# B. Voc.in – Artificial Intelligence & Machine Learning

#### Semester I

<b>Course Code</b>	Course Title	Credits
BMA101	Programming for Problem Solving	4
BMA102	Programming for Problem Solving Lab	2
BMA103	Mathematics-I	4
BMA104	Communication Skills	4
BMA105	Communication Skills Lab	1
BMA106	Basics of Artificial Intelligence and Machine Learning	4
BMA107	Fundamental of Computer and Information Technology Lab	1

#### **Semester II**

<b>Course Code</b>	Course Title	Credits
BMA201	Mathematics-II	4
BMA202	Object Oriented Programming Using C++	3
BMA203	Web Technology	3
BMA204	Data Structure & Algorithms	4
BMA205	Digital Electronics	4
BMA206	Web Technology Lab	1
BMA207	Object Oriented Programming Using C++ Lab	1
BMA208	Environmental Science	2

## **Semester III**

<b>Course Code</b>	Course Title	Credits
BMA301	Discrete Mathematics	4
BMA302	Operating System	4
BMA303	Design & Analysis of Algorithms	4
BMA304	Computer Organization & Architecture	4
BMA305	Operating System Lab	2
BMA306	Design & Analysis of Algorithms Lab	2
XXX	Open elective course	2
BMA307	Multimedia and Applications	3
BMA308	Cloud Computing	3
BMA309	Introduction to Artificial Intelligence & Machine Learning	2

# **Semester IV**

<b>Course Code</b>	Course Title	Credits
BMA401	Introduction to Machine Learning with Python	4
BMA402	Java Programming	4
BMA403	Relational Database Management System	4
BMA404	Introduction to Robotics	4
BMA405	Relational Database Management System Lab	1
BMA406	Introduction to Machine Learning with Python Lab	2
BMA407	Java Programming Lab	1
BMA499	XXX	3
BMA408	Data ware housing & Data Mining	3
BMA409	Big Data	3

## Semester V

<b>Course Code</b>	Course Title	Credits
BMA501	Formal Language & Automata Theory	4
BMA502	Computer Networks	4
BMA503	Deep learning	4
BMA504	Deep Learning Lab	2
BMA505	Project-1	2
BMA506	Optimization Techniques in Machine Learning	4
BMA599	xxx(MOOC)	3
BMA507	Soft Computing(Elective)	3
BMA508	Speech and Language Processing(Elective)	3

# Semester VI

<b>Course Code</b>	Course Title	Credits
BMA601	Advanced Machine Learning	3
BMA602	Network Security with AI	3
BMA603	Data and Visual analytics in AI	3
BMA604	Project-II	2
BMA606	Digital Signal processing	3
BMA	xxx(MOOC)	3
BMA607	Deep Learning(Elective)	3
BMA608	Block Chain Designing(Elective)	3
BMA609	Personality Development programme	2