06:00	
College Curriculum Committee	Thomas R.	Digitally signed by Thomas R. Mitchell DN: cn=Thomas R. Mitchell, o=Texas A&M	
Dean	Mitchell	International University, ou=College of Arts & Sciences, email=tmitchell@tamiu.edu, c=US Date: 2014.01.28 16:25.06 -06'00'	

Provost

Date

To meet 45 advanced hours required for the degree.

From: Goonatilake, Hoonandara R

Sent: Thursday, April 10, 2014 10:39 AM

**To:** Trevino, Mary T. **Cc:** Lin, Runchang

Subject: RE: BA in Mathematics Degree Program, Catalog 2014-2015

Thanks a lot!

>> The change should be to "Advanced". Yes

>> Should the stipulation that the courses meeting the requirement should come from arts, economics,

humanities, natural sciences and social sciences? Yes

We settle with them for now. Any additional concerns will be addressed until we further review them.

Thanks,

Rohitha Goonatilake

From: Trevino, Mary T.

Sent: Thursday, April 10, 2014 10:21 AM

To: Goonatilake, Hoonandara R

Subject: RE: BA in Mathematics Degree Program, Catalog 2014-2015

The change should be to "Advanced".

Should the stipulation that the courses meeting the requirement should come from arts, economics,

humanities, natural sciences and social sciences?

From: Goonatilake, Hoonandara R

Sent: Thursday, April 10, 2014 10:17 AM

**To:** Trevino, Mary T.

Subject: BA in Mathematics Degree Program, Catalog 2014-2015

Dear Mary,

I think it is only way that we can address this issue. The following revised in red for junior year is suggested for BA in Mathematics.

## **JUNIOR YEAR JUNIOR YEAR**

MATH 4335 Advanced Calculus 3 MATH 4310 Abstract Algebra 3

MATH 3310 Intro to Linear Algebra 3 Liberal Arts Elective 3

MATH 3330 Ord Diff Equations 3 Liberal Arts Elective 3

Soc/Behavioral Science\* 3 Minor/General Elective\*\* 3

Foreign Language/Study

Abroad

3 Minor/General Elective\*\* 3

**Total 15 15** 

Thanks,

Rohitha Goonatilake