D. Y. PATIL AGRICULTURE AND TECHNICAL UNIVERSITY, TALSANDE, KOLHAPUR
SCHOOL OF ENGINEERING AND TECHNOLOGY

SYLLABUS STRUCTURE

B. Tech. (Artificial Intelligence & Machine Learning)

INDEX

DISTRIBUTION OF SUBJECT GROUPS

1	Basic Science Courses (BSC)
2	Engineering Science Courses (ESC)
3	Humanities & Social Science Including Management Courses (HSSMC)
4	Professional Core Courses (PCC)
5	Professional Elective Courses (PEC)
6	Open Elective Courses (OEC)
7	Seminar/Project/Internship/Industrial Training (PROJ)
8	Mandatory Courses (MC)

D. Y. PATIL AGRICULTURE AND TECHNICAL UNIVERSITY, TALSANDE, KOLHAPUR
SCHOOL OF ENGINEERING AND TECHNOLOGY

SYLLABUS STRUCTURE

B. Tech. (Artificial Intelligence & Machine Learning)

DISTRIBUTION OF COURSES IN SUBJECT GROUPS

1) BASIC SCIENCE COURSES (BSC)

Sr. No.	Course Code	Corse Type	Name of Course	Teaching Scheme per week			
				L	T	P	Credits
1.			Applied Mathematics – I	3	1	0	4
2.			Applied Physics	3	0	0	3
3.			Applied Physics Lab	0	0	2	1
4.			Applied Mathematics - II	3	1	0	4
5.			Applied Chemistry	3	0	0	3
6.			Applied Chemistry Lab	0	0	2	1
7.			Statistics, Probability& Operation Research	3	0	2	4
						Total Credits	**20**

2) ENGINEERING SCIENCE COURSES (ESC)

Sr. No.	Course Code	Corse Type	Name of Course	Teaching Scheme per week			
				L	T	P	Credits
1.			Computer Programming in C	3	0	0	3
2.			Engineering Drawing	2	0	0	2
3.			Engineering Drawing Lab	0	0	4	2
4.			Computer Programming in C	0	0	2	1
5.			Workshop Practice I	0	0	2	1
6.			Object Oriented Programming	3	0	0	3
7.			Engineering Mechanics	3	0	0	3
8.			Fundamentals of Electronics and Electrical	3	0	0	3
9.			Object Oriented Programming lab	0	0	2	1
10.			Engineering Mechanics Lab.	0	0	2	1
11.			Fundamentals of electronics and Electrical lab	0	0	2	1
12.			Workshop Practice II	0	0	2	1
13.			Discrete Mathematics	4	0	0	4
14.			The Lab Discrete Mathematics	0	0	2	1
						Total Credits	**27**

3) Humanities & Social Science Including Management Courses (HSSMC)

Sr. No.	Course Code	Corse Type	Name of Course	Teaching Scheme per week			
				L	T	P	Credits
1.			Social Innovation	0	1	2	2
2.			Professional Communication	2	0	0	2
3.			Professional Communication –Lab	0	0	2	1
4.			Foreign language (German / Japanese/ Russian) (Noncredit)	1	0	0	0
5.			Engineering Exploration	0	0	4	2
6.			Development of Life Skill	1	0	2	1
7.			Human Values & Ethics	3	0	0	0
8.			Community Services	0	0	2	1
							9

4) PROFESSIONAL CORE COURSES (PCC)

Sr. No.	Course Code	Corse Type	Name of Course	Teaching Scheme per week			
				L	T	P	Credits
1.			Introduction to Machine Learning	3	0	0	3
2.			Data Structure	3	0	0	3
3.			Advanced Programming with Machine Learning	3	0	0	3
4.			Data Structure - Lab	0	0	4	2
5.			Advanced Programming with Machine Learning - Lab	0	0	4	2
6.			Data and Information Management with AI	3	0	0	3
7.			Theory of Computation	3	1	0	4
8.			Operating System	3	0	2	4
9.			Computer Networks for AI and ML	3	0	0	3
10.			Application Based Programming using Python	3	0	2	4
11.			Data and Information Management with AI - Lab	0	0	2	1
12.			Computer Networks for AI and ML	0	0	2	1
13.			Computer Algorithms	3	1	0	4
14.			Computer Vision & Image Processing	3	0	0	3
15.			Ad HOC- Wireless Networks	3	0	0	3
16.			AI and Computing Intelligence	3	0	0	3
17.			R Programming for AI and ML	2	0	4	4
18.			Computer Vision & Image Processing-Lab	0	0	2	1
19.			AI and Computing Intelligence-Lab	0	0	2	1
20.			Database Engineering	3	0	0	3

21.			Information Security in AI	3	0	0	3
22.			Programming for Problem Solving	2	0	4	4
23.			Database Engineering Lab	0	0	2	1
24.			Information Security in AI-Lab	0	0	2	1
25.			Pattern Recognition in ML	3	0	0	3
26.			AI in Web Designing	3	0	0	3
27.			Pattern Recognition in ML-lab	0	0	4	2
28.			AI in Web Designing-Lab	0	0	4	2
29.			Deep Learning	3	0	0	3
30.			Natural Language Processing	3	1	0	4
31.			Deep Learning Lab	0	0	2	1
32.			Robotics & Intelligence System-Lab	0	0	2	1
33.			Robotics & Intelligence System	3	0	0	3
							86

5) PROFESSIONAL ELECTIVE COURSES (PEC)

Sr. No.	Course Code	Corse Type	Name of Course	Teaching Scheme per week			
				L	T	P	Credits
1			Professional Elective-I	3	1	0	4
2			Professional Elective-II	3	1	0	4
3			Professional Elective-II	3	1	0	4
							12

6) OPEN ELECTIVE COURSES (OEC)

Sr. No.	Course Code	Corse Type	Name of Course	Teaching Scheme per week			
				L	T	P	Credits
1			Open Elective-I	3	1	0	4
2			Open Elective-II	3	1	0	4
				Total Credits			**08**

7) SEMINAR/PROJECT/INTERNSHIP/INDUSTRIAL TRAINING

Sr. No.	Course Code	Corse Type	Name of Course	Teaching Scheme per week			
				L	T	P	Credits
1.			Project-I	0	0	4	1
2.			Project-II	0	0	4	1
3.			Project-III	0	0	0	2
4.			Project-IV	0	0	4	2
5.			Internship	0	0	4	4
6.			Project-V	2	0	0	2

			Total Credits	**12**

8) MANDATORY COURSES

Sr. No.	Course Code	Corse Type	Name of Course	Teaching Scheme per week			
				L	**T**	**P**	**Credits**
1			Democracy, Election & Good Governance (Non-Credit)	0	0	0	**NC**
2			*Environmental Studies	2	0	0	**NC**
				Total Credits			**00**

D. Y. PATIL AGRICULTURE AND TECHNICAL UNIVERSITY, TALSANDE, KOLHAPUR
SCHOOL OF ENGINEERING AND TECHNOLOGY

SYLLABUS STRUCTURE

B. Tech. (Artificial Intelligence & Machine Learning)

SUMMARY OF DISTRIBUTION OF COURSES IN ALL SEMESTER

Sr. No.	Category	No. of Subjects in Each Category	Suggested Breakup of Credits by AICTE	Total
1	BASIC SCIENCE COURSES (BSC)	5	25	20
2	ENGINEERING SCIENCE COURSES (ESC)	8	24	27
3	Humanities & Social Science Including Management Courses (HSSMC)	7	12	9
4	PROFESSIONAL CORE COURSES (PCC)	21	48	86
5	PROFESSIONAL ELECTIVE COURSES (PEC)	3	18	12
6	OPEN ELECTIVE COURSES (PEC)	2	18	8
7	SEMINAR/PROJECT/INTERNSHIP/INDUSTRIAL TRAINING	6	15	12
8	MANDATORY COURSES	2	Non-Credit	(Non-Credit)
		54	**160**	**174**

D. Y. PATIL AGRICULTURE AND TECHNICAL UNIVERSITY, TALSANDE, KOLHAPUR
SCHOOL OF ENGINEERING AND TECHNOLOGY

SYLLABUS STRUCTURE

B. Tech. (Artificial Intelligence & Machine Learning)

Semester wise Distribution of Courses

No. of Courses	SEMESTER							
	I	II	III	IV	V	VI	VII	VIII
1	Applied Mathematics – I	Applied Mathematics – II	Stastistictics, Probability & Operations Research	Data and Information Management with AI	Computer Algorithms	Database Engineering	Pattern Recognition in ML	Deep Learning
2	Applied Physics	Applied Chemistry	Stastistictics, Probability & Operations Research	Theory of Computation	Computer Vision & Image Processing	Information Security in AI	AI in Web Designing	Natural Language Processing
3	Computer Programming in C	Object Oriented Programming	Introduction to Machine Learning	Operating System	Ad HOC- Wireless Networks	Open Elective-I	Professional Elective-II	Robotics & Intelligence System
4	Engineering Drawing	Engineeing Mechanics	Data Structures	Computer Networks for AI and ML	AI and Computing Intelligence	Professional Elective I	Open Elective-II	Professinal Elective-III
5	Social Innovation	Fundamentals of Electronics and Electrical	Advanced Programming with Machine Learning	Application Based Programming using Python	R Programming for AI and ML	Programming for Problem Solving	Professional Elective-II	Natural Language Processing
6	Professional Communication	Engineering Exploration	Stastistictics, Probability & Operations Research	Theory of Computation	Computer Algorithms	Open Elective-I	Open Elective-II	Professinal Elective-III

7	Applied Mathematics – I	Applied Mathematics – II	The Lab Discrete Mathematics	Operating System	Computer Vision & Image Processing-Lab	Professional Elective I	Pattern Recognition in ML-lab	Deep Learning Lab
8	Applied Physics Lab.	Applied Chemistry Lab.	Data Structures - Lab	Data and Information Management with AI - Lab	AI and Computing Intelligence-Lab	Database Engineering Lab	AI in Web Designing-Lab	Robotics & Intelligence System-Lab
9	Engineering Drawing Lab.	Object Osriented Programming lab	Advanced Programming with Machine Learning - Lab	Computer Networks for AI and ML	Project-II	Information Security in AI-Lab	Project-IV	Community Services
10	Computer Programming in C	Engineeing Mechanics Lab.	Environmental Studies	Application Based Programming using Python	Human Values and Ethics	Project-III	Internship	Project-V
11	Professional Communication Lab.- I	Fundamentals of electronics and Electrical lab		Project-I				
12	Workshop Practice I	Workshop Practice II		Development of Life Skills				
13	Foreign language (German / Japanese/ Russian) (Non credit)							
14	Democracy, Election & Good Governance (Non Credit Mandatory Course)*							
Credits	**22**	**23**	**22**	**22**	**20**	**22**	**24**	**19**

SYLLABUS STRUCTURE

B. Tech. (Artificial Intelligence & Machine Learning)

SEMESTERWISE CREDITS & MARKS

SEM	CREDITS	NO. OF SUBJECT	TOTAL MARKS
I	22	9	825
II	23	7	775
III	22	6	700
IV	22	7	800
V	20	7	700
VI	22	6	700
VII	24	6	700
VIII	19	6	800
TOTAL	174	54	6000

Note:* Democracy, Election & Good Governance subject counted in II SEM.

D. Y. PATIL AGRICULTURE AND TECHNICAL UNIVERSITY, TALSANDE, KOLHAPUR

SCHOOL OF ENGINEERING AND TECHNOLOGY

SCHEME OF TEACHING AND EXAMINATION

FIRST YEAR B. TECH. (Artificial Intelligence & Machine Learning)

SEMESTER- I (Chemistry Group)

Sr. No.	Course Code	Corse Type	Name of Course	Teaching Scheme per week				Total Marks	Evaluation Scheme (Marks)					
									Theory			Practical		
				L	T	P	Credits		Scheme	Max marks	Min. Passing	Scheme	Max marks	Min. Passing
1			Applied Mathematics-I	3	-	-	03	100						
2			Applied Chemistry	3	-	-	03	100						
3			Computer Programming in C	3	-	-	03	100						
4			Engineering Mechanics	3	-	-	03	100						
5			Fundamental of electronics and Electrical	3	-	-	03	100						
6			Social Innovation	-	1	2	02	50						
7			Applied Mathematics-I	-	1	-	01	25						
8			Applied Chemistry Lab	-	-	2	01	25						
9			Computer Programming in C Lab	-	-	2	01	25						
10			Engineering Mechanics Lab	-	-	2	01	25						
11			Fundamental of electronics and Electrical Lab	-	-	2	01	25						
12			Workshop Practice Lab-I	-	-	2	01	50						
13			Foreign language (German/Japanese/ Russian) (Non-Credit)	1	-	-	-	100						
14			Democracy, Election & Good Governance (Non Credit Mandatory Course)*											
			Total	16	2	12	23	825						

Note: 1) Tutorials & practical shall be conducted in batches with batch strength not exceeding 20 students.

2) SEE will be conducted for 100 marks and converted to 50 marks.

CSE: Continuous Semester Evaluation **SEE: Semester End Evaluation** **IPE: Internal Practical Evaluation**

D. Y. PATIL AGRICULTURE AND TECHNICAL UNIVERSITY, TALSANDE, KOLHAPUR

SCHOOL OF ENGINEERING AND TECHNOLOGY

SCHEME OF TEACHING AND EXAMINATION

FIRST YEAR B. TECH. (Artificial Intelligence & Machine Learning)

SEMESTER- II

Sr. No.	Course Code	Corse Type	Name of Course	Teaching Scheme per week				Total Marks	Evaluation Scheme (Marks)					
									Theory			Practical		
				L	T	P	Credits		Scheme	Max marks	Min. Passing	Scheme	Max marks	Min. Passing
1			Applied Mathematics-II	3	-	-	03	100						
2			Applied Physics	3	-	-	03	100						
3			Object oriented Programming	3	-	-	03	100						
4			Engineering Drawing	2	-	-	02	100						
5			Engineering Exploration	-	-	4	02	100						
6			Professional Communication	2	-	-	02	100						
7			Applied Mathematics-II	-	1	-	01	25						
8			Applied Physics Lab	-	-	2	01	25						
9			Object oriented Programming Lab	-	-	2	01	25						
10			Engineering Drawing Lab	-	-	4	02	25						
11			Professional; Communications Lab	-	-	2	01	25						
12			Workshop Practice Lab-II	-	-	2	01	50						
			Total	13	1	16	22	775						

Note: 1) Tutorials & practical shall be conducted in batches with batch strength not exceeding 20 students.
2) SEE will be conducted for 100 marks and converted to 50 marks.

CSE: Continuous Semester Evaluation **SEE: Semester End Evaluation** **IPE: Internal Practical Evaluation**

D. Y. PATIL AGRICULTURE AND TECHNICAL UNIVERSITY, TALSANDE, KOLHAPUR
SCHOOL OF ENGINEERING AND TECHNOLOGY
SCHEME OF TEACHING AND EXAMINATION
FIRST YEAR B. TECH. (Artificial Intelligence & Machine Learning)
SEMESTER- I (Physics Group)

Sr. No.	Course Code	Corse Type	Name of Course	Teaching Scheme per week				Total Marks	Evaluation Scheme (Marks)					
									Theory			Practical		
				L	T	P	Credits		Scheme	Max marks	Min. Passing	Scheme	Max marks	Min. Passing
1			Applied Mathematics-I	3	-	-	03	100						
2			Applied Physics	3	-	-	03	100						
3			Computer Programming in C	3	-	-	03	100						
4			Engineering Drawing	2	-	-	02	100						
5			Social Innovation	-	1	2	02	50						
6			Professional Communication	2	-	-	02	100						
7			Applied Mathematics-I	-	1	-	01	25						
8			Applied Physics Lab	-	-	2	01	25						
9			Computer Programming in C Lab	-	-	2	01	25						
10			Engineering Drawing Lab	-	-	4	02	25						
11			Professional; Communications Lab	-	-	2	01	25						
12			Workshop Practice Lab-I	-	-	2	01	50						
13			Foreign language (German/Japanese/ Russian) (Non-Credit)	1	-	-	-	100						
14			**Democracy, Election & Good Governance (Non-Credit Mandatory Course) ***											
			Total	14	2	14	22	825						

Note: 1) Tutorials & practical shall be conducted in batches with batch strength not exceeding 20 students.
2) SEE will be conducted for 100 marks and converted to 50 marks.

CSE: Continuous Semester Evaluation **SEE: Semester End Evaluation** **IPE: Internal Practical Evaluation**

D. Y. PATIL AGRICULTURE AND TECHNICAL UNIVERSITY, TALSANDE, KOLHAPUR
SCHOOL OF ENGINEERING AND TECHNOLOGY
SCHEME OF TEACHING AND EXAMINATION
FIRST YEAR B. TECH. (Artificial Intelligence & Machine Learning)
SEMESTER- II

Sr. No.	Course Code	Corse Type	Name of Course	Teaching Scheme per week				Total Marks	Evaluation Scheme (Marks)					
									Theory			Practical		
				L	T	P	Credits		Scheme	Max marks	Min. Passing	Scheme	Max marks	Min. Passing
1			Applied Mathematics-II	3	-	-	03	100						
2			Applied Chemistry	3	-	-	03	100						
3			Object oriented Programming	3	-	-	03	100						
4			Engineering Mechanics	3	-	-	03	100						
5			Engineering Exploration	-	-	4	02	100						
6			Fundamental of electronics and Electrical	3	-	-	03	100						
7			Applied Mathematics-II	-	1	-	01	25						
8			Applied Chemistry Lab	-	-	2	01	25						
9			Object oriented Programming Lab	-	-	2	01	25						
10			Engineering Mechanics Lab	-	-	2	01	25						
11			Fundamental of electronics and Electrical Lab	-	-	2	01	25						
12			Workshop Practice Lab-II	-	-	2	01	50						
			Total	15	1	14	23	775						

Note: 1) Tutorials & practical shall be conducted in batches with batch strength not exceeding 20 students.
2) SEE will be conducted for 100 marks and converted to 50 marks.

CSE: Continuous Semester Evaluation **SEE: Semester End Evaluation** **IPE: Internal Practical Evaluation**

D. Y. PATIL AGRICULTURE AND TECHNICAL UNIVERSITY, TALSANDE, KOLHAPUR

SCHOOL OF ENGINEERING AND TECHNOLOGY

SCHEME OF TEACHING AND EXAMINATION

SECOND YEAR B. TECH. (Artificial Intelligence & Machine Learning)

SEMESTER- III

Sr. No.	Course Code	Corse Type	Name of Course	Teaching Scheme per week				Total Marks	Evaluation Scheme (Marks)					
									Theory			Practical		
				L	T	P	Credits		Scheme	Max marks	Min. Passing	Scheme	Max marks	Min. Passing
1			Statistics, Probability & Operations Research	3	-	-	3	100						
2			Discrete Mathematics	4	-	-	4	100						
3			Introduction to Machine Learning	3	-	-	3	100						
4			Data Structures	3	-	-	3	100						
5			Advanced Programming with Machine Learning	3	-	-	3	100						
6			Statistics, Probability & Operations Research	-	1	-	1	25						
7			The Lab Discrete Mathematics	-	-	2	1	50						
8			Data Structures - Lab			4	2	75						
9			Advanced Programming with Machine Learning - Lab	-	-	4	2	50						
10			Environmental Studies	2	-	-	-	-						
			Total	**18**	**1**	**10**	22	700						

Note: 1) Tutorials & practical shall be conducted in batches with batch strength not exceeding 20 students.
2) SEE will be conducted for 100 marks and converted to 50 marks.
3) *Environmental Studies project evaluation and theory examination will be conducted at the end of the year (along with Sem IV end examination)

CSE: Continuous Semester Evaluation **SEE: Semester End Evaluation** **IPE: Internal Practical Evaluation**
EPE: External Practical Examination **IOE: Internal Oral Evaluation** **EOE: External Oral Examination**

D. Y. PATIL AGRICULTURE AND TECHNICAL UNIVERSITY, TALSANDE, KOLHAPUR

SCHOOL OF ENGINEERING AND TECHNOLOGY

SCHEME OF TEACHING AND EXAMINATION

SECOND YEAR B. TECH. (Artificial Intelligence & Machine Learning)

SEMESTER- IV

Sr. No.	Course Code	Corse Type	Name of Course	Teaching Scheme per week				Total Marks	Evaluation Scheme (Marks)					
									Theory			Practical		
				L	T	P	Credits		Scheme	Max marks	Min. Passing	Scheme	Max marks	Min. Passing
1			Data and Information Management with AI	3	-	-	3	100						
2			Theory of Computation	3	-	-	3	100						
3			Operating System	3	-	-	3	100						
4			Computer Networks for AI and ML	3	-	-	3	100						
5			Application Based Programming using Python	3	-	-	3	75						
6			Theory of Computation	-	1	-	1	25						
7			Operating System	-	-	2	1	25						
8			Data and Information Management with AI - Lab	-	-	2	1	25						
9			Computer Networks for AI and ML	-	-	2	1	75						
10			Application Based Programming using Python Lab	-	-	2	1	50						
11			Project-I	-	-	2	1	75						
12			Development of Life Skills	1		2	1	50						
			Total	**16**	**1**	**12**	22	800						

Note: 1) Tutorials & practical shall be conducted in batches with batch strength not exceeding 20 students.

2) SEE will be conducted for 100 marks and converted to 50 marks.

3) * Environmental Studies project evaluation & theory examination will be conducted at the end of the year (along with Sem IV end examination)

CSE: Continuous Semester Evaluation **SEE: Semester End Evaluation** **IPE: Internal Practical Evaluation**

EPE: External Practical Examination **IOE: Internal Oral Evaluation** **EOE: External Oral Examination**

D. Y. PATIL AGRICULTURE AND TECHNICAL UNIVERSITY, TALSANDE, KOLHAPUR

SCHOOL OF ENGINEERING AND TECHNOLOGY

SCHEME OF TEACHING AND EXAMINATION

THIRD YEAR B. TECH. (Artificial Intelligence & Machine Learning)

SEMESTER- V

Sr. No.	Course Code	Corse Type	Name of Course	Teaching Scheme per week				Total Marks	Evaluation Scheme (Marks)					
									Theory			Practical		
				L	T	P	Credits		Scheme	Max marks	Min. Passing	Scheme	Max marks	Min. Passing
1			Computer Algorithms	3	-	-	3	100						
2			Computer Vision & Image Processing	3	-	-	3	100						
3			Ad HOC- Wireless Networks	3	-	-	3	100						
4			AI and Computing Intelligence	3	-	-	3	100						
5			R Programming for AI and ML	2	-	4	4	75						
6			Computer Algorithms	-	1	-	1	25						
7			Computer Vision & Image Processing-Lab	-	-	2	1	50						
8			AI and Computing Intelligence-Lab	-	-	2	1	75						
9			Project-II	-	-	2	1	75						
10			Human Values and Ethics	3	-	-	-	-						
			Total	17	1	10	20	700						

Note: 1) Tutorials & practical shall be conducted in batches with batch strength not exceeding 20 students.
2) SEE will be conducted for 100 marks and converted to 50 marks.

CSE: Continuous Semester Evaluation **SEE: Semester End Evaluation** **IPE: Internal Practical Evaluation**
EPE: External Practical Examination **IOE: Internal Oral Evaluation** **EOE: External Oral Examination**

D. Y. PATIL AGRICULTURE AND TECHNICAL UNIVERSITY, TALSANDE, KOLHAPUR

SCHOOL OF ENGINEERING AND TECHNOLOGY

SCHEME OF TEACHING AND EXAMINATION

THIRD YEAR B. TECH. (Artificial Intelligence & Machine Learning)

SEMESTER- VI

Sr. No.	Course Code	Corse Type	Name of Course	Teaching Scheme per week				Total Marks	Evaluation Scheme (Marks)					
									Theory			Practical		
				L	T	P	Credits		Scheme	Max marks	Min. Passing	Scheme	Max marks	Min. Passing
1			Database Engineering	3	-	-	3	100						
2			Information Security in AI	3	-	-	3	100						
3			Open Elective-I	3	-	-	3	100						
4			Professional Elective I	3	-	-	3	100						
5			Programming for Problem Solving	2	-	4	4	75						
6			Open Elective-I	-	1	-	1	25						
7			Professional Elective I	-	1	-	1	25						
8			Database Engineering Lab	-	-	2	1	75						
9			Information Security in AI-Lab	-	-	2	1	25						
10			Project-III	-	-	4	2	75						
			Total	**14**	**2**	**12**	22	700						

Note: 1) Tutorials & practical shall be conducted in batches with batch strength not exceeding 20 students.
2) SEE will be conducted for 100 marks and converted to 50 marks.

CSE: Continuous Semester Evaluation **SEE: Semester End Evaluation** **IPE: Internal Practical Evaluation**
EPE: External Practical Examination **IOE: Internal Oral Evaluation** **EOE: External Oral Examination**

Open Elective I:- 1) Legal Aspects of Business 2) Strategic Management 3) Enterprise Solutions

Professional Elective I: 1) Optimization in ML 2) Software Engineering and Testing Methodologies 3) Virtual & Augmented Reality

SUMMER INTERSHIP

The students are expected to undergo 4 to 6 weeks internship in the industry and work on the relevant area as assigned by the Industry. The work done should be monitored and evaluated by the concerned industry expert based on the report prepared by the student. The department has to assign faculty mentors to a student who has to communicate with the industry and monitor the entire internship related work periodically. The scheme of evaluation will be as under: -

a) Industry expert/ supervisor: - 70%

b) Department & Faculty mentor: - 30%

Faculty mentor includes presentation and submission of report to the department at the beginning of the subsequent semester.

1) The internship can be availed by the students during the summer vacations after completion of semester IV or VI.

2) The credits of the internships will be considered in semester VII.

3) The industry experts/ supervisor is expected to assign the work worth minimum 100 to 120 hours for 4 weeks duration and should monitor and evaluate periodically.

4) At the completion of internship work the student is expected to prepare a report on the work done and get a certificate from the industry expert.

D. Y. PATIL AGRICULTURE AND TECHNICAL UNIVERSITY, TALSANDE, KOLHAPUR

SCHOOL OF ENGINEERING AND TECHNOLOGY

SCHEME OF TEACHING AND EXAMINATION

FINAL YEAR B. TECH. (Artificial Intelligence & Machine Learning)

SEMESTER- VII

Sr. No.	Course Code	Corse Type	Name of Course	Teaching Scheme per week				Total Marks	Evaluation Scheme (Marks)					
									Theory			Practical		
				L	T	P	Credits		Scheme	Max marks	Min. Passing	Scheme	Max marks	Min. Passing
1			Pattern Recognition in ML	3	-	-	3	100						
2			AI in Web Designing	3	-	-	3	100						
3			Professional Elective-II	3	-	-	3	100						
4			Open Elective-II	3	-	-	3	100						
5			Professional Elective-II	-	1	-	1	25						
6			Open Elective-II	-	1	-	1	25						
7			Pattern Recognition in ML-lab	-	-	4	2	50						
8			AI in Web Designing-Lab	-	-	4	2	75						
9			Project-IV	-	-	4	2	125						
10			Internship	-	-		4	-						
			Total	**12**	**2**	**12**	24	700						

Note: 1) Tutorials & practical shall be conducted in batches with batch strength not exceeding 20 students.
2) SEE will be conducted for 100 marks and converted to 50 marks.

CSE: Continuous Semester Evaluation **SEE: Semester End Evaluation** **IPE: Internal Practical Evaluation**
EPE: External Practical Examination **IOE: Internal Oral Evaluation** **EOE: External Oral Examination**

Professional Elective II: 1) Search Engine Design and Optimization 2) Neural Networks 3) Cloud Computing for AI
Open Elective-II: 1) Innovation Management 2) Business Analysis 3) Enterprise Solutions

D. Y. PATIL AGRICULTURE AND TECHNICAL UNIVERSITY, TALSANDE, KOLHAPUR

SCHOOL OF ENGINEERING AND TECHNOLOGY

SCHEME OF TEACHING AND EXAMINATION

FINALYEAR B. TECH. (Artificial Intelligence & Machine Learning)SEMESTER- VIII

Sr. No.	Course Code	Corse Type	Name of Course	Teaching Scheme per week				Total Marks	Evaluation Scheme (Marks)					
									Theory			Practical		
				L	T	P	Credits		Scheme	Max marks	Min. Passing	Scheme	Max marks	Min. Passing
1			Deep Learning	3	-	-	3	100						
2			Natural Language Processing	3	-	-	3	100						
3			Robotics & Intelligence System	3	-	-	3	100						
4			Professional Elective-III	3	-	-	4	100						
5			Natural Language Processing	-	1	-	1	25						
6			Professional Elective-III	-	1	-	1	25						
7			Deep Learning Lab	-	-	2	1	75						
8			Robotics & Intelligence System-Lab	-	-	2	1	100						
9			Community Services	-	-	2	1	25						
10			Project-V	-	-	4	2	150						
			Total	**12**	**2**	**10**	20	800						

CSE: Continuous Semester Evaluation **SEE: Semester End Evaluation** **IPE: Internal Practical Evaluation**
EPE: External Practical Examination **IOE: Internal Oral Evaluation** **EOE: External Oral Examination**

Professional Elective III: 1) Bit coins and Crypto currencies 2) Big data and distributed processing