College of Computer, Mathematical and Natural Sciences

Computer Science - Machine Learning

Effective Fall 2022 *This is a curriculum tracking sheet, not an official audit*

Name_____ **UID**_____

Date Entered Major_____ **Second degree/major**_____ **Is CMNS first major? Y N**

General Education Requirements

Fundamental Studies

Requirement		Course	Credits	Completed?
AW	Academic Writing (before 30 credits)		3	
PW	Professional Writing (after 60 credits)		3	
OC	Oral Communication		3	

Distributive Studies

Requirement		Course	Credits	Completed?
NL	Natural Science with Lab		4	
NS	Natural Science		3 or 4	
HS	History and Social Sciences		3	
HS	History and Social Sciences		3	
HU	Humanities		3	
HU	Humanities		3	
SP	Scholarship in Practice (non-major)		3	
SP	Scholarship in Practice (non-major)		3	

I-Series

Overlap with Distributive Studies and/or I-Series

Requirement		Course	Credits	Completed?
IS	I-Series			
IS	I-Series			

Diversity

Can overlap with Distributive Studies or I-Series

Requirement		Course	Credits	Completed?
UP	Understanding Plural Societies			
UP	Understanding Plural Societies			
or **CC**	Cultural Competence			

Gen Ed Mathematics (MA) and Analytic Reasoning (AR) are satisfied by major requirements.

Upper Level Concentration

Students must complete a minimum of 12 credit hours of 300 - 400 level courses in one discipline outside of Computer Science. No course that is in, or cross-listed as, CMSC may be counted in this requirement. Only 1 independent study or experiential learning course may be used. Students who are pursuing a minor or a second major can use those credits in this area. Consult with your academic advisor to ensure each course you plan to take will satisfy this area.

Course	Credits	Completed?

Elective Credits

Students must take enough elective courses in any discipline(s) they choose to reach the total number of 120 credits required for graduation. Students who are pursuing a minor or a second major can use those credits in this area.

Course	Credits	Completed?

Major Requirements

Lower Level Requirements (Must pass with a grade of C- or higher)

Title	Course	Credits	Completed?
Calculus I	MATH 140	4	
Calculus II	MATH 141	4	
Object-Oriented Programming I	CMSC 131	4	
Object-Oriented Programming II	CMSC 132	4	
Introduction to Computer Systems	CMSC 216	4	
Discrete Structures	CMSC 250	4	
Organization of Programming Languages	CMSC 330	3	
Algorithms	CMSC 351	3	
STAT 4xx with MATH 141 prerequisite	STAT 4XX	3	
Introduction to Linear Algebra	MATH 240	4	

Upper Level Courses (Must pass with a grade of C- or higher)

Students must fulfill their computer science upper level course requirements from at least 3 areas

Required:	Course	Credits	Completed?
Introduction to Data Science	CMSC 320	3	
Introduction to Artificial Intelligence	CMSC 421	3	
Introduction to Machine Learning *	CMSC 422	3	

Select Two of the Following:	Course	Credits	Completed?
Computer Vision	CMSC 426	3	
Computation Methods *	CMSC 460 or CMSC466 or MATH 401	3	
Introduction to Numerical Analysis *			
Applications of Linear Algebra *			
Introduction to Natural Language Processing *	CMSC 470	3	
Introduction to Deep Learning * (formerly CMSC 498L)	CMSC 472	3	
Capstone in Machine Learning * (formerly CMSC 498P)	CMSC 473	3	
Introduction to Computational Game Theory	CMSC 474	3	
Introduction to Robotics with Perception * (formerly CMSC 498F)	CMSC 476	3	

* Indicates the course has unique prerequisites

Upper Level Elective Courses (Must pass with a grade of C- or higher)

Select 6 credits from CMSC 300- or 400-level courses (not eligible CMSC330 & CMSC351)

Title	Course	Credits	Completed?
		3	