

#### 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

# (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					
			Т	P	Duratio n of exam	CI A	CE	Tot al	Cred it	
		First Se	mester							
	25MAIC01	Introduction to Digital Intelligence	4		3	40	60	100	4	
	25MAIC02	Artificial Intelligence	4		3	40	60	100	4	
	25MAIC03	Internet of Things	4		3	40	60	100	4	
	25MAIC04	Data Science	4		3	40	60	100	4	
I	25MAIC05	Computing Lab I - Internet of Things	-	6	3	40	60	100	3	
	25MAIC06	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 S	emeste	r						
	25MAIC07	Natural Language Processing	4		3	40	60	100	4	
	25MAIC08	Computer Vision and Image Processing	4		3	40	60	100	4	
	25MAIC09	Neural Network and Deep Learning	4		3	40	60	100	4	
I	25MAIC10	Computing Lab III - Computer Vision and Image Processing	-	6	3	40	60	100	3	
	25MAIC11	Computing Lab IV - Deep Learning using Python	-	6	3	40	60	100	3	
II		Interdisciplinary Course	4		3	-	_	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	25MAIC12	Human Computer Interaction	3	-	3	40	60	100	3	
	25MAIC13	Generative Artificial Intelligence	3	-	3	40	60	100	3	
	25MAIC14	Big Data Analytics	3	-	3	40	60	100	3	
	25MAIC15	Cyber Intelligence	3	-	3	40	60	100	3	
	25MAIC16A/ 25MAIC16B/ 25MAIC16C	Elective Artificial Intelligence for Business / Artificial Intelligence for Home Science / Machine Learning for Chemistry and Biochemistry.	3	-	3	100	-	100	3	
	25MAIC17	Computing Lab V- Generative Artificial Intelligence	-	6	3	40	60	100	3	
	25MAIC18	Computing Lab VI - Data Visualization using Analytical Tools	-	4	3	40	60	100	2	
	25MAIC19	Mini Project	1	-	-	100	-	100	2	
	25MAIC20	Digital Health (Self-Study Course)	2	-	3	100	-	100	2	
	25MAIC21	Internship	-	-	-	-	-	100	2	
II		Multi-Disciplinary Course	2	-	3	100	•	100	2	
Fourth Semester										
I	25MAIC22	Research Thesis/ Project/ Patent	_	30	-	100	100	200	20	
Total Credits										

Other courses to be undergone by the student:

#### Minimum 96+2 credits to earn the degree.

#### **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

<sup>\*</sup> MOOC courses- 2 to 4 Credits – Credit transfer may be claimed.

<sup>\*\*</sup> Students who exit at the end of 1<sup>st</sup> year shall be awarded a **Postgraduate Diploma**.