# Data Science and Engineering — ABM

#### Accelerated Bachelor's/Master's Curriculum for Data Science and Engineering

The Accelerated Bachelor's/Master's Program (ABM) offers outstanding students in the Department of Mathematics and Statistics an opportunity to earn both the bachelor's and the master's degrees in less time and at less cost than usual. The ABM program allows these exceptional students to count up to nine credit hours toward both the bachelor's and master's degrees. The Bachelor of Science in Applied Mathematics - Applied Discrete Mathematics Option undergraduate major can lead to a Master of Science in Data Science and Engineering - Data Science track in the ABM track. Please see the Department of Mathematics and Statistics for additional information.

Below is a chart of all the approved courses that can be taken in the ABM program and what course that replaces at the undergraduate level.

Code	Title	Hours
STAT 6000	Intermediate Statistical Methods for Data Science (Replaces STAT 5000 Intermediate Statistical Methods for Data Science)	3
STAT 6650	Statistical Learning (Replaces STAT 5660 Statistical Learning)	3
MATH 6050	Matrix Theory and Applications (Replaces MATH 5060 Matrix Theory and Applications)	3

### Senior Year for Students in ABM Program - Applied Mathematics - Applied Discrete Mathematics Option

Courses marked with an asterisk are those used by students enrolled in the ABM program to meet nine undergraduate hours during their senior year and nine graduate hours to be used toward their graduate degree.

#### Senior

Fall	Hours	Spring	Hours
MATH 6370 Linear Algebra		3 MATH 6710 Linear Optimization	3
Discrete Math Electives		3 *STAT 6650 Statistical Learning	3
*STAT 6000 Intermediate Statistical Methods for Data Science		3 *MATH 6050 Matrix Theory and Applications	3
Interdisciplinary Elective		3 Elective	3

## Accelerated Master of Science in Data Science and Engineering - Data Science track (non-thesis)

# First Year

Fall	Hours Spring	Hours Summer	Hours
STAT 6600 Probability and Statistics for Data Science	3 COMP 6630 Machine Learning	3 STAT 7940 Capstone Project	3
COMP 6120 Database Systems I	3 COMP 6130 Data Mining	3	
MATH/STAT Elective	3 MATH/STAT Elective	3	
	9	9	3

**Total Hours: 21**