SAMPLE MATHEMATICS-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 Elective 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 BUS 1010, ETR 1100, BUS 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 3431 +CS 4445	MA 1023 MA 1024 MA 2073 +MA 2631 +MA 3627 +MA 3631 +MA 4603 +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/DS 4342)
- Business modeling and prediction (MIS 4084, OIE 4420)

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.

Last updated on November 19, 2019