B.S. DATA SCIENCE 2021-22

YEAR 1		YEAR 2		YEAR 3		YEAR 4	
Fall (14 cr)	*Spring (14 cr)*	*Fall (17 cr)*	*Spring (16 cr)*	*Fall (15 cr)*	*Spring (15 cr)*	*Fall (12 cr)*	*Spring (12 cr)*

YEAR 1

Fall (14 cr)

CS 1420 — Accl. Object Oriented Programming — 4 — FA/SP

Co-requisites

*MATH 1310 — Engineering Calculus I — 4 — FA/SP

WRTG 2010 — Intermediate Writing — 3 — FA/SP/SU

General Education BF — 3 — FA/SP/SU

Spring (14 cr)

CS 2420 — Intro. Algorithms and Data Structures — 4 — FA/SP

MATH 1320 — Engineering Calculus II — 4 — FA/SP/SU

DS 2500 — Data Wrangling — 3 — SP

General Education HF — 3 — FA/SP/SU

Grey = Pre-Major Courses
Check handbook.cs.utah.edu for application requirements and instructions

For a complete list of approved Data Domain and Data Analysis Breadth Electives, visit:

https://www.cs.utah.edu/data-science/bs-in-data-science/

YEAR 2

Fall (17 cr)

CS 2100 — Discrete Structures — 3 — FA/SP

CS 3500 — Software Practice — 4 — FA/SP

MATH 3070 — Applied Statistics I — 4 — FA/SP/SU

Elective — Data Domain — 3 — FA/SP

American Institutions — 3 — FA/SP/SU

Spring (16 cr)

MATH 2270 — Linear Algebra — 4 — FA/SP/SU

CS 4150 — Algorithms — 3 — FA/SP

MATH 3080 — Applied Statistics II — 3 — SP

Elective — Data Domain — 3 — FA/SP

Pre-req: WRTG 2010
WRTG 3014 or WRTG 3015 — 3 — FA/SP/SU

YEAR 3

Fall (15 cr)

DS 3190 — Foundations of Data Analysis — 3 — FA

DS 4630 — Visualization for Data Science — 3 — FA

DS 3390 — Ethics in Data Science — 3 — FA

Elective — Data Analysis Breadth — 3 — FA/SP

General Education FF — 3 — FA/SP/SU

Spring (15 cr)

DS 4140 — Data Mining — 3 — SP

DS 4530 — Database Systems — 3 — SP

Elective — Data Domain — 3 — FA/SP

Elective — Data Analysis Breadth — 3 — FA/SP

General Education (3000+) — 3 — FA/SP/SU

YEAR 4

Fall (12 cr)

DS 4800 — Senior Capstone Project (Design) — or — **DS 4940** — Undergraduate Research — 3 — FA/SP

DS 4350 — Machine Learning — 3 — FA/SP

Elective — Data Analysis Breadth — 3 — FA/SP

DV Requirement — 3 — FA/SP/SU

Spring (12 cr)

DS 4850 — Senior Capstone Project — or — **DS 4970** — Undergraduate Thesis — 3 — FA/SP

General Education BF — 3 — FA/SP

General Education HF — 3 — FA/SP/SU

IR FF Requirement (3000+) — 3 — FA/SP/SU

✳ = Students who do not pursue the Engineering Calculus sequence are required to complete MATH 1210 (Calculus I), MATH 1220 (Calculus II), and MATH 2210 (Calculus III)

Caveat: Semester availability is subject to change at the discretion of the departments and does not create a binding contractual nexus or obligation between the student and the University of Utah

Total Required Credit Hours: 122