

# Houghton University

## Data Science BA

(31–36 hours in core; 7–8 elective hours)

Total Major LA Credits: 0

### Data Science Major Requirements

Credits

Liberal Arts

#### Core Courses\* (31-36 hours)

<input type="checkbox"/>	CSCI 211 Programming I	4	
<input type="checkbox"/>	DSCI 211 Data Science I	4	LA
<input type="checkbox"/>		4	
<input type="checkbox"/>	DSCI	4	LA
<input type="checkbox"/>	DSCI 480 Senior Capstone Seminar in Data Science	4	LA
<input type="checkbox"/>	MATH		LA
<input type="checkbox"/>	PSY/BADM 309 Statistics	4	LA
<input type="checkbox"/>	Digital Communication course		

#### Electives\* (7-8 hours)

<input type="checkbox"/>			
<input type="checkbox"/>			
<input type="checkbox"/>			

### Degree Requirements

Earned a C- or above in each Major/Concentration/Minor credit	<input type="checkbox"/>
Minimum of 124 credit hours completed	
Minimum of 93 Liberal Arts credits for a BA degree	
At least 50% of major completed through Houghton	<input type="checkbox"/>
30 credit hours from Houghton	<input type="checkbox"/>
18 of the last 24 credit hours are from Houghton	<input type="checkbox"/>

Official degree and program requirements are housed in the Registrar's Office. This degree audit worksheet serves as an advising tool; it is not a contract, an academic transcript, or an official notification of completion of degree/program requirements. It is the student's responsibility to be aware of and understand the requirements of his/her degree program. If assistance is needed, students should consult their academic advisor and the University's academic catalog.

## \*Detailed Options

### Core Course Options

DSCI 212 Data Science II (4 LA) or CSCI 345 Machine Learning (4 LA)

and

DSCI 380 Collaborative Research in Data Science (4 LA) or DSCI 289/389/489 Data Science Internship (4 LA)

and

MATH 181 Calculus I (4 LA) or MATH 170/171 Calculus I with Pre-calculus A and B (4 LA, 4 LA)

and

Choose one digital communication class from options listed below

### Elective Options

CSCI 218	Programming II	4	
CSCI 236	Data Structures & Algorithms	4	
CSCI 312	Computational Statistics	4	LA
CSCI 315	Big Data & Cloud Computing	4	

CSCI 340	Databases	4	
DSCI 212 Data Science II (4 LA) or CSCI 345 Machine Learning (4 LA) - <u>whichever is not taken in core</u>			
MATH 261	Linear Algebra	4	LA
POLS 212/ SOC 312	Social Science Research Methods	3	LA
PSY 312	Advanced Statistics	4	LA
Digital Communication course (chosen from options below; in addition to the one taken in core)			

### Digital Communication Options

COMM 224/ ART 224	Motion Media Design & Animation	4	LA
COMM 228/ ART 228	Digital Video I	4	
COMM 232	Introduction to Web Communication	4	LA
COMM 243/ ART 245	Graphic Design	4	
COMM 284/ ART 284	Introduction to Digital Imaging	4	
COMM 314	New Media and Society	3	LA