

# Dr. Babasaheb Ambedkar Technological University, Lonere

(Established as a University of Technology in the State of Maharashtra)

(Under Maharashtra Act No. XXIX of 2014)

P.O. Lonere, Dist. Raigad, Pin 402 103, Maharashtra

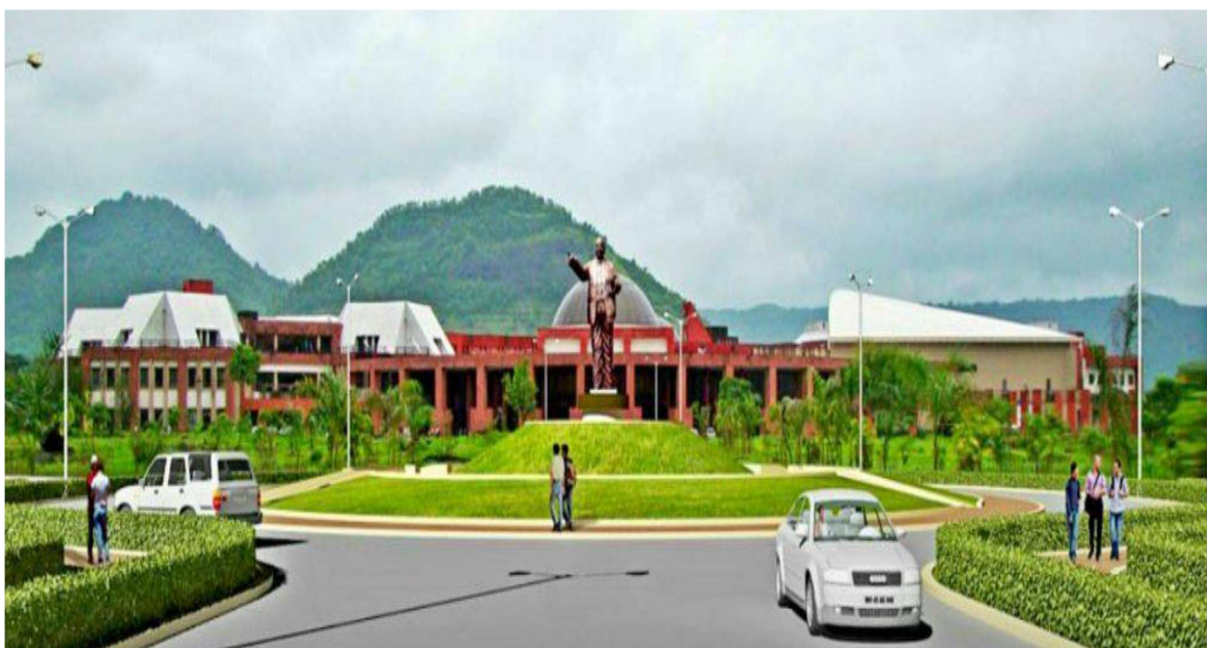
Telephone and Fax.: 02140 - 275142

[www.dbatu.ac.in](http://www.dbatu.ac.in)

## Draft Copy of Curriculum for Undergraduate Degree Programme

### B. Tech. in Civil Engineering

With effect from (Fourth Year) AY 2023-24



**Teaching & Evaluation Scheme for Second Year B. Tech. Civil Engg.**

Semester- III										
Course Category	Course Code	Course Title	Teaching Scheme			Evaluation Scheme				Credit
			L	T	P	CA	MSE	ESE	Total	
BSC 5	BTBS301	Mathematics – III	3	1	-	20	20	60	100	4
ESC 8	BTCVES302	Mechanics of Solids	3	1	-	20	20	60	100	4
PCC 1	BTCVC303	Building Construction & Drawing	2	1	-	20	20	60	100	3
PCC 2	BTCVC304	Hydraulics -I	3	1	-	20	20	60	100	4
PCC 3	BTCVC305	Surveying	2	1	-	20	20	60	100	3
HSSMC2	BTHM306	Soft Skill Development	2	-	-	50	-	-	50	Audit
LC 1	BTCVL 307	Solid Mechanics Laboratory	-	-	2	20	-	30	50	1
LC 2	BTCVL 308	Hydraulics-I Laboratory	-	-	2	20	-	30	50	1
LC 3	BTCVL 309	Surveying Laboratory	-	-	2	20	-	30	50	1
<b>Internship</b>	<b>BTES210P</b>	<b>Internship –I Evaluation (From Sem II)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>50</b>	<b>50</b>	<b>Audit</b>
<b>Total</b>			<b>15</b>	<b>05</b>	<b>06</b>	<b>210</b>	<b>100</b>	<b>440</b>	<b>750</b>	<b>21</b>

Semester- IV										
Course Category	Course Code	Course Title	Teaching Scheme			Evaluation Scheme				Credit
			L	T	P	CA	MSE	ESE	Total	
PCC 4	BTCVC401	Building Planning and Drawing	2	-	-	20	20	60	100	2
PCC 5	BTCVC402	Environmental Engineering	2	-	-	20	20	60	100	2
PCC 6	BTCVC403	Structural Mechanics - I	2	1	-	20	20	60	100	3
PCC 7	BTCVC404	Water Resources Engineering	3	-	-	20	20	60	100	3
PCC 8	BTCVC405	Hydraulics - II	2	1	-	20	20	60	100	3
PCC 9	BTCVC406	Engineering Geology	2	1	-	20	20	60	100	3
LC 4	BTCVL407	Building Planning and CAD Lab.	-	-	2	20	-	30	50	1
LC 5	BTCVL408	Environmental Engg. Lab.	-	-	2	20	-	30	50	1
LC 6	BTCVL409	HE-II Lab.	-	-	2	20	-	30	50	1
<b>Internship</b>	<b>BTCVP410</b>	<b>Field Training / Internship/Industrial Training (minimum of 4 weeks training in Summer Vacation after Semester IV and appear at examination in Semester V)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>To be evaluated in V Sem.</b>
<b>Total</b>			<b>13</b>	<b>03</b>	<b>06</b>	<b>180</b>	<b>120</b>	<b>450</b>	<b>750</b>	<b>19</b>

**Teaching & Evaluation Scheme for Third Year B Tech Civil Engg.**

Semester- V										
Course Category	Course Code	Course Title	Teaching Scheme			Evaluation Scheme				Credit
			L	T	P	CA	MSE	ESE	Total	
PCC 10	BTCVC501	Design of Steel Structures	2	1	-	20	20	60	100	3
PCC 11	BTCVC502	Geotechnical Engineering	3	1	-	20	20	60	100	4
PCC 12	BTCVC503	Structural Mechanics –II	2	1	-	20	20	60	100	3
PCC 13	BTCVC504	Concrete Technology	2	-	-	20	20	60	100	2
HSSMC3	BTHM505	Project Management	3	-	-	20	20	60	100	3
PEC 1	BTCVPE506	A. Advanced Environmental Engg. B. Applied Geology C. Hydraulic Engineering Design D. Advanced Water Resources E. Geomatics F. Town and Urban Planning G. Material, Testing and Evaluation H. Construction Economics & Finance	3	-	-	20	20	60	100	3
ESC10	BTCVES507	Software applications in Civil Engineering	2	-	-	50	-	-	50	Audit
LC 7	BTCVL508	SDD of Steel Structures Lab.	-	-	2	20	-	30	50	1
LC 8	BTCVL509	Geotechnical Engineering Lab.	-	-	2	20	-	30	50	1
LC 9	BTCVL510	Concrete Technology Lab.	-	-	2	20	-	30	50	1
<b>Internship</b>	<b>BTCVP410</b>	<b>Internship – 2 Evaluation</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>Audit</b>
<b>Total</b>			<b>17</b>	<b>3</b>	<b>6</b>	<b>230</b>	<b>120</b>	<b>450</b>	<b>800</b>	<b>21</b>

**Dr. Babasaheb Ambedkar Technological University**

**B.Tech. Civil Engineering**

**Course Structure for Semester VII (Fourth Year) w.e.f. 2023-2024**

Course Code	Type of Course	Course Title	Weekly Teaching Scheme			Evaluation Scheme				Credits
			L	T	P	CA	MSE	ESE	Total	
BTCVC701	Core	Design of Reinforced & Prestressed Concrete Structures	3	1	--	20	20	60	100	4
BTCVC702	Core	Infrastructure Engineering	3	--	--	20	20	60	100	3
BTCVC703	Core	Construction Techniques	3	--	--	20	20	60	100	3
BTCVC704	Core	Professional Practices	3	1	--	20	20	60	100	4
BTCVE705A	Elective IV	Engineering Economics	3	--	--	20	20	60	100	3
BTCVE705B		Finite Element Method								
BTCVE705C		Limit State Design of Steel Structures								
BTCVE705D		Rock Mechanics								
BTCVE705E		Applications of Drone Technology								
BTCVE705F		Advanced RC Design								
BTCVE705G		Applied Hydrology & Flood Control								
BTCVE705H		Legal Aspects in Civil Engineering Contracts								
BTCVE705I		Bridge Engineering								
BTCVOE706A		Open Elective V								
BTCVOE706B	Air Pollution Control									
BTCVOE706C	Applications of AI and ML in Civil Engineering									
BTCVOE706D	Introduction to Earthquake Engineering									
BTCVOE706E	Internet of Things									
BTCVOE706F	Tunneling and Underground Excavations									
BTCVOE706G	Bamboo Construction Technology									
BTHM707A		Essence of Indian Traditional Knowledge	2	--	--	--	--	--	--	Audit
BTHM707B		Foreign language <sup>##</sup>								
BTCVL708		Design & Drawing of Prestressed Concrete	--	--	2	30	--	20	50	1



	Lab.	Structures								
BTCVL709		Professional Practices	--	--	2	30	--	20	50	1
<b>BTCVP610</b>	<b>Training</b>	<b>Field Training / Internship/Industrial Evaluation</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>50</b>	<b>50</b>	<b>1</b>
BTCVS710	BTS	Seminar	--	--	2	--	--	50	50	1
BTCVP711	BTP	Project Stage-I**	--	--	4	--	50	50	100	3
<b>Total</b>			<b>20</b>	<b>2</b>	<b>10</b>	<b>160</b>	<b>150</b>	<b>490</b>	<b>800</b>	<b>24</b>

**B.Tech. Civil Engineering**  
Course Structure for Semester VIII [Fourth Year] w.e.f. 2023-2024

Course Code	Type of Course	Course Title	Weekly Teaching Scheme			Evaluation Scheme <sup>s</sup>				Credits
			L	T	P	CA	MSE	ESE	Total	
BTCVSS801A	(Self-Study Course) #	Characterization of Construction Materials	02**	--	--	20	20	60	100	3
BTCVSS801B		Geo synthetics and Reinforced Soil Structures								
BTCVSS801C		Higher Surveying								
BTCVSS801D		Maintenance and Repair Of Concrete Structures								
BTCVSS801E		Structural Dynamics								
BTCVSS801F		Engineering Systems & Development								
BTCVSS801G		Sustainable River Basin Management								
BTCVSS801H		Modern Construction Materials								
BTCVSS801J		Advanced Town & Urban Planning								
BTCVSS802A	(Self-Study Course) #	Energy Efficiency Acoustics and Day lighting in Building	02**	--	--	20	20	60	100	3
BTCVSS802B		Environmental Remediation of Contaminated Sites								
BTCVSS802C		Remote Sensing Essentials								
BTCVSS802D		Mechanical Characterization of Bituminous Materials								
BTCVSS802E		Soil Structure Interaction								
BTCVSS802F		Design of Water Supply Systems								
<b>BTCVP803</b>	<b>Project Stage-II</b>	<b>Project Stage II or Internship</b>	<b>--</b>	<b>--</b>	<b>24</b>	<b>100</b>	<b>--</b>	<b>100</b>	<b>200</b>	<b>12</b>
<b>Total</b>			<b>04</b>	<b>--</b>	<b>24</b>	<b>140</b>	<b>40</b>	<b>220</b>	<b>400</b>	<b>18</b>

**Draft of Proposed Course Structure  
For Post Graduate Degree Programme  
M. Tech. in Civil Engineering  
with Specialization in  
Construction Technology and Management  
Presented to Academic Council  
On 15 April 2017**



**Dr. Babasaheb Ambedkar Technological University  
Lonere 402 103, Dist- Raigad, Maharashtra, INDIA**

## First Semester

Sr. No.	Subject Code	Name of Subject	Hours /Week			Credit	Examination Scheme				
			L	P	T		Theory		CA	PR/OR	Total
							TH	MTE			
01	CVCTM 101	Management and Project Planning	03	--	1	04	60	20	20	--	100
02	CVCTM 102	Cost and Quality Management	03	--	1	04	60	20	20	--	100
03	CVCTM 103	Contract Administration and Management	03	--	1	04	60	20	20	--	100
04	CVCTM 104	Communication Skills	02	--	--	02	--	--	25	25	50
05	CVCTM -L01	PG Lab-I	--	03	--	02	--	--	25	25	50
06	CVCTM-E1	Elective-I	03	--	--	03	60	20	20	--	100
07	CVCTM-E2	Elective-II	03	--	--	03	60	20	20	--	100
<b>Total for Semester I</b>			<b>17</b>	<b>03</b>	<b>03</b>	<b>22</b>	<b>300</b>	<b>100</b>	<b>150</b>	<b>50</b>	<b>600</b>

### Elective-I

**CVCTM-E1/01:** Advanced Construction Materials and Techniques

**CVCTM-E1/02:** Advanced Construction Equipment

**CVCTM-E1/03:** Retrofitting of Structures

### Elective-II

**CVCTM-E2/01:** Construction Disaster Management

**CVCTM-E2/02:** Applications of Statistical Methods

**CVCTM-E2/03:** Advanced Sustainable Building Technology

## Second Semester

Sr. No.	Subject Code	Name of Subject	Hours /Week			Credit	Examination Scheme				
			L	P	T		Theory		CA	PR/OR	Total
							TH	MTE			
01	CVCTM 201	Project Economics and Finance	03	--	1	04	60	20	20	--	<b>100</b>
02	CVCTM 202	Construction Safety	03	--	1	04	60	20	20	--	<b>100</b>
03	CVCTM-S01	Seminar-I	--	04	--	02	--	--	50	50	<b>100</b>
04	CVCTM-L02	PG Lab-II or Mini -Project	--	04	--	02	--	--	50	50	<b>100</b>
05	CVCTM-E3	Elective-III (Departmental)	03	--	--	03	60	20	20	--	<b>100</b>
06	CVCTM-E4	Elective-IV (Departmental)	03	--	--	03	60	20	20	--	<b>100</b>
07	CVCTM-E5	Elective-V (Open)	03	--	--	03	60	20	20	--	<b>100</b>
<b>Total for Semester II</b>			<b>15</b>	<b>08</b>	<b>02</b>	<b>21</b>	<b>300</b>	<b>100</b>	<b>200</b>	<b>100</b>	<b>700</b>

### Elective-III

**CVSE-E3/01:** Architecture and Town planning

**CVSE-E3/02:** Operation Research

**CVSE-E3/03:** Value Engineering and Valuation

### Elective- IV

**CVSE-E4/01:** Resource Management

**CVSE-E4/02:** Building Environment and Services

**CVSE-E4/03:** Risk Analysis and Decision Making

### Elective-V (Open)

**CVSE-E5/01:** Research Methodology

**CVSE-E5/02:** Infrastructure Development

### Third Semester

Sr. No.	Subject Code	Name of the subject	Hours/Week			Credit	Examination scheme				
			L	P	T		Theory		CA	PR / OR	Total
							TH	Test			
1	CVCTM301	Project Management and Intellectual Property Rights (Self Study)*	--	--	--	02	--	--	50	50	100
2	CVCTMPS1	Project Stage -I	--	--	--	10	--	--	50	50	100
<b>Total for Semester III</b>			--	--	--	12	--	--	100	100	200

### Fourth Semester

Sr. No.	Subject Code	Name of the subject	Hours/Week			Credit	Examination scheme				
			L	P	T		Theory		CA	PR / OR	Total
							TH	Test			
1	CVCTMPS2	Project Stage-II	-	-	-	20	-	-	100	100	200
<b>Total for Semester IV</b>			-	-	-	20	-	-	100	100	200
<b>GRAND TOTAL</b>											<b>1700</b>

\* Student may select this course either from NPTEL/MOOC pool or any other approved reputed source. The submission of course completion certificate is mandatory.

**Dr. Babasaheb Ambedkar Technological University**  
(Established as a University of Technology in the State of Maharashtra)  
(under Maharashtra Act No. XXIX of 2014)  
P.O. Lonere, Dist. Raigad, Pin 402 103, Maharashtra  
Telephone and Fax. 02140 - 275142  
[www.dbatu.ac.in](http://www.dbatu.ac.in)



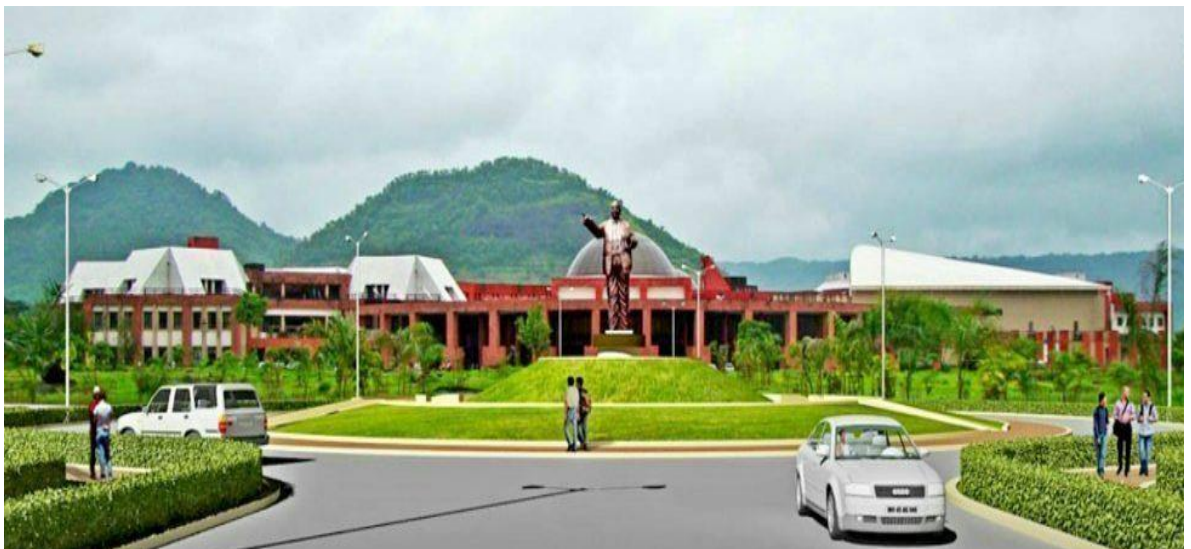
# **PROPOSED CURRICULUM**

# **UNDER GRADUATE PROGRAMME**

# **B.TECH**

**COMPUTER ENGINEERING**

**WITH EFFECT FROM THE ACADEMIC YEAR 2020-2021**





**Semester –III (Second Year)**  
**Proposed Scheme w.e.f. July – 2021**

Course Category	Course Code	Course Title	Weekly Teaching Hrs			Evaluation Scheme				Credit
			L	T	P	CA	MSE	ESE	Total	
	BTBS301	Engineering Mathematics – III	3	1	-	20	20	60	100	4
	BTCOC302	Discrete Mathematics	3	1	-	20	20	60	100	4
	BTCOC303	Data Structures	3	1	-	20	20	60	100	4
	BTCOC304	Computer Architecture & Organization	3	1	-	20	20	60	100	4
	BTCOC305	Elective –I (a) Object - oriented Programming in C++ (b) Object Oriented Programming in Java	3	1	-	20	20	60	100	4
	BTCOL306	Data Structures Lab & Object Oriented Programming Lab	-	-	4	60	-	40	100	2
	BTCOS307	Seminar – I	-		4	60	-	40	100	2
	<b>BTES211P</b>	<b>Field Training / Internship / Industrial Training Evaluation</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>Audit</b>
<b>TOTAL</b>			<b>15</b>	<b>5</b>	<b>8</b>	<b>220</b>	<b>100</b>	<b>380</b>	<b>700</b>	<b>24</b>

**Semester –IV (Second Year)**  
**Proposed Scheme w.e.f. January – 2022**

Course Category	Course Code	Course Title	Weekly Teaching Hrs			Evaluation Scheme				Credit
			L	T	P	CA	MSE	ESE	Total	
	BTCOC401	Design & Analysis of Algorithms	3	1	-	20	20	60	100	4
	BTCOC402	Operating Systems	3	1	-	20	20	60	100	4
	BTHM403	Basic Human Rights	3	-	-	20	20	60	100	3
	BTBS404	Probability Theory and Random Processes	3	-	-	20	20	60	100	3
	BTES405	Digital Logic Design & Microprocessors	3	1	-	20	20	60	100	4
	BTCOL406	Operating Systems & Python Programming Lab	1*	-	4	60	-	40	100	3
	BTCOS407	Seminar – II			4	60	-	40	100	2
	<b>BTCOF408</b>	<b>Field Training / Internship / Industrial Training Evaluation</b>						<b>-</b>	<b>-</b>	<b>Audit to be evaluated in V Sem.</b>
<b>TOTAL</b>			<b>16</b>	<b>3</b>	<b>8</b>	<b>220</b>	<b>100</b>	<b>380</b>	<b>700</b>	<b>23</b>

\*Note: Lecture should be conducted only for Python Programming

**Semester –V (Third Year)**  
**Proposed Scheme w.e.f. July – 2022**

Course Category	Course Code	Course Title	Weekly Teaching Hrs			Evaluation Scheme				Credit
			L	T	P	CA	MSE	ESE	Total	
	BTCOC501	Database Systems	3	1	-	20	20	20	100	4
	BTCOC502	Theory of Computation	3	1	-	20	20	20	100	4
	BTCOC503	Software Engineering	3	1	-	20	20	20	100	4
	BTCOE504	Elective – II (A) Human computer Interaction (B) Numerical Methods	3	-	-	20	20	20	100	3
	BTHM505	Elective – III (A) Economics and Management (B) Business Communication	3	-	-	20	20	20	100	3
	BTCOL506	Database Systems & Software Engineering Lab	-	-	4	60	-	40	100	2
	BTCOM507	Mini-project – I	-	-	4	60	-	40	100	2
	<b>BTCOF408</b>	<b>Field Training / Internship / Industrial Training Evaluation</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>Audit</b>
<b>TOTAL</b>			<b>15</b>	<b>3</b>	<b>8</b>	<b>220</b>	<b>100</b>	<b>380</b>	<b>700</b>	<b>22</b>

**Semester –VI (Third Year)**  
**Proposed Scheme w.e.f. January – 2023**

Course Category	Course Code	Course Title	Weekly Teaching Hrs			Evaluation Scheme				Credit
			L	T	P	CA	MSE	ESE	Total	
	BTCOC601	Compiler Design	3	1	-	20	20	60	100	4
	BTCOC602	Computer Networks	3	1	-	20	20	60	100	4
	BTCOC603	Machine Learning	3	1	-	20	20	60	100	4
	BTCOE604	Elective – IV (A) Geographic Information System (B) Internet of Things (C) Embedded Systems	3	-	-	20	20	60	100	3
	BTHM605	Elective – V (A) Development Engineering (B) Employability and Skill Development (C) Consumer Behaviour	3	-	-	20	20	60	100	3
	BTCOL606	Competitive Programming & Machine Learning Lab	1*	-	4	60	-	40	100	3
	BTCOM607	Mini-project – II	-	-	4	60	-	40	100	2
	<b>BTCOF608</b>	<b>Field Training / Internship / Industrial Training</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>Audit to be Evaluated in VII Sem.</b>
<b>TOTAL</b>			<b>16</b>	<b>3</b>	<b>8</b>	<b>220</b>	<b>100</b>	<b>380</b>	<b>700</b>	<b>23</b>

\*Note: Lecture should be conducted only for Competitive Programming

**Semester –VII (Final Year)**  
**Proposed Scheme w.e.f. July – 2023**

Course Category	Course Code	Course Title	Weekly Teaching Hrs			Evaluation Scheme				Credit
			L	T	P	CA	MSE	ESE	Total	
	BTCOC701	Artificial Intelligence	3	-	-	20	20	60	100	3
	BTCOC702	Cloud Computing	3	-	-	20	20	60	100	3
	BTCOE703	Elective – VI (A) Bioinformatics (B) Distributed System (C) Big Data Analytics	3	-	-	20	20	60	100	3
	BTCOE704	Open Elective – VII (A) Cryptography and Network Security (B) Business Intelligence (C) Block chain Technology	3	-	-	20	20	60	100	3
	BTCOE705	Open Elective – VIII (A) Virtual Reality (B) Deep Learning (C) Design Thinking	3	-	-	20	20	60	100	3
	BTHM706	Foreign Language Studies	-	-	4	-	-	-	-	Audit
	BTCOL707	Artificial Intelligence & Cloud Computing Lab	-	-	4	60	-	40	100	2
	BTCOS708	Project Phase – I	-	-	-	60	-	40	100	2
	<b>BTCOF608</b>	<b>Field Training / Internship / Industrial Training</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>Audit</b>
<b>TOTAL</b>			<b>15</b>	<b>-</b>	<b>8</b>	<b>220</b>	<b>100</b>	<b>380</b>	<b>700</b>	<b>19</b>

**Semester –VIII (Final Year)**  
**Proposed Scheme w.e.f. January – 2024**

Course Category	Course Code	Course Title	Weekly Teaching Hrs			Evaluation Scheme				Credit
			L	T	P	CA	MSE	ESE	Total	
	BTCOF801	Project phase – II (In-house) / Internship and Project in Industry	-	-	24	60	-	40	100	12
<b>TOTAL</b>			-	-	24	60	-	40	100	12



**Syllabus**  
**for**  
**M. Tech. (Computer Engineering)**  
**M. Tech. (Computer Science)**  
**M. Tech. (Computer Science & IT)**  
**M. Tech. (Computer Science & Engg)**  
**w.e.f. July 2017**

**Department of Computer Engineering**  
**Master of Technology (Computer Engineering)**

Sr No	Code	Course Name	Teaching Scheme				Examination Scheme				
			L	P	T	CR	IA	MSE	ESE	OR	Total
<b>Semester I</b>											
1	MTCE1101	Computer Algorithms	3		1	4	20	20	60		100
2	MTCE1102	Machine Learning	3		1	4	20	20	60		100
3	MTCE1103	Advanced Computer Networks	3		1	4	20	20	60		100
4	MTCE1104	Elective I	3			3	20	20	60		100
5	MTCE1105	Elective II	3			3	20	20	60		100
6	MTCE1106	Communication Skill	2			2	25			25	50
7	MTCE1107	Software Lab I		4		2	25			25	50
		Total	17	4	3	22	150	100	300	50	600
<b>Semester II</b>											
1	MTCE1201	Data Science	3		1	4	20	20	60		100
2	MTCE1202	Software Architecture	3		1	4	20	20	60		100
3	MTCE1203	Elective III	3			3	20	20	60		100
4	MTCE1204	Elective IV	3			3	20	20	60		100
5	MTCE1205	Elective V	3			3	20	20	60		100
7	MTCE1207	Software Lab II		4		2	50			50	100
8	MT CE1208	Seminar I		4		2	50			50	100
		Total	15	8	2	21	200	100	300	100	700
<b>Semester III</b>											
1	MTCE2101	Project Management and Intellectual Property Rights (Self Study)				2	50			50	100
3	MTCE2103	Project- I				10	50			50	100
		Total				12	100			100	200
<b>Semester IV</b>											
1	MTCE2201	Project-II				20	100			100	200
		Total				20	100			100	200

## **List of Electives**

### **Elective 1**

1. Cloud Computing
2. Game Theory
3. Natural Language Processing
4. Social Network Analysis

### **Elective 3**

1. Software Testing
2. Algorithms for Big Data
3. Software Language Engineering
4. Cryptography and Network Security

### **Elective 5:**

1. Functional Programming
2. Object Oriented Systems
3. Reinforcement Learning
4. Pattern Recognition

### **Elective 2**

1. Intrusion Detection System
2. Model Checking
3. Artificial Intelligence and Knowledge Reasoning
4. High Performance Computing

### **Elective 4**

1. Introduction to Cognitive Sciences
2. Virtual Reality
3. Mobile Computing
4. Storage Systems

# Dr. Babasaheb Ambedkar Technological University, Lonere.

Dr. Babasaheb Ambedkar Technological University

(Established as a University of Technology in the State of Maharashtra)

(under Maharashtra Act No. XXIX of 2014)

P.O. Lonere, Dist. Raigad, Pin 402 103, Maharashtra

Telephone and Fax. : 02140 -275142

[www.dbatu.ac.in](http://www.dbatu.ac.in)

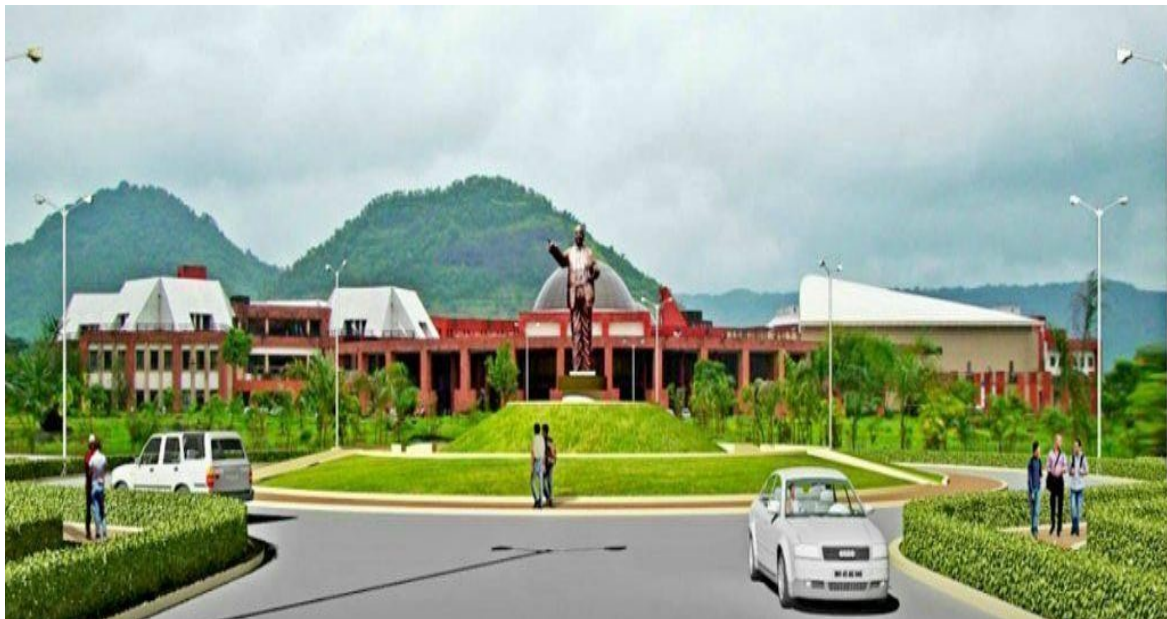


## COURSE STRUCTURE AND SYLLABUS

for

**Second Year B. Tech. Electrical Engineering / Electrical Engineering  
(Electronics and Power)/ Electrical & Electronics Engg / Electrical & Power  
Engineering**

**With effect from the Academic Year 2021-2022**



Dr. Babasaheb Ambedkar Technological University, Lonere.

**B.Tech (Electrical Engineering / Electrical Engineering (Electronics and Power)/ Electrical & Electronics Engg / Electrical & Power Engineering)**

**Curriculum of Second Year**

**Semester III**

Course Category	Course Code	Course Title	Teaching Scheme			Evaluation Scheme				Credit
			L	T	P	CA	MSE	ESE	Total	
BSC	BTBS301	Engineering Mathematics-III	3	1	-	20	20	60	100	4
PCC1	BTEEC302	<b>Electrical Machines-I</b>	3	1	-	20	20	60	100	4
PCC2	BTEEC303	Electrical and Electronics Measurement	3	1	-	20	20	60	100	4
HSSMC	BTHM304	Basic Human Rights	2	-	-					Audit
ESC	BTES305	<b>Engineering Material Science</b>	3	-	-	20	20	60	100	3
LC	BTEEL306	Electrical Machines-I Lab			2	60		40	100	1
LC	BTEEL307	Electrical and Electronics Measurement Lab			2	60		40	100	1
Project	BTEEP308	Mini Project-I			4	60		40	100	2
Internship	BTES211P	Internship-I Evaluation						50	50	1
			14	3	8	260	80	410	750	20

**Semester IV**

Course Category	Course Code	Course Title	Teaching Scheme			Evaluation Scheme				Credit
			L	T	P	CA	MSE	ESE	Total	
PCC3	BTEEC401	<b>Network Theory</b>	3	1	-	20	20	60	100	4
PCC4	BTEEC402	<b>Power System</b>	3	1	-	20	20	60	100	4
PCC5	BTEEC403	Electrical Machine-II	3	1	-	20	20	60	100	4
BSC	BTBS404	Analog and Digital Electronics	3	-	-	20	20	60	100	3
PEC1	BTEEPE405	Group A	3	-	--	20	20	60	100	3
LC	BTEEL406	Network Theory Lab	-	-	2	30		20	50	1
LC	BTEEL407	Power System Lab	-	-	2	30		20	50	1
LC	BTEEL408	Electrical Machine-II Lab	-	-	2	30		20	50	1
LC	BTEEL409	Analog and Digital Electronics lab	-	-	2	30		20	50	1
Internship	BTEEP410	Internship-II (minimum of 4 weeks which can be completed partially in third or fourth semester or in at one time)	-	-	-	-	-	-	-	-
						220	100	380	700	22

**Group-A**

- (A) Electromagnetic Field Theory
- (B) **Signals and System**
- (C) Advance Renewable Energy Sources
- (D) **Electronic Devices and Circuits**

Dr. Babasaheb Ambedkar Technological University, Lonere.

**B.Tech (Electrical Engineering / Electrical Engineering (Electronics and Power)/ Electrical & Electronics Engg / Electrical & Power Engineering)**

**Curriculum for Semester V**

Course Category	Course Code	Course Title	Teaching Scheme			Evaluation Scheme				Credit
			L	T	P	CA	MS E	ESE	Total	
PCC4	BTEEC501	Power System Analysis	3	1	-	20	20	60	100	4
PCC5	BTEEC502	Microprocessor and Microcontroller	3	-	-	20	20	60	100	3
PCC6	BTEEC503	Power Electronics	3	1	-	20	20	60	100	4
PCC2	BTEEPLE504	Group B	3	-	-	20	20	60	100	3
OEC1	BTEEOE505	Group C	3	-	-	20	20	60	100	3
HSSMC	BTHM506	Foreign Language #	-	-	-	-	-	-	-	Audit
LC	BTEEL507	Power System Analysis Lab	-	-	2	60	-	40	100	1
LC	BTEEL508	Microprocessor and Microcontroller Lab	-	-	2	60	-	40	100	1
LC	BTEEL509	Power Electronics Lab	-	-	2	60	-	40	100	1
Project	BTEEPE510	Mini project-II	-	-	2	60	-	40	100	1
Internship	BTEEP410	Internship-II Evaluation	-	-	-	-	-	50	50	1
<b>Total</b>			<b>15</b>	<b>2</b>	<b>10</b>	<b>340</b>	<b>100</b>	<b>510</b>	<b>950</b>	<b>22</b>

**Semester VI**

PCC7	BTEEC601	Switchgear and Protection	3	-	-	20	20	60	100	3
PCC8	BTEEC602	Electrical Machine Design	3	1	-	20	20	60	100	4
PCC9	BTEEC603	Control System Engineering	3	1	-	20	20	60	100	4
PEC3	BTEEPE604	Group D	3	-	-	20	20	60	100	3
OEC2	BTEEOE605	Group E	3	-	-	20	20	60	100	3
LC	BTEEL606	Switchgear and Protection Lab	-	-	2	60	-	40	100	1
LC	BTEEL607	Electrical Machine Design Lab	-	-	2	60	-	40	100	1
LC	BTEEL608	Control System Engineering Lab	-	-	2	60	-	40	100	1
Seminar	BTEEM609	Seminar	-	-	4	60	-	40	100	2
Internship	BTEEP610	Internship-III (minimum of 4 weeks which can be completed partially in third or fourth semester or in at one time)	-	-	-	-	-	-	-	Credits to be evaluated in VII sem.
<b>Total</b>			<b>15</b>	<b>2</b>	<b>10</b>	<b>340</b>	<b>100</b>	<b>460</b>	<b>900</b>	<b>22</b>

BSC= Basic Science Course, ESC= Engineering Science Course, PCC= Professional Core Course, PEC= Professional Elective Course, OEC= Open Elective Course, LC= Laboratory Course, HSSMC= Humanities and Social Science including Management Course

# Online NPTEL Course



### Semester V

<b>BTEEPE504 Professional Elective (Group B)</b>	<b>BTEEOE505 Open Elective (Group C)</b>
(A) HVDC	(A) Embedded System
(B) Power Quality Issues	(B) Electrical Safety
(C) Industrial Automation	(C) Condition Monitoring of Electric Apparatus

<b>BTHM506 Foreign Language</b>
(A) Japanese Language
(B) German Language

### Semester VI

<b>BTEEPE604 Professional Elective (Group D)</b>	<b>BTEEOE605 Open Elective (Group E)</b>
(A) Flexible AC Transmission System	(A) E-waste Management
(B) Smart Grid Technology	(B) Power Plant Engineering
(C) Modeling, Simulation and Control of Electric Drives	(C) Sensor Technology
	(D) Lightning Interaction with Power System

Dr. Babasaheb Ambedkar Technological University, Lonere.

**B.Tech (Electrical Engineering / Electrical Engineering (Electronics and Power)/  
Electrical & Electronics Engg / Electrical & Power Engineering)**

**Curriculum for Semester VII [Final Year]**

Sr. No.	Course Code	Type of Course	Course Title	Hours per week			Evaluation Scheme			Total Marks	Credits
				L	T	P	MSE	CA	ESE		
1	BTEEC701	PCC1	Power System Operation & Control	3	0	0	20	20	60	100	3
2	BTEEC702	PCC2	High Voltage Engineering	3	0	0	20	20	60	100	3
3	BTEEC703	PCC3	Electrical Drives	3	0	0	20	20	60	100	3
4	BTEEE704	PEC1	Elective-IX	3	0	0	20	20	60	100	3
5	BTEEE705	PEC2	Elective-X	3	0	0	20	20	60	100	3
6	BTEEL706	Lab	Power System Operation & Control Lab	0	0	2	--	30	20	50	1
7	BTEEL707	Lab	High Voltage Engineering Lab	0	0	2	--	30	20	50	1
8	BTEEL708	Lab	Electrical Drives Lab	0	0	2	--	30	20	50	1
9	BTEES709	Seminar	Seminar	0	0	2	--	30	20	50	1
10	BTEEP710	Project	Project Part-I	0	0	6	--	30	20	50	3
11	BTEEF711	--	Field Training /Internship/Industrial Training III	--	--	--	--	--	50	50	1
<b>Total</b>				<b>15</b>	<b>0</b>	<b>14</b>	<b>100</b>	<b>250</b>	<b>450</b>	<b>800</b>	<b>23</b>

Elective-IX	Elective-X
A) Special Purpose Electrical Machines	A) Digital Signal Processing
B) Electrical Traction and Utilization	B) Energy Audit and Conservation
C) Engineering System Design and Optimization	C) Electrical Power Quality
D) Financial Management	D) HVDC Transmission and FACTS

Dr. Babasaheb Ambedkar Technological University, Lonere.

**B.Tech (Electrical Engineering / Electrical Engineering (Electronics and Power)/  
Electrical & Electronics Engg / Electrical & Power Engineering)**

**Curriculum for Semester VIII [Final Year]**

Sr. No.	Course Code	Course Title	Hours per week			Evaluation Scheme			Total Marks	Credits
			L	T	P	MSE	CA	ESE		
		1.Power Management Integrated Circuits 2.DC Power Transmission Systems 3.High Power Multilevel Converters 4.Fuzzy Sets, Logic and Systems & Applications 5.The Joy of Computing using Python 6.Introduction to Industry 4.0 and Industrial Internet of Things 7.Entrepreneurship Essentials	3	0	0	20*	20*	60*	100	3
		# Student to opt any two subjects from above list	3	0	0	20*	20*	60*	100	3
6	BTEEP803	Project - II	0	0	30	--	100	150	250	15
		<b>Total</b>	<b>6</b>	<b>0</b>	<b>30</b>	<b>40</b>	<b>240</b>	<b>270</b>	<b>450</b>	<b>21</b>

\* Six months of Internship in the industry

\*Students doing project at institute will have to appear for CA/MSE/ESE

\* Student doing project at Industry will give NPTEL examination / Examination conducted by university i.e. CA/MSE/ESE

# These subjects are to be studied on self –study mode using SWAYAM/NPTEL/Any other source

# Teacher who work as a facilitator for the course should be allotted 3 hrs/week load.

# Project Load: 2hrs/week/project.

**Mapping of Courses with MOOCs Platform SWYAM / NPTEL**

S.N.	Course Name	Duration	Name of Professor	Institute offering Course
1	Power Management Integrated Circuits	12 Weeks	Prof. Qadeer Ahmad Khan	IITM
2	DC Power Transmission Systems	12 Weeks	Prof. Krishna S	IITM
3	High Power Multilevel Converters	12 Weeks	Prof. Anandarup Das	IITD
4	Fuzzy Sets, Logic and Systems & Applications	12 Weeks	Prof. Nishchal Kumar Verma	IITK
5	The Joy of Computing using Python	12 Weeks	Prof. Sudarshan Iyengar Prof. Yayati Gupta	IIT Ropar
6	Introduction to Industry 4.0 and Industrial Internet of Things	12 Weeks	Prof. Sudip Misra	IIT KGP
7	Entrepreneurship Essentials	12 Weeks	Prof. Manoj Kumar Mondal	IIT KGP

**Dr. Babasaheb Ambedkar Technological University, Lonere.**

**Dr. Babasaheb Ambedkar Technological University  
(Established as a University of Technology in the State of Maharashtra)  
(under Maharashtra Act No. XXIX of 2014)  
P.O. Lonere, Dist. Raigad, Pin 402 103, Maharashtra  
Telephone and Fax. : 02140 - 275142  
www.dbatu.ac.in**



## **COURSE STRUCTURE AND SYLLABUS**

For

### **B. Tech. Electronics and Telecommunication Engineering Programme**

**With effect from the Academic Year**

**2017-2018 (First Year), 2018-2019 (Second Year),  
2019-2020 (Third Year), 2020-2021 (Final Year).**



**Dr. Babasaheb Ambedkar Technological University, Lonere.**

**B. Tech (Electronics & Telecommunication Engineering) / B. Tech (Electronics Engineering)  
Curriculum for Semester III [Second Year]**

Sr. No.	Course Code	Course Title	Hours Per Week			Evaluation Scheme			Total Marks	Credits
			L	T	P	MSE	CA	ESE		
1	BTBSC301	Engineering Mathematics-III	3	1	0	20	20	60	100	4
2	BTEXC302	Analog Circuits	2	1	0	20	20	60	100	3
3	BTEXC303	Electronic Devices & Circuits	2	1	0	20	20	60	100	3
4	BTEXC304	Network Analysis	2	1	0	20	20	60	100	3
5	BTEXC305	Digital Logic Design	2	1	0	20	20	60	100	3
6	BTHM3401	Basic Human Rights	2	0	0	--	50	--	50	(Audit)
7	BTEXL307	Analog Circuits Lab	0	0	2	--	60	40	100	1
8	BTEXL308	Electronic Devices & Circuits Lab	0	0	2	--	60	40	100	1
9	BTEXL309	Network Analysis Lab	0	0	2	--	60	40	100	1
10	BTEXL310	Digital Logic Design Lab	0	0	2	--	60	40	100	1
11	BTEXW311	Electronics Workshop	0	0	2	--	60	40	100	1
12	BTES211P	Field Training/ Internship/Industrial Training Evaluation	--	--	--	--	--	50	50	1
<b>Total</b>			<b>13</b>	<b>05</b>	<b>10</b>	<b>100</b>	<b>450</b>	<b>550</b>	<b>1100</b>	<b>22</b>

**Dr. Babasaheb Ambedkar Technological University, Lonere.**

**B. Tech (Electronics & Telecommunication Engineering) / B. Tech (Electronics Engineering)  
Curriculum for Semester IV [Second Year]**

Sr. No	Course Code	Course Title	Hours Per Week			Evaluation Scheme			Total Marks	Credits
			L	T	P	MSE	CA	ESE		
1	BTEXC401	Electrical Machines and Instruments	2	1	0	20	20	60	100	3
2	BTEXC402	Analog Communication Engineering	2	1	0	20	20	60	100	3
3	BTEXC403	Microprocessor	2	1	0	20	20	60	100	3
4	BTEXC404	Signals and Systems	2	1	0	20	20	60	100	3
5	BTID405	Product Design Engineering	1	0	2	30	30	40	100	2
6	BTBSC406	Numerical Methods and Computer Programming	2	1	0	20	20	60	100	3
7	BTEXL407	Electrical Machines and Instruments Lab	0	0	2	--	60	40	100	1
8	BTEXL408	Analog Communication Engineering Lab	0	0	2	--	60	40	100	1
9	BTEXL409	Microprocessor Lab	0	0	2	--	60	40	100	1
10	BTEXL410	Signals and Systems Lab	0	0	2	--	60	40	100	1
11	BTHML411	Soft-Skill Development	0	0	2	--	60	40	100	1



Dr. Babasaheb Ambedkar Technological University, Lonere.

12	BTEXF412	Field Training/ Internship/Industrial Training (Minimum 4 weeks which can be completed partially in third semester or fourth semester or in at one time)	--	--	--	--	--	--	--	1* (To be evaluated in V <sup>th</sup> Semester)
<b>Total</b>			<b>11</b>	<b>05</b>	<b>12</b>	<b>130</b>	<b>430</b>	<b>540</b>	<b>1100</b>	<b>22</b>

**Dr. Babasaheb Ambedkar Technological University, Lonere.**

**B. Tech (Electronics & Telecommunication Engineering)**  
**Proposed Curriculum for Semester V [Third Year]**

Sr. No.	Course Code	Type of Course	Course Title	Hours Per Week			Evaluation Scheme			Total Marks	Credits
				L	T	P	MSE	CA	ESE		
1	BTEXC501	Professional Core Course 1	Electromagnetic Field Theory	2	1	0	20	20	60	100	3
2	BTEXC502	Professional Core Course 2	Control System Engineering	3	0	0	20	20	60	100	3
3	BTETC503	Professional Core Course 3	Computer Architecture	3	0	0	20	20	60	100	3
4	BTEXC504	Professional Core Course 4	Digital Signal Processing	2	1	0	20	20	60	100	3
5	BTEXC505	Professional Core Course 5	Microcontroller and its Applications	3	0	0	20	20	60	100	3
6	BTEXPE506A	Program Elective Course 1	Probability Theory and Random Processes	3	0	0	20	20	60	100	3
	BTEXPE506B		NSQF (Level 7 Course)								
	BTEXPE506C		Data Structure & Algorithms Using Java Programming								
	BTEXPE506D		Introduction to MEMS								

**Dr. Babasaheb Ambedkar Technological University, Lonere.**

7	BTETL507	Control System Engineering Lab	0	0	2	--	30	20	50	1
8	BTETL508	Digital Signal Processing Lab	0	0	2	--	30	20	50	1
9	BTETL509	Microcontroller and its Applications Lab	0	0	2	--	30	20	50	1
10	BTETP510	Mini Project	0	0	2	--	30	20	50	1
11	BTETS511	Seminar	0	0	2	--	30	20	50	1
12	BTEXF412	Field Training/ Internship/Industrial Training Evaluation	--	--	--	--	--	50	50	1
<b>Total</b>			<b>16</b>	<b>02</b>	<b>10</b>	<b>120</b>	<b>270</b>	<b>510</b>	<b>900</b>	<b>24</b>

**Dr. Babasaheb Ambedkar Technological University, Lonere.**

**B. Tech (Electronics & Telecommunication Engineering)  
Proposed Curriculum for Semester VI [Third Year]**

Sr. No.	Course Code	Type of Course	Course Title	Hours Per Week			Evaluation Scheme			Total Marks	Credits
				L	T	P	MSE	CA	ESE		
1	BTETC601	Professional Core Course 1	Antennas and Wave Propagation	3	0	0	20	20	60	100	3
2	BTETC602	Professional Core Course 2	Computer Network & Cloud Computing	3	0	0	20	20	60	100	3
3	BTETC603	Professional Core Course 3	Digital Image Processing	3	0	0	20	20	60	100	3
4	BTETPE604A	Program Elective Course 2	CMOS Design	3	0	0	20	20	60	100	3
	BTETPE604B		Information Theory and Coding								
	BTETPE604C		Power Electronics								
	BTETPE604D		Nano Electronics								
	BTETPE604E		NSQF (Level 7 Course)								
	BTETPE604F		Android Programming								
5	BTETOE605A	Open Elective Course 1	Digital System Design	3	0	0	20	20	60	100	3
	BTETOE605B		Optimization Techniques								
	BTETOE605C		Project Management and Operation Research								

**Dr. Babasaheb Ambedkar Technological University, Lonere.**

	BTETOE605D		Augmented, Virtual and Mixed Reality								
	BTETOE605E		Python Programming								
	BTETOE605F		Web Development and Design								
6	BTHM606	Humanities & Social Science including Management Courses	Employability & Skill Development	2	0	0	20	20	60	100	2
7	BTETL607	Computer Network & Cloud Computing Lab		0	0	2	--	30	20	50	1
8	BTETL608	Program Elective 2 Lab		0	0	2	--	30	20	50	1
9	BTETL609	Open Elective 1 Lab		0	0	2	--	30	20	50	1
10	BTETP610	Mini-project		0	0	2	--	30	20	50	1
11	BTETF611	Field Training/ Internship/ Industrial Training (Minimum 4 weeks)		--	--	--	--	--	--	--	1* (To be evaluated in VII <sup>th</sup> Semester)
<b>Total</b>				<b>17</b>	<b>0</b>	<b>8</b>	<b>120</b>	<b>240</b>	<b>440</b>	<b>800</b>	<b>21</b>

**Dr. Babasaheb Ambedkar Technological University, Lonere.**

<b>Program Elective 2</b>	<b>Open Elective 1</b>
(A) CMOS Design	(A) Digital System Design
(B) Information Theory and Coding	(B) Optimization Techniques
(C) Power Electronics	(C) Project Management and Operation Research
(D) Nano Electronics	(D) Augmented, Virtual and Mixed Reality
(E) NSQF (Level 7 Course)	(E) Python Programming
(F) Android Programming	(F) Web Development and Design

\* To be evaluated in VII<sup>th</sup> Semester

**Dr. Babasaheb Ambedkar Technological University, Lonere.**

**B. Tech (Electronics & Telecommunication Engineering)**  
**Proposed Curriculum for Semester VII [Final Year]**

Sr. No.	Course Code	Type of Course	Course Title	Hours Per Week			Evaluation Scheme			Total Marks	Credits
				L	T	P	MSE	CA	ESE		
1	BTETC701	Professional Core Course 1	Digital Communication	3	0	0	20	20	60	100	3
2	BTETPE702	Program Elective 3	Group A	3	0	0	20	20	60	100	3
3	BTETPE703	Program Elective 4	Group B	3	0	0	20	20	60	100	3
4	BTETPE704	Program Elective 5	Group C	3	0	0	20	20	60	100	3
5	BTHM705	Humanities & Social Science including Management Courses	Financial Management	2	0	0	20	20	60	100	2
6	BTETL706	Program Elective 3 Lab		0	0	2	--	30	20	50	1
7	BTETL707	Program Elective 4 Lab		0	0	2	--	30	20	50	1
8	BTETL708	Program Elective 5 Lab		0	0	2	--	30	20	50	1
9	BTETP709	Project Part I		0	0	8	--	50	50	100	4
10	BTETF611	Field Training/ Internship/Industrial Training Evaluation		--	--	--	--	--	50	50	1
<b>Total</b>				<b>14</b>	<b>0</b>	<b>14</b>	<b>100</b>	<b>240</b>	<b>460</b>	<b>800</b>	<b>22</b>

**Dr. Babasaheb Ambedkar Technological University, Lonere.**

<b>Program Elective - 3 (Group A)</b>	<b>Program Elective -4 (Group B)</b>	<b>Program Elective- 5 (Group C)</b>
(A) Microwave Theory & Techniques	(A) Embedded System Design	(A) Consumer Electronics
(B) RF Circuit Design	(B) Artificial Intelligence Deep learning	(B) Analog Integrated Circuit Design
(C) Satellite Communication	(C) VLSI Design & Technology	(C) Soft Computing
(D) Fiber Optic Communication	(D) Data Compression & Encryption	(D) Advance Industrial Automation-1
(E) Wireless Sensor Networks	(E) Big Data Analytics	(E) Mechatronics
(F) Mobile Computing	(F) Cyber Security	(F) Electronics in Smart City



Dr. Babasaheb Ambedkar Technological University, Lonere.

**B. Tech (Electronics & Telecommunication Engineering)**

Proposed Curriculum for Semester VIII [Final Year]

**(Students doing the Project at Institute Level)**

Sr. No.	Course Code	Type of Course	Course Title	Hours Per Week			Evaluation Scheme			Total Marks	Credits
				L	T	P	MSE	CA	ESE		
1	BTETPE801	Program Elective 6	Group A	3	0	0	20	20	60	100	3
2	BTETPE802	Program Elective 7	Group B	3	0	0	20	20	60	100	3
3	BTETOE803	Open Elective 2	Group C	3	0	0	20	20	60	100	3
4	BTETL804	Program Elective 6 Lab		0	0	2	--	30	20	50	1
5	BTETL805	Program Elective 7 Lab		0	0	2	--	30	20	50	1
6	BTETP806	Project Part-II		0	0	16	--	150	100	250	8
<b>Total</b>				<b>9</b>	<b>0</b>	<b>20</b>	<b>60</b>	<b>270</b>	<b>320</b>	<b>650</b>	<b>19</b>

OR

**B. Tech (Electronics & Telecommunication Engineering)**

Proposed Curriculum for Semester VIII [Final Year]

**(Students doing the Project at Industry)**

Sr. No.	Course Code	Type of Course	Course Title	Hours Per Week			Evaluation Scheme			Total Marks	Credits
				L	T	P	MSE	CA	ESE		
1	BTETPE801	Program Elective 6	Group A	3	0	0	20	20	60	100	3*
2	BTETPE802	Program Elective 7	Group B	3	0	0	20	20	60	100	3*
3	BTETOE803	Open Elective 2	Group C	3	0	0	20	20	60	100	3*
4	BTETP804	Project Part-II		0	0	20	--	200	150	350	10
<b>Total</b>				<b>9</b>	<b>0</b>	<b>20</b>	<b>60</b>	<b>260</b>	<b>330</b>	<b>650</b>	<b>19</b>

\* Students should complete the certification credit course using SWAYAM, MOOC, NPTEL, Coursera platform and submit the certificate. University will transfer these credits accordingly.

OR

**B. Tech (Electronics & Telecommunication Engineering)**

Proposed Curriculum for Semester VIII [Final Year]

(Students doing the In-plant training and completing the Project sponsored / promoted by Industry)

Sr. No.	Course Code	Type of Course	Course Title	Hours Per Week			Evaluation Scheme			Total Marks	Credits
				L	T	P	MSE	CA	ESE		
1	BTETPE801	Program Elective 6	Group A	--	--	--	--	60*	40*	--	Audit *
2	BTETPE802	Program Elective 7	Group B	--	--	--	--	60*	40*	--	Audit *
3	BTETOE803	Open Elective 2	Group C	--	--	--	--	60*	40*	--	Audit *
4	BTETP804I	In-Plant Training and Project Part-II		--	--	30	--	450	200	--	19
<b>Total</b>				--	--	<b>30</b>	--	<b>450</b>	<b>200</b>	<b>650</b>	<b>19</b>

\* Students should complete the certification course using SWAYAM, MOOC, NPTEL Platform or self -study mode.

Program Elective 6 (Group A)	Program Elective 7 (Group B)	Open Elective 2 (Group C)
(A) Entrepreneurship Development	(A) e-Yantra	(A) Advanced Industrial Automation -2
(B) Mixed Signal Design	(B) Mobile Communication & Networks	(B) IoT based Embedded System Design.
(C) Bio-medical Signal Processing	(C) Geo-informatics and Spatial Computing	(C) Industrial Drives and Control
(D) Multirate Digital Signal Processing	(D) Software Defined Radio	(D) Robotics Design
(E) Wavelet Theory	(E) Under Water Signal Processing	(E) Block Chain Technology

# **Dr. Babasaheb Ambedkar Technological University**

## **Course Structure and Syllabus**

**For**

**M. Tech. (Electronics & Telecommunication Engineering)**

**Two Year (Four Semester) Course**

**(w.e.f. July 2017)**



**DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY,**

**Lonere-402103, Raigad (MS)**

# Dr. Babasaheb Ambedkar Technological University

Teaching and Examination Scheme for

M.Tech. (Electronics & Telecommunication Engineering) w.e.f. July 2017

Sr. No.	Course Code	Name of the Course	Hours/Week			Credit	Examination scheme				
			L	P	T		Theory		IA	PR/OR	TOTAL
							TH	Test			
<b>First Semester</b>											
01	MTETC101	Signal Theory	03	--	1	04	60	20	20	--	<b>100</b>
02	MTETC102	Radiation and Microwave Techniques	03	--	1	04	60	20	20	--	<b>100</b>
03	MTETC103	Signal Processing Algorithms & Applications	03	--	1	04	60	20	20	--	<b>100</b>
04	MTETE114	Elective-I	03	--	--	03	60	20	20	--	<b>100</b>
05	MTETE125	Elective-II	03	--	--	03	60	20	20	--	<b>100</b>
06	MTETC106	Communication Skills	02	--	--	02	--	--	25	25	<b>50</b>
07	MTETL107	PG Lab-I*	--	03	--	02	--	--	25	25	<b>50</b>
<b>Total for Semester I</b>			<b>17</b>	<b>03</b>	<b>03</b>	<b>22</b>	<b>300</b>	<b>100</b>	<b>150</b>	<b>50</b>	<b>600</b>
<b>Second Semester</b>											
01	MTETC201	Estimation and Detection Theory	03	--	1	04	60	20	20	--	<b>100</b>
02	MTETC202	Information Theory and Coding	03	--	1	04	60	20	20	--	<b>100</b>
03	MTETE233	Elective-III	03	--	--	03	60	20	20	--	<b>100</b>
04	MTETE244	Elective- IV	03	--	--	03	60	20	20	--	<b>100</b>
05	MTETE255	Elective-V- (Open to all)	03	--	--	03	60	20	20	--	<b>100</b>
06	MTETS206	Seminar-I	--	04	--	02	--	--	50	50	<b>100</b>
07	MTETP207	Mini-Project	--	04	--	02	--	--	50	50	<b>100</b>
<b>Total for Semester II</b>			<b>15</b>	<b>8</b>	<b>02</b>	<b>21</b>	<b>300</b>	<b>100</b>	<b>200</b>	<b>100</b>	<b>700</b>
<b>Third Semester</b>											
1	MTETC301	Project Management & Intellectual Property Rights (Self Study)#	--	--	--	02	--	--	50	50	<b>100</b>
2	MTETP302	Project-I	--	--	--	10	--	--	50	50	<b>100</b>
<b>Total for Semester III</b>			<b>--</b>	<b>--</b>	<b>-</b>	<b>12</b>	<b>--</b>	<b>--</b>	<b>100</b>	<b>100</b>	<b>200</b>
<b>Fourth Semester</b>											
1	MTETP401	Project-II	--	--	--	20	--	--	100	100	<b>200</b>
<b>Total for Semester IV</b>			<b>--</b>	<b>--</b>	<b>--</b>	<b>20</b>	<b>--</b>	<b>--</b>	<b>100</b>	<b>100</b>	<b>200</b>
<b>GRAND TOTAL</b>											<b>1700</b>

\* PG Lab-I –Practical shall be based on courses of first semester.

# Student has to choose this course either from NPTEL/MOOC pool and submission of course completion certificate is mandatory.

**Elective-I**

1. Artificial Neural Networks and Applications
2. Electromagnetic Interference and Compatibility
3. Mobile Communication
4. Fault Tolerant Systems
5. Analog and Mixed Signal Processing

**Elective-II**

1. RF and Millimeter Wave circuit Design
2. System On-Chip
3. Optical Fiber Communication
4. Statistical Signal Processing
5. Microelectronics

**Elective-III**

1. Multirate Digital Signal Processing
2. Embedded System Design
3. Wireless Sensor Network Design
4. VLSI and Microsystems
5. Numerical Methods in Electromagnetics

**Elective-IV**

1. Advanced Biomedical Signal Processing
2. Reconfigurable Computing
3. Digital VLSI Design
4. Radar Signal Processing
5. Electromagnetics, Antenna and Propagation

**Elective-V (Open)**

1. Internet of Things
2. Linear Algebra
3. Neural Networks in Embedded Applications
4. Research Methodology
5. Wavelet Transforms and its Applications

# **Dr. Babasaheb Ambedkar Technological University**

(Established as a University of Technology in the State of Maharashtra)

(under Maharashtra Act No. XXIX of 2014)

P.O. Lonere, Dist. Raigad,  
Pin 402 103, Maharashtra  
Telephone and Fax. : 02140 - 275142  
[www.dbatu.ac.in](http://www.dbatu.ac.in)



**Course Contents for**  
**B. Tech. in Mechanical Engineering**  
**w.e.f. June 2018**

**From 3<sup>rd</sup> Semester - 8<sup>th</sup> Semester**

**Course Structure for Semester III**

**B. Tech in Mechanical Engineering / B. Tech. in Mechanical Engineering (Sandwich)  
(2022-23)**

Semester III										
Course Category	Course Code	Course Title	Teaching Scheme			Evaluation Scheme				No. of Credits
			L	T	P	CA	MSE	ESE	Total	
BSC7	BTBS301	Engineering Mathematics – III	3	1	-	20	20	60	100	4
PCC1	BTMC302	Fluid Mechanics	3	1	-	20	20	60	100	4
PCC2	BTMC303	Thermodynamics	3	1	-	20	20	60	100	4
ESC10	BTMES304	Materials Science and Metallurgy	3	1	-	20	20	60	100	4
PCC3	BTMCL305	Machine Drawing and CAD Lab	-	-	4	60	-	40	100	2
PCC4	BTMCL306	Mechanical Engineering Lab – I	-	-	4	60	-	40	100	2
PROJ-2	BTES209P	IT – 1 Evaluation	-	-	-	-	-	100	100	1
<b>Total</b>			<b>12</b>	<b>4</b>	<b>8</b>	<b>200</b>	<b>80</b>	<b>420</b>	<b>700</b>	<b>21</b>

BSC = Basic Science Course, ESC = Engineering Science Course, PCC = Professional Core Course

PEC = Professional Elective Course, OEC = Open Elective Course, LC = Laboratory Course

HSSMC = Humanities and Social Science including Management Courses

**Course Structure for Semester IV**

**B. Tech in Mechanical Engineering / B. Tech. in Mechanical Engineering (Sandwich)  
(2022-23)**

Semester IV										
Course Category	Course Code	Course Title	Teaching Scheme			Evaluation Scheme				No. of Credits
			L	T	P	CA	MSE	ESE	Total	
PCC 5	BTMC401	Manufacturing Processes – I	3	1	-	20	20	60	100	4
PCC 6	BTMC402	Theory of Machines-I	3	1	-	20	20	60	100	4
HSSMC3	BTHM403	Basic Human Rights	3	-	-	20	20	60	100	3
ESC11	BTMES404	Strength of Materials	3	1	-	20	20	60	100	4
PEC 1	BTMPE405A-C	Elective-I	3	-	-	20	20	60	100	3
PCC7	BTMCL406	Mechanical Engineering Lab-II	-	-	4	60	-	40	100	2
PROJ-3	BTMI407	Field Training /Industrial Training (minimum of 4 weeks which can be completed partially in the third and fourth semester or in one semester itself)	-	-	-	-	-	-	-	Credits to be evaluated in Sem V
<b>Total</b>			<b>15</b>	<b>4</b>	<b>4</b>	<b>160</b>	<b>100</b>	<b>340</b>	<b>600</b>	<b>20</b>

BSC = Basic Science Course, ESC = Engineering Science Course, PCC = Professional Core Course

PEC = Professional Elective Course, OEC = Open Elective Course, LC = Laboratory Course



# DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE

HSSMC = Humanities and Social Science including Management Courses

## Elective I

Sr. No	Course code	Course Name
1	BTMPE405A	Numerical Methods in Engineering
2	BTMPE405B	Sheet Metal Engineering
3	BTMPE405C	Fluid Machinery

## Course Structure for Semester V

### B. Tech in Mechanical Engineering / B. Tech. in Mechanical Engineering (Sandwich) (2022-23)

Semester V										
Course Category	Course Code	Course Title	Teaching Scheme			Evaluation Scheme				No. of Credits
			L	T	P	CA	MSE	ESE	Total	
PCC 8	BTMC 501	Heat Transfer	3	1	-	20	20	60	100	4
PCC 9	BTMC 502	Machine Design – I	3	1	-	20	20	60	100	4
PCC 10	BTMC 503	Theory of Machines- II	3	1	-	20	20	60	100	4
PEC 2	BTMPE 504A-C BTAPE504A,D	Elective-II	3	-	-	20	20	60	100	3
OEC 1	BTMOE 505A-D	Open Elective-I	3	-	-	20	20	60	100	3
PCC 11	BTMC 506	Applied Thermodynamics	3		-	20	20	60	100	3
PCC12	BTMCL 507	Mechanical Engineering Lab – III	-	-	6	60	-	40	100	3
PROJ-3	BTMI 408	IT – 2 Evaluation	-	-	-	-	-	100	100	1
<b>Total</b>			<b>18</b>	<b>3</b>	<b>6</b>	<b>180</b>	<b>120</b>	<b>500</b>	<b>800</b>	<b>25</b>

BSC = Basic Science Course, ESC = Engineering Science Course, PCC = Professional Core Course

PEC = Professional Elective Course, OEC = Open Elective Course, LC = Laboratory Course

HSSMC = Humanities and Social Science including Management Courses

## Elective II

Sr. No	Course code	Course Name
1	BTMPE504A	Refrigeration and Air conditioning
2	BTMPE504B	Steam and Gas Turbines
3	BTMPE504C	Engineering Tribology
4	BTAPE504A	Fundamentals of Automobile Design
5	BTAPE504D	Automobile Engineering

## Open Elective I

Sr.No.	Course code	Course Name
1	BTMOE505A	Solar Energy
2	BTMOE505B	Renewable Energy Sources
3	BTMOE505C	Human Resource Management
4	BTMOE505D	Product Design Engineering

Course Structure for Semester VI

B. Tech in Mechanical Engineering / B. Tech. in Mechanical Engineering (Sandwich)  
(2022-23)

Semester VI										
Course Category	Course Code	Course Title	Teaching Scheme			Evaluation Scheme				No. of Credits
			L	T	P	CA	MSE	ESE	Total	
PCC12	BTMC 601	Manufacturing Processes-II	3	1	-	20	20	60	100	4
PCC13	BTMC 602	Machine Design-II	3	1	-	20	20	60	100	4
PEC3	BTMPE 603A-C BTAPE 603C,E	Elective-III	3		-	20	20	60	100	3
PEC4	BTMPE 604A-D BTAPE 604B	Elective-IV	3		-	20	20	60	100	3
OEC2	BTMOE 605A-E	Open Elective-II	3	-	-	20	20	60	100	3
PCC14	BTMCL 606	Mechanical Engineering Lab – IV	-	-	6	60	-	40	100	3
PROJ-4	BTMS607	B Tech Seminar	-	-	2	60		40	100	1
PROJ-5	BTMP 608	Mini Project (TPCS)	-	-	2	60	-	40	100	1
PROJ-6	BTMI 609 (IT-3)	Field Training / Industrial Training (minimum of 4 weeks which can be completed partially in fifth semester and sixth semester or in one semester itself).	-	-	-	-	-	-	-	Credits to be evaluated in Sem VII
<b>Total</b>			<b>15</b>	<b>2</b>	<b>10</b>	<b>280</b>	<b>100</b>	<b>420</b>	<b>800</b>	<b>22</b>

BSC = Basic Science Course, ESC = Engineering Science Course, PCC = Professional Core Course  
 PEC = Professional Elective Course, OEC = Open Elective Course, LC = Laboratory Course  
 HSSMC = Humanities and Social Science including Management Courses

Elective III:

Sr.No	Course code	Course Name
1	BTMPE603A	IC Engines
2	BTMPE603B	Mechanical Vibrations
3	BTMPE603C	Machine Tool Design
4	BTMPE603D	Engineering Metrology and Quality Control
5	BTAPE603C	Advance Automobile Design
6	BTAPE603E	E – Vehicles

## **Dr. Babasaheb Ambedkar Technological University, Lonere**

---

### **Elective IV:**

<b>SrNo</b>	<b>Course code</b>	<b>Course Name</b>
1	BTMPE604A	Process Equipment Design
2	BTMPE604B	Product Life Cycle Management
3	BTMPE604C	Finite Element Method
4	BTMPE604D	Robotics
5	BTAPE604B	Computational Fluid Dynamics

### **Open Elective II:**

<b>Sr.No</b>	<b>Course code</b>	<b>Course Name</b>
1	BTMOE605A	Quantitative Techniques and Project Management
2	BTMOE605B	Nanotechnology
3	BTMOE605C	Energy Conservation and Management
4	BTMOE605D	Wind Energy
5	BTMOE605E	Introduction to Probability Theory and Statistics

**Course Structure for Semester VII**

**B. Tech in Mechanical Engineering / B. Tech. in Mechanical Engineering (Sandwich)  
(2023-24)**

Semester VII										
Course Category	Course Code	Course Title	Teaching Scheme			Evaluation Scheme				No. of Credits
			L	T	P	CA	MSE	ESE	Total	
PCC15	BTMC701	Mechatronics	3	-	-	20	20	60	100	3
HSSMC4	BTHM702	Industrial Engineering and Management	3	-	-	20	20	60	100	3
PEC5	BTMPE703A-G BTPPE703D	Elective-V	3	-	-	20	20	60	100	3
OEC3	BTMOE704A-C	Open Elective-III	3	-	-	20	20	60	100	3
OEC4	BTMOE705A-C	Open Elective-IV	3	-	-	20	20	60	100	3
PCC16	BTMCL706	Mechanical Engineering Lab -V	-	-	4	60	-	40	100	2
PROJ-6	BTMP 707	Mini Project	-	-	6	30	-	20	50	3
PROJ-7	BTMI609	IT – 3 Evaluation	-	-	-	-	-	100	100	1
<b>Total</b>			<b>15</b>	<b>-</b>	<b>10</b>	<b>190</b>	<b>100</b>	<b>460</b>	<b>750</b>	<b>21</b>

BSC = Basic Science Course, ESC = Engineering Science Course, PCC = Professional Core Course

PEC = Professional Elective Course, OEC = Open Elective Course, LC = Laboratory Course

HSSMC = Humanities and Social Science including Management Courses

**Elective V:**

Sr. No	Course code	Course Name
1	BTMPE703A	Design of Air Conditioning Systems
2	BTMPE703B	Biomechanics
3	BTMPE703C	Non-conventional Machining
4	BTMPE703D	Advanced IC Engines
5	BTMPE703E	Additive Manufacturing
6	BTMPE703F	Surface Engineering
7	BTPPE703D	Processing of Polymers
8	BTMPE703G	Stress Analysis

**Open Elective III:**

Sr. No	Course code	Course Name
1	BTMOE704A	Sustainable Development
2	BTMOE704B	Entrepreneurship Development
3	BTMOE704C	Plant Maintenance

**Open Elective IV:**

Sr.No	Course code	Course Name
1	BTMOE705A	Engineering Economics
2	BTMOE705B	Biology for Engineers
3	BTMOE705C	Intellectual Property Rights

**Course Structure for Semester VIII**

**B. Tech in Mechanical Engineering / B. Tech. in Mechanical Engineering (Sandwich) 2023-24**

Semester VIII										
Course Category	Course Code	Course Title	Teaching Scheme			Evaluation Scheme				Credit
			L	T	P	CA	MSE	ESE	Total	
		Choose any two subjects from ANNEXURE-A#				20	20	60	100	3
						20	20	60	100	3
PROJ-8	BTMP801/ BTMI801	Project OR Internship	-	-	16	60	-	40	100	08
<b>Total</b>			-	-	16	100	40	160	300	14

**ANNEXURE-A# (Provisional)**

**Recommendations of 8<sup>th</sup> Semester Courses in Self-study Mode from NPTEL/ SWYAM Platform,  
THE LIST MAY ALTER AND MODIFY AS PER THE AVAILABILITY OF THE SUBJECTS ON THE  
NPTEL/ SWYAM Platform AND USEFULNESS, EVERY YEAR**

# **Dr. Babasaheb Ambedkar Technological University**

(Established as a University of Technology in the State of Maharashtra)

(under Maharashtra Act No. XXIX of 2014)

P.O.: Lonere, Dist.: Raigad,  
Pin 402 103, Maharashtra  
Telephone and Fax.: 02140 - 275142  
[www.dbatu.ac.in](http://www.dbatu.ac.in)



## **Course Structure and Contents**

**for**

## **M.Tech. in Design Engineering/Machine Design Engineering/Mechanical Design Engineering**

**From 1<sup>st</sup> Semester - 4<sup>th</sup> Semester**

**MASTER OF TECHNOLOGY**  
**(Design Engineering/ Machine Design Engineering/ Mechanical Design Engineering)**

Syllabus with effect from July 2018

**Semester-I**

Course Code	Type of Course	Name of the Course	Hours/Week			Credit	Examination Scheme				
			L	T	P		Theory		CA	PR/OR	Total
							TH	Test			
MDE11	PCC	Advanced Methods in Engineering Design	3	1	--	4	60	20	20	--	100
MDE12	PCC	Analysis and Synthesis of Mechanisms	3	1	--	4	60	20	20	--	100
MDE13	PCC	Advanced Mechanical Vibrations	3	1	--	4	60	20	20	--	100
MDE14A	Elective I	Advanced Machine Design	3	--	--	3	60	20	20	--	100
MDE14B		Mechanics of Composite Materials									
MCADM14C		Instrumentation and Automatic Control									
MDE14D		Experimental Stress Analysis									

MME14E		Robotics									
MDE14F		Advanced Engineering Materials									
MDE14G		Stress Analysis									
MDE15A	Elective II	Tribology in Design	3	--	--	3	60	20	20	--	100
MDE15B		Theory of Elasticity and Plasticity									
MDE15C		Failure Analysis and Design									
MDE15D		Machine Tool Design									
MDE15E		Process Equipment Design									
MDE15F		Computational Techniques in Engineering Design									
BSH16	HSMC	Communication Skills	2	--	--	2	--	--	25	25	50
MDE17	PCC	Design Lab	--	--	3	2	--	--	25	25	50
<b>Total</b>			<b>17</b>	<b>3</b>	<b>3</b>	<b>22</b>	<b>300</b>	<b>100</b>	<b>150</b>	<b>50</b>	<b>600</b>



## Semester-II

Course Code	Type of Course	Name of the Course	Hours/Week			Credit	Examination Scheme				
			L	T	P		Theory		CA	PR/OR	Total
							TH	Test			
MDE21	PCC	Finite Element Method	3	1	--	4	60	20	20	--	100
MDE22	PCC	Design Optimization	3	1	--	4	60	20	20	--	100
MDE23A	Elective III	Vehicle Dynamics	3	--	--	3	60	20	20	--	100
MDE23B		Engineering Fracture Mechanics									
MDE23C		Noise, Vibration and Harshness									
MCAAD23D		Design of Piping System									
ME-XX24A	Elective IV	Mechatronics	3	--	--	3	60	20	20	--	100
MDE24B		Design For Manufacture and Assembly									
MDE24C		Rotor Dynamics									
MOE25A	Elective V	Research Methodology	3	--	--	3	60	20	20	--	100
MOE25B		Design of Experiments									
MOE25C		Advanced Optimization Techniques									

MOE25D		Environmental Engineering and Pollution Control										
MOE25E		Soft Computing Techniques										
MOE25F		Manufacturing Automation										
MOE25G		Modeling and Simulation										
MDE26	PCC	Seminar	--	--	4	2	--	--	50	50	100	
MDE27	PCC	Mini Project	--	--	4	2	--	--	50	50	100	
<b>Total</b>			<b>15</b>	<b>2</b>	<b>8</b>	<b>21</b>	<b>300</b>	<b>100</b>	<b>200</b>	<b>100</b>	<b>700</b>	

### Semester-III

Course Code	Type of Course	Name of the Course	Hours/Week			Credit	Examination Scheme				
			L	T	P		Theory		CA	PR/OR	Total
							TH	Test			
MMECH31	PCC	*Project Management and Intellectual Property Rights (Self Study Course)	--	--	--	2	--	--	50	50	100
MDE32	PCC	Project Stage -I	---	--	--	10	--	--	50	50	100
<b>Total</b>			---	--	--	<b>12</b>	--	--	<b>100</b>	<b>100</b>	<b>200</b>

### Semester-IV

Course Code	Type of Course	Name of the Course	Hours/Week			Credit	Examination Scheme				
			L	T	P		Theory		CA	PR/OR	Total
							TH	Test			
MDE41	PCC	Project Stage -II	---	--	--	20	--	--	100	100	200
<b>Total</b>			---	--	--	<b>20</b>	--	--	<b>100</b>	<b>100</b>	<b>200</b>

# **Dr. Babasaheb Ambedkar Technological University**

(Established as a University of Technology in the State of Maharashtra)

(under Maharashtra Act No. XXIX of 2014)

P.O. Lonere, Dist. Raigad,  
Pin 402 103, Maharashtra  
Telephone and Fax. : 02140 - 275142  
[www.dbatu.ac.in](http://www.dbatu.ac.in)



## **Course Contents for**

**M. Tech. in Manufacturing Engineering/ Manufacturing Engineering  
Processes/ Manufacturing Process Engineering/ Mechanical Production  
Engineering**

**From 1<sup>st</sup> Semester - 4<sup>th</sup> Semester**

## MASTER OF TECHNOLOGY

(Manufacturing Engineering/ Manufacturing Engineering Processes/ Manufacturing Process Engineering/ Mechanical Production Engineering)

Syllabus with effect from July 2018

### Semester-I

Course Code	Type of Course	Name of the Course	Hours/Week			Credit	Examination Scheme				
			L	T	P		Theory		CA	PR/OR	Total
							TH	Test			
MME11	PCC	Theory of Machining	3	1	--	4	60	20	20	--	100
MME12	PCC	CNC Technology	3	1	--	4	60	20	20	--	100
MME13	PCC	Advanced Joining Technology	3	1	--	4	60	20	20	--	100
MME14A	Elective I	Quality Control and Reliability	3	--	--	3	60	20	20	--	100
MME14B		Sheet Metal Engineering									
MME14C		Processing of Advanced Materials									
MME14D		Additive Manufacturing									
MME14E		Robotics									
MME14F		Advanced Tool Design									
MME15A	Elective II	Polymer Processing Technology	3	--	--	3	60	20	20	--	100
MMECH15A		Manufacturing Planning and Control									
MME15B		Micro-Nano Engineering									
ME-XX15C		Hydraulic, Pneumatic and Fluidic Control									
MDE15D		Machine Tool Design									
MME15E		Finite Element Method									
MME15F	Machine Learning Techniques										
BSH16	HSMC	Communication Skills	2	--	--	2	--	--	25	25	50
MME17	PCC	Manufacturing Engineering Lab	--	--	3	2	--	--	25	25	50
<b>Total</b>			<b>17</b>	<b>3</b>	<b>3</b>	<b>22</b>	<b>300</b>	<b>100</b>	<b>150</b>	<b>50</b>	<b>600</b>

**Semester-II**

Course Code	Type of Course	Name of the Course	Hours/Week			Credit	Examination Scheme				
			L	T	P		Theory		CA	PR/OR	Total
							TH	Test			
MME21	PCC	Metal Forming Processes	3	1	--	4	60	20	20	--	100
MME22	PCC	Casting and Moulding Technology	3	1	--	4	60	20	20	--	100
MME23A	Elective III	Ultra-precision Machining	3	--	--	3	60	20	20	--	100
MMECH23A		Numerical Methods and Computational Techniques									
MME23B		Sensors for Intelligent Manufacturing and Monitoring									
ME-XX23B		CAD-CAE									
MME23C		Diamond Turning Technology									
MME23D		Management Information System									
MME23E		Technology and Knowledge Management									
MME23F		Knowledge Based System in Manufacturing									
ME-XX24A	Elective IV	Mechatronics	3	--	--	3	60	20	20	--	100
MME24B		Surface Engineering									
MME24C		Metrology and Computer Aided Inspection									
MME24D		Characterization Techniques									
MME24E		Lean Manufacturing									

MME24F		World Class Manufacturing									
MME24G		Total Productive Maintenance									
MOE25A	Elective V	Research Methodology	3	--	--	3	60	20	20	--	100
MOE25B		Design of Experiments									
MOE25C		Advanced Optimization Techniques									
MOE25D		Environmental Engineering and Pollution Control									
MOE25E		Soft Computing Techniques									
MOE25F		Manufacturing Automation									
MOE25G		Modeling and Simulation									
MME26		PCC									
MME27	PCC	Mini Project	--	--	4	2	--	--	50	50	100
<b>Total</b>			<b>15</b>	<b>2</b>	<b>8</b>	<b>21</b>	<b>300</b>	<b>100</b>	<b>200</b>	<b>100</b>	<b>700</b>

### Semester-III

Course Code	Type of Course	Name of the Course	Hours/Week			Credit	Examination Scheme				
			L	T	P		Theory		CA	PR/OR	Total
							TH	Test			
MMECH31	PCC	*Project Management and Intellectual Property Rights (Self Study Course)	--	--	--	2	--	--	50	50	100
MME32	PCC	Project Stage -I	---	--	--	10	--	--	50	50	100
<b>Total</b>			---	--	--	<b>12</b>	--	--	<b>100</b>	<b>100</b>	<b>200</b>

### Semester-IV

Course Code	Type of Course	Name of the Course	Hours/Week			Credit	Examination Scheme				
			L	T	P		Theory		CA	PR/OR	Total
							TH	Test			
MME41	PCC	Project Stage -II	---	--	--	20	--	--	100	100	200
<b>Total</b>			---	--	--	<b>20</b>	--	--	<b>100</b>	<b>100</b>	<b>200</b>

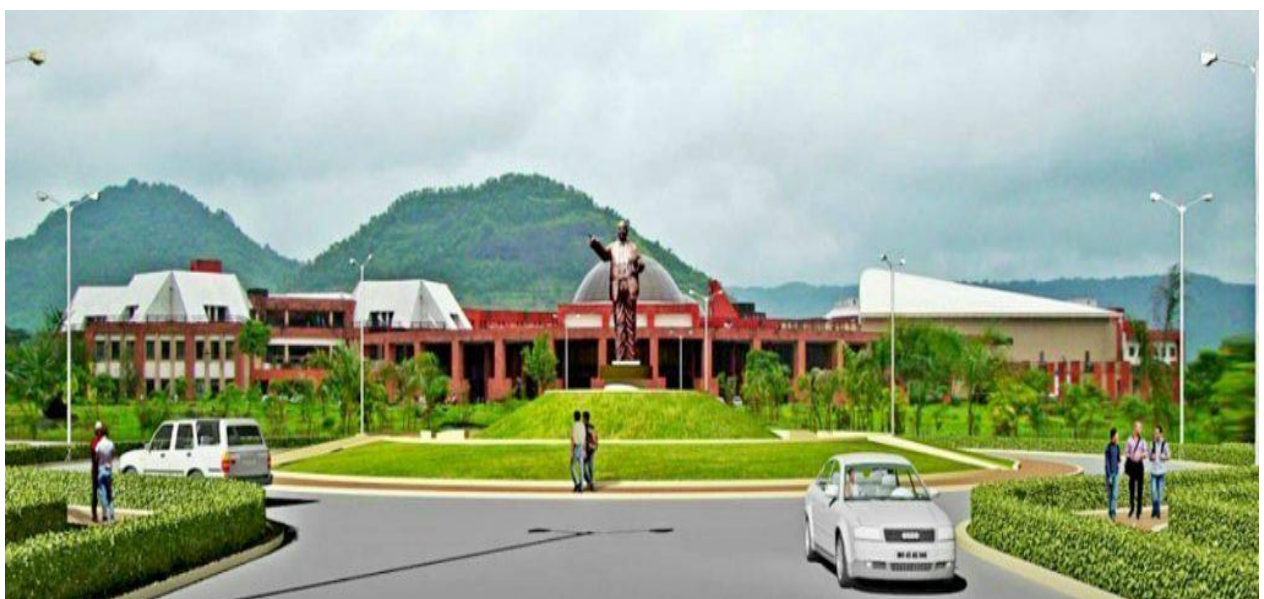


**Dr. Babasaheb Ambedkar Technological University**  
(Established as a University of Technology in the State of Maharashtra)  
(under Maharashtra Act No. XXIX of 2014)  
P.O. Lonere, Dist. Raigad, Pin 402 103, Maharashtra  
Telephone and Fax. 02140 - 275142  
[www.dbatu.ac.in](http://www.dbatu.ac.in)



**PROPOSED CURRICULUM**  
**UNDER GRADUATE PROGRAMME**  
**B.Tech**  
**FIRST YEAR ENGINEERING**

**WITH EFFECT FROM THE ACADEMIC YEAR 2020-2021.**



Teaching and Evaluation Scheme for First Year B. Tech. (All Branches)

**Group A**

<b>Semester I</b>									
Course Code	Course Title	Teaching Scheme			Evaluation Scheme				Credit
		L	T	P	CA	MSE	ESE	Total	
Mandatory	<b>Induction Program</b>	<b>3-weeks duration in the beginning of semester.</b>							
BTBS101	Engineering Mathematics- I	3	1	-	20	20	60	100	4
BTBS102	Engineering Physics	3	1	-	20	20	60	100	4
BTES103	Engineering Graphics	2	-	-	20	20	60	100	2
BTHM104	Communication Skills	2	-	-	20	20	60	100	2
BTES105	Energy and Environment Engineering	2	-	-	20	20	60	100	2
BTES106	Basic Civil and Mechanical Engineering	2	-	-	50	-	-	50	Audit
BTBS107L	Engineering Physics Lab	-	-	2	60	-	40	100	1
BTES108L	Engineering Graphics Lab	-	-	4	60	-	40	100	2
BTHM109L	Communication Skills Lab.	-	-	2	60	-	40	100	1
		<b>14</b>	<b>2</b>	<b>8</b>	<b>330</b>	<b>100</b>	<b>420</b>	<b>850</b>	<b>18</b>
<b>Semester II</b>									
BTBS201	Engineering Mathematics-II	3	1	-	20	20	60	100	4
BTBS202	Engineering Chemistry	3	1	-	20	20	60	100	4
BTES203	Engineering Mechanics	2	1	-	20	20	60	100	3
BTES204	Computer Programming in C	3	-	-	20	20	60	100	3
BTES205	Workshop Practices	-	-	4	60	-	40	100	2
BTES206	Basic Electrical and Electronics Engineering	2	-	-	50	-	-	50	Audit
BTBS207L	Engineering Chemistry Lab	-	-	2	60	-	40	100	1
BTES208L	Engineering Mechanics Lab	-	-	2	60	-	40	100	1
BTES210S	Seminar	-	-	2	60	-	40	100	1
<b>BTES211P</b>	<b>Field Training / Internship/Industrial Training (minimum of 4 weeks which can be completed partially in first semester and second Semester or in at one time).</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>Credits To be evaluated in III Sem.</b>
		<b>13</b>	<b>3</b>	<b>10</b>	<b>430</b>	<b>80</b>	<b>440</b>	<b>950</b>	<b>19</b>
		<b>27</b>							

## Dr. Babasaheb Ambedkar Technological University, Lonere

Teaching and Evaluation Scheme for First Year B. Tech. (All Branches)

### Group B

Semester I									
Course Code	Course Title	Teaching Scheme			Evaluation Scheme				Credit
		L	T	P	CA	MSE	ESE	Total	
Mandatory	<b>Induction Program</b>	<b>3-weeks duration in the beginning of semester.</b>							
BTBS101	Engineering Mathematics- I	3	1	-	20	20	60	100	4
BTBS102	Engineering Chemistry	3	1	-	20	20	60	100	4
BTES103	Engineering Mechanics	2	1	-	20	20	60	100	3
BTES104	Computer Programming in C	3	-	-	20	20	60	100	2
BTES105L	Workshop Practices	-	-	4	60	-	40	100	2
BTES106	Basic Electrical and Electronics Engineering	2	-	-	50	-	-	50	Audit
BTBS107L	Engineering Chemistry Lab	-	-	2	60	-	40	100	1
BTES108L	Engineering Mechanics Lab	-	-	2	60	-	40	100	1
		<b>13</b>	<b>03</b>	<b>10</b>	<b>370</b>	<b>80</b>	<b>400</b>	<b>850</b>	<b>18</b>
		<b>25</b>							
Semester II									
BTBS201	Engineering Mathematics-II	3	1	-	20	20	60	100	4
BTBS202	Engineering Physics	3	1	-	20	20	60	100	4
BTES203	Engineering Graphics	2	-	-	20	20	60	100	2
BTHM204	Communication Skills	2	-	-	20	20	60	100	2
BTES205	Energy and Environment Engineering	2	-	-	20	20	60	100	2
BTES206	Basic Civil and Mechanical Engineering	2	-	-	50	-	-	50	Audit
BTBS207L	Engineering Physics Lab	-	-	2	60	-	40	100	1
BTES208L	Engineering Graphics Lab	-	-	3	60	-	40	100	2
BTHM209L	Communication Skills Lab.	-	-	2	60	-	40	100	1
BTES210S	Seminar	-	-	2	60	-	40	100	1
<b>BTES211P</b>	<b>Field Training / Internship/Industrial Training (minimum of 4 weeks which can be completed partially in first semester and second Semester or in at one time)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>Credits To be evaluated in III Sem.</b>
		<b>14</b>	<b>02</b>	<b>09</b>	<b>390</b>	<b>100</b>	<b>460</b>	<b>950</b>	<b>19</b>
		<b>26</b>							



SHIVAJI UNIVERSITY, KOLHAPUR-416 004. MAHARASHTRA

PHONE : EPABX-2609000 website- [www.unishivaji.ac.in](http://www.unishivaji.ac.in)

FAX 0091-0231-2691533 & 0091-0231-2692333 – BOS - 2609094

शिवाजी विद्यापीठ, कोल्हापूर - 416004.

दुरध्वनी (ईपीएबीएक्स) २६०९००० (अभ्यास मंडळे विभाग- २६०९०९४)

फॅक्स : ००९१-०२३१-२६९१५३३ व २६९२३३३. e-mail: bos@unishivaji.ac.in

Ref../SU/BOS/Com & Mgmt./

Date : 23/06/2020

To,

The Principal  
All Affiliated (Commerce & Management) Colleges/Institutions,  
Shivaji University, Kolhapur

No 1297

**Subject : Regarding Syllabi and Equivalence of MBA Part-II (Sem-III/IV) Choice Based Credit System (CBCS) degree programme under the Faculty of Commerce & Management.**

Sir/Madam,

With reference to the subject mentioned above, I am directed to inform you that the University authorities have accepted and granted approval to the revised syllabi and equivalence of MBA Part-II (Sem-III/IV) Choice Based Credit System (CBCS) under the Faculty of Commerce & Management.

This syllabi shall be implemented from the academic year 2020-2021 onwards. A soft copy containing the syllabus is attached herewith and it is also available on university website [www.unishivaji.ac.in](http://www.unishivaji.ac.in) (Student - Online Syllabus).

The question papers on the pre-revised syllabi of above mentioned course will be set for the examinations to be held in October / November 2020 & March / April, 2021. These chances are available for repeater students, if any.

You are therefore, requested to bring this to the notice of all Students and Teachers concerned.

Thanking you,

Yours faithfully,

  
Dr. Registrar

**Encl : As above**

**Copy to,**

1. I/c Dean, Faculty of Commerce & Management
  2. Chairman, Board of Studies
  3. Director, BOEE
  4. Appointment Section
  5. P. G. Admission Section
  6. O. E. 1 Section
  7. Affiliation Section (U.G./P.G.)
  8. Computer Center/I.T.
  9. Eligibility Section
  10. Distance Education
  11. P.G. Seminar Section
- } for information
- } for information and necessary action.

### MBA Part -I Semester-I

Paper No.	Course Code	Subjects	Weekly	Internal Marks	Uni. Exam		Total Marks
					Written	Online /Written MCQ	
1	CC 101	Indian Ethos & Management Concepts	4	20	60	20	100
2	CC102	Management Accounting	4	20	60	20	100
3	CC 103	Managerial Economics	4	20	60	20	100
4	CC 104	Information Technology for Management	4	20	60	20	100
5	CC 105	Legal and Business Environment	4	100	-	-	100
6	CC 106	Organizational Behaviour	4	20	60	20	100
7	SECC 107	Soft Skill Development (Internal)	4	20	60	20	100
8	SECC 108	Optional – A* (Internal)	2	50	--	--	50
		<b>Total</b>	<b>30</b>	<b>280</b>	<b>300</b>	<b>120</b>	<b>700</b>

### MBA Part-I Semester-II

Paper No.	Course Code	Subjects	Weekly	Internal Marks	Uni. Exam		Total Marks
					Written	Online/ Written MCQ	
9	CC 201	Marketing Management	4	20	60	20	100
10	CC 202	Financial Management	4	20	60	20	100
11	CC 203	Human Resource Management	4	20	60	20	100
12	CC 204	Operations Management	4	20	60	20	100
13	CC 205	Management Information System	4	20	60	20	100
14	CC 206	Research Methodology	4	20	60	20	100
15	AECC 207	Managerial Skills for Effectiveness (Internal)	4	100	-	-	100
16	SECC 208	Optional – B* (Internal)	2	50	--	--	50
		<b>Total</b>	<b>30</b>	<b>280</b>	<b>300</b>	<b>120</b>	<b>700</b>

### MBA. Part-II Semester-III

Paper No.	Course Code	Subjects	Weekly	Internal Marks	Uni. Exam		Total Marks
					Written	Online /Written MCQ	
17	CC 301	Strategic and Change Management	4	20	60	20	100
18	CC 302	Business Intelligence and Analytics	4	20	60	20	100
19	AECC 303	Project Report & Viva-Voce	4	50	50	--	100
20	DSC 304	Elective I- Paper-I	4	20	60	20	100
21	DSC 305	Elective-I Paper-II	4	20	60	20	100
22	DSC 306	Elective-II Paper-I	4	20	60	20	100
23	DSC 307	Elective-II Paper-II	4	20	60	20	100
24	SECC 308	Optional – C* (Internal)	2	50	--	--	50
		<b>Total</b>	<b>30</b>	<b>230</b>	<b>350</b>	<b>120</b>	<b>700</b>

### MBA. Part-II Semester-IV

Paper No.	Course Code	Subjects	Weekly	Internal Marks	Uni. Exam		Total Marks
					Written	Online /Written MCQ	
25	CC 401	Innovation and Entrepreneurship	4	20	60	20	100
26	CC 402	Startups and New Venture (Internal)	4	100	-	-	100
27	SECC 403	Employability Skill (Internal)	4	100	-	-	100
28	DSE 404	Elective I- Paper-III	4	20	60	20	100
29	DSE 405	Elective-I Paper-IV	4	20	60	20	100
30	DSE 406	Elective II- Paper-III	4	20	60	20	100
31	DSE 407	Elective-II Paper-IV	4	20	60	20	100
32	SECC 408	Optional – D* (Internal)	2	50	--	--	50
		<b>Total</b>	<b>30</b>	<b>280</b>	<b>300</b>	<b>120</b>	<b>700</b>

28 Heads, Total Marks – 2800 One theory lecture duration is 60 minutes. 112 credits program.

7 full time faculties as per revised AICTE directions

Sr.	Existing Electives**	Sr.	Additional Electives Offered**
1	Marketing Management	8	Hospitality Management
2	Human Resource Management	9	Entrepreneurship Development
3	Financial Management	10	International Business
4	Production Management		
5	IT & System Management		
6	Agriculture Business Management		
7	Textile Management		

Sr.	Optional A Paper - VIII	Sr.	Optional B Paper - XVI
I	Chh. Shivaji Maharaj -The Management Guru	I	Total Quality Management
II	Computerized Accounting	II	Negotiation Skills
III	Personality Development	III	Taxation
IV	Business Models	IV	E-Business
V	Constitution of India	V	Computer Applications for Business
VI	Creativity and Innovation	VI	Behavioural Finance
Sr.	Optional C Paper - XXIV	Sr.	Optional D Paper - XXXII
I	Corporate Social Responsibility	I	Corporate Finance
II	ERP/SAP	II	B2B Marketing
III	Business Analytics	III	Econometrics
IV	Labour Laws	IV	Organizational Development
V	Marketing Research	V	Sports Management
VI	Customer Relationship Management	VI	Logistic and Supply Chain Management

\* Optional papers are **TWO** unit credit courses which are assessed internally by respective institute. Optional courses are to be imparted by industrial experts, practitioners, consultants and professionals from business. Student has to opt for any one optional course offered per internal course and no university examination would be held for the same. **THIRTY** (30) hours of pedagogy excluding tutorials and examination would be the duration of one optional course. The evaluation of optional course is to be done by institute. Optional course is natured as internal course and no university examination would be held for the same. Institute has to design the examination of optional papers. The performance of student in optional course out of 50 marks has to be send to university with rest internal marks.

\*\*The electives selected by minimum 15 students will be taught by a faculty in a class. Rest of the students will prepare themselves for their selected module. However faculty will counsel them and complete their internal work as per module requirement. In case of electives selected less than 15 students, it is at the discretion of Head of the Institution to decide on the teaching and practical instructions.





Estd 2009

Shri Balasaheb Mane Shikshan Prasarak Mandal's  
**ASHOKRAO MANE GROUP OF INSTITUTIONS**

Address : Vathar Tarf Vadgaon, Tal. Hatkanangale, Dist. Kolhapur - 416 112 (Maharashtra)

Phone : (0230) 2407740, 2407760 Fax : (0230) 2407750 Email : director@amgoi.edu.in Website : www.amgoi.org

Approved by : AICTE, New Delhi No. F-No. MS ( NewInt ) 2009 / 08, Higher & Technical Education Department, Govt. of Maharashtra, Directorate of Technical Education, Mumbai. Affiliated to : Dr. Babasaheb Ambedkar Technological University, Lonere - Raigad. (B.Tech. & M.Tech. Programs), Shivaji University, Kolhapur. (MBA Program).

Accredited by NAAC

**Founder President**  
**Late Shri. Ashokrao Mane**

**Director**  
**Dr. A. V. Deshmukh, M.E., Ph.D.**

**President**  
**Hon. Shri. Vijaysinh A. Mane**

Date :

### Summary Sheet

Ref. No. :

List of MoU's with relevant organizations.

Sr. No.	Name of Department	Name of the Organization	Duration
1	Civil Engineering	Jugai Ready Mix Concrete, Vathar tarf Vadgaon.	3 Years
2	Civil Engineering	Unicorn Construction, Kolhapur	3 Years
3	Civil Engineering	PolyEdge Consultancy, Shirol	3 Years
4	Civil Engineering	D.V. Mane & Associates, Pune	5 Years
5	Computer Sci. & Engg.	DataFlair Web Service Pvt. Ltd.	3 Years
6	Computer Sci. & Engg.	Fameux Technologies Pvt. Ltd.	3 Years
7	Computer Sci. & Engg.	Softmusk Info Pvt. Ltd.	3 Years
8	Computer Sci. & Engg.	Noitavonne, Kolhapur	1 Years
9	Computer Sci. & Engg.	Excel - R	3 Years
10	Computer Sci. & Engg.	Rudra Infotech	3 Years
11	Computer Sci. & Engg.	Rotary Club of Kolhapur	3 Years
12	Computer Sci. & Engg.	Royal Arise Technology	3 Years
13	Computer Sci. & Engg.	Digital Microsys Technologies	3 Years
14	Computer Sci. & Engg.	Elite Softwares	5 Years
15	Computer Sci. & Engg.	Bits Techno Developments Pvt. Ltd.	3 Years
16	Electrical Engineering	MSEDCL Institute of Training & Safety Eklahare, Nashik	3 Years
17	Electrical Engineering	Shiv Solar Company, Islampur	3 Years
18	Electrical Engineering	Kimaya Automation Pvt Ltd	3 Years
19	Electrical Engineering	Shockproof Electrical	3 Years
20	Electrical Engineering	Pooja Wires and Cables	5 Years
21	Electrical Engineering	MVCS Automation Private Limited	2 Years
22	Electronics & Tele. Engg	Unique Power Service Rajarampuri, Kolhapur	3 Years
23	Electronics & Tele. Engg	Robosap Innovations Pvt. Ltd	3 Years
24	Electronics & Tele. Engg	Vidhi Automation, Kolhapur	3 Years
25	Electronics & Tele. Engg	Shree Electro- Arts, Jaysingpur	3 Years
26	Electronics & Tele. Engg	Procom Enterprises, Ichalkaranji	3 Years
27	Electronics & Tele. Engg	Bits Techno Developments Pvt. Ltd.	3 Years
28	Electronics & Tele. Engg	Electrosal Hitech Pvt. Lft, Nipani	3 Years
29	Electronics & Tele. Engg	Arun InfoTech, Kolhapur	3 Years
30	Electronics & Tele. Engg	D S Automation, Kolhapur	3 Years
31	T & P Office	Shashwatgyan, Pune	3 Years
32	Mechanical Engineering	D-Sign Design, Kolhapur	3 Years
33	T & P Office	BVG India Limited	1 Years
34	Mechanical Engineering	Archer Infotech Pune	2 Years
35	Mechanical Engineering	Tata Technologies limited	continuous
36	Mechanical Engineering	EXCELR Solution, Bengaluru	2 Years
37	MBA	Ramakrishna Agros	5 Years
38	MBA	Creative Institute of Education, Kolhapur	3 Years
39	MBA	Harvard Business School Publishing (HBSP)	1 Years



2872

Institute Code : 6217

Shri Balasaheb Mane Shikshan Prasarak Mandal's

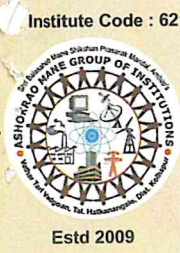
## ASHOKRAO MANE GROUP OF INSTITUTIONS

Address : Vathar Tarf Vadgaon, Tal. Hatkanangale, Dist. Kolhapur - 416 112 (Maharashtra)

Phone : (0230) 2407740, 2407760 Fax : (0230) 2407750 Email : director@amgoi.edu.in Website : www.amgoi.org

Approved by : AICTE, New Delhi No. F-No. MS ( NewInt ) 2009 / 08, Higher & Technical Education Department, Govt. of Maharashtra, Directorate of Technical Education, Mumbai. Affiliated to : Dr. Babasaheb Ambedkar Technological University, Lonere - Raigad. (B.Tech. & M.Tech. Programs), Shivaji University, Kolhapur. (MBA Program).

Accredited by NAAC with 'A' Grade CGPA 3.08



Founder President  
Late Shri. Ashokrao Mane

Director  
Dr. H. T. Jadhav, M.E., Ph.D.

President  
Hon. Shri. Vijaysinh A. Mane

Ref. No. : AMGOI/civil/04/2022-23

Date : 10/10/2022

### MEMORANDUM OF UNDERSTANDING (MOU)

Jugai Ready Mix Concrete  
Near NH 4, Vathar Tarf Vadgaon,  
Tal- Hatkanangle Dist- Kolhapur,  
416112

Between

Ashokrao Mane Group of Institutions  
Vathar Tarf Vadgaon, Tal-  
Hatkanangale, Dist.-Kolhapur, 416112

&

This memorandum of understanding (MOU) is made at Kolhapur on 10/10/2022 between Jugai Ready Mix Concrete, Vathar Tarf Vadgaon and Ashokrao Mane Group of Institutions, Vathar Tarf Vadgaon.

The MOU is signed between Head of Ashokrao Mane Group of Institutions and Jugai Ready Mix Concrete Vathar Tarf Vadgaon.

Jugai Ready Mix Concrete is engaged in management consultancy activities in concrete mix design, Material testing, technical and specialized design consultancy in Civil Engineering.

Balasaheb Mane Shikshan Prasarak Mandal, Ambap is working in the education field since 1980 and has 29 schools, 1 Engineering, 1 Poly Technique, 12 Pharmacy, 1 BAMS, and 1 ITI. Ashokrao Mane Group of Institutions has 5 undergraduates, 4 Post Graduates courses of engineering and MBA course

DTE Institute Code : 6217



Shri Balasaheb Mane Shikshan Prasarak Mandal's  
**ASHOKRAO MANE GROUP OF INSTITUTIONS**

Address : Vathar Tarf Vadgaon, Tal. Hatkanangale, Dist. Kolhapur - 416 112 (Maharashtra)

Phone : (0230) 2407740, 2407760 Fax : (0230) 2407750 Email : director@amgoi.edu.in Website : www.amgoi.org

Approved by : AICTE, New Delhi No. F.No. MS ( NewInt ) 2009 / 08, Higher & Technical Education Department, Govt. of Maharashtra, Directorate of Technical Education, Mumbai. Affiliated to : Dr. Babasaheb Ambedkar Technological University, Lonere - Raigad. (B.Tech. & M.Tech. Programs), Shivaji University, Kolhapur. (MBA Program).

Accredited by NAAC with 'A' Grade CGPA 3.08

1670

Founder President  
Late Shri. Ashokrao Mane

Director  
Dr. H. T. Jadhav, M.E., Ph.D.

President  
Hon. Shri. Vijaysinh A. Mane

Ref. No. : AMGOI/Civil/04/2022-23

Date : 10/10/2022

As per this MOU, We jointly plan and execute activities for betterment and development of technical skill of students and faculty of the Institute by taking help of Jugai Ready Mix Concrete Vathar Tarf Vadgaon. We here by agree and undertake to extend all the cooperation in the respect of following activities preferably related to the civil engineering, mechanical engineering and MBA streams.

1. Internship/Industrial Training/Industrial visits of the students
2. Mutual utilization of technological facilities and expertise
3. Knowledge and facility sharing for industry sponsored projects
4. Expertise staff as resource persons of specially focused technologies
5. To facilitate growth of various sub activities through support in all possible ways

This agreement will valid for 3 years from the date of signing and will be extended based on mutual understanding.



Director

Jugai Ready Mix Concrete Vathar Tarf Vadgaon

HOD  
Prof. J. A. Patil  
Civil. Engg.

Dean R&D  
Dr. H. V. Shete  
(AMGOI)

Dean Academics  
Prof. P. B. Ghewari  
(AMGOI)

Director  
Dr. H. T. Jadhav  
(AMGOI)



DTE Institute Code : 6217



Shri Balasaheb Mane Shikshan Prasarak Mandal's  
**ASHOKRAO MANE GROUP OF INSTITUTIONS**

1671

**Address :** Vathar Tarf Vadgaon, Tal. Hatkanangale, Dist. Kolhapur - 416 112 (Maharashtra)

**Phone :** (0230) 2407740, 2407760 **Fax :** (0230) 2407750 **Email :** director@amgoi.edu.in **Website :** www.amgoi.org

**Approved by :** AICTE, New Delhi No. F.No. MS ( NewInt ) 2009 / 08, Higher & Technical Education Department, Govt. of Maharashtra, Directorate of Technical Education, Mumbai. **Affiliated to :** Dr. Babasaheb Ambedkar Technological University, Lonere - Raigad. (B.Tech. & M.Tech. Programs), Shivaji University, Kolhapur. (MBA Program).

**Accredited by NAAC with 'A' Grade CGPA 3.08**

**Founder President**  
**Late Shri. Ashokrao Mane**

**Director**  
**Dr. H. T. Jadhav, M.E., Ph.D.**

**President**  
**Hon. Shri. Vijaysinh A. Mane**

Ref. No. : **AMGOI/civil/67/2022-23**

Date : **29/04/2023**

**MEMORANDUM OF UNDERSTANDING (MOU)**

**Unicorn Construction**  
Islampur,  
Tal- Walwa Dist- Sangli, 415409

**Between**

**&**

**Ashokrao Mane Group of Institutions**  
Vathar Tarf Vadgaon, Tal-  
Hatkanangale, Dist.-Kolhapur, 416112

This memorandum of understanding (MOU) is made at Kolhapur on 29/04/2023 between **Unicorn Construction, Islampur and Ashokrao Mane Group of Institutions, Vathar Tarf Vadgaon.**

The MOU is signed between Head of Ashokrao Mane Group of Institutions and Unicorn Construction, Islampur.

Unicorn Construction is engaged in management consultancy activities in building construction and canal works.

**Balasaheb Mane Shikshan Prasarak Mandal, Ambap** is working in the education field since 1980 and has 29 schools, 1 Engineering, 1 Poly Technique, 12 Pharmacy, 1 BAMS, and 1 ITI. Ashokrao Mane Group of Institutions has 5 undergraduates, 4 Post Graduates courses of engineering and MBA course

DTE Institute Code : 6217



Shri Balasaheb Mane Shikshan Prasarak Mandal's  
**ASHOKRAO MANE GROUP OF INSTITUTIONS**

1672

**Address :** Vathar Tarf Vadgaon, Tal. Hatkanangale, Dist. Kolhapur - 416 112 (Maharashtra)

**Phone :** (0230) 2407740, 2407760 **Fax :** (0230) 2407750 **Email :** director@amgoi.edu.in **Website :** www.amgoi.org

**Approved by :** AICTE, New Delhi No. F-No. MS ( NewInt ) 2009 / 08, Higher & Technical Education Department, Govt. of Maharashtra, Directorate of Technical Education, Mumbai. **Affiliated to :** Dr. Babasaheb Ambedkar Technological University, Lonere - Raigad. (B.Tech. & M.Tech. Programs), Shivaji University, Kolhapur. (MBA Program).

**Accredited by NAAC with 'A' Grade CGPA 3.08**

**Founder President**  
**Late Shri. Ashokrao Mane**

**Director**  
**Dr. H. T. Jadhav, M.E., Ph.D.**

**President**  
**Hon. Shri. Vijaysinh A. Mane**

Ref. No. : **AMGOI/Civil/67/2022-23**

Date : **29/04/2023**

As per this MOU, We jointly plan and execute activities for betterment and development of technical skill of students and faculty of the Institute by taking help of Unicorn Construction, Islampur. We here by agree and undertake to extend all the cooperation in the respect of following activities preferably related to the civil engineering, mechanical engineering and MBA streams.

1. Internship/Industrial Training/Industrial visits of the students
2. Knowledge and facility sharing for industry sponsored projects
3. Expertise staff as resource persons of specially focused technologies
4. To facilitate growth of various sub activities through support in all possible ways

This agreement will valid for **3 years** from the date of signing and will be extended based on mutual understanding.

**UNICON CONSTRUCTION**

**Director**

Unicorn Construction, Islampur

**HOD**  
**Prof. J. A. Patil**  
**Civil. Engg.**

**Dean R&D**  
**Dr. H. V. Shete**  
**(AMGOI)**

**Dean Academics**  
**Prof. P. B. Ghewari**  
**(AMGOI)**

**Director**  
**Dr. H. T. Jadhav**  
**(AMGOI)**



# Memorandum of Understanding (MOU) between DataFlair Web Services Pvt Ltd and Ashokrao Mane Group of Institutions, Faculty of Engineering, Vathar Tarf Vadgaon

---

**Date: 26 Dec-23**

## Parties:

1. **DataFlair Web Services Pvt Ltd**, 140-d, Sudama Nagar, Indore, MP, hereinafter referred to as the "DataFlair."
2. **Ashokrao Mane Group of Institutions, Faculty of Engineering, Vathar Tarf Vadgaon** hereinafter referred to as the "College."

## Background:

The College is committed to providing high-quality education and enhancing the employability of its students.

DataFlair specializes in offering free certification courses on latest cutting-edge technologies, study material, interview questions, tests, projects, and industry-recognized certificates in various technical domains, thereby supporting skill development and employability.

## Purpose:

The purpose of this Memorandum of Understanding is to establish a framework for collaboration between the College and the DataFlair Company to benefit the students of the College through the free Certification courses that the DataFlair Company is providing.

## Terms of Collaboration:

1. **Course Access:** The DataFlair Company will provide free access to its certification courses, study material, interview questions, tests, projects, and industry-recognized certificates to the students of the College.
2. **Customization:** The College may request course customization to align with its curriculum and specific requirements. Such requests may be considered by the DataFlair Company on a case-by-case basis.
3. **Technical Support:** The DataFlair Company will provide technical support to ensure the smooth delivery of courses.
4. **Certification:** Upon successful completion of courses, students will receive industry-recognized certificates from the DataFlair Company, enhancing their employability.



5. **Collaboration:** The College and the DataFlair Company will collaborate on sharing the courses to all the students of the College every year (Not only to few batches) and ensuring awareness of the available resources.
6. **Data Privacy:** Both parties will adhere to all applicable data protection laws and ensure the privacy and security of student data.
7. **Duration:** This MOU shall commence on the date of signing and remain in effect unless terminated by either party with written notice.
8. **Financial Obligations:** In this MOU between College and DataFlair Company, it is agreed and understood that no financial obligations or terms are involved in the collaboration. Neither DataFlair company nor College / Faculties / Students need to pay.

#### Responsibilities:

1. **The College:** The College will facilitate the provision of resources, including access to students, promotion of courses, and sharing course information with students periodically on official channels. The College shall make reasonable efforts to ensure that all new students are informed and all incoming students have access to these courses provided by DataFlair.
2. **The DataFlair Company:** The DataFlair Company will provide access to courses, study material, and certification.

#### Dispute Resolution:

Any disputes arising from this MOU shall be resolved through amicable negotiations between the parties.

#### Amendment:

This MOU may only be amended in writing and signed by both parties.

#### For DataFlair:

1. Name: Prachi Patodi  
Designation: Director



#### For Ashokrao Mane Group of Institutions, Faculty of Engineering, Vathar Tarf Vadgaon

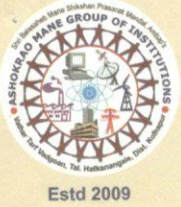
1. Name: Prof. P.B. Ghewari  
Designation: Director, AMGOI
2. Name: Prof. S.S. Redekar  
Designation: HOD, CSE

*Shri Balasaheb Mane*  
I / C DIRECTOR

SHRI BALASAHEB MANE SHIKSHAN PRASARAK MANDAL'S  
ASHOKRAO MANE GROUP OF INSTITUTIONS  
Vathar Tarf Vadgaon, Tal. Hatkanangale, Dist. Kolhapur, M.S. 416112

*S.S. Redekar*  
HOD  
Computer Science & Engineering  
AMGOI, Faculty of Engineering  
Vathar Tarf vadgaon, Dist. Kolhapur





Shri Balasaheb Mane Shikshan Prasarak Mandal's  
**ASHOKRAO MANE GROUP OF INSTITUTIONS**

**Address :** Vathar Tarf Vadgaon, Tal. Hatkanangale, Dist. Kolhapur - 416 112 (Maharashtra)  
**Phone :** (0230) 2407740, 2407760 **Fax :** (0230) 2407750 **Email :** director@amgoi.edu.in **Website :** www.amgoi.org

**Approved by :** AICTE, New Delhi No. F-No. MS ( NewInt ) 2009 / 08, Higher & Technical Education Department, Govt. of Maharashtra, Directorate of Technical Education, Mumbai. **Affiliated to :** Dr. Babasaheb Ambedkar Technological University, Lonere - Raigad. (B.Tech. & M.Tech. Programs), Shivaji University, Kolhapur. (MBA Program).

**Accredited by NAAC with 'A' Grade CGPA 3.08**

**Founder President**  
**Late Shri. Ashokrao Mane**

**Director**  
**Dr. H. T. Jadhav**, M.E., Ph.D.

**President**  
**Hon. Shri. Vijaysinh A. Mane**

Ref. No. :

Date :

**MEMORANDUM OF UNDERSTANDING (MOU)**

**Between**

**Fameux Technologies**

**S.No- 36/1/2, B- 12 Chandrabhaga**

**Heights Ambegaon BK Pune Pune MH**

**411046**

**&**

**Ashokrao Mane Group of Institutions**

**Vathar Tarf Vadgaon,**

**Tal- Hatkanangale, Dist.-Kolhapur,**

**India,Pin-416112**

**Department of CSE**

This memorandum of understanding (MOU) is made at Kolhapur on Saturday, 09/12/2023 between **Fameux Technologies** and **Department of Computer Science and Engineering of Ashokrao Mane Group of Institutions Vathar Tarf Vadgaon.**

The MOU is signed between Head of Computer Science and Engineering Department of AMGOI, and **Director of Fameux Technologies**

**Fameux Technologies** is a new era IT Institute which focuses on Placement assistance, training and Industrial projects as well as Computer Technology, Android and Website development, Digital marketing, Cloud Computing & all Software Courses.

As per this MOU, We jointly plan and execute activities for betterment and development of technical skill of students and faculties of the Institute by taking help of **Fameux Technologies**

We here by agree and undertake to extend all the cooperation in the respect of following activities,

1. To support institute in the Online and Offline campus activities.
2. To permit students of institute undergo Industrial Training.
3. To permit students open for government, private project after the training.
3. Mutual utilization of testing facilities tools and products and guidance of expert staff.
4. Knowledge sharing as per SDLC for Industry Sponsored Projects.
5. Expertise staff as resource persons of specially focused technologies.
6. Training to students of Institute on new technologies.
7. To facilitate growth of various sub activities through support in all possible ways.

This agreement will valid for **3 year** from the date of signing.

  
**HOD CSE**

**Prof. S. S. Redekar**  
**(AMGOI)**

  
**I/C Director**

**Prof. P. B. Ghewari**  
**(AMGOI)**



**Director**  
**Mr. Deodatta Gotarne**  
**(Fameux Technologies)**

**MEMORANDUM OF UNDERSTANDING (MoU)**  
**Between**  
**Fameux Technologies Pvt. Ltd. Pune**  
**And**  
**Ashokrao Mane Group of Institutions**

This Memorandum of understanding ("MOU") is entered into and effective as of \_\_\_\_\_  
by and between:

**Fameux Technologies Pvt. Ltd.**

Fameux Technologies is a Group of Companies serving the nation from past 10 Years. Fameux Technologies Pvt. Ltd. ([www.fameuxtechnologies.com](http://www.fameuxtechnologies.com)) is an IT Development and HR Outsourcing Company. FAMEUX TECHNOLOGIES PVT. LTD. is the leader in the "specialized training" brands of India certified by ISO 9001:2015 for its best quality. Fameux Technologies is the largest training service provider in various engineering domains for all engineering students as well as for the working professionals. It has an extensive experience of nurturing over 20000+ students in the past few years.

Fameux Technologies is a trustworthy brand in Education and Training industry with its presence across several cities such as Mumbai, Pune, Jaipur and Moradabad.

**And**

**Ashokrao Mane Group of Institutions**

**Purpose:** This MoU is made with the purpose to highlight the mutually beneficial cooperation between the two parties, that is, FAMEUX TECH & AMGOI for assisting each other in different developmental activities so as to encourage beneficial industry institute interaction, with the aim of catering an innovative & flexible outcome to the organizational aims and other needs of both the parties.

**1. Role and scope of cooperation:**

- a. The parties agree to, in the spirit of mutual cooperation, use best efforts towards providing support to each other in various mutually beneficial activities such as technology transfer, training program for students, seeking mutual advice etc.
- b. FAMEUX TECH will deliver training on course modules agreed by both the parties.



- c. Encourage students, faculty/resource personnel of either organization to attend trainings, workshops, seminars, awareness programs, enhance skills & knowledge etc. in the respective areas of interest.
- d. Encourage joint research activities and projects by faculty members and resource personnel.
- e. Both organizations shall explore the possibilities of mutual support, in their learning, hiring and research requirements based on mutual convenience.
- f. FAMEUX TECH may seek assistance of AMGOI faculty members in product/process modification, modernization, trouble shooting, etc.
- g. AMGOI will provide the lab infrastructure and lab assistance required for the training program.
- h. FAMEUX TECH will conduct Internship and Industrial training programs on the latest technologies to make them industry ready. FAMEUX TECH will also provide placement assistance to the students.
- i. Students can join the placement drives conducted at FAMEUX TECH, PUNE campus.

## 2. Technical offering from Fameux Technologies

1. Internship Program for Final Year Students, with Placemat Assistance.
2. Certification Courses for 3<sup>rd</sup> and 4<sup>th</sup> year Engineering Students (40 Hours)
3. Lectures in collage premises as per collage requirement.
4. Technical Courses for Students with 100% Placement assistance.
5. Campus Recruitment Training for final year students during Internship Program.

IN WITNESS WHEREOF, the parties here to have executed this understanding on the date, month and year, here in above written.

### For Ashokrao Mane Group of Institutions

1. Dr. Pravin Ghewari  
Principal

2. Prof. Suraj Redekar  
HOD, CSE

### For Fameux Technologies Pvt. Ltd.

1. Deodatta M Gotarne  
Director

2. Rai Shantanu  
Head: Operations

**Fameux** Technologies

Speciality Business Centre, A 405, Near Silicon Valley, Balewadi, Pune 411045

**MEMORANDUM OF UNDERSTANDING**

**BETWEEN**

**M.S.E.D.C.L, Institute of Training & Safety**

**Eklahare, Nashik-422105**

**AND**

**Ashokrao Mane Group of Institutions, Vathar**



DTE Institute Code : 6217

Shri Balasaheb Mane Shikshan Prasarak Mandal's

4154

## ASHOKRAO MANE GROUP OF INSTITUTIONS

Address : Vathar Tarf Vadgaon, Tal. Hatkanangale, Dist. Kolhapur - 416 112 (Maharashtra)

Phone : (0230) 2407740, 2407760 Fax : (0230) 2407750 Email : director@amgoi.edu.in Website : www.amgoi.org

Approved by : AICTE, New Delhi No. F-No. MS ( NewInt ) 2009 / 08, Higher & Technical Education Department, Govt. of Maharashtra, Directorate of Technical Education, Mumbai. Affiliated to : Dr. Babasaheb Ambedkar Technological University, Lonere - Raigad. (B.Tech. & M.Tech. Programs), Shivaji University, Kolhapur. (MBA Program).

Accredited by NAAC with 'A' Grade CGPA 3.08



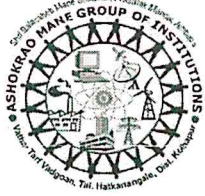
Founder President  
Late Shri. Ashokrao Mane

Director  
Dr. A. V. Deshmukh, M.E., Ph.D.

President  
Hon. Shri. Vijaysinh A. Mane

Ref. No. : AMGOI/Electrical/672/2023-24.

Date : 27/02/2024.



### MEMORANDUM OF UNDERSTANDING

Whereas, Ashokrao Mane Group of Institutions, Vathar, Department of Electrical Engineering provides quality technical education to the students in the area of Hands-on Laboratory Experience, Project-Based Learning, Industry Collaboration and Internships

And



Whereas, Maharashtra State Electricity Distribution Company limited (MSEDCL), also known as MAHAVITARAN is engaged in supplies electricity to a 2.30 core consumers all over Maharashtra. As the largest public sector Electricity Distribution Company in the state and in Asia, Mahavitaran plays an important role in the power scenario of Maharashtra. Primary function on MSEDCL is to develop and maintain efficient, co-ordinate and economical distribution system and providing quality electric supply to consumers. It is necessary to inculcate exceptional leadership, professional competencies, commercial acumen, team building, changing attitude, developing work culture and enhancing safety standard among the work force.

As per organization training policy, the various training activities carried out in our institute.

The Department of training and safety, has situated in serene atmosphere at Eklahare, training arm of MSEDCL, is accredited by Central Electricity Authority (CEA) "A" grade under Ministry of Power, Government of India. It imparts residential Orientation: Induction & Need based Training to Engineers, Staff from Human Resources, Finance & Account cell and vigilance & legal cell.

There are four Regional Training Centers at Nashik, Aurangabad, Sangli & Amravati and there are 25 small Training Centers at District level for conduction of one day Safety Seminar for employees and public for safety awareness.

Under the National Training program, the Department of Training & safety is also a partner - training institute recognized by Power Finance Corporation (PFC) and Rural Electrification Corporation (REC). The Memorandum of Agreement (MoA) made between REC and institute of training & Safety, MSEDCL for conduct of C&D employees training program during 2013-2019.



**ASHOKRAO MANE GROUP OF INSTITUTIONS****Address :** Vathar Tarf Vadgaon, Tal. Hatkanangale, Dist. Kolhapur - 416 112 (Maharashtra)**Phone :** (0230) 2407740, 2407760 **Fax :** (0230) 2407750 **Email :** director@amgoi.edu.in **Website :** www.amgoi.org**Approved by :** AICTE, New Delhi No. F-No. MS ( NewInt ) 2009 / 08, Higher & Technical Education Department, Govt. of Maharashtra, Directorate of Technical Education, Mumbai. **Affiliated to :** Dr. Babasaheb Ambedkar Technological University, Lonere - Raigad. (B.Tech. & M.Tech. Programs), Shivaji University, Kolhapur. (MBA Program).**Accredited by NAAC with 'A' Grade CGPA 3.08**

Estd 2009

**Founder President**  
**Late Shri. Ashokrao Mane****Director**  
**Dr. A. V. Deshmukh, M.E., Ph.D.****President**  
**Hon. Shri. Vijaysinh A. Mane**

Ref. No. :

Date :

**SCOPE OF THE MEMORANDUM OF UNDERSTANDING**

This MoU details the modalities and general conditions regarding collaboration between, Ashokrao Mane Group of Institutions, Vathar. and M.S.E.D.C.L, Institute of Training & safety, for enhancing, the availability of highly qualified manpower in the areas of Electrical without any prejudice to prevailing rules and regulations in Ashokrao Mane Group of Institutions, Vathar and M.S.E.D.C.L, Institute of Training & Safety. The areas of cooperation can be extended through mutual consent.

**SCOPE AND TERMS OF INTERACTIONS**

Both Ashokrao Mane Group Of Institutions, Vathar, (Electrical Engineering Department) and Institute of Training & safety shall encourage interactions between the Engineers, Research fellows, faculty members and students of both the organizations through the following arrangements:

- Exchange of Personnel through deputation for special subject periods.
- Organization of joint conferences and seminars, industrial visits, Expert lectures etc Monitor process of organizing industry based projects and thesis for graduate & postgraduate students.
- Practical training of Ashokrao Mane Group of Institutions, Vathar and M.S.E.D.C.L, Institute of Training & safety.
- MSEDCL may request to design a course of Courses to enhance quality and performance of its employees. Such courses may be run at any mutually convenient premises.
- MSEDCL may seek assistance/ guidance Ashokrao Mane Group of Institutions, Vathar. Faculty members introduce/process modification, modernization, trouble shooting, etc.
- Ashokrao Mane Group of Institutions, Vathar and M.S.E.D.C.L, would arrange discussion sessions for the staff and students, which will help Ashokrao Mane Group of Institutions, Vathar, to design its syllabus, vision & Mission of the institute & Departments, Program Objectives according to the current requirement of the MSEDCL, as well as design various certificates and engineering courses for the requirement of MSEDCL.



**ASHOKRAO MANE GROUP OF INSTITUTIONS**

Address : Vathar Tarf Vadgaon, Tal. Hatkanangale, Dist. Kolhapur - 416 112 (Maharashtra)

Phone : (0230) 2407740, 2407760 Fax : (0230) 2407750 Email : director@amgoi.edu.in Website : www.amgoi.org

Approved by : AICTE, New Delhi No. F-No. MS ( NewInt ) 2009 / 08, Higher &amp; Technical Education Department, Govt. of Maharashtra, Directorate of Technical Education, Mumbai. Affiliated to : Dr. Babasaheb Ambedkar Technological University, Lonere - Raigad. (B.Tech. &amp; M.Tech. Programs), Shivaji University, Kolhapur. (MBA Program).

Accredited by NAAC with 'A' Grade CGPA 3.08



Estd 2009

**Founder President**  
**Late Shri. Ashokrao Mane**

**Director**  
**Dr. A. V. Deshmukh, M.E., Ph.D.**

**President**  
**Hon. Shri. Vijaysinh A. Mane**

Ref. No. :

Date :

**SHARING OF FACILITIES**

- Ashokrao Mane Group of Institutions, Vathar and M.S.E.D.C.L, make provisions to share their respective important R&D facilities & Infrastructure in order to promote academic and research interaction in the areas of co- operation.
- Ashokrao Mane Group of Institutions, Vathar and M.S.E.D.C.L shall provide access to the library facilities to scientists' members of faculty and students as per the prevailing rules and norms in the respective institutes.

**CO-ORDINATION OF THE PROGRAMME INCLUDING FINANCIAL ARRANGEMENTS**

- The collaborative program between Ashokrao Mane Group of Institutions, Vathar, and M.S.E.D.C.L, shall be coordinated by a coordination committee appointed by both the institutes.
- The expenses i.e. cost of travelling allowances, dearness allowances and cost of stay of the faculty (if any) for expert lectures will be taken care of by spoke institute.

**EFFECTIVE DATE AND DURATION OF MOU**

- This MoU shall be effective from the date signing by competent authorities at both ends.
- The duration of the MoU shall be for a period of three years from the effective date.
- The MoU may be extended or terminated by a prior notice of not less than three months. By either party or mutually specifically disclosing the intension to withdraw from MoU. However, termination of the MoU will not in any manner affect the interests of the students/ Faculty/Scientists who have been admitted to pursue a program under the MoU.
- Any clause or article of the MoU may be modified or amended by mutual agreement of MSEDCL and Ashokrao Mane Group of Institutions, Vathar.

**MISCELLANEOUS**

- The MoU is purely knowledge sharing base.
- Both Ashokrao Mane Group of Institutions, Vathar and M.S.E.D.C.L, shall not, during the term of this Agreement directly or indirectly, solicit or offer employment of engagement to any of the personnel of other party.
- After this Agreement has been signed, the exercise shall be taken in co-ordination with each other.

4157

DTE Institute Code : 6217

Shri Balasaheb Mane Shikshan Prasarak Mandal's

# ASHOKRAO MANE GROUP OF INSTITUTIONS

Address : Vathar Tarf Vadgaon, Tal. Hatkanangale, Dist. Kolhapur - 416 112 (Maharashtra)

Phone : (0230) 2407740, 2407760 Fax : (0230) 2407750 Email : director@amgoi.edu.in Website : www.amgoi.org

Approved by : AICTE, New Delhi No. F-No. MS ( NewInt ) 2009 / 08, Higher & Technical Education Department, Govt. of Maharashtra, Directorate of Technical Education, Mumbai. Affiliated to : Dr. Babasaheb Ambedkar Technological University, Lonere - Raigad. (B.Tech. & M.Tech. Programs), Shivaji University, Kolhapur. (MBA Program).



Estd 2009

Accredited by NAAC with 'A' Grade CGPA 3.08

**Founder President**  
**Late Shri. Ashokrao Mane**

**Director**  
**Dr. A. V. Deshmukh**, M.E., Ph.D.

**President**  
**Hon. Shri. Vijaysinh A. Mane**

Ref. No. :

Date :

**IN WITNESS WHERE OF PARTIES HERE TO HAVE ENTERED INTO THIS AGREEMENT EFFECTIVE AS ON THE DATE AND YEAR FIRST WRITTEN ABOVE.**



**Dr. Ajay V. Deshmukh,**  
**Director,**  
**Ashokrao Mane Group of**  
**Institutions, Vathar**  
**(Dr. Ajay V. Deshmukh)**  
**DIRECTOR**

SHRI BALASAHEB MANE SHIKSHAN PRASARAK MANDAL'S  
ASHOKRAO MANE GROUP OF INSTITUTIONS  
Vathar Tarf Vadgaon, Tal. Hatkanangale  
Dist. Kolhapur - M.S. 416112

Witness:

- 1)
- 2)

Date:- 27/02/2024



**Add. Executive Engineer,**  
**M.S.E.D.C.L,**  
**Regional Training Centre,**  
**Sangli**

Witness:

- 1)
- 2)

Date:-





- Industrial, Commercial, Residential, Agriculture
- Solar Pannel Installation
- Govt. electrical Contractor & Engineer

✉ shivsolarcompany33@gmail.com

☎ 9860963394, 9822214119, 9762201625

Ref.No.:

Date: 15/09/2023

## MEMORANDUM of UNDERSTANDING (MoU)

Shiv Solar Company

Shivam Pride Phase II Mantri  
Colony, Islampur 415-409

Between

&

Ashokrao Mane Group of Institutions  
Vathar Tarf Vadgaon, Tal-  
Hatkanangale, Dist.-Kolhapur,  
India, Pin-416112

Department Of Electrical Engineering

This memorandum of understanding (MoU) is made at Kolhapur on 15/09/2023 between **Shiv Solar Company, Islampur and Department of Electrical Engineering of Ashokrao Mane Group of Institutions Vathar Tarf Vadgaon.**

The MoU is signed between Head of Electrical Engineering Department of AMGOI, Director of AMGOI and Shiv Solar Company, Islampur.

Ashokrao Mane Group of Institutions, Vathar Tarf Vadgaon, is technical academic institution affiliated to Dr. Babasaheb Ambedkar Technical University, Lonere whereas; Shiv Solar Company is technical support team in Solar system. Also, **Shiv Solar Company, Islampur is providing installation, maintenance and services of Solar plants** to electrical consumers.

As per this MoU, we jointly plan and execute activities for betterment and development of technical skill of students and faculty of the Institute by taking help of Shiv Solar Company, Islampur. We here by agree and undertake to extend all the cooperation in the respect of following activities,

1. Shiv Solar Company will provide technical support to student's project in the area of renewable energy sources.
2. Shiv Solar Company will provide hands on training and guest lecture to the students of Electrical Engineering.

**Address: Gala No. 06, Shivam Pride Ph. II, Mantri Colony, Islampur. 415409**



**SHIV  
SOLAR  
COMPANY**

THE INFINITE ENERGY

- Industrial, Commercial, Residential, Agriculture
- Solar Pannel Installation
- Govt. electrical Contractor & Engineer

✉ shivsolarcompany33@gmail.com

☎ 9860963394, 9822214119, 9762201625

Ref.No.:

Date: / / 20

- Ashokrao Mane Group of Institutions Vathar will spare laboratory and library facility on mutually accepted terms and conditions as and when required with core intension to enhance their experience of installation and testing of solar equipments.
- Shiv Solar Company, Islampur, will permit their engineering and experts to render their expertise for the benefit of students whenever they are called as resource persons for specially focused Programs.

This agreement will valid for **03 years** from the date of signing.

For Shiv Solar Company

Partner

Technical Director  
Mr. Pawan Bidkar  
(Shiv Solar Company)

HoD, EE  
Prof. Mrs. S. H. Shete  
(AMGOI)

**HOD**  
Electrical Engineering  
AMGOI, Faculty of Engineering  
Vathar Tari Vadgaon,  
Tal. Hatkanangale, Dist. Kolhapur

Director  
Prof. Dr. H. T. Jadhav  
(AMGOI)

**DIRECTOR**  
SRI BALASAHEB MANE SHIKSHAN PRASARAK MANDAL'S  
ASHOKRAO MANE GROUP OF INSTITUTIONS  
Vathar Tarf Vadgaon, Tal. Hatkanangale, Dist. Kolhapur, M.S. 416112



Address: Gala No. 06, Shivam Pride Ph. II, Mantri Colony, Islampur. 415409