## **BS Mathematics - Actuarial Science (Fall 2022 & Later)**

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

Foundation	Grade	
FYWS 125 <sup>1</sup>	First Year Seminar	
CTL-125 Critical Thinking		
MA	Foundational Math course XXX	
Choose 1 cours	se from each area *	
<sup>2</sup> Natural/Physical Science		
Literature		
History HI-100 or HI-102		
Arts/Design/Co	omm.	
Philosophy		
Theology/Relig		
Social/Behavio	ral 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 Inq	uiry (3 credits)	
Social and Glol	pal Awareness (3 credits)	
Scientific Litera	cy (3 credits)	

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 El	ectives (number of credits vary)	Grade

approved Math and Computer Science courses. Studen are required to take at least one course in Biology, Chem 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  $\underline{or}$  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

\* See list of courses. <sup>1</sup>(Requires Grade C or higher)

<sup>2</sup>Science/Natural Science courses includes

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

ey

Course transferred and Requirement satisfied

w Requirement waived

Required Supporting Courses

тw Course transferred and Requirement waived

**Required Curriculum for Degree in Major** 

MA 151	Calculus I
MA 152	Calculus II
MA 201	Introduction to LaTeX
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

Grade

Grade

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## SACRED HEART UNIVERSITY College of Arts and Sciences

## **BS Mathematics - Actuarial Science (Fall 2022 & Later)**

The Bachelor of Science program in Mathematics, Actuaruial Science Concentration, at Sacred Heart University is designed to prepare students for a career as an actuary. Students will be prepared to take two actuarial exams (Exams P and FM) by the time of graduation, and have preparation for additional exams. Sacred Heart University is recognized by the Society of Actuaries as a UCAP-IC Institution. Further, our courses MA 332, EC 202, EC 203, AC 221, and FN 215 are recognized by the Society of Actuaries as VEE approved courses.

YEAR 1	SEMESTER I	YEAR 1	SEMESTER 2
FYWS 125 or	First Year Seminar	FYWS 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
MA 201	Introduction to LaTeX	MA 301	Mathematical Structures and Proofs
EC 202	Principles of Microeconoics	EC 203	Principles of Macroeconomics
CIT 201	Catholic Intellectual Tradition Seminar I	CIT 202	Catholic Intellectual Tradition Seminar II
	Foundational Core		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

## SUGGESTED FOUR YEAR SEQUENCE OF STUDY:

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