## **Data Science-BS**

## THE UNIVERSITY OF RHODE ISLAND FALL 2018-SPRING 2019

120 Credits Total 56 Credits in Major

#### ABOUT THE DATA SCIENCE BS DEGREE:

The BS program in Data Science is designed to provide a broad introduction to the fundamentals of data science including ethics, computing, statistics, and mathematics. The required mathematics preparation provides a basis for advanced work. Students will be well prepared for careers or graduate study in data science.

## **STEP 1:**

## **Major Requirements:**

Course	Semester	Credits	Grade
MTH 141*		4	
MTH 142*		4	
MTH 215		3	
CSC 201 or 211		4	
CSC 320		4	
CSC/DSP 310		4	
DSP/STA 441		4	
CSC/DSP 461		4	
STA 305		4	_
STA 409		3	
BUS 456		3	
WRT 201* or HPR 112		3	
CSC 499 or STA/DSP 490		4	

Complete three courses from the following domain areas:

Biological Sciences: BIO 439, CMB 320, BPS/CSC/STA 522

Computer Science: CSC 212, 412, 415, 436, 450

Data Science Program: DSP 393

Geographic Information Systems: LAR 302 or NRS 409/410

Mathematics: MTH 243, 418, 447, 451, 471

Oceanography: OCG 350, 351

Social Science and Humanities: HIS 116, PHL 212\*

Statistics: STA 411 or 412, STA 445, 460

	3-4	
	3-4	
	3-4	

<sup>\*</sup>Course approved for general education credit

## Free elective credits (to meet the 120 credits required for graduation):

Course	Credits	Course	Credits

In order to transfer to the College of Arts and Sciences, students must complete MTH 131 or 141, MTH 215, and STA 409. Students must also have a 2.00 GPA both cumulatively and in all courses required for the major that have been completed at the time of transfer.

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**GENERAL EDUCATION GUIDELINES:** General education is 40 credits. Each of the twelve outcomes (A1-D1) must be met by at least 3 credits. A single course may meet more than one outcome, but cannot be double counted towards the 40 credit total. At least one course must be a Grand Challenge (G). No more than twelve credits can have the same course code (note- HPR courses may have more than 12 credits). General education courses may also be used to meet requirements of the major or minor when appropriate.

**STEP 2:** STEP 3:

# **General Education Credit Count** At least 40 credits, no more than 12 credits with the same course code. Course Course Cr. Cr. Total Gen Ed credits 40

General Education Outcome Audit			
	Course		
KNOWLEDGE			
A1. STEM			
A2. Social & Behavioral Sciences			
A3. Humanities			
<b>A4.</b> Arts & Design			
COMPETENCIES			
<b>B1.</b> Write effectively			
<b>B2.</b> Communicate effectively			
<b>B3.</b> Mathematical, statistical, or			
computational strategies			
<b>B4.</b> Information literacy			
RESPONSIBILITIES			
C1. Civic knowledge &			
responsibilities			
C2. Global responsibilities			
C3. Diversity and Inclusion			
INTEGRATE & APPLY			
<b>D1.</b> Ability to synthesize			
GRAND CHALLENGE			
<b>G.</b> Check that at least one course of			
your 40 credits is an approved "G"			
course			

### SEE OPPOSITE SIDE FOR PROGRAM REQUIREMENTS.

**NOTE:** This worksheet sheet is a snapshot of your entire curriculum. You must work with your advisor each term to discuss requirements to keep you on course for timely progress to complete this major. Official requirements for graduation are listed in the University Catalog.

Please note: Both major and cumulative GPA must be 2.00 or higher in order to graduate.

## Data Science BS (2018-2019 Catalog)

#### Requirements by Year

The below is a sample plan showing how a student may graduate with this major in 4 years. It is not intended to be prescriptive. Credits in transfer, as well as summer or j-term coursework, may result in deviations from the above recommendations. Students should consult with an advisor to ensure they are on track each semester. For course titles and pre-requisite information, please visit: uri.edu/catalog

Fall	Spring	Milestones	
Year One			
WRT 201 (B1, B4)	CSC 201	Overall GPA 2.00	
Math prerequisite or free elective	MTH 141 (A1, B3)	Consider minor or second major	
A2 gen ed	A4 gen ed		
A3 gen ed	B2 gen ed	Earn at least a C- in MTH 141 to take MTH 142	
Free elective		Complete 30 credits	
URI 101			
(17 credits total)	(14 credits total)		

Year Two			
MTH 142	CSC/DSP 310	Overall GPA 2.00	
STA 409	MTH 215	Eligible to move to the College of Arts &	
C1 gen ed	C3 gen ed	Sciences	
C2 gen ed	G gen ed	STA 409 is a pre-requisite for STA 305	
Free elective	Free elective	Consider/declare minor or second major	
(16 credits total)	(16 credits total)	Complete 60 credits	

Year Three			
CSC 320	STA/DSP 441	Overall GPA 2.00	
STA 305	Elective from domain area	Consider internship	
CSC/DSP 461	Elective from domain area	Complete 90 credits	
Free elective	Free elective		
	Free elective		
(15 credits total)	(16 credits total)		

Year Four			
BUS 456	CSC 499 or STA/DSP 490	Overall GPA 2.00	
D1 gen ed	Free elective	Complete Intent to Craduate Form by Oct 1st	
Elective from domain area	Free elective	Complete Intent to Graduate Form by Oct 1st	
Free elective	Free elective	Complete 120 credits	
Free elective	Free elective (if needed)		
(15 credits total)	(13-15 credits total)		

## **Course Offerings**

Please note that some courses are only offered in the fall or spring semesters, as indicated below.

 Fall
 Spring

 STA 305
 CSC/DSP 310

 CSC/DSP 461
 STA 445

 STA/DSP 441
 STA/DSP 490