

M.Tech Curriculum in Artificial Intelligence & Machine Learning - 2021-2023

| Semester-I | | | | | | | |
|------------|--------------------|--|---|---|---|----|--|
| S. No | Course Code | Course Name | L | T | P | C | |
| 1 | MAT560 | Mathematical Foundations for Machine Learning | 3 | 0 | 0 | 3 | |
| 2 | AML500 | Advanced Algorithms and Analysis | 3 | 0 | 0 | 3 | |
| 3 | AML501 | Machine Learning Techniques | 3 | 0 | 0 | 3 | |
| 4 | AML501L | Machine Learning Techniques Lab | 0 | 0 | 3 | 2 | |
| 5 | AML502 | Artificial Intelligence and Knowledge Representation | 3 | 0 | 0 | 3 | |
| 6 | AML502L | Artificial Intelligence and Knowledge Representation Lab | 0 | 0 | 3 | 2 | |
| 7 | | Elective-I | 3 | 0 | 0 | 3 | |
| Total | | | | | | 19 | |

| Semester-II | | | | | | |
|-------------|--------------------|---|---|---|----|---|
| S. No | Course Code | Course Name | L | T | P | С |
| 1 | MAT561 | Optimisation Techniques | 3 | 0 | 0 | 3 |
| 2 | AML504 | Data Warehousing and Pattern Mining | 3 | 0 | 0 | 3 |
| 3 | AML504L | Data Warehousing and Pattern Mining Lab | 0 | 0 | 3 | 2 |
| 4 | AML505 | Deep Learning Techniques | 3 | 0 | 0 | 3 |
| 5 | AML505L | Deep Learning Techniques Lab | 0 | 0 | 3 | 2 |
| 6 | AML506 | Natural Language Computing | 3 | 0 | 0 | 3 |
| 7 | | Elective-II | 3 | 0 | 0 | 3 |
| 8 | RM101 | Research Methodology and IPR | 2 | 0 | 0 | 2 |
| Total | | | | | 21 | |

| Semester-III | | | | | | | |
|--------------|--------------------|------------------------------------|---|---|----|----|--|
| S. No | Course Code | Course Name | L | T | P | C | |
| 1 | EGL501 | English for Research Paper Writing | 1 | 0 | 0 | 1 | |
| 2 | AML507 | Big Data Analytics | 3 | 0 | 0 | 3 | |
| 3 | AML508 | Soft Computing | 3 | 0 | 0 | 3 | |
| 4 | AML580 | Project Work-Phase I | 0 | 0 | 20 | 10 | |
| Total | | | | | 17 | | |

| Semester-IV | | | | | | |
|-------------|--------------------|-----------------------|---|---|----|----|
| S. No | Course Code | Course Name | L | T | P | C |
| 1 | AML581 | Project Work-Phase II | 0 | 0 | 28 | 14 |
| Total | | | | | 14 | |



| List of Electives | | | | | | |
|--------------------|--|---|---|---|---|--|
| Course Code | Course Name | L | T | P | C | |
| AML551 | Modelling and Simulation of Digital Systems | 3 | 0 | 0 | 3 | |
| AML552 | Knowledge Engineering and Expert Systems | 3 | 0 | 0 | 3 | |
| AML553 | Information Retrieval | 3 | 0 | 0 | 3 | |
| AML554 | Pattern Recognition | 3 | 0 | 0 | 3 | |
| AML555 | Problem Solving Methods in Artificial Intelligence | 3 | 0 | 0 | 3 | |
| AML556 | Cognitive Systems | 3 | 0 | 0 | 3 | |
| AML557 | Introduction to High Performance Computing | 3 | 0 | 0 | 3 | |
| AML558 | Computer Vision | 3 | 0 | 0 | 3 | |
| AML559 | Number theory and Cryptography | 3 | 0 | 0 | 3 | |
| AML560 | Agent Systems | 3 | 0 | 0 | 3 | |
| AML561 | Artificial Intelligence and Neural Networks | 3 | 0 | 0 | 3 | |
| AML562 | Statistical Modelling for Computer Sciences | 3 | 0 | 0 | 3 | |
| AML563 | Fuzzy Logic and its Applications | 3 | 0 | 0 | 3 | |
| AML564 | Electronic Design Automation | 3 | 0 | 0 | 3 | |