<div align="center">

Academic Year 2024-25
Program: M. Tech (AIML)
Course outcome and mapping

</div>

Program Outcome:

PO1: An ability to independently carry out research /investigation and development work to solve practical problems.
PO2: An ability to write and present a substantial technical report/document.
PO3: Demonstrate a degree of mastery over the electronic and telecommunication program. The mastery should be at a level higher than the requirements in the appropriate bachelor's program

Course Outcomes:

Course Name: MTM101 Research Methodology and IPR

MTM101.1	Define the different terminologies used in research and intellectual property rights.
MTM101.2	Describe the various forms of intellectual property rights, research, research problems, sampling and design.
MTM101.3	Discuss procedure to execute the sampling design, data collection, research and protect different forms of IPRs
MTM101.4	Prepare the sample research design, sampling design, research and patent filing report.
MTM101.5	Analyze collection of research data, ethics of research and intellectual property rights.
MTM101.6	Examine the validity, reliability, hypothesis of research and patentability.

CO PO mapping:

CO	PO 1	PO 2	PO 3
MTM101.1	3		
MTM101.2	3		
MTM101.3	3		
MTM101.4	3	3	3
MTM101.5	3	3	3
MTM101.6	3	3	3

1: Slight (Low)   2: Moderate (Medium)   3: Substantial (High)

Course coordinator   Program Coordinator
Dr. P. U. Zine

Maharashtra Institute of Technology, Aurangabad
Electronics and Computer Engineering Department

MTech (AIML)First Year (2024-2025)
Academic Year 2024-25
Program: M. Tech (AIML)
Course outcome and mapping

Program Outcome:

PO1: An ability to independently carry out research /investigation and development work to solve practical problems.
PO2: An ability to write and present a substantial technical report/document.
PO3: Demonstrate a degree of mastery over the electronic and telecommunication program. The mastery should be at a level higher than the requirements in the appropriate bachelor's program

Course Outcomes:

Course Name: MAM102 Mathematical Foundation for Machine Learning
Year of Study: 2024-2025

ECE102.1	Understand and use linear algebra in machine learning models.
ECE102.2	Apply calculus to optimize machine learning models
ECE102.3	Use probability and statistics to analyze and evaluate models.
ECE102.4	Solve optimization problems to enhance machine learning algorithms.

CO PO and PSO Mapping

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
ECE102.1	2													1	
ECE102.2		1												1	
ECE102.3		1												1	
ECE102.4		1												1	

1: Slight (Low)   2: Moderate (Medium)   3: Substantial (High)

Ms. P.P. Nalgirkar   Dr. S.J.Nandedkar

Course coordinator   Module Coordinator

Maharashtra Institute of Technology, Aurangabad.
Electronics and Telecommunication Engineering Department

Academic Year 2024-25
Program: M. Tech (AIML)
Course outcome and mapping

Program Outcome:

PO1: An ability to independently carry out research /investigation and development work to solve practical problems.
PO2: An ability to write and present a substantial technical report/document.
PO3: Demonstrate a degree of mastery over the electronic and telecommunication program. The mastery should be at a level higher than the requirements in the appropriate bachelor's program

Course Outcomes:

Course Name: MAM103 Artificial and Computational Intelligence

MAM103.1	Write AI & ML algorithms and programming using relevant tools and programming languages
MAM103.2	Identity, select and apply a suitable computational intelligence tools to solve problems in complex process and systems
MAM103.3	Develop an application for speech processing using NLP algorithms
MAM103.4	Elaborate impact of AI on society, economy and employment.

CO PO mapping:

CO	PO 1	PO 2	PO 3
MTE104.1	1		
MTE104.2	1		
MTE104.3			1
MTE104.4			1

Course Name: MAM112 Lab-II Artificial and Computational Intelligence

MAM112.1	Demonstrate the applications of artificial intelligence and machine learning.
MAM112.2	Explore opportunities and career in Computational intelligence domain

CO PO mapping:

CO	PO 1	PO 2	PO 3
MAM112.1	1		2
MAM112.2	1		2

1: Slight (Low)   2: Moderate (Medium)   3: Substantial (High)

Course coordinator   Program Coordinator
Dr. S. J. Nandedkar   Dr. S. J. Nandedkar

Maharashtra Institute of Technology, Aurangabad.
Electronics and Telecommunication Engineering Department

Academic Year 2024-25
Program: M. Tech (AIML)
Course outcome and mapping

Program Outcome:

PO1: An ability to independently carry out research /investigation and development work to solve practical problems.
PO2: An ability to write and present a substantial technical report/document.
PO3: Demonstrate a degree of mastery over the electronic and telecommunication program. The mastery should be at a level higher than the requirements in the appropriate bachelor's program

Course Outcomes:

Course Name: MAM104 Data Science and Visualization

MAM104.1	Understand the key terminology, concepts, tools and techniques used in statistical analysis
MAM104.2	Conduct basic statistical analysis of data
MAM104.3	Elaborate different data representation and visualization tools.
MAM104.4	Explain exploratory data analysis tools in data sciences.

CO PO mapping:

CO	PO 1	PO 2	PO 3
MAM104.1			2
MAM104.2			2
MAM104.3			1
MAM104.4			1

Course Name: MAM113 Lab-III Data Science and Visualization

MAM113.1	Study different characteristics of data .
MAM113.2	To represent and visualize the data using different tools

CO PO mapping:

CO	PO 1	PO 2	PO 3
MAM113.1			2
MAM113.2			2

1: Slight (Low)   2: Moderate (Medium)   3: Substantial (High)

Course coordinator   Program Coordinator
Dr. G. S. Sable   Dr. S. J. Nandedkar

Maharashtra Institute of Technology, Aurangabad.
Electronics and Telecommunication Engineering Department

Academic Year 2024-25
Program: M. Tech (AIML)
Course outcome and mapping

Program Outcome:

 PO1: An ability to independently carry out research /investigation and development work to solve practical problems.
 PO2: An ability to write and present a substantial technical report/document.
 PO3: Demonstrate a degree of mastery over the electronic and telecommunication program. The mastery should be at a level higher than the requirements in the appropriate bachelor's program

Course Outcomes:

Course Name: MAM 121 Professional Elective-I – Advanced Deep Learning

MAM121.1	Define basic terminologies in deep learning and neural network based learning
MAM121.2	Describe various concepts of deep learning and training of networks
MAM121.3	Analyze the different Deep Reinforcement learning techniques
MAM121.4	Apply advanced optimization techniques in deep learning models
MAM121.5	Implement deep learning techniques on advanced applications such as NLP, Computer Vision, and Healthcare

CO PO mapping:

CO	PO 1	PO 2	PO 3
MAM1121.1	1		
MAM121.2	1		
MAM121.3			1
MAM121.4			1
MAM121.5			1

1: Slight (Low)   2: Moderate (Medium)   3: Substantial (High)

Course coordinator   Program Coordinator
 Dr. Sayyad Ajij D   Dr. S. J. Nandedkar

Maharashtra Institute of Technology, Aurangabad.
Electronics and Telecommunication Engineering Department

Academic Year 2024-25
Program: M. Tech (AIML)
Course outcome and mapping

Program Outcome:

PO1: An ability to independently carry out research /investigation and development work to solve practical problems.

PO2: An ability to write and present a substantial technical report/document.

PO3: Demonstrate a degree of mastery over the electronic and telecommunication program. The mastery should be at a level higher than the requirements in the appropriate bachelor's program

Course Outcomes:

Course Name: MAM114-Seminar

MTE114.1	Impart skills by presenting effectively and preparing detail presentation report.
MTE114.2	Identify promising new dimensions of cutting-edge technologies by studying research papers

CO PO mapping:

CO	PO 1	PO 2	PO 3
MTE114.1		3	
MTE114.2	3		

1: Slight (Low)   2: Moderate (Medium)   3: Substantial (High)

Course coordinator   Program Coordinator