

**Mathematics—Decision Science Major (53 credit hours)**

**2018-2019**

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**Major Requirements\***

- MATH 2010, Calculus I, 4 credit hours (semester 1 of freshmen year)
- MATH 2020, Calculus II, 4 credit hours (semester 2 of freshmen year)
- MATH 2120, Introductory Statistics with Applications, 4 credit hours
- MATH 3010, Linear, Algebra, 4 credit hours
- MATH 3020, Calculus III, 4 credit hours
- MATH 3200, Mathematical Models, 3 credit hours
- MATH 4000, Problem Seminar, 2 credit hours
- MATH 4010, Mathematical Statistics, 4 credit hours

One course from:

- MATH 3100, Differential Equations, 3 credit hours
- MATH 3300, Numerical Analysis, 3 credit hours
- MATH 3400, Mathematics of Finance, 3 credit hours
  
- BSNS 2710, Principles of Management, 3 credit hours
- BSNS 2810, Principles of Marketing, 3 credit hours
- BSNS 3240, Operations Management, 3 credit hours
- BSNS 3510, Supply Chain Management, 3 credit hours
- BSNS 4110, Marketing Research, 3 credit hours
- BSNS 4330, Marketing Management, 3 credit hours
  
- One 3 hour independent study course combining mathematics and decision science.

Proposed course sequence:

Freshman: BSNS 2710, MATH 2010; MATH 2020, 2120  
Sophomore: MATH 3010; BSNS 2810, MATH 3020, 3200  
Junior: BSNS 3510, MATH 3100/3300/3400, 4010; BSNS 3240  
Senior: BSNS 4110, MATH 4000; BSNS 4330, Independent Study

- MATH 2010, Calculus I, is a Quantitative Reasoning course in the Liberal Arts Program.
- MATH 2120, Introductory Statistics with Applications, is a Quantitative Reasoning course in the Liberal Arts Program.
- MATH 4000, Problem Seminar, is a Speaking Intensive course in the Liberal Arts Program.

Mathematics: Decision Science Major Suggested Course Sequence

2018-2019

SEMESTER 1		SEMESTER 2	
BSNS 2710	3 Hours	MATH 2020	4 Hours
MATH 2010	4 Hours	MATH 2120	4 Hours
ENGL 1100/ENGL 1110	3-4 Hours	ENGL 1120	3 Hours
LART 1050	1 Hour	LART 1100	2 Hours
Foreign Language	4 Hours		

SEMESTER 3		SEMESTER 4	
MATH 3010	4 Hours	BSNS 2810	3 Hours
BIBL 2000	3 Hours	MATH 3020	4 Hours
COMM 1000	3 Hours	MATH 3200	3 Hours
Personal Wellness	2-Hours	Scientific Ways of Knowing	4 Hours

SEMESTER 5		SEMESTER 6	
BSNS 3510	3 Hours	BSNS 3240	3 Hours
MATH 3100/3300/3400	3 Hours	Civic Ways of Knowing	3 Hours
MATH 4010	4 Hours	Global/Intercultural	3 Hours
Social & Behavioral Ways of Knowing	3 Hours	Writing Intensive	3 Hours

SEMESTER 7		SEMESTER 8	
BSNS 4110	3 Hours	BSNS 4330	3 Hours
MATH 4000	2 Hours	Independent Study	3 Hours
Christian Ways of Knowing	3 Hours	Aesthetic Ways of Knowing	3 Hours
Writing Intensive	3 Hours	Elective	3 Hours

Decision science is a discipline that is concerned with using mathematics to make appropriate decisions when confronted with complex problems. It can deal with optimizing the design or operation of systems involving machinery, materials, money and even people.

The Mathematics-Decision Science major allows students to enhance a Mathematics major with courses from the Falls School of Business, without requiring a double major. The resulting major is more focused than a traditional Mathematics major, yet still versatile for a broad range of career paths fields throughout business, industry, and government.