

WPI DATA SCIENCE Ph.D PLAN of STUDY

STUDENT NAME: _____ WPI ID: _____

Faculty Advisor: _____

1. Core *Breadth* Competency: Students must take a course from *each of five* Core DS Categories - 15 credits.
2. Core *Depth* Competency: Students must take 2 *additional* courses from *any of 5* Core DS Categories - 6 credits.
3. Only courses with a **B** grade or higher may be counted toward the Ph.D. Competency Requirements.
4. Students must earn an **A** in 4 of the 7 Core Competency Category Courses to meet Ph.D. Competency Requirements.

CORE COMPETENCY CATEGORIES

*Students without prior background in a Core DS Category are advised to take the course listed with a star. **

With prior advisor approval, students may submit a petition to take a course other than those in a Core DS Category.

1. INTEGRATIVE DATA SCIENCE:		Semester	Grade
DS 501 *	Introduction to Data Science		
2. MATHEMATICAL ANALYTICS:		Semester	Grade
DS 502/MA 543 *	Statistical Methods for Data Scientists		
MA 542	Regression Analysis		
MA 554	Applied Multivariate Analysis		
3. DATA ACCESS and MANAGEMENT:		Semester	Grade
CS 542 *	Database Management Systems		
MIS 571 *	Database Applications Development		
CS 561	Advanced Topics in Database systems		
DS 503/CS 585	Big Data Management		
4. DATA ANALYTICS and MINING:		Semester	Grade
CS 548 *	Knowledge Discovery and Data Mining		
CS 539	Machine Learning		
DS 504/CS 586	Big Data Analytics		
5. BUSINESS INTELLIGENCE and CASE STUDIES:		Semester	Grade
MIS 584 *	Business Intelligence		
MKT 568	Data Mining Business Applications		

APPROVED PETITIONED COURSES

You can file a petition to have other courses counted toward the core competency requirement.

COURSE NUMBER	COURSE TITLE	CREDITS	GRADE	OTHER
Course 1:				
Course 2:				
Course 3:				
Course 4:				
Course 5:				
Course 6:				

STUDENT, FACULTY and GRADUATE ADVISOR SIGNATURES

STUDENT SIGNATURE: _____ Date: _____

Student printed name: _____

FACULTY ADVISOR SIGNATURE: _____ Date: _____

Faculty Advisor Printed Name: _____

GRADUATE COORDINATOR SIGNATURE: _____ Date: _____

Graduate Coordinator Printed Name: _____

Once signed by your Faculty Advisor and yourself, please bring to the Data Science office.