Name: _____

COMPUTER SCIENCE (Data Science) B.S.

40 courses of three or more credits and 3 one-credit PE courses

GENERAL EDUCATION CORE

BASIC REQUIREMENTS (2 courses and 3 one-credit PE courses)

Composition and Rhetoric
- ☐ EN 103 Composition and Rhetoric I
- ☐ EN 104 Composition and Rhetoric II

Physical Education Courses
- ☐ PE 100
- ☐ PE ____
- ☐ PE ____

MODES OF THINKING (4 courses)

Literature (Select one)
- ☐ EN 110, EN 112, EN 115

Mathematics **(Satisfied by Major – 121)**

Natural Science (Select one)
- ☐ BI 209, BI 210, BI 211, BI 242, CH 209, PH 209

Philosophy
- ☐ PL 109

Social Sciences (Select one)
- ☐ CJ 109, EC 209, EC 112, PO 103, PO 109, PS 109, or SO 109

CULTURAL LITERACY (6 courses)

Humanities I and II. *Preferably* select a set (e.g., HI 201/202). However, a combination (e.g., PO 201 + HI 214) is acceptable.
- ☐ Hum. I: HI 201, PO 201, HI 213
- ☐ Hum. II: HI 202, PO 202, HI 214, HI 262

Humanities III: Great Works of Art & Music (See Master Schedule of Day Classes)
- ☐ ___ ____

Humanities IV: Great Works of Literature (See Master Schedule of Day Classes)
- ☐ ___ ____

Foreign Language/World Cultures (Select either two of the same language, any two WC, or one WC and one approved course with international study)
- ☐ ___ ____
- ☐ ___ ____

CHRISTIAN VALUES AND THEOLOGY (3 courses)

Catholic Theology
- ☐ TH 109

Intermediate Theology (200/300 level TH)
- ☐ TH ____

Values Seminar (See Master Schedule of Day Classes)
- ☐ ___ ____

MAJOR

(16 courses)

- ☐ CS 115: Introduction to Python
- ☐ CS 211: Object-Oriented Programming
- ☐ CS 222: Data Structures
- ☐ CS 230: Computer Architecture and Hardware
- ☐ CS 250: Introduction to Data Science
- ☐ CS 260: Databases and Data Visualization
- ☐ CS 360: Database Analysis and Design
- ☐ CS 362: Introduction to Machine Learning
- ☐ CS 370: Intro. to Artificial Intelligence
- ☐ CS 420: Special Topics in Data Science
- ☐ CS 453: Senior Coordinating Seminar
- ☐ MA 121: Calculus I
- ☐ MA 122: Calculus II
- ☐ MA 222: Statistical Analysis using R
- ☐ MA 331: Linear Algebra

One Elective chosen from MA or CS courses at 200, 300 or 400 level, excluding MA260 and CS475

☐ _____

MINOR _____

(6 courses)

☐ ___ ____ ☐ ___ ____
☐ ___ ____ ☐ ___ ____
☐ ___ ____ ☐ ___ ____

ELECTIVES

(As needed to complete 40-course req.)

☐ ___ ____ ☐ ___ ____
☐ ___ ____ ☐ ___ ____
☐ ___ ____ ☐ ___ ____
☐ ___ ____ ☐ ___ ____
☐ ___ ____

Ann Koefer, Dir. of the Acad. Resource Center
Effective fall, 2020

For the most up-to-date record of progress toward completion of degree requirements, students should use the Academic Evaluation tool, which is listed under the Academic Planning heading in WebAdvisor.

DE SALES UNIVERSITY
Typical Program: COMPUTER SCIENCE (Data Science) B. S.

FALL SEMESTER	**SPRING SEMESTER**
FIRST YEAR	
Intro to Python (CS 115)	Object-Oriented Programming (CS 211)
Calculus I (MA 121)	Database and Data Visualization (CS 260)
Composition and Rhetoric I (EN 103)	Composition and Rhetoric II (EN 104)
Philosophy MOT (PL 109)	Calculus II (MA 122)
Foreign Language/World Cultures	Foreign Language/World Cultures
Lifetime Fitness and Wellness (PE 100)	Physical Education (Activity)
SECOND YEAR	
Computer Architecture and Hardware (CS 230)	Statistical Analysis using R (MA 222)
Data Structures (CS 222)	Intro to Machine Learning (CS 362)
Intro to Data Science (CS 250)	Social Science MOT
Humanities 1	Humanities 2
Catholic Theology (TH 109)	Literature MOT
Physical Education (Activity)	
THIRD YEAR	
Intro to Artificial Intelligence (CS 370)	Special Topics in Data Science (CS 420)
Linear Algebra (MA 333)	CS Elective
Humanities 3	Humanities 4
Intermediate Theology	Natural Science MOT
Free Elective	Free Elective
FOURTH YEAR	
Database Analysis & Design (CS 360)	Senior Coordinating Seminar (CS 453)
Values Seminar	Free Elective
Free Elective	Free Elective
Free Elective	Free Elective
Free Elective	Free Elective

A. Koefer, Director of the Academic Resource Center
Effective fall, 2020