

Name: _____

Email: _____

ID: _____

Phone: _____

Bridge Courses (Required if no previous background)

		Credits	Pre-Req	Semester	Grade
CS 623	Database Management Systems (or Equivalent)	3	CS 504		
CS 632P	Python Programming (or Equivalent)	3	Programming experience		

Core Courses (18 credits)

		Credits	Pre-Req	Semester	Grade
CS 660	Mathematical Foundation of Analytics	3	Calculus; linear algebra; introductory statistics	Fall 1	
CS 673	Scalable Databases	3	CS 623, CS 632P	Fall 1	
CS 675	Introduction to Data Science	3	Introductory statistics; programming experience	Fall 1	
CS 619	Data Mining	3	CS 504	Spring 1	
CS 632M	Machine Learning	3	CS 675, CS 660	Spring 1	
CS 676	Algorithms for Data Science	3	CS 675, CS 660	Spring 1	

Data Science Capstone Course (3 credits)

		Credits	Pre-Req	Semester	Grade
CS 668	Analytics Capstone Project	3	At least 18 credits completed	Spring 2	

Electives (6 credits must be in Computer Science Courses)

		Credits	Pre-Req	Semester	Grade

Total Credits _____

Advisor _____ **Date** _____

Elective Courses (9 credits – 6 must be from Computer Science)

		Credits	Pre-Req	Semester	Grade
CS 672	Introduction to Deep Learning	3	CS 660, CS 632P		
CS 608	Algorithms and Computing Theory	3	CS 504		
CS 618	Complex Systems	3	CS 660		
CS 626	Mathematical Optimization Techniques	3	CS 660		
CS 627	Artificial Intelligence	3	CS 504		
CS 671	Computer Vision	3	Programming experience, CS 660		
CS 655	Pattern Recognition	3	CS 504, CS 608		
CS 658	Introduction to Analytics Computing	3			
CS 662	Big Data Warehousing	3	CS 658		
CS 632N	Online Social Network Analysis	3	CS 608		
CS 632W	Data Science Seminar	1			
CS 674	Supportive Technologies for Blockchain	3			
CS 701	Advanced Algorithms	3	CS 241 or CS 608		
CS 727	Advanced Artificial Intelligence	3	CS 502		
CS 740	Advanced Computer Vision	3			
CS 755	Advanced Pattern Recognition and Machine Learning	3	CS 619 and Instructor Permission		

		Credits	Pre-Req	Semester	Grade
IS 614	Applied Artificial Intelligence	3	IS 617		
IS 637	Information Systems Project & Change Management	3	IS 617		
IS 660J	Data Warehousing and the Organization	3	IS 622		
IS 664	Database Programming	3	IS 613		
IS 665	Data Warehousing, Data Mining and Visualization	3	MBA 628		
IS 667	Database Design and Development of Web Applications	3	IS 613		
IS 668	Visualizing Information Systems: Introduction to Geographic Information Systems	3			
IS 669	Big Data and Information Systems	3			

		Credits	Pre-Req	Semester	Grade
FIN 650	Applied Analytical Methods in Finance	3	FIN 652, MBA 644 or 626		
FIN 657	Financial Econometrics for Risk Modeling	3	MBA 646		
MAR 664	Marketing Analytics	3			
MBA 646	Business Analytics for Decision Making	3			
MAR 680X	Data Mining Using SAS	3			
MBA 647	Decision Modeling for Management	3	MBA 646		
MAR 635	Marketing Research	3			
MAR 6XX	Visual Analytics	3			
ECO 630	Game Theory for Business Decisions	3	MBA 644, MBA 672		
ECO 653	Empirical Methods for Business Economic Analysis	3	MBA 632, MBA 648		

		Credits	Pre-Req	Semester	Grade
BMB 620	Quantitative Methods: Data Analysis and Presentation	3	MAT 131, MAT 132		
ENS 622	Quantitative Methods in Environmental Science	4	ENS 611		
ENS 623	Research and Statistical Methods	4	UG Sciences		