

BS Neuroscience (Fall 2024 & Later)

Minimum 120 credits required for Bachelor's degree

Foundational Core (27-29 Credits)

Grade

FYWS-125 ¹	First Year Seminar	
MA _____	Foundational Core Math course	
Choose 1 course from each area *		
² Natural/Physical Science		
Literature		
History	HI-100,102,110, or 115	
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 (LAE) (12 Credits Total)

Student must complete 4 courses from at least 2 different subjects and one course in each area.

(see list on Registrar's Website - checksheets)

Humanistic Inquiry (3 credits)		
Social and Global Awareness (3 credits)		
Scientific Literacy (3 credits)		
LAE in any area (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 Neuroscience major (52-54 credits)

Grade

Biology Core		
BI 111	Concepts in Biology I	
BI 112	Concepts in Biology II	
BI 113	Concepts in Biology I Laboratory	
BI 114	Concepts in Biology II Laboratory	
BI 201	Genetics & Evolution	
BI 202	Ecology & Evolution	
BI 203	Genetics & Evolution Laboratory	
BI 204	Ecology & Evolution Laboratory	
BI 399	Senior Seminar	

Psychology Core

PS 110	Introduction to Psychology	
PS 201	Research Design & Analysis I	

Neuroscience Core

BI205/PS350	Essentials of Neuroscience	
BI 345/346	Neurobiology	
PS 351	Behavioral Neuroscience	
BI 390/360 or PS 397	Supervised Research (3 credits) or Internship (3 credits)	

At least 5 electives from the following list (2 must be from Biology and 2 must be from Psychology)

BI 207/209	Anatomy & Physiology II with lab	
BI 255	Animal Behavior	
BI 299	Neuroscience elective	
BI 305	Behavioral Neurobiology	
BI 306	Pharmacology	
BI 311/313	Cell Biology	
BI 315	Developmental Biology	
PS 335	Human & Animal Learning	
PS 352	Hormones & Behavior	
PS 353	Psychopharmacology	
PS 354	Social Neuroscience	
PS 358	Human Neuroscience	
PS 389	Celtic Connections: Enrich the Brain	

Required Supporting courses

Grade

CH 151	General Chemistry I	
CH 152	General Chemistry II	
CH 153	General Chemistry Laboratory I	
CH 154	General Chemistry Laboratory II	
CH 221/223	Organic Chemistry I with Lab	
MA 131	Statistics	
MA 140 or 151	PreCalculus or Calculus	
PY	Physics 100 level with Lab	

General Electives (number of credits vary)

Grade

Checksheet Key

T	Course transferred & requirement satisfied
W	Requirement waived

SACRED HEART UNIVERSITY COLLEGE OF ARTS & SCIENCES BS Neuroscience (Fall 2024 & Later)

The Neuroscience major offers an innovative and interdisciplinary curricula that combines a rigorous grounding in the foundational principles of both biological and psychological science at all scales of organization from molecules to human and animal behavior up to ecosystems. The program emphasizes coursework in biology and psychology focusing on the areas where these two disciplines intersect with one another. The curriculum requires students to participate in "real world" experiences through independent research projects with Biology and Psychology faculty and/or internships with outside partner organizations.

The Neuroscience major provides the intellectual and technical skills necessary for a wide range of productive careers in a rapidly changing world. The program is ideal for students interested in pursuing graduate studies in an array of fields including medical school or the workplace in neuroscience-related biotechnology and pharmaceutical enterprises.

Students majoring in Neuroscience are required to complete 52-54 credits in Biology and Psychology: 18 credits in the Biology core, 6 credits in the Psychology core, and 28-30 credits in the Neuroscience core. 23 credits are also required in the supporting areas of Chemistry, Mathematics, and Physics.

SUGGESTED FOUR YEAR SEQUENCE OF STUDY:

YEAR 1	SEMESTER 1	YEAR 1	SEMESTER 2
XX	First Year Writing Seminar or Elective (Foundational Core)	FYWS 125 or XX	First Year Writing Seminar or Elective (Foundational Core)
BI 111/BI 113	Concepts in Biology I with Laboratory	BI112/BI114	Concepts in Biology II with Laboratory
CH 151/153	General Chemistry I with Laboratory	CH 152/154	General Chemistry II with Laboratory
MA140 or 151	PreCalculus or Calculus	MA 131	Statistics
PS 110	Introduction to Psychology		Elective (Foundational Core)

YEAR 2	SEMESTER 3	YEAR 2	SEMESTER 4
BI202/204	Ecology & Evolution with Laboratory	BI201/203	Genetics & Evolution with Laboratory
CH 221/223	Organic Chemistry I with Lab	BI 205/PS 350	Essentials of Neuroscience
CIT 201	Human Journey CIT I	CIT 202	Human Journey CIT II
PS 201	Research Design & Analysis I		Elective (Foundational Core)
	Elective (Foundational Core)		Elective (Foundational Core)

YEAR 3	SEMESTER 5	YEAR 3	SEMESTER 6
BI 345/346	Neurobiology with lab	BI ____	BI Neuroscience elective
PS 351	Behavioral Neuroscience	PS ____	PS Neuroscience elective
BI 390/360 or PS 397	Research or Internship		LAE Elective
	LAE Elective		Elective (Free)
	LAE Elective		Elective (Free)

YEAR 4	SEMESTER 7	YEAR 4	SEMESTER 8
BI ____	BI Neuroscience elective	BI or PS ____	BI or PS Neuroscience elective
PS ____	PS Neuroscience elective	BI 399	Senior Seminar
PY 1XX	Physics With Lab		Elective (Free)
	Elective (Free)		Elective (Free)
	Elective (Free)		Elective (Free)

Note: Students must average 15 or more credits/semester to graduate on an 8 semester schedule.