

## B.S. STEM Major (Fall 2019 & Later)

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

		Grade
FYS-125 <sup>1</sup>	First Year Seminar	
CTL-125	Critical Thinking	
<b>Choose 1 course from each area:</b>		
College-level Math Course		
<sup>2</sup> Natural/Physical Science		
Literature		
History	HI-100 or HI-102	
Arts/Design/Comm.		
Philosophy		
Theology/Religion		
Social/Behavioral Sciences		

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

CIT 201	CIT Seminar I	
CIT 202	CIT Seminar II	

### Liberal Arts Explorations (LAE) (9 Credits Total)

<b>Website - checksheets)</b>		
Humanistic Inquiry (3 credits)		
Social and Global Awareness (3 credits)		
Scientific Literacy (3 credits)		

\* See list of courses.

<sup>1</sup>(Requires Grade C or higher)

<sup>2</sup>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
BI109	Biology for Elementary Teachers with Lab	
BIXXX	Bio Elective with Lab	
CH101/102	The Physical World Lecture and Lab (2 credits)	
CHXXX	Chem Elective with Lab	
CS 104	Digital Animation and Gaming for Non-majors	
CS 111	Introduction to Structured Programming	
CS 125	Computer Science Explorations	
CSE 125	CSE Explorations	
ENGR 125	Engineering Explorations	
MA 107	Math for Elementary Teachers (4 credits)	
MA 211	Geometry for Educators	
PY 101/102	Earth and Space Science Lecture and Lab	
PY104 or PY E	Elementary Physics (or PY Elective with Lab)	
BI391	STEM Capstone	

### Required Supporting Courses

		Grade
ENG 244	Studies in World Literature	
ENG 245	American Literature for Elementary Educators	
GS 150	World Geography	
HI 222 or 223	U.S. History to 1865 OR since 1865	
PO 121	Introduction to American Government	
PS 110	Intro to Psychology	
PS 273	Adolescent Development	
MA 131	Elementary Statistics	

### Professional Education Sequence (24 credits)

Required Undergraduate Courses in the Farrington School of Education		Grade
ED 300	Educational Psychology	
ED 301	Introduction to Exceptionalities	
ED 302	Education in the United States	
ED 304	Multicultural Education	
ED 343	Introduction to Language and Literacy	
ED 401	Educational Technology	
ED 403	Children's Literature	
ED 404	Classroom Management: Elementary	

### 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 STEM (Fall 2019 & Later)

The STEM Major is designed to meet the needs of aspiring elementary school teachers interested in focusing on the sciences. Students who are not planning to become elementary teachers may select the STEM Major. For both groups, the STEM major is excellent preparation in the liberal arts, with focus on science, technology, engineering, and mathematics

#### SUGGESTED FOUR-YEAR SEQUENCE OF STUDY:

<b>YEAR 1</b>	<b>SEMESTER 1 (16-17 credits)</b>	<b>YEAR 1</b>	<b>SEMESTER 2 (17-18 credits)</b>
FYS 125 <b>OR</b> CTL-125	First Year Seminar Critical Thinking	FYS 125 <b>OR</b> CTL-125	First Year Seminar Critical Thinking
PO 121 <b>OR</b> PS 110	Intro to American Government Intro to Psychology	PO 121 <b>OR</b> PS 110	Intro to American Government Intro to Psychology
MA 107 <b>OR</b> BI109	Math for Elementary Teachers Bio for Elem Teachers w Lab	BI 109 <b>OR</b> MA 107	Bio for Elem Teachers w Lab Math for Elementary Teachers
CSE 125	CSE Explorations	CS 125	Computer Science Explorations
HI100	Western Civilizations	ENGR 125	Engineering Explorations
CS 104	Digital Animation and Gaming for Non-maj	GS150	World Geography
		CS 111	Introduction to Structured Programming
<b>YEAR 2</b>	<b>SEMESTER 3 (15 credits)</b>	<b>YEAR 2</b>	<b>SEMESTER 4 (15 credits)</b>
CIT 201	CIT Seminar I	CIT 202	CIT Seminar II
PY 101/102	Earth and Space Science/Lab	CH 101/102	Physical World/ Physical Science Lab
ENG 245	American Lit for Elem Educators	ENG244	Studies in World Literature
MA 211	Geometry for Educators	MA 131	Statistics for Decision Making
(LAE) <b>OR</b> PH ELEC LAE or Foundational Philosophy		HI 222 <b>OR</b> 223	US History to/since 1865
<b>YEAR 3</b>	<b>SEMESTER 5 (15 Credits)</b>	<b>YEAR 3</b>	<b>SEMESTER 6 - (17 credits) - Dingle Option</b>
PS 273	Adolescent Development	Foundational Core	
<i>ED 343</i>	<i>Intro to Language and Literacy</i>	<i>ED 401</i>	<i>Educational Technology (online)</i>
<i>ED 300</i>	<i>Educational Psychology</i>	BI Elective	
<i>ED 302</i>	<i>Education in the United States</i>	PY Elective	
(LAE )		Foundational Core	
<b>YEAR 4</b>	<b>SEMESTER 7 (16 credits)</b>	<b>YEAR 4</b>	<b>SEMESTER 8 (15 credits)</b>
<i>ED 403</i>	<i>Children's Literature</i>	<i>ED 304</i>	<i>Multicultural Education</i>
<i>ED 404</i>	<i>Classroom Management</i>	<i>ED 301</i>	<i>Introduction to Exceptionalities</i>
<i>Chem Elective</i>		BI391	STEM Capstone
<i>Elective</i>		LAE	
<i>Elective</i>		Elective	

Major requirements begin fall semester Freshman Year and end spring semester Senior Year.

Professional Education Courses begin fall semester Junior Year and end spring semester Senior Year.

*Professional Education Courses taken in the College of Education are in italics.*