

WPI DATA SCIENCE MINOR PROGRAM PLANNING and APPROVAL FORM

Last Name:

First Name:

WPI ID:

WPI Email:

Major Department:

Graduation Date:

In the table below, list 6 courses from the Approved DS minor courses. Please note that no more than one unit of coursework (3 courses) may be double counted. First visit: <https://www.wpi.edu/academics/study/data-science-minor> to know more about the Minor process. Then contact DS-minor-advisor@wpi.edu to know related procedures and indicate your Minor intentions by completing the [Minor Declaration Form](#) and [planning and approval form](#). After completing the minor, please update and send the [Planning and Approval Form](#) with an official copy of your transcript to DS-minor-advisor@wpi.edu **to get a signature to confirm completion**. At any point, if you have any questions about the courses that you are planning to take for completing your Data Science minor, please send an email to or schedule a meeting with DS-minor-advisor@wpi.edu to have your questions answered.

DATA SCIENCE MINOR REQUIREMENTS

	Course	Term	Grade	Double Count Y/N
1 Business DS Courses, 2000 level or ↑				
2 Computer Science DS Courses, 2000 Level or ↑				
3 Math Sciences DS Course, 2000 Level or ↑				
4 DS Core Course (DS1010/DS2010 or DS3010)				
5 DS Core Course (DS1010/DS2010 or DS3010)				
6 Any approved discipline Course, 3000 level or ↑				
Have you discussed the DS minor with your Academic Advisor?				

Academic Advisor's Signature: _____

Advisor's Printed Name and Title: _____

CERTIFICATION of DS MINOR COMPLETION

DS Minor Completion Approval by DS Minor Advisor.

Signature: _____ Date: _____

**Credit may not be earned for both MA 2621 *and* MA 2631.

‡ Credit may not be earned for both CS 2102 *and* CS 2103

** Credit may be earned for both BUS 2080 and OIE 2081

APPROVED COURSES for the DATA SCIENCE MINOR

DATA SCIENCE CORE COURSES

DS 1010 Data Science I: Introduction to Data Science
 DS 2010 Data Science II: Modeling and Data Analysis
 DS 3010 Data Science III: Computational Data Intelligence

BUSINESS COURSES

BUS 2080 Data Analysis for Decision Making	MIS 4741 User Experience and Design
BUS 3010 Creating Value Through Innovation	MKT 3650 Consumer Behavior
ETR 3633 Entrepreneurial Selling	OIE 2081 Introduction to Prescriptive Analytics
MIS 3720 Business Data Management	OIE 3460 Simulation Modeling and Analysis
MIS 4084 Business Intelligence	OIE 4430 Advanced Prescriptive Analytics: From Data to Impact
MIS 4720 Systems Analysis and Design	

COMPUTER SCIENCE COURSES

CS 2102 Object-Oriented Design Concepts	CS 4120 Analysis of Algorithms
CS 2103 Accelerated Object-Oriented Design Concepts	CS 4233 Object-Oriented Analysis and Design
CS 2022/MA 2201 Discrete Mathematics	CS 4241 Webware: Computational Technology for Network Information Systems
CS 2119 Application Building with Object-Oriented Concepts	CS 4341 Introduction to Artificial Intelligence
CS 2223 Algorithms	CS 4342 Machine Learning
CS 2301 Systems Prog. for Non-Majors	CS 4432 Database Systems II
CS 2303 Systems Programming Concepts	DS/CS 4433 Big Data Management and Analytics
CS 3041 Human-Computer Interaction	CS 4445 Data Mining and Knowledge Discovery in Databases
CS 3133 Foundations of Computer Science	CS 4802/BCB 4002 Biovisualization
CS 3431 Database Systems I	CS 4803/BCB 4003 Biological and Biomedical Database Mining
CS 3733 Software Engineering	

MATHEMATICAL SCIENCES COURSES

MA 2051 Ordinary Differential Equations	MA 3233 Discrete Optimization
MA 2071 Matrices and Linear Algebra I	CS 4032/MA 3257 Numerical Methods for Linear and Nonlinear Systems
MA 2072 Accelerated Matrices and Linear Algebra I	MA 3627 Introduction to the Design and Analysis of Experiments
MA 2073 Matrices and Linear Algebra II	MA 3631 Mathematical Statistics
CS 2022/MA 2201 Discrete Mathematics	MA 4213 Loss Models I - Risk Theory
MA 2210 Mathematical Methods in Decision Making	MA 4214 Loss Models II - Survival Models
MA 2431 Mathematical Modeling with Ordinary Differential Equations	MA 4235 Mathematical Optimization
MA 2611 Applied Statistics I	MA 4237 Probabilistic Methods in Operations Research
MA 2612 Applied Statistics II	MA 4603/BCB 4004 Statistical Methods in Genetics and Bioinformatics
MA 2621 Probability for Applications	MA 4631 Probability and Mathematical Statistics I
MA 2631 Probability Theory	MA 4632 Probability and Mathematical Statistics II
MA 3231 Linear Programming	MA/DS 4635 Data Analytics and Statistical Learning