BS Mathematics (Fall 2018 & Later)

Minimum 120 credits required for Bachelor's degree

Foundational Core (30-32 Credits)		**Grade**
FYXX 125[1]	First Year Seminar	
CTL-125	Critical Thinking	
MA ____	Foundational Math course	XXXXXXX
Choose 1 course from each area *		
[2]Natural/Physical Science		
Literature		
History	HI-100 or HI-102	
Arts/Design/Comm.		
Philosophy		
Theology/Relig		
Social/Behavioral Science		

Human Journey Seminars: Great Books in CIT (6 Credits)

CIT 201	CIT Seminar I	
CIT 202	CIT Seminar II	

Liberal Arts Explorations (9 Credits Total)

Student must complete one course in each area.		
Humanistic Inquiry (3 credits)		
Social and Global Awareness (3 credits)		
Scientific Literacy (3 credits)		

* See list of courses.

[1](Requires Grade C or higher)

[2]Science/Natural Science courses includes approved Math and Computer Science courses. Students are required to take at least one course in Biology, Chemistry, or Physics in the Foundational or Liberal Arts Exploration Core. CS and MA courses may be used as a Science/Natural Science in either the Foundational Core **or** as a requirement in the LAE Core but not in both categories.

Note: MA 006 and ESL courses **will not** count towards the 120 credit graduation requirement.

Approved Study Abroad courses may be used to satisfy requirements for the foundational core or a Liberal Arts Exploration

A maximum of 8 Applied Music credits may be applied towards graduation

Required Curriculum for Degree in Major

		Grade
MA 151	Calculus I	
MA 152	Calculus II	
MA 253	Calculus III	
MA 261	Linear Algebra	
MA 301	Mathematical Structures and Proofs	
MA 331	Mathematical Probability and Statistics I	
MA 362	Abstract Algebra	
MA 371	Real Analysis	
MA 398	Senior Seminar	
MA ___	Mathematics Elective*	
MA ___	Mathematics Elective*	
MA ___	Mathematics Elective*	
MA ___	Mathematics Elective*	
*Mathematics electives must be at the 250-level or higher. *EC 391 may be substituted as a mathematics elective with permission of the department chair.		

Required Supporting Courses		**Grade**
Choose ONE of the following sequences:		
	Biology 111/113 & 112/114	
	Chemistry 151/153 & 152/154	
	Physics 111/113 & 112/114	
	Economics 202 & 203	
	Computer Science 111 & 112	

General Electives (number of credits vary)		**Grade**

Checksheet Key

T	Course transferred and Requirement satisfied
W	Requirement waived
TW	Course transferred and Requirement waived

SACRED HEART UNIVERSITY
College of Arts and Sciences

BS Mathematics (Fall 2018 & Later)

The Bachelor of Science program in Mathematics at Sacred Heart University is designed to prepare students for advanced studies or employement in areas where analytical and computational skills are in demand. The Mathematics curriculum was developed in accordance with the recommendations of the Committee on the Undergraduate Program in Mathematics of the Mathematical Association of America. It consists of courses which prepare our students not only to continue study towards advanced degrees in Mathematics, but also for successful careers in Actuarial Science, Statistics, Computer Science, Engineering, or Education. The Mathematics major requires completion of 43 credits in Math plus a 6-8 credit sequence in a supporting discipline. The remaining credits required for graduation are within the liberal arts core curriculum.

SUGGESTED FOUR YEAR SEQUENCE OF STUDY:

YEAR 1	**SEMESTER I**	**YEAR 1**	**SEMESTER 2**
FYXX 125 or	First Year Seminar	FYXX 125 or	First Year Seminar or
CTL-125	Critical Thinking	CTL-125	Critical Thinking
MA 151	Calculus I	MA 152	Calculus II
	Foundational Core		Foundational Core
	Foundational Core		Foundational Core
	Foundational Core		Foundational Core

YEAR 2	**SEMESTER 3**	**YEAR 2**	**SEMESTER 4**
MA 253	Calculus III	MA 261	Linear Algebra
CIT 201	Catholic Intellectual Tradition Seminar I	MA 301	Mathematical Structures and Proofs
	Foundational Core	CIT 202	Catholic Intellectual Tradition Seminar II
	Liberal Arts Exploration		Liberal Arts Exploration
	Liberal Arts Exploration		Free Elective

YEAR 3	**SEMESTER 5**	**YEAR 3**	**SEMESTER 6**
MA 331	Mathematical Probability & Statistics I	MA 362	Abstract Algebra
MA 371	Real Analysis	MA	Mathematics Elective
	Required Supporting Course		Required Supporting Course
	Free Elective		Free Elective
	Free Elective		Free Elective

YEAR 4	**SEMESTER 7**	**YEAR 4**	**SEMESTER 8**
MA 398	Senior Seminar in Mathematics	MA	Mathematics Elective
MA	Mathematics Elective	MA	Mathematics Elective
	Free Elective		Free Elective
	Free Elective		Free Elective
	Free Elective		Free Elective

Note: Foundational Core should be completed by the end of sophomore year.