

St. Mary's University

BS in Bioinformatics with Computer Science Minor Degree Plan – 120 Hours

The maximum credit transferable from a junior college, or any combination of junior colleges, is 66 semester hours.

St. Mary's Core (39 hours)

Requirements	Texas Common Course Equivalency	Hours Required
___ First Year Experience	Not required for transfer students accepted with 30 or more credit hours. However, a student may need to take three (3) additional hours of elective credits in order to meet the required hours for this degree.	3
___ Freshmen Composition I	ENGL 1301	3
___ Literature	ENGL 1302 or any ENGL 23XX Literature course	3
___ History	Any HIST 13XX or 23xx course	3
___ Social Science	Any two of the following courses: BUSI 1301, CRIJ 1301, ECON 2301, ECON 2302, GOVT 2305, GOVT 2306, PSYC 1301, PSYC 2306, PSYC 2316, PSYC 2314, SOCI 1301, SOCI 1306, SOCI 2319, SPCH 1311, SPCH 1315, SPCH 1321, SPCH 2335	6
___ Mathematics	MATH 2413	
___ Natural or Physical Sciences	CHEM 1401 or CHEM 1311 and CHEM 1111	
___ Fine Arts	Any 3-credit hour Fine Arts course from the following: ARTS, MUSI, DRAM	3
___ Foreign Language and International Engagement	Two courses (1411 and 1412) in a language not previously studied or two courses (2311 and 2312) in a language previously studied	6
___ Philosophy – Self	PHIL 1301	3
___ Philosophy – Ethics	PHIL 2306	3
___ Theology	Theology courses from other universities may be transferable with the approval of the Theology Department	3
___ Intermediate Theology	Theology courses from other universities may be transferable with the approval of the Theology Department	3

Bioinformatics Major Courses – Computer Science minor (77 hours)

Requirements for this major:	Texas Common Course Equivalency	Hours Required
___ BIO 3310 – Intro to Bioinformatics	No equivalent	3
___ BIO 3314 – Internship/Research	No equivalent	3
___ BIO 3410 – Biostatistics for Life Science	No equivalent	4
___ BIO 4311 – Bioinformatics Programming with R	No equivalent	3
___ BIO 4312 – Bioinformatics Capstone Or BL 3464 – Evolutionary Biology Or BL 4420 – Forensic Biotechnology	No equivalent	3
___ BIO 4411 – Genes, Genomes, and Genomics	No equivalent	4

—	BL 1401 – General Biology for Majors I	BIOL 1406	4
—	BL 1402 – General Biology for Majors II	BIOL 1407	4
—	BL 2110 – Sophomore Biology Seminar	No equivalent	1
—	BL 2330 – Genetic Principles	BIOL 2416	3
—	BL 2332 – Cell Biology	No equivalent	3
—	BL 3110 – Junior Biology Seminar	No equivalent	1
—	BL 4110 – Senior Junior Seminar	No equivalent	1
—	BL 34XX or 44XX – Advanced Biology Elective	No equivalent	4
—	BL 4451 – Biochemistry I	No equivalent	4
—	CH 1401 – General Chemistry I	CHEM 1411 or CHEM 1311 and CHEM 1111	4
—	CH 1402 – General Chemistry II	CHEM 1412 or CHEM 1312 and CHEM 1112	4
—	CS 1310 – Programming I in C	COSC 1436 or COSC 1336	3
—	CS 1311 – Data Structures	COSC 2336 or COSC 2436 or COSC 2415 or COSC 2315	
—	CS 2313 – Object Oriented Programming I	COSC 1337 or COSC 1437	3
—	CS 3300 – Introduction to Programming for Data Analytics in Python	No equivalent	3
—	CS 3310 – Intro to Systems Analysis and Design	No equivalent	3
—	CS 3320 – Files and Database	No equivalent	3
—	CS 3340 – Software Engineering	No equivalent	3
—	MT 2412 – Calculus I	MT 2413	4
—	MT 2323 – Discrete Math Structures	MATH 2305	3
Electives (4 hours)			4
An elective can be any course taken from any discipline. Students can use these hours to pursue certificates, minors, or second majors.			
Total Semester hours for this degree			120

Updated 11/19/2025