

M.S. in Artificial Intelligence (EG-MS-ARIN) Program Worksheet

College of Engineering & Computer Science

Name:	Z#:	Starting Term:
Phone #:	Overall GPA:	Date:

Degree Requirements

Students can choose between thesis and non-thesis options. Both options require a minimum of 30 credit hours (crs). Regardless of the option chosen, all students must complete the following requirements:

- Maintain a minimum 3.00 GPA to remain and graduate from the program.
- All courses within the degree program must be completed with a letter grade of "C" or higher.
- A minimum of 15 credit hours must be taken at the 6000 level.
- A maximum of 3 credit hours of Directed Independent Study (DIS) can be taken (faculty approval required).
- After completing 9 credit hours of coursework, students are <u>required</u> to submit a Plan of Study (POS) via MyPOS.

Thesis Option Requirements

- Students must secure a Thesis Advisor.
- Complete 6 credits hours of Master's Thesis under the supervision of a faculty advisor.

Prerequisite Courses Required for Admissions (Mandatory, need to be taken first semester)

Course Number & Title	Semester Taken	Grade

Core Courses- Complete two (6 crs) from the three listed below.

Course Number & Title	Semester Taken	Grade
CAP 5625 Computational Foundations of Artificial Intelligence		
CAP 6635 Artificial Intelligence		
CAP 6673 Data Mining and Machine Learning		

^{*}See additional Thesis Requirements on the last page*

Al Electives- Complete four electives (12crs) if non-thesis option. Complete two (6crs) electives if thesis option.

Computer Vision section

Course Number & Title	Semester Taken	Grade
CAP 6411 Foundations of Vision		
CAP 6415 Computer Vison		
CAP 6618 Machine Learning for Computer Vision		
COP 6728 Visual Information Retrieval		

Data Analytics & Algorithms section

Course Number & Title	Semester Taken	Grade
CAP 5625 Computational Foundations of Artificial Intelligence		
CAP 5768 Introduction to Data Science		
CAP 6315 Social Networks and Big Data Analytics		
CAP 6546 Data Mining for Bioinformatics		
CAP 6635 Artificial Intelligence		
CAP 6780 Big Data Analytics with Hadoop		
CEN 6405 Computer Performance Modeling		
COT 6405 Analysis of Algorithms		

Knowledge Management & Reasoning section

Course Number & Title	Semester Taken	Grade
CAP 6640 Natural Language Processing		
CAP 6776 Information Retrieval		
CAP 6777 Web Mining		
COP 5859 Semantic Web Programming		

Machine Learning section

Course Number & Title	Semester Taken	Grade
CAP 5615 Introduction to Neural Networks		
CAP 6512 Evolutionary Computing		
CAP 6617 Sparse Learning		
CAP 6619 Deep Learning		
CAP 6629 Reinforcement Learning		
CAP 6673 Data Mining and Machine Learning		
CAP 6778 Advanced Data Mining and Machine Learning		

Applications section

Course Number & Title	Semester Taken	Grade
CAP 6683 Artificial Intelligence in Medicine & Healthcare		
CAP 6807 Computational Advertising & Real-time Data Analytics		
EEL 5661 Robotic Applications		

Electives- Complete any four (12 crs) graduate courses offered by the EECS department.		
Course Number & Title Semester Taken Grad		

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Thesis Option- Complete 6 credit hours of Thesis. Student is required to have a thesis form signed by a faculty advisor to register for thesis credits.

Course Number & Title	Semester Taken	Grade
CAP 6974 Master's Thesis Artificial Intelligence		

List any Directed Independent Study (DIS) course here. Student is required to have a DIS form signed by a faculty advisor to register for a DIS course.

Course Number & Title	Semester Taken	Grade

The EECS Department may approve substitutions for core or elective courses. List any course substitutions here. Student is required to have advisor approval in writing.

Course Number & Title	Indicate "core" or "elective"	Semester Taken	Grade

List all failed courses here, with letter grades lower than a "C".

Course Number & Title	Semester Taken	Grade

Eligibility Requirements for Thesis Candidacy:

Students may apply for candidacy upon completing 9 credit hours of coursework and maintaining a 3.00 overall/cumulative GPA. Students must prepare a POS via MyPOS in consultation with their graduate advisor, detailing the courses necessary for fulfilling their degree requirements. Approval from the student's advisor is required for all listed courses.

Students working toward the MS Thesis option degree may <u>not</u> register for thesis <u>credits until</u> their POS has been approved.

The Thesis Committee is composed of:

- At least three faculty members
- A minimum of two members are from the EECS Department
- The Committee Chair from the EECS Department