

St. Mary's University

BS in Computer Science with Data Science Track Degree Plan – 128 Hours

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

St. Mary's Core (42 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	Select one: BIOL 1308, BIOL 1309, CHEM 1411, CHEM 1412, GEOL 1301, GEOL 1303, GEOL 1401, GEOL 1403, GEOG 1301, GEOL 1304, GEOL 1305, GEOL 1404, GEOL 1405, PHYS 1305, PHYS 1401, PHYS 1402.	3
— 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

Computer Science Major Courses (42 hours)

Requirements for this major:	Texas Common Course Equivalency	Hours Required
— CS 1310 – Programming I in C	COSC 1336 or COSC 1436	3
— CS 1311 – Data Structures	COSC 2436 or COSC 2315	3
— CS 2110 – Sophomore CS seminar	No equivalent	1
— CS 2313 – Object Oriented Programming I	COSC 1337 or COSC 1437	1
— CS 2315 - Algorithms	No equivalent	3
— CS 2323 – Object Oriented Programming II	No equivalent	3
— CS 2350 – Computer Architecture	COSC 2325	3
— CS 3110 – Junior CS Seminar	No equivalent	1

—	CS 3310 – Intro to Systems Analysis and Design	No equivalent	3
—	CS 3320 – Files and Database	No equivalent	3
—	CS 3330 – Computer Networks	No equivalent	3
—	CS 3335 – Survey of Programming Languages	No equivalent	3
—	CS 3340 – Software Engineering	No equivalent	3
—	CS 3350 – Operating Systems	No equivalent	3
—	CS 4110 – Senior CS Seminar	No equivalent	1
—	CS 4395 – Senior Project	No equivalent	3

Math Minor (17 hours)

—	MT 2412 – Calculus I	MATH 2413	3
—	MT 2318 – Applied Linear Algebra	MATH 2318	3
—	MT 2323 – Discrete Math Structures	MATH 2305	3
—	MT 2413 – Calculus II	MATH 2414	4
—	MT 4331 – Probability Theory	No equivalent	3

Data Science Track (9 hours)

—	CS 4375 – Advanced Topics	No equivalent	3
—	CS/BIO/EG/MT/QM 43XX – Cybersecurity Electives	No equivalent	6

Electives (10 hours) **10**

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