



Avinashilingam Institute for Home Science and Higher Education for Women

Deemed to be University Estd. u/s 3 of UGC Act 1956, Category 'A' by MHRD [now MoE]

Re-accredited with A++ Grade by NAAC. CGPA 3.65/4, Category I by UGC

Coimbatore - 641 043, Tamil Nadu, India

Department of Computer Science (coordinated by Centre for Machine Learning and Intelligence, DST-CURIE-AI)

Master of Science Artificial Intelligence (Two years programme)

Programme Outcomes:

- PO1:** Understand the fundamental subjects to solve different problems towards various technological aspects that suites the current scenarios
- PO2:** Familiarize with the technical and professional skills to work with modern AI tools, resources, and software.
- PO3:** Apply AI techniques and algorithms to automate processes, enhance decision-making, and solve real-world problems.
- PO4:** Gain the ability to solve complex scientific problems using AI tools, derivations, and mathematical simulations.
- PO5:** Evaluate AI solutions that are developed and applied with ethical principles while promoting sustainability and social responsibility.
- PO6:** Develop AI-based employability skills to apply in technology, healthcare, finance, and business sectors.

Programme Specific Outcomes:

- PSO1:** Acquire depth knowledge in Artificial Intelligence tools and software.
- PSO2:** Implement the concepts of Artificial Intelligence in various domains.
- PSO3:** Experiment with Artificial Intelligence applications to explore and develop innovative solutions for real-world problems.

**Master of Science
Artificial Intelligence
(Two years programme)
Scheme of Instruction and Examination
(For Students admitted from 2025-2026 and onwards)**

Part	Subject Code	Name of Paper/ component	Hours of instruction /week		Scheme Examination				
			T	P	Duration of exam	CI A	CE	Total	Credit
First Semester									
I	25MSAI01	Introduction to Digital Intelligence	4		3	40	60	100	4
	25MSAI02	Artificial Intelligence	4		3	40	60	100	4
	25MSAI03	Internet of Things	4		3	40	60	100	4
	25MSAI04	Data Science	4		3	40	60	100	4
	25MSAI05	Computing Lab I - Internet of Things	-	6	3	40	60	100	3
	25MSAI06	Computing Lab II - R Programming for Data Science	-	6	3	40	60	100	3
II		CSS/ Adult Education/ Community Engagement and Social Responsibility	2	-	-	-	-	-	-
Second Semester									
I	25MSAI07	Natural Language Processing	4		3	40	60	100	4
	25MSAI08	Computer Vision and Image Processing	4		3	40	60	100	4
	25MSAI09	Neural Network and Deep Learning	4		3	40	60	100	4
	25MSAI10	Computing Lab III - Computer Vision and Image Processing	-	6	3	40	60	100	3
	25MSAI11	Computing Lab IV - Deep Learning using Python	-	6	3	40	60	100	3
II		Interdisciplinary Course	4	-	3	40	60	100	4
		Professional Certification Courses							2
	25MXCSS1/ 25MXAED1/ 25MXCSR1	CSS/ Adult Education/ Community Engagement and Social Responsibility	2	-	2	-	-	-	2
	Internship during Summer Vacation (1 month)								

Third Semester									
I	25MSAI12	Human Computer Interaction	3	-	3	40	60	100	3
	25MSAI13	Generative Artificial Intelligence	3	-	3	40	60	100	3
	25MSAI14	Big Data Analytics	3	-	3	40	60	100	3
	25MSAI15	Cyber Intelligence	3	-	3	40	60	100	3
	25MSAI16A/ 25MSAI16B/ 25MSAI16C	Elective Artificial Intelligence for Business / Artificial Intelligence for Home Science / Machine Learning for Chemistry and Biochemistry.	3	-	3	100	-	100	3
	25MSAI17	Computing Lab V- Generative Artificial Intelligence	-	6	3	40	60	100	3
	25MSAI18	Computing Lab VI - Data Visualization using Analytical Tools	-	4	3	40	60	100	2
	25MSAI19	Mini Project	1	-	-	100	-	100	2
	25MSAI20	Digital Health (Self-Study Course)	2	-	3	100	-	100	2
	25MSAI21	Internship	-	-	-	100	-	100	2
II		Multi-Disciplinary Course	2	-	3	100	-	100	2
Fourth Semester									
I	25MSAI22	Research Thesis/ Project/ Patent	-	30	-	100	100	200	20
Total Credits									96

Other courses to be undergone by the student:

* **MOOC courses- 2 to 4 Credits – Credit transfer may be claimed.**

Minimum 96+2 credits to earn the degree.

** Students who exit at the end of 1st year shall be awarded a **Postgraduate Diploma.**

Courses offered to other PG Programmes:

1. Interdisciplinary Course–

25MAII01-Machine Learning using Excel

2. Multidisciplinary Course–

25MAIM01-Machine Learning for Biochemistry, Biotechnology

25MAIM02-Machine Learning for Chemistry

25MAIM03-Mobile Application Development

25MAIM04–G-Suite for front office