



# D Y Patil Agriculture & Technical University, Talsande

Structure & Contents for B. Tech AI & ML in School of Engineering and Technology  
Program (AY 2021-22) R0

Structure for First Year Odd Semester ( Semester I )										
Course Code	Course Title	L	T	P	C	Component	Evaluation Scheme			
							Exam	WT %	Min. Pass %	
BTAIML001101 Version: 1.0	Applied Mathematics – I	3			3	Theory 100 Marks	FET	20	40	
							MSE	30		
							ESE	50	40	
BTAIML001102 Version: 1.0	Engineering Physics	3			3	Theory 100 Marks	FET	20	40	
							MSE	30		
							ESE	50	40	
BTAIML001103 Version: 1.0	Operating System	3			3	Theory 100 Marks	FET	20	40	
							MSE	30		
							ESE	50	40	
BTAIML001104 Version: 1.0	Fundamentals of Electrical and Electronics Engineering	3			3	Theory 100 Marks	FET	20	40	
							MSE	30		
							ESE	50	40	
BTAIML001104 Version: 1.0	Basic Programming with C	3			3	Theory 100 Marks	FET	20	40	
							MSE	30		
							ESE	50	40	
BTAIML001105 Version: 1.0	Environment Science	2	-	-	1	Theory 50 Marks	ESE	50	40	
BTAIML001106 Version: 1.0	Basic Programming with C Lab				4	2	Practical 50 Marks	FEP	25	40
							POE	25	40	
BTAIML001107 Version: 1.0	Fundamentals of Electrical and Electronics Engineering Lab				2	1	Practical 50 Marks	FEP	25	40
							POE	25	40	
BTAIML001108 Version: 1.0	Engineering Physics Lab				2	1	Practical 50 Marks	FEP	25	40
							POE	25	40	
<b>Total</b>		<b>17</b>	<b>-</b>	<b>8</b>	<b>20</b>	<b>700 Marks</b>	<b>Total Hours: 25, Total Credits: 20</b>			

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Structure for First Year Even Semester ( Semester II )									
Course Code	Course Title	L	T	P	C	Component	Evaluation Scheme		
							Exam	WT	Min. Pass %
BTAIML001201 Version: 1.0	Applied Mathematics – II	3			3	Theory 100 Marks	FET	20	40
							MSE	30	
							ESE	50	40
BTAIML001202 Version: 1.0	Engineering Chemistry	3			3	Theory 100 Marks	FET	20	40
							MSE	30	
							ESE	50	40
BTAIML001203 Version: 1.0	Computer Network & Communication	3			3	Theory 100 Marks	FET	20	40
							MSE	30	
							ESE	50	40
BTAIML001204 Version: 1.0	Discrete Mathematics	3			3	Theory 100 Marks	FET	20	40
							MSE	30	
							ESE	50	40
BTAIML001205 Version: 1.0	Problem solving using Advanced C Programming	3			3	Theory 100 Marks	FET	20	40
							MSE	30	
							ESE	50	40
BTAIML001206 Version: 1.0	Communication Skills	2			2	Theory 50 Marks	ESE	50	40
BTAIML001207 Version: 1.0	Engineering Chemistry			2	1	Practical 50 Marks	FEP	25	40
							POE	25	40
BTAIML001208 Version: 1.0	Advanced C Programming Lab			2	1	Practical 50 Marks	FEP	25	40
							POE	25	40
BTAIML001209 Version: 1.0	Communication Skills Lab			2	1	Practical 50 Marks	FEP	25	40
							POE	25	40
<b>Total</b>		<b>17</b>			<b>8</b>	<b>20</b>	<b>700 Marks</b>	<b>Total Hours: 25, Total Credits: 20</b>	

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Structure for Second Year Odd Semester ( Semester III )										
Course Code	Course Title	L	T	P	C	Component	Evaluation Scheme			
							Exam	WT %	Min. Pass %	
BTAI ML002301 Version: 1.0	Transform Calculus, Fourier Series and Numerical Techniques	3	1		4	Theory 100 Marks	FET	20	40	
							MSE	30		
							ESE	50	40	
BTAI ML002302 Version: 1.0	Data Structure	3			3	Theory 100 Marks	FET	20	40	
							MSE	30		
							ESE	50	40	
BTAI ML002303 Version: 1.0	Object Oriented Programming using C++	3			3	Theory 100 Marks	FET	20	40	
							MSE	30		
							ESE	50	40	
BTAI ML002304 Version: 1.0	Fuzzy Logic and Applications	3			3	Theory 100 Marks	FET	20	40	
							MSE	30		
							ESE	50	40	
BTAI ML002305 Version: 1.0	Relational Database Management System	3			3	Theory 100 Marks	FET	20	40	
							MSE	30		
							ESE	50	40	
BTAI ML002306 Version: 1.0	OOPS using C++ Lab				4	2	Practical 100 Marks	FEP	50	40
								POE	50	40
BTAI ML002107 Version: 1.0	RDBMS Lab				4	2	Practical 100 Marks	FEP	50	40
								POE	50	40
<b>Total</b>		<b>15</b>	<b>1</b>	<b>8</b>	<b>20</b>	<b>Total Hours: 24, Total Credits: 20</b>				

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Structure & Contents for B. Tech AI & ML in School of Engineering and Technology  
Program (AY 2021-22) R0

Structure for Second Year Even Semester ( Semester IV )									
Course Code	Course Title	L	T	P	C	Component	Evaluation Scheme		
							Exam	WT %	Min. Pass %
BTAIML002401 Version: 1.0	Linear Algebra for AI ML	3	1		4	Theory 100 Marks	FET	20	40
							MSE	30	
							ESE	50	40
BTAIML002402 Version: 1.0	R Programming	3			3	Theory 100 Marks	FET	20	40
							MSE	30	
							ESE	50	40
BTAIML002403 Version: 1.0	Web Development for AI ML	3			3	Theory 100 Marks	FET	20	40
							MSE	30	
							ESE	50	40
BTAIML002404 Version: 1.0	Software Engineering	3			3	Theory 100 Marks	FET	20	40
							MSE	30	
							ESE	50	40
BTAIML002405 Version: 1.0	Introduction to Machine Learning	3			3	Practical 100 Marks	FEP	50	40
							POE	50	40
BTAIML002406 Version: 1.0	R Programming Lab			4	2	Practical 100 Marks	FEP	50	40
							POE	50	40
BTAIML002407 Version: 1.0	Web Development Lab			4	2	Practical 200 Marks	FEP	50	40
							POE	50	40
<b>Total</b>		<b>15</b>	<b>1</b>	<b>8</b>	<b>20</b>	<b>Total Hours: 24, Total Credits: 20</b>			
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Structure for Third Year Odd Semester ( Semester V )									
Course Code	Course Title	L	T	P	C	Component	Evaluation Scheme		
							Exam	WT %	Min. Pass %
BTAIML003501 Version: 1.0	Statistics for AI ML	3			3	Theory 100 Marks	FET	20	40
							MSE	30	
							ESE	50	40
BTAIML003502 Version: 1.0	Predictive Analysis	3			3	Theory 100 Marks	FET	20	40
							MSE	30	
							ESE	50	40
BTAIML003503 Version: 1.0	Cloud Computing for AI ML	3			3	Theory 100 Marks	FET	20	40
							MSE	30	
							ESE	50	40
BTAIML003504 Version: 1.0	Introduction to AI	3			3	Theory 100 Marks	FET	20	40
							MSE	30	
							ESE	50	40
BTAIML003505 Version: 1.0	Python Programming	3			3	Theory 100 Marks	FET	20	40
							MSE	30	
							ESE	50	40
BTAIML003506 Version: 1.0	Cloud Computing Lab			4	2	Practical 100 Marks	FEP	50	40
							POE	50	40
BTAIML003507 Version: 1.0	Python Programming Lab			4	2	Practical 100 Marks	FEP	50	40
							POE	50	40
BTAIML003508 Version: 1.0	Mini Project using R			2	1	Practical 100 Marks	FEP	50	40
							POE	50	40
<b>Total</b>		<b>15</b>			<b>10</b>	<b>20</b>	<b>Total Hours: 25, Total Credits: 20</b>		

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Structure & Contents for B. Tech AI & ML in School of Engineering and Technology  
Program (AY 2021-22) R0

Structure for Third Year Even Semester ( Semester VI )										
Course Code	Course Title	L	T	P	C	Component	Evaluation Scheme			
							Exam	WT %	Min. Pass %	
BTAIML003601 Version: 1.0	Data Visualization with matplotlib	3	1		4	Theory 100 Marks	FET	20	40	
							MSE	30		
							ESE	50	40	
BTAIML003602 Version: 1.0	Decision Support System	3			3	Theory 100 Marks	FET	20	40	
							MSE	30		
							ESE	50	40	
BTAIML003603 Version: 1.0	Julia Programming	3			3	Theory 100 Marks	FET	20	40	
							MSE	30		
							ESE	50	40	
BTAIML003604E_ Version: 1.0	Elective - I	3			3	Theory 100 Marks	FET	20	40	
							MSE	30		
							ESE	50	40	
BTAIML003605 Version: 1.0	Decision Support System	3			3	Theory 100 Marks	FET	20	40	
							MSE	30		
							ESE	50	40	
BTAIML003606 Version: 1.0	Data Visualization Lab				4	2	Practical 100 Marks	FEP	50	40
								POE	50	40
BTAIML003607 Version: 1.0	Julia Programming Lab				4	2	Practical 100 Marks	FEP	50	40
								POE	50	40
<b>Total</b>		<b>15</b>	<b>1</b>	<b>8</b>	<b>20</b>	<b>Total Hours: 24, Total Credits: 20</b>				

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# D Y Patil Agriculture & Technical University, Talsande

Structure & Contents for B. Tech AI & ML in School of Engineering and Technology  
Program (AY 2021-22) R0

Structure for Final Year Odd Semester ( Semester VII )									
Course Code	Course Title	L	T	P	C	Component	Evaluation Scheme		
							Exam	WT %	Min. Pass %
BTAIML004701 Version: 1.0	Virtual Reality	3			3	Theory 100 Marks	FET	20	40
							MSE	30	
							ESE	50	40
BTAIML004702 Version: 1.0	Introduction to Neural Network	3			3	Theory 100 Marks	FET	20	40
							MSE	30	
							ESE	50	40
BTAIML004703 Version: 1.0	TensorFlow for Machine Learning Research	3			3	Theory 100 Marks	FET	20	40
							MSE	30	
							ESE	50	40
BTAIML004704 Version: 1.0	Visualization Techniques- TABLEAU	3			3	Theory 100 Marks	FET	20	40
							MSE	30	
							ESE	50	40
BTAIML004705E_ Version: 1.0	Elective - II	3			3	Theory 100 Marks	FET	20	40
							MSE	30	
							ESE	50	40
BTAIML004706 Version: 1.0	TensorFlow Lab			4	2	Practical 100 Marks	FEP	50	40
							POE	50	40
BTAIML004707 Version: 1.	TABLEAU Lab			4	2	Practical 100 Marks	FEP	50	40
							POE	50	40
BTAIML004708 Version: 1.0	Mini Project			2	1	Practical 100 Marks	FEP	50	40
							POE	50	40
<b>Total</b>		<b>15</b>			<b>10</b>	<b>20</b>	<b>Total Hours: 25, Total Credits: 20</b>		
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**D Y PATIL**  
AGRICULTURE  
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TALSANDE

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**Structure & Contents for B. Tech AI & ML in School of Engineering and Technology  
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**Structure for Third Year Even Semester ( Semester VIII )**

**Internship/ Capstone Project 20 Credits**

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Electives are to be decided by the students based on their personal choice, academic requirements and in consultation with mentor and HOD. Following electives are offered by the department: