
SAMPLE CS-ORIENTED DATA SCIENCE MAJOR PROGRAM PATHWAY

UNIVERSITY REQUIREMENTS	
Minimum Academic Credit	15 Units
Residency	8 Units
Humanities and Arts	6/3 Units
Interactive Qualifying Project	3/3 Unit
Social Science	2/3 Unit
Physical Education	1/3 Unit
Free Electives	3/3 Unit

MAJOR-SPECIFIC REQUIREMENTS (10 UNITS)	
DS Core Courses*	3/3 Unit
Disciplinary Foundation Courses	10/3 Units
Disciplinary Electives Courses	11/3 Units
DS MQP	3/3 Unit
Data Privacy and Ethics	1/3 Unit
Sciences	2/3 Unit

(*) DS core courses include DS 1010, DS 2010, DS 3010.

DISCIPLINARY FOUNDATION COURSES (10/3 UNITS)

COMPUTER SCIENCE COURSES (3/3 Unit Required)	MATHEMATICS COURSES (5/3 Unit Required)	BUSINESS COURSES (2/3 Unit Required)
Two of CS 1004, CS 1101, CS 1102, CS 2102, CS 2103, CS 2119, or from CS electives below (**) AND One of CS 2223	Two of MA 1020, MA 1021, MA 1022, MA 1120, or from MA electives below AND Both MA 2611 and MA 2612 AND One of MA 2071 or MA 2072	One of OBC 1010, ETR1100, MIS 3010, ETR 3633 AND One of BUS 2080 or OIE 2081

(**) At most 1/3 CS unit at the 1000 level.

DISCIPLINARY ELECTIVE COURSES (11/3 UNITS)

COMPUTER SCIENCE COURSES	MATHEMATICS COURSES	BUSINESS COURSES
CS 4120 +CS 4341 +CS 4432 +CS 3733 +CS 4445 +CS 4342 +CS 3431 +CS 4433/ DS 4433	MA 1024 + MA 4635	MIS 4084

Electives must include at least one course in each of the categories below:

- Databases (CS 3431, CS 4432, MIS 3720, CS 4433/DS 4433)
- Data mining/machine learning (CS 4445, CS 4342/DS4342)
- Business modeling and prediction (MIS 4084, OIE 4430)

Electives must include at least 4/3 at the 4000 level or above.

Students are encouraged to take electives marked with a "+".

It is a sample program. Students should tailor-make their own programs with their academic advisors.