# Data Science and Mathematics, BS (Boston)

The data science and mathematics combined major combines computer science, data science, and mathematics into an integrated curriculum. The program provides the rigorous theoretical background necessary for success in the data science field.

#### **Program Requirements**

Complete all courses listed below unless otherwise indicated. Also complete any corequisite labs, recitations, clinicals, or tools courses where specified and complete any additional courses needed beyond specific college and major requirements to satisfy graduation credit requirements.

#### **Universitywide Requirements**

All undergraduate students are required to complete the Universitywide Requirements (https://catalog.northeastern.edu/undergraduate/university-academics/university-wide-requirements/).

#### **NUpath Requirements**

All undergraduate students are required to complete the NUpath Requirements (https://catalog.northeastern.edu/undergraduate/university-academics/nupath/).

#### **Data Science Courses**

Must be taken in alignment with your home college:  SS 1200   First Year Seminar   1 or MATH 1000   Mathematics at Northeastern   1 or MATH 1000   Science at Northeastern   1 SCI 1210   Professional Development for Khoury Co-op   1 or EESC 2000   Professional Development for Co-op   1 Occupater Science Required Courses   1 All students can take a self-assessment to attempt to place out of CS 2000 and CS 2001. Students who place out of CS 2000 and CS 2001 will instead substitute with 4-5 semester hours of CS, CY, or DS coursework at the 3000 level or higher not otherwise required in the degree.  SS 1800   Discrete Structures   5 and CS 1802   and Seminar for CS 1800   1 or SS 2000   Introduction to Program Design and Implementation   5 and CS 2001   and Lab for CS 2000   1 or SS 2000   Introduction to Databases   4 Occupater Science Option   7 Oc	Code	Title	Hours
St 1200   First Year Seminar   1   Or MATH 1000   Mathematics at Northeastern   1   Or MATH 1000   Science at Northeastern   1   Or ESC 1000   Science at Northeastern   1   Or ESC 2000   Professional Development for Khoury Co-op   1   Or ESC 2000   Professional Development for Co-op   1   Or ESC 2000   Professional Development for Co-op   1   Or ESC 2000   Students who place out of CS	<b>Computer Science Overview</b>		
or MATH 1000 Science at Northeastern  Science Required Courses  Mall students can take a self-assessment to attempt to place out of CS 2000 and CS 2001. Students who place out of CS 2000 and CS 2001 illinities and substitute with 1-5 semester hours of CS, CY, or DS coursework at the 3000 level or higher not otherwise required in the degree.  Science Required in the degree.  Science Structures and CS 2001 illinities and substitute with 1-5 semester hours of CS, CY, or DS coursework at the 3000 level or higher not otherwise required in the degree.  Science Structures and CS 1800 Discrete Structures and CS 1800 and Seminar for CS 1800  Science Structures and Lab for CS 1800  Science Structures and Lab for CS 2000 introduction to Program Design and Implementation and Lab for CS 2000 introduction to Databases  Complete one of two options:  CS 2000 Introduction to Databases  CS 2100 Program Design and Implementation 1 and Lab for CS 2100 and Lab for CS 3100  DS 2500 Program Design and Implementation 2 and Lab for CS 3100  DS 2500 Intermediate Programming with Data and Lab for CS 3100  DS 2500 Intermediate Programming with Data and Lab for DS 2500  DS 3500 Advanced Programming with Data Data Science Foundations  DS 2500 Intermediate Programming with Data Data Science Foundations  DS 2500 Intermediate Programming with Data Data Science Foundations  DS 2500 Information Presentation and Visualization  4 About A 2500 Large-Scale Information Storage and Retrieval  A CS 4000 Information Presentation and Visualization  A CS 4000 Information Fresentation and Visualization Presentation Science Science Science Science Science Science Science Scien	Must be taken in alignment with you	ur home college:	
The Count of INSC 1000   Professional Development for Khoury Co-op   1 or EESC 2000   Professional Development for Khoury Co-op   1 or EESC 2000   Professional Development for Co-op   1 or EESC 2000   Professional Cs 2001 will instead substitute with 4-5 semester hours of CS, CY, or DS coursework at the 3000 level or higher not obtained for East 2001 will instead substitute with 4-5 semester hours of CS, CY, or DS coursework at the 3000 level or higher not obtained with 4-5 semester hours of CS, CY, or DS coursework at the 3000 level or higher not obtained with 4-5 semester hours of CS, CY, or DS coursework at the 3000 level or higher not obtained with 4-5 semester hours of CS, CY, or DS coursework at the 3000 level or higher not obtained with 4-5 semester hours of CS, CY, or DS coursework at the 3000 level or higher not obtained with 4-5 semester hours of CS, CY, or DS coursework at the 3000 level or higher not obtained with 4-5 semester hours of CS, CY, or DS coursework at the 3000 level or higher not obtained with 4-5 semester hours of CS, CY, or DS coursework at the 3000 level or higher not obtained with 4-5 semester hours of CS, CY, or DS coursework at the 3000 level or higher not of CS, CY, or DS coursework at the 3000 level or higher not coursework at the 3000 level or higher not of CS, CY, or DS coursework at the 3000 level or higher not of CS, CY, or DS coursework at the 3000 level or higher not course may also be taken as upper division electives.  **Course of CS, CY, or DS, CO, or DS, CO, or DS, CY, or DS,	CS 1200	First Year Seminar	1
SS 1210 Professional Development for Khoury Co-op or EESC 2000 Professional Development for Co-op Computer Science Required Courses All students can take a self-assessment to attempt to place out of CS 2000 and CS 2001. Students who place out of CS 2000 and CS 2001 will instead substitute with 4-5 semester hours of CS, CY, or DS coursework at the 3000 level or higher not otherwise required in the degree.  SS 1800 Discrete Structures and Seminar for CS 1800  SS 2000 Introduction to Program Design and Implementation and Lab for CS 2000  SS 2001 Introduction to Databases  4 Programming Sequence Pathways  Computer Science Option  CS 2100 Program Design and Implementation 1 and Lab for CS 2100  SS 3100 Program Design and Implementation 2 and Lab for CS 2100  SS 3100 Program Design and Implementation 2 and Lab for CS 3100  And SS 3101 and Lab for CS 2100  SS 3500 Intermediate Programming with Data and Lab for CS 3100  Data Science Option  SS 2500 Intermediate Programming with Data and Lab for DS 2500  DS 3500 Advanced Programming with Data  Data Science Foundations  DS 2500 Advanced Programming with Data  DATA Science Foundations  DS 3500 Advanced Programming with Data  DATA Science Foundations  DS 3500 Advanced Programming with Data  DATA Science Foundations  DS 3500 Advanced Programming with Data  DATA Science Foundations  DS 3500 Advanced Programming with Data  DATA Science Foundations  DS 3500 Advanced Programming with Data  DATA Science Foundations  DS 3500 Advanced Programming with Data  DATA Science Foundations  DS 3500 Advanced Programming with Data  DATA Science Foundations  DS 3500 Advanced Programming with Data  DATA Science Foundations  DS 3500 Advanced Programming with Data  DATA Science Foundations  DS 3500 Advanced Programming with Data  DATA Science Foundations  DS 3500 Advanced Programming with Data  DATA Science Foundations  DS 3500 Advanced Programming with Data  DATA Science Foundations  DS 3500 Advanced Programming with Data  DATA Science Foundations  DATA Science Foundations  DATA Science Founda	or MATH 1000	Mathematics at Northeastern	
To FESC 2000 Professional Development for Co-op  Computer Science Required Course  All students can take a self-assessment to attempt to place out of CS 2000 and CS 2001. Students who place out of CS 2000 and CS 2001 will instead substitute with 4-5 semester hours of CS, CY, or DS coursework at the 3000 level or higher not otherwise required in the degree.  Solo Discrete Structures and Seminar for CS 1800  Solo Discrete Structures and Implementation 1  Advanced Programming with Data  Advanced	or INSC 1000	Science at Northeastern	
Computer Science Required Courses All students can take a self-assessment to attempt to place out of CS 2000 and CS 2001. Students who place out of CS 2000 and CS 2001 will instead substitute with 4-5 semester hours of CS, CY, or DS coursework at the 3000 level or higher not students and CS 2001 will instead substitute with 4-5 semester hours of CS, CY, or DS coursework at the 3000 level or higher not students and CS 2001 will instead substitute with 4-5 semester hours of CS, CY, or DS coursework at the 3000 level or higher not students and CS 2002 and Seminar for CS 1800  SS 2000 Introduction to Program Design and Implementation and Lab for CS 2000  SS 3000 Introduction to Databases  4 Programming Sequence Pathways  Complete one of two options:  CS 2100 Program Design and Implementation 1 and Lab for CS 2100  CS 3100 Program Design and Implementation 1 and Lab for CS 2100  and CS 3101 and Lab for CS 2100  CS 3100 Program Design and Implementation 2 and Lab for CS 3100  Data Science Option  DATA Science Option  DATA Science Option  DATA Science Option  DATA Science Foundations  Advanced Programming with Data and Lab for DS 2500  DS 3500 Advanced Programming with Data  And DS 4200 Information Presentation and Visualization  4 Choury Approved Electives  With advisor approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.  Complete 8 semester hours from within the following options:  8 CS 2500 or higher, except CS 5010	CS 1210	Professional Development for Khoury Co-op	1
All students can take a self-assessment to attempt to place out of CS 2000 and CS 2001. Students who place out of CS 2000 and CS 2001 will instead substitute with 4-5 semester hours of CS, CY, or DS coursework at the 3000 level or higher not obtain the degree.  SS 1800  Discrete Structures SS 1800  Discrete Structures SS 2000  Introduction to Program Design and Implementation and Lab for CS 2000  Introduction to Databases  4  Programming Sequence Pathways  Complete one of two options: SS 2000  Program Design and Implementation 1 and Lab for CS 2100 CS 3100 And CS 2101 And Lab for CS 2100 SS 3101 And Lab for CS 2100 SS 3101 And Lab for CS 3100 And SS 3101 And Lab for CS 3100 SS 3500 Data Science Option  DS 2500 Advanced Program Design and Implementation 2 and Lab for DS 2500 DS 3500 Advanced Programming with Data and DS 2501 Advanced Programming with Data And DS 2501 Advanced Programming with Data And DS 2501 Advanced Programming with Data Advanced Programming with Data Data Science Foundations  DS 4200 Information Presentation and Visualization  4  Khoury Approved Electives  With advisor approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.  Complete 8 semester hours from within the following options:  8  CS 2500 or higher, except CS 5010	or EESC 2000	Professional Development for Co-op	
and CS 2001 will instead substitute with 4-5 semester hours of CS, CY, or DS coursework at the 3000 level or higher not substitute with 4-5 semester hours of CS, CY, or DS coursework at the 3000 level or higher not substitute with 4-5 semester hours of CS, CY, or DS coursework at the 3000 level or higher not substitute with 4-5 semester hours of CS, CY, or DS coursework at the 3000 level or higher not substitute with 4-5 semester hours of CS, CY, or DS coursework at the 3000 level or higher not substitute with 4-5 semester hours of CS 1800  CS 28000 Introduction to Program Design and Implementation 3 and Lab for CS 2000  CS 3200 Introduction to Databases 4  Programming Sequence Pathways  Complete one of two options: 9  Complete one of two options: 9  CS 2100 Program Design and Implementation 1 and CS 2101 and Lab for CS 2100  CS 3100 Program Design and Implementation 2 and CS 3100 and Lab for CS 3100  Data Science Option  DS 2500 Intermediate Programming with Data and DS 2501 and Lab for DS 2500  DS 3500 Advanced Programming with Data  DATA Science Foundations  DATA S	<b>Computer Science Required Course</b>	s	
and CS 1802 and Seminar for CS 1800  SS 2000 Introduction to Program Design and Implementation and Lab for CS 2000  Introduction to Databases 4  Programming Sequence Pathways  Complete one of two options: 9  Complete one of two options: 9  Computer Science Option  CS 2100 Program Design and Implementation 1 and Lab for CS 2100 and Lab for CS 21		·	
and CS 2001 and Lab for CS 2000 CS 3200 Introduction to Databases 4  Programming Sequence Pathways  Complete one of two options: 9  Computer Science Option  CS 2100 Program Design and Implementation 1 and CS 2101 and Lab for CS 2100  CS 3100 Program Design and Implementation 2 and CS 3101 and Lab for CS 3100  CS 3100 Program Design and Implementation 2 and CS 3101 and Lab for CS 3100  Data Science Option  DS 2500 Intermediate Programming with Data and DS 2501 and Lab for DS 2500  DS 3500 Advanced Programming with Data  DS 3500 Advanced Programming with Data  DS 3000 Foundations of Data Science  DS 4200 Information Presentation and Visualization 4  DS 4300 Large-Scale Information Storage and Retrieval  With advisor approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as  Lapper-division electives.  Complete 8 semester hours from within the following options: 8 CS 2500 or higher, except CS 5010	CS 1800 and CS 1802		5
Programming Sequence Pathways Complete one of two options:  CS 2100 and CS 2101 and Lab for CS 2100 CS 3100 and CS 3101 and Lab for CS 3100 Data Science Option  DS 2500 BI Intermediate Programming with Data and Lab for DS 2500 DS 3500 Advanced Programming with Data and DS 2501 DS 3500 Advanced Programming with Data DS 2500 BI Science Foundations  DS 2400 Information Presentation and Visualization Again Science Sould Information Presentation and Visualization Again Science Sould Information Presentation and Visualization Again Science Sould Information Storage and Retrieval  Khoury Approved Electives  With advisor approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.  Complete 8 semester hours from within the following options:  CS 2500 or higher, except CS 5010	CS 2000 and CS 2001		5
Complete one of two options:  CS 2100 Program Design and Implementation 1 and CS 2101 and Lab for CS 2100  CS 3100 Program Design and Implementation 2 and LS 2101 and LS 2101 and LS 2101  DATE OF COMPTON OF COMPTON OF CS 2100  DATE OF COMPTON OF CS 2100  Advanced Programming with Data  DATE OF COMPTON OF COMPT	CS 3200	Introduction to Databases	4
CS 2100 Program Design and Implementation 1 and CS 2101 and Lab for CS 2100  CS 3100 Program Design and Implementation 2 and CS 3101 and Lab for CS 3100  Data Science Option  DS 2500 Intermediate Programming with Data and DS 2501 and Lab for DS 2500 DS 3500 Advanced Programming with Data  DS 2500 Intermediate Programming with Data  DS 2500 Advanced Programming with Data  DS 3500 Foundations  DS 3000 Foundations of Data Science  DS 4200 Information Presentation and Visualization 4 DS 4300 Large-Scale Information Storage and Retrieval  Khoury Approved Electives  With advisor approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.  Complete 8 semester hours from within the following options:  8 CS 2500 or higher, except CS 5010	<b>Programming Sequence Pathways</b>		
CS 2100 Program Design and Implementation 1 and CS 2101 and Lab for CS 2100  CS 3100 Program Design and Implementation 2 and CS 3101 and Lab for CS 3100  Data Science Option  DS 2500 Intermediate Programming with Data and Lab for DS 2500  DS 3500 Advanced Programming with Data  Data Science Foundations  DS 3000 Foundations of Data Science 4  DS 4200 Information Presentation and Visualization 4  DS 4300 Large-Scale Information Storage and Retrieval 4  Khoury Approved Electives  With advisor approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.  Complete 8 semester hours from within the following options: 8  CS 2500 or higher, except CS 5010	Complete one of two options:		9
and CS 2101 and Lab for CS 2100  CS 3100 Program Design and Implementation 2 and Lab for CS 3100  Data Science Option  DS 2500 Intermediate Programming with Data and DS 2501 and Lab for DS 2500  DS 3500 Advanced Programming with Data  Data Science Foundations  DS 3000 Foundations of Data Science  DS 4200 Information Presentation and Visualization  A 4200 Large-Scale Information Storage and Retrieval  A Khoury Approved Electives  With advisor approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.  Complete 8 semester hours from within the following options:  8 CS 2500 or higher, except CS 5010	Computer Science Option		
and CS 3101 and Lab for CS 3100  Data Science Option  DS 2500 Intermediate Programming with Data and DS 2501 and Lab for DS 2500  DS 3500 Advanced Programming with Data  Data Science Foundations  DS 3000 Foundations of Data Science  DS 4200 Information Presentation and Visualization 4  DS 4300 Large-Scale Information Storage and Retrieval 4  Khoury Approved Electives  With advisor approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.  Complete 8 semester hours from within the following options: 8  CS 2500 or higher, except CS 5010			
DS 2500 Intermediate Programming with Data and DS 2501 and Lab for DS 2500  DS 3500 Advanced Programming with Data  Data Science Foundations  DS 3000 Foundations of Data Science 4  DS 4200 Information Presentation and Visualization 4  DS 4300 Large-Scale Information Storage and Retrieval 4  Khoury Approved Electives  With advisor approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.  Complete 8 semester hours from within the following options: 8  CS 2500 or higher, except CS 5010			
and DS 2501 and Lab for DS 2500 DS 3500 Advanced Programming with Data  Data Science Foundations DS 3000 Foundations of Data Science 4 DS 4200 Information Presentation and Visualization 4 DS 4300 Large-Scale Information Storage and Retrieval 4  Khoury Approved Electives With advisor approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as supper-division electives.  Complete 8 semester hours from within the following options: 8 CS 2500 or higher, except CS 5010	Data Science Option		
Data Science Foundations DS 3000 Foundations of Data Science 4 DS 4200 Information Presentation and Visualization 4 DS 4300 Large-Scale Information Storage and Retrieval 4 Khoury Approved Electives With advisor approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives. Complete 8 semester hours from within the following options: 8 CS 2500 or higher, except CS 5010			
Pos 3000 Foundations of Data Science 4 DS 4200 Information Presentation and Visualization 4 DS 4300 Large-Scale Information Storage and Retrieval 4  Khoury Approved Electives With advisor approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives. Complete 8 semester hours from within the following options: 8 CS 2500 or higher, except CS 5010	DS 3500	Advanced Programming with Data	
Information Presentation and Visualization  Large-Scale Information Storage and Retrieval  Khoury Approved Electives With advisor approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.  Complete 8 semester hours from within the following options:  CS 2500 or higher, except CS 5010	Data Science Foundations		
Large-Scale Information Storage and Retrieval 4  Khoury Approved Electives  With advisor approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.  Complete 8 semester hours from within the following options:  CS 2500 or higher, except CS 5010	DS 3000	Foundations of Data Science	4
Khoury Approved Electives With advisor approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives. Complete 8 semester hours from within the following options:  CS 2500 or higher, except CS 5010	DS 4200	Information Presentation and Visualization	4
With advisor approval, directed study, research, project study, and appropriate graduate-level courses may also be taken as upper-division electives.  Complete 8 semester hours from within the following options:  CS 2500 or higher, except CS 5010	DS 4300	Large-Scale Information Storage and Retrieval	4
upper-division electives.  Complete 8 semester hours from within the following options:  CS 2500 or higher, except CS 5010	Khoury Approved Electives		
CS 2500 or higher, except CS 5010	With advisor approval, directed stud upper-division electives.	ly, research, project study, and appropriate graduate-level courses may also be taken as	
	Complete 8 semester hours from wi	thin the following options:	8
CY 2000 or higher, except CY 4930	CS 2500 or higher, except CS 501	0	
	CY 2000 or higher, except CY 493	0	

#### 2 Data Science and Mathematics, BS (Boston)

DS 2500 or higher, except DS 4900

MKTG 4606

	2-ig.ta., /a., t.oo, 1-ooorg), a.ra / tatomation 1.ooca.or. 1.ooca.or.	
<b>Mathematics Courses</b>		
Code	Title	Hours
Problem-Solving Requirement		
MATH 1365	Introduction to Mathematical Reasoning	4
Calculus Requirements		
MATH 1341	Calculus 1 for Science and Engineering	4
MATH 1342	Calculus 2 for Science and Engineering	4
MATH 2321	Calculus 3 for Science and Engineering	4
Intermediate and Advanced Matl	h Requirements	
MATH 2331	Linear Algebra	4
MATH 2341	Differential Equations and Linear Algebra for Engineering	4
MATH 3081	Probability and Statistics	4
MATH 3175	Group Theory	4
MATH 3527	Number Theory 1	4
Mathematics Elective Requirement	ents	
Complete four courses in the following	lowing range:	16

Digital, Analytics, Technology, and Automation Research Practicum

#### **Integrative Requirements**

Code	Title	Hours
Integrative Courses		
DS 4400	Machine Learning and Data Mining 1	4
DS 4420	Machine Learning and Data Mining 2	4

#### **Computer Science Writing Requirements**

MATH 3001 to MATH 4999 but not MATH 4000

icits	
Title	Hours
First-Year Writing	4
First-Year Writing for Multilingual Writers	
Advanced Writing in the Technical Professions	4
Advanced Writing in the Sciences	
Interdisciplinary Advanced Writing in the Disciplines	
	Title  First-Year Writing First-Year Writing for Multilingual Writers  Advanced Writing in the Technical Professions Advanced Writing in the Sciences

#### **Required General Electives**

Code	Title	Hours
Complete 20 semester hours of general ele	ectives.	20

### **Khoury College GPA Requirement**

Minimum cumulative 2.000 GPA required in all CS, CY, DS, and IS courses

# **Science GPA Requirement (Mathematics)**

A minimum 2.000 GPA in the following course codes is required: MATH.

#### **NUpath Requirements Satisfied**

- · Advanced Writing in the Disciplines
- Analyzing and Using Data
- · Conducting Formal and Quantitative Reasoning
- Demonstrating Thought and Action in a Capstone
- Engaging with the Natural and Designed World
- · Writing in the First Year
- · Writing-Intensive in the Major

Integrating Knowledge and Skills Through Experience is satisfied through co-op.

# **Program Requirement**

130 total semester hours required

# **Plan of Study**

# **Sample Plans of Study**

# FOUR YEARS, TWO CO-OPS IN SUMMER SECOND HALF/FALL

			_
v	`~	_	7

real I								
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	
CS 1200		1 DS 2500 and DS 2501		5 MATH 3081		4 General Elective		4
CS 1800 and CS 1802		5 MATH 1342		4 General Elective		4 General Elective		4
CS 2000 and CS 2001		5 MATH 1365		4				
ENGW 1111		4 General Elective		4				
MATH 1341		4						
		19	1	17		8		8
Year 2								
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	
CS 3200		4 CS 1210		1 MATH 3527		4 Co-op		0
DS 3000		4 DS 3500		4 Khoury Elective		4		
MATH 2321		4 DS 4200		4				
MATH 2341		4 MATH 2331		4				
		MATH elective		4				
		16	1	17		8		0
Year 3								
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	
Со-ор		0 DS 4300		4 ENGW 3302, 3307, or 3315		4 Co-op		0
		DS 4400		4 General Elective		4		
		MATH 3175		4				
		MATH elective		4				
		0	1	16		8		0
Year 4								
Fall	Hours	Spring	Hours					
Со-ор		0 DS 4420		4				
		Khoury Elective		4				
		MATH elective		4				
		General Elective		4				
		0		16				
Total Haura: 122								

Total Hours: 133

#### FOUR YEARS, TWO CO-OPS IN SPRING/SUMMER FIRST HALF

٧	e	а	r	1

Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours
CS 1200		1 DS 2500 and DS 2501		5 MATH 3081		4 General Elective	4
CS 1800 and CS 1802	!	5 MATH 1342		4 General Elective		4 General Elective	4
CS 2000 and CS 2001		5 MATH 1365		4			
ENGW 1111	•	4 General Elective		4			
MATH 1341		4					
	19	9	1	17		8	8

#### 4 Data Science and Mathematics, BS (Boston)

Year 2								
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	
CS 1210		1 Co-op		Со-ор		Khoury Elective		4
CS 3200		4				General Elective		4
DS 3000		4						
MATH 2321		4						
MATH 2341		4						
		17	1	0	-	0		8
Year 3								
Fall	Hours	Spring	Hours	Summer 1	Hours	Summer 2	Hours	
Со-ор		0 Co-op		Co-op		ENGW 3302, 3307, or 3315		4
DS 3500		4				General Elective		4
DS 4200		4						
MATH 2331		4						
MATH Elective		4						
		16		0		0		8
Year 4								
Fall	Hours	Spring	Hours					
DS 4300		4 DS 4420		4				
DS 4400		4 MATH 3527		4				
MATH 3175		4 Khoury Elective		4				
MATH elective		4 MATH elective		4				
		16	1	6				

Total Hours: 133