



# MS-DS Degree Progress Worksheet

Name

Date

This worksheet is designed to help you plan and track your progress toward the MS-DS degree. Please consult with your Graduate Advisor for questions regarding your degree requirements and progress. See also: [Recommended Study Plans](#).

## Core Courses (21 Credits)

### Required Core Courses (15 credits)

Course Number & Title	Course Taken & No. of Credits		Semester to Complete
	<input type="checkbox"/>		
DTSC 5301 - Data Science as a Field	<input type="checkbox"/>	1	
DTSC 5302 - Ethical Issues in Data Science	<input type="checkbox"/>	1	
DTSC 5303 - Cybersecurity for Data Science	<input type="checkbox"/>	1	
STAT 5000 - Statistical Methods and Applications 1	<input type="checkbox"/>	3	
STAT 5010 - Statistical Methods and Applications 2	<input type="checkbox"/>	3	
CSCI 5502 - Data Mining	<input type="checkbox"/>	3	
CSCI 5622 - Machine Learning	<input type="checkbox"/>	3	

### Choose Two Courses (6 credits) – Choose Plan & Select from the Following Core Courses Below

- Plan A & C:** Students on [Plan A](#) or [Plan C](#) must take: DTSC 5501 Data Structures & Algorithms & **either** ATLS 5214 Big Data Architecture **or** DTCS 5020 Introduction to Statistical Learning **or** CSCI 5253 Datacenter Scale Computing **or** INFO 5602 Information Visualization
- Plan B:** Students on [Plan B](#) must **select two courses** from the following: **(1)** Either ATLS 5214 Big Data Architecture **or** CSCI 5253 Datacenter Scale Computing, **(2)** DTSC 5020 Introduction to Statistical Learning, **(3)** CSCI 5454 Design and Analysis of Algorithms **or** **(4)** INFO 5602 Information Visualization

Course Number & Title	Course Taken & No. of Credits		Semester to Complete
	<input type="checkbox"/>		
DTSC 5501 - Data Structures & Algorithms	<input type="checkbox"/>	3	
ATLS 5214 - Big Data Architecture <b>OR</b> CSCI 5253 - Datacenter Scale Computing <i>*Students cannot take/count both courses toward core requirements</i>	<input type="checkbox"/>	3	
STAT 5600 - Methods in Statistical Learning	<input type="checkbox"/>	3	
INFO 6502 - Information Visualization	<input type="checkbox"/>	3	
CSCI 5454 - Design and Analysis of Algorithms	<input type="checkbox"/>	3	

## Elective Courses (9 Credits)

See [Curriculum](#) page for details. Electives are subject to change and department availability/consent. For any electives not currently approved for credit toward the MS-DS degree, you must consult with your Graduate Advisor for approval.

- ▶ **Computer Science:** CSCI 5302 Advanced Robotics (3) | CSCI 5341 Dynamic Models in Biology (3) | CSCI 5322 Algorithmic Human-Robot Interaction (3) | CSCI 5352 Network Analysis & Modeling (3) | CSCI 5402 Research Methods in Human-Robot Interaction (3) | CSCI 5403 Cybersecurity (3) | CSCI 5423 Biologically-Inspired Multi-Agent Systems (3) | CSCI 5454 Design Analysis of Algorithms (3) | CSCI 5576 High Performance Scientific Computing (3) | CSCI 5722 Computer Vision (3) | CSCI 5822 Probabilistic Models of Human and Machine Learning (3) | CSCI 5832 Natural Language Processing (3) | CSCI 5880 Interactive Machine Learning for Customizable and Expressive Interfaces (3) | CSCI 5922 Neural Networks & Deep Learning (3) | CSCI 6502 Big Data Analytics – Systems, Algorithms & Applications (3) | CSCI 7000 Current Topics in Computer Science (3)
- ▶ **Data Science:** DTSC 5930 Internship (1–3) | DTSC 5840 Independent Study (1–6) | DTSC 5810 Capstone (3) | DTSC 5900 Special Topics (3)
- ▶ **Information Science:** INFO 5507 Data & the Humanities (3) | INFO 5601 Ethical & Policy Dimensions of Information & Technology (3) | INFO 5612 Recommender Systems (3) | INFO 5613 Network Science (3)
- ▶ **Business/Analytics:** MBAX 6410 Process Analytics (3) | MSBC 5680 Optimization Modeling (3) | MSBX 5405 Structured Data Modeling and Analysis (3) | MSBX 5310 Customer Analytics (3) | MSBX 5420 Unstructured and Distributed Data Modeling Analysis (3)

\*Other graduate level courses can be taken with faculty and advisor approval. See [Data Science Electives](#) page for details.

Course Number & Title	Course Taken & No. Of Credits	Semester to Complete
	<input type="checkbox"/>	
	<input type="checkbox"/>	
	<input type="checkbox"/>	
	<input type="checkbox"/>	

## Notes