University of Illinois at Urbana-Champaign
Professional Online MCS Degree Program Requirements (Coursera Platform)
Student Planning Worksheet

Name: **COMMENTS:**

Must maintain an overall **3.0 GPA**	
Degree must be completed within 5 years	
Must complete **32 Credit Hours**	
Breadth Requirement Total Credit Hours Completed	
500-level Requirement Total Credit Hours Completed	
Additional Coursework Total Credit Hours Completed	
Total Credit Hours Completed	

BREADTH COURSES: 12-16 credit hours (Must complete at least one course from **four different areas** with a grade of B- or higher.)

AREA	CREDIT HRS	GRADE	COURSE / SEMESTER
Architecture, Compilers, Parallel Computing			
CS 484	4		
Artificial Intelligence*			
*CS 441, 445**, 446, 447, 598 Deep Learning for Healthcare****	4		
Database and Information Systems*			
CS 410, 411, 412	4		
Interactive Computing*			
*CS 416, 418, 445**, 519****	4		
Programming Languages, Formal Methods, Software Engineering			
*CS 421, 427, 475**	4		
Scientific Computing			
CS 450	4		
Security and Privacy			
*CS 461**, 463**	4		
Systems and Networking*			
*CS 425, 435, 437, 461**, 463**, 498 Cloud Computing Applications*	4		
Theoretical Computer Science			
*CS 475**	4		
Total Credit Hours from Breadth Coursework - 12 to 16 credit hours			

ADVANCED COURSES: 12 credit hours (Any **three courses** from the list below; grades must be C or higher.)

500-LEVEL Courses (500-590 or 598)	CREDIT HRS	GRADE	COURSE / SEMESTER
CS 513 Theory & Practice of Data Cleaning	4		
*CS 519 Scientific Visualization [Recommended prereq: CS 416 or CS 418]****	4		
CS 598 Advanced Bayesian Modeling	4		
CS 598 Practical Statistical Learning [Required prereq: CS 410, CS 412, an Artificial Intelligence breadth course, or STAT 420]	4		
*CS 598 Deep Learning for Healthcare [Recommended prereq: CS 441]****	4		
CS 598 Foundations of Data Curation	4		
***Capstone Courses** (Capstone Courses are not required; students who choose to take a capstone must meet BOTH prerequisites)*			
CS 598 Data Mining Capstone [Required prereqs: CS 410 and CS 412]	4		
CS 598 Cloud Computing Capstone [Required p rereqs: *CS 498 Cloud Computing Applications* and one other Cloud Computing breadth course]	4		
Total Credit Hours from Advanced Courses - 12 credit hours			

ADDITIONAL COURSES: 4 to 8 hours (grades must be C or higher.)

Additional Courses	CREDIT HRS	GRADE	COURSE / SEMESTER
STAT 420 Methods of Applied Statistics - Statistical Modeling in R	4		
OR any extra course from "Breadth" or "Advanced"			
	4		
Total Credit Hours from Additional Courses - 4 to 8 credit hours			

** Breadth area coursework required for the MCS-Data Science track.*

*** May only be applied to one breadth area.*

**** If either CS 519 or CS 598 DLH is applied toward BOTH breadth and advanced requirements, then 8 hours of "Additional Coursework" is required.*