

# SAMPLE TEACHER WORKLOAD

**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

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**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>

**Teaching and Evaluation Scheme for Final Year B. Tech. Programme in Information Technology**  
(For Academic year 2020-21)

Sr. No.	Course Code	Course Title	Teaching Scheme				Evaluation Scheme				Total Marks	Credits	Total Hours
			L	T	P	MSE	CA		ESE				
							CA-I	CA-II	Internal	External			
<b>Semester VII</b>													
1	BTITC701	Cloud Computing and Storage Management	2	-	-	20	20		60	100	2	2	
2	BTITC702	Artificial Intelligence#	3	-	-	20	20		60	100	3	3	
3	<b>Elective VII</b>		3	-	-	20	20		60	100	3	3	
	BTITE703A	A) Pattern Recognition											
	BTITE703B	B) Soft Computing											
	BTITE703C	C) Electronic Payment System <sup>@</sup>											
4	<b>Elective VIII (Open)</b>		3	-	-	20	20		60	100	3	3	
	BTITOE704A	A) Natural Language Processing											
	BTITOE704B	B) Machine Learning											
5	<b>Elective IX</b>		3	-	-	20	20		60	100	3	3	
	BTITPE705A	A) Real Time Systems											
	BTITPE705B	B) Information Security											
	BTITPE705C	C) Management Information Systems											
	BTITPE705D	D) Distributed Computing											
	BTITPE705E	E) Data Warehousing and Data Mining											
6	BTITL706	Cloud Computing and Storage Management Lab	-	-	2	-	15	15	10	10	50	1	2
7	<b>Elective VII Lab</b>		-	-	2	-	15	15	10	10	50	1	2
	BTITEL707A	A) Pattern Recognition Lab											
	BTITEL707B	B) Soft Computing Lab											
	BTITEL707C	C) Electronic Payment System Lab											
8	<b>Elective IX Lab</b>		-	-	2	-	15	15	10	10	50	1	2
	BTITPEL708A	A) Real Time Systems Lab											
	BTITPEL708B	B) Information Security Lab											
	BTITPEL708C	C) Management Information Systems Lab											
	BTITPEL708D	D) Distributed Computing Lab											
	BTITPEL708E	E) Data Warehousing and Data Mining Lab											
9	BTITP709	Project Phase I*	-	-	4	-	30	10	10	50	2	4	
10	BTITF710	Field Training / Internship/ Industrial Training-III Evaluation	-	-	-	-	-	50		50	1	-	
<b>Summary of Semester Assessment Marks, Credit &amp; Hours</b>			<b>14</b>	<b>-</b>	<b>10</b>	<b>100</b>	<b>220</b>	<b>430</b>	<b>750</b>	<b>20</b>	<b>24</b>		

Semester VIII												
1	BTITC801	Internet of Things#	3	-	-	20	20	60	100	3	3	
2	BTITC802	Mobile Computing#	3	-	-	20	20	60	100	3	3	
3	BTITP803	Project Phase II/ Project with Internship**	-	-	24	-	50	50	50	150	12	24
Summary of Semester Assessment Marks, Credit & Hours			6	-	24	40	90	220	350	18	30	

## B. Tech. Civil Engineering

### Course Structure for Semester VII (Fourth Year) w.e.f. 2020-2021

Course Code	Type of Course	Course Title	Weekly Teaching Scheme			Evaluation Scheme				Credits
			L	T	P	CA	MSE	ESE	Total	
BTCVC701	Core	Design of Concrete Structures - II	2	1	--	20	20	60	100	3
BTCVC702	Core	Infrastructure Engineering	3	--	--	20	20	60	100	3
BTCVC703	Core	Water Resources Engineering	3	1	--	20	20	60	100	4
BTCVC704	Core	Professional Practices	2	1	--	20	20	60	100	3
BTCVE705A	Elective IV	Construction Techniques	3	--	--	20	20	60	100	3
BTCVE705B		Engineering Economics								
BTCVE705C		Finite Element Method								
BTCVE705D		Limit State Design of Steel Structures								
BTCVE705E		Plastic Analysis and Design								
BTCVE705F		Water Power Engineering								
BTCVOE706A	Open Elective V	Advanced Structural Mechanics	3	--	--	--	--	--	--	Audit (AU/ NP)
BTCVOE706B		Air Pollution Control								
BTCVOE706C		Bridge Engineering								
BTCVOE706D		Introduction to Earthquake Engineering								
BTCVOE706E		Town and Urban Planning								
BTCVOE706F		Tunneling and Underground Excavations								
BTCVL707	Laboratory	Design & Drawing of RC & Steel Structures	--	--	2	30	--	20	50	1
BTCVL708	Laboratory	Professional Practices	--	--	2	30	--	20	50	1
BTCVT709	Training	Field Training /Internship/Industrial	--	--	--	--	--	50	50	1
BTCVS710	BTS	Seminar	--	--	2	--	--	50	50	1
BTCVP711	BTP	Project Stage-I**	--	--	6	--	50	50	100	3
<b>Total</b>			<b>16</b>	<b>3</b>	<b>12</b>	<b>160</b>	<b>150</b>	<b>490</b>	<b>800</b>	<b>23</b>

## B. Tech. Civil Engineering

Course Structure for Semester VIII [Fourth Year] w.e.f. 2020-2021

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) <sup>#</sup>	Characterization of Construction Materials	03**	--	--	20	20	60	100	3
BTCVSS801B		Geosynthetics and Reinforced Soil Structures								
BTCVSS801C		Higher Surveying								
BTCVSS801D		Maintenance and Repair of Concrete Structures								
BTCESS801E		Structural Dynamics								
BTCESS802A	(Self-Study Course) <sup>#</sup>	Energy Efficiency Acoustics and Daylighting in Building	03**	--	--	20	20	60	100	3
BTCESS802B		Environmental Remediation of Contaminated Sites								
BTCESS802C		Remote Sensing Essentials								
BTCESS802D		Mechanical Characterization of Bituminous Materials								
BTCESS802E		Soil Structure Interaction								
BTCEP803	Project Stage-II	In-house Project or Internship and Project in Industry*	--	--	30	50	--	100	150	15
Total			04	--	30	90	40	220	350	21

**B. Tech. Mechanical Engineering**  
**Course Structure for Semester VII [Fourth Year] w.e.f. 2020-2021**

Course Code	Type of Course	Course Title	Weekly Teaching Scheme			Evaluation Scheme				Credits
			L	T	P	CA	MSE	ESE	Total	
BTMEC701	PCC 29	Mechatronics	2	1	--	20	20	60	100	3
BTMEC702	PCC 30	CAD/CAM	2	1	--	20	20	60	100	3
BTMEC703	PCC 31	Manufacturing Processes - III	2	1	--	20	20	60	100	3
BTMEC704A	PEC 2	Fluid Machinery	2	1	--	20	20	60	100	3
BTMEC704B		Industrial Engineering and Management								
BTMEC704C		Finite Element Method								
BTMEC704D		Surface Engineering								
BTMEC704E		Refrigeration and Air Conditioning								
BTAMC704C		Automobile Design (Product Design, PLM, CAE, Catia)								
BTMEC705A	OEC 5	Engineering Economics	3	--	--	--	--	--	--	Audit (AU/ NP)
BTMEC705B		Intellectual Property Rights								
BTMEC705C		Wind Energy								
BTMEC705D		Knowledge Management								
BTMEL706	PCC 32	Manufacturing Processes Lab - II	--	--	2	30	--	20	50	1
BTMEL707	PCC 33	Mechatronics Lab	--	--	2	30	--	20	50	1
BTMEL708	PCC 34	CAD/CAM Lab	--	--	2	30	--	20	50	1
BTMES709	Project 4	Seminar	--	--	2	30	--	20	50	1
BTMEF710	Project 5	Field Training /Internship/Industrial Training III	--	--	--	--	--	50	50	1
BTMEP711	Project 6	Project Stage-I**	--	--	6	30	--	20	50	3
Total			11	4	14	230	80	390	700	20

**B. Tech. Mechanical Engineering**  
**Course Structure for Semester VIII [Fourth Year] w.e.f. 2020-2021**

Course Code	Type of Course	Course Title	Weekly Teaching Scheme			Evaluation Scheme				Credits
			L	T	P	CA	MSE	ESE	Total	
Choose any two subjects from ANNEXURE-A#			-	-	--	20	20	60	100	3
			-	-	--	20	20	60	100	3
BTMEP803	Project 7	Project Stage-II or Internship and Project*	--	--	30	50	--	100	150	15
Total			--	--	30	90	40	220	350	21

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**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>

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**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

**Semester - I  
Group A**

Sr. No.	Course Code	Course Title	Weekly Teaching hrs			Evaluation Scheme			Credit	
			L	T	P	CA	MSE	ESE		
1	<b>Mandatory</b>	<b>Induction Program</b>	<b>3 weeks duration in the beginning of the semester</b>							
2	BTBS101	Engineering Mathematics – I	3	1	-	20	20	60	4	
3	BTBS102	Engineering Physics	3	1	-	20	20	60	4	
4	BTES103	Engineering Graphics	2	-	-	20	20	60	2	
5	BTHM104	Communication Skills	2	-	-	20	20	60	2	
6	BTES105	Energy and Environment Engineering	2	-	-	20	20	60	2	
7	BTES106	Basic Civil and Mechanical Engineering	2	-	-	50	-	-	Audit	
8	BTBS107L	Engineering Physics Lab	-	-	2	60	-	40	1	
9	BTBS108L	Engineering Graphics Lab	-	-	4	60	-	40	2	
10	BTHM109L	Communication Skills Lab	-	-	2	60	-	40	1	
<b>TOTAL</b>			<b>14</b>	<b>2</b>	<b>8</b>	<b>330</b>	<b>100</b>	<b>420</b>	<b>18</b>	



**Semester - II**  
**Group B**

Sr. No.	Course Code	Course Title	Weekly Teaching hrs			Evaluation Scheme			Credit
			L	T	P	CA	MSE	ESE	
1	BTBS201	Engineering Mathematics – II	3	1	-	20	20	60	4
2	BTBS202	Engineering Chemistry	3	1	-	20	20	60	4
3	BTES203	Engineering Mechanics	2	1	-	20	20	60	3
4	BTES204	Computer Programming in C	2	-	-	20	20	60	2
5	BTES205	Workshop Practices	-	-	4	60	-	40	2
6	BTES206	Basic Electrical and Electronics Engineering	2	-	-	50	-	-	Audit
7	BTES207L	Computer Programming Lab	-	-	2	60	-	40	1
8	BTBS208L	Engineering Chemistry Lab	-	-	2	60	-	40	1
9	BTES209L	Engineering Mechanics Lab	-	-	2	60	-	40	1
10	BTES210P	Mini Project	-	-	2	60	-	40	1
11	BTES211P	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).	-	-	-	-	-	-	Credit to be evaluated in III Sem
<b>TOTAL</b>			<b>12</b>	<b>3</b>	<b>12</b>	<b>430</b>	<b>80</b>	<b>440</b>	<b>19</b>