UNIVERSITY OF WISCONSIN
MILWAUKEE

Master of Science in Engineering ~~ Program of Study

Concentration: Artificial Intelligence/Machine Learning

NAME: _____ **STUDENT I.D. #:** _____ **DATE:** _____

(Please Type or Print Clearly)

EMAIL: _____ **ADVISOR:** _____

Thesis & Non-Thesis Total – 31 cr.	Course Number	Course Title	Credits	Semester *
Concentration Area	EAS 701	Effective Academic Writing	1	
	EAS 702	Preparing Professionals	2	
CEAS & Program Required Courses	COMPSCI 557G **Or** COMPSCI 715	Introduction to Database Systems **Or** Programming for Machine Learning	3	
	COMPSCI/ELEENG 711 **Or** COMPSCI 411G	Introduction to Machine Learning **Or** Machine Learning and Applications	3	
	Concentration Elective		3	
16 cr. min. Non-Thesis 18 cr. min. Thesis	Concentration Elective		3	
	Suggested Elective		3	
Additional Electives (Must be 700+)			3	
			3	
			3	
15 cr. min. Non-Thesis 9 cr. min. Thesis			3	
			3	
Thesis (4 cr.)			4	

*** For enrollment management and planning purposes, you must indicate the semester in which the course was taken or when you plan to take it.**

SUBMITTED BY: _____ **DATE:** _____
Student

APPROVED BY: _____ **DATE:** _____
Major Professor

APPROVED BY: _____ **DATE:** _____
Graduate Programs Office Signature

- Link to College Catalog: Courses | UW-Milwaukee Academic Catalog & Course Search: Search Classes - University of Wisconsin-Milwaukee
- Coursework transferred from another institution must be approved by using the Graduate Transfer Credi Evaluations/TCE: Graduate-Transfer-Credit-Evaluation-Form-1.pdf . Send completed form to the Graduate Programs Office for processing.
- Up to 12 graduate credits can transfer to UWM, only 6 into the concentration section of the Program of Study.
- Approved Areas for Additional Electives: Biomedical Engineering, Civil & Environmental Engineering; Electrical Engineering; Industrial & Manufacturing Engineering; Materials Science Engineering; & Mechanical Engineering.

Master of Science in Engineering – Concentration: Artificial Intelligence/Machine Learning

Course Number	Course Title	(Credits)	
Required Course: CEAS Seminar			
EAS 701	Effective Academic Writing	(1)	Thesis & Non-Thesis
EAS 702	Preparing Future Engineering Faculty & Professionals	(2)	Thesis

Required Course: (Must choose **one**.): COMPSCI 557G Introduction to Database Systems (3)
Or COMPSCI 715 Programming for Machine Learning (3)

Required Course: (Must choose **one**.): COMPSCI /ELEENG 711 Introduction to Machine Learning (3)
Or COMPSCI 411G Machine Learning and Applications (3)

Required Concentration Electives: (Must choose **two**.)
COMPSCI/ELEENG 712 Image Processing (3)
COMPSCI 722 Artificial Intelligence Planning Techniques (3)
COMPSCI 723 Natural Language Processing (3)
Or COMPSCI 423G Introduction to Natural Language Processing (3)
COMPSCI 744 Text Renewal and Its Applications in Biomedicine (3)
Or COMPSCI 444G Introduction to Text Renewal and Its Applications in Biomedicine (3)
ELEENG 574G Intermediate Control Systems (3)
ELEENG 810 Foundations for Advanced Machine Learning and Signal Processing (3)
ELEENG/COMPSCI 811 Advanced Machine Learning (3)
ELEENG 816Optimal Control Theory (3)
MECHENG 476G Introduction to Robotics
IND ENG 717 Operations Research in Engineering Management (3)

Required Suggested Electives: (Must choose **one**.)
COMPSCI 425G Introduction to Data Mining (3)
COMPSCI/ELEENG 710 Artificial Intelligence (3)
ELEENG 420G Random Signals and Systems (3)
ELEENG 474G Introduction to Control Systems (4)
IND ENG 716 Engineering Statistical Analysis (3)
IND ENG 590G/890 Topics in Industrial and Systems Engineering (Introduction to Connected Systems) (1-3)
IND ENG 590G/890 Topics in Industrial and Systems Engineering (Engineering Data Analysis) (1-3)

Additional Elective Courses (Must be courses numbered between 701 and 999, excluding 888 and 998). Qualifying courses can be from those listed here or **any Engineering disciple** course approved by your faculty advisor as part of your Program of Study.