

BS Mathematics - Actuarial Science (Fall 2020 & Later)

Minimum 120 credits required for Bachelor's degree	
Foundational Core (30-32 Credits)	Grade

FYS 125 ¹	First Year Seminar	
CTL-125	Critical Thinking	
MA _____	Foundational Math course	XXXXXX
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)

²Science/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	Probability	
MA 332	Mathematical Statistics	
MA 349	Actuarial Mathematics	
MA 398	Senior Seminar in Mathematics	
MA ____	One of MA 362 or 371	

Required Supporting Courses

EC 202	Principles of Microeconomics	
EC 203	Principles of Macroeconomics	
AC 221	Financial Accounting and Reporting	
FN 215	Financial Management	
FN 442	Derivatives and Risk Management	

General Electives (number of credits vary)

[illegible]

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

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The Bachelor of Science program in Mathematics, Actuarial Science Concentration, at Sacred Heart University is designed to prepare students for a career as an actuary. Students will be prepared to take three actuarial exams by the time of graduation: Exams P, FM, and 3L. Sacred Heart University is in the process of being recognized by the Society of Actuaries as a UCAP-IC Institution. Further, our courses EC 202, and EC 203 are recognized by the Society of Actuaries as VEE approved courses, and MA 332 is in the process of being approved.

SUGGESTED FOUR YEAR SEQUENCE OF STUDY:

YEAR 1	SEMESTER 1		YEAR 1	SEMESTER 2
FYS 125 or	First Year Seminar		FYS 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
EC 202	Principles of Microeconomics		EC 203	Principles of Macroeconomics
	Liberal Arts Exploration			Liberal Arts Exploration
YEAR 3	SEMESTER 5		YEAR 3	SEMESTER 6
MA 331	Probability		MA 332	Mathematical Statistics
MA 371	Real Analysis	<--- OR --->	MA 362	Abstract Algebra
AC 221	Financial Accounting and Reporting		FN 215	Financial Management
	Free Elective			Free Elective
	Free Elective			Free Elective
YEAR 4	SEMESTER 7		YEAR 4	SEMESTER 8
MA 398	Senior Seminar in Mathematics		MA 349	Actuarial Mathematics
	Free Elective		FN 442	Derivatives and Risk Management
	Free Elective			Free Elective
	Free Elective			Free Elective
	Free Elective			Free Elective

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