

Dr. Babasaheb Ambedkar Technological University, Lonere.

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

Sl. 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
Total			13	05	10	100	450	550	1100	22

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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

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✓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 Y th Semester)
Total			11	05	12	130	430	540	1100	22

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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								

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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
Total			16	02	10	120	270	510	900	24

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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
Total				14	0	14	100	240	460	800	22

B. Tech (Electronics & Telecommunication 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	MSE	CA	ESE	Total	
		<ul style="list-style-type: none"> • Introduction to Internet of Things • Computer Vision and Image Processing • Biomedical Signal Processing • Industrial Automation and Control • Cryptography and Network Security • Digital IC Design # Student to opt any two subjects from above list	3	-	--	20*	20*	60*	100	3
			3	-	--	20*	20*	60*	100	3
BTMEP803	Project Part-II or Internship*		--	--	30	--	--	100	150	15
Total			--	--				220	350	21

* 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

No	Course Name	Duration (Weeks)	Institute Offering Course	Name of Professor
1	Introduction to internet of things	12	IIT Kharagpur	Prof. Sudip Misra
2	Computer Vision and Image Processing	12	IIT Gandhinagar	Prof. M. K. Bhuyan
3	Biomedical Signal Processing	12	IIT Kharagpur	Prof. Sudipta Mukhopadhyay
4	Industrial Automation and Control	12	IIT Kharagpur	Prof. Siddhartha Mukhopadhyay
5	Cryptography & Network Security	12	IIT Kharagpur	Prof. Sourav Mukhopadhyay
6	Digital IC Design	12	IIT Madras	Prof. Janakiraman

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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			
First Semester											
01	MTETC101	Signal Theory	03	--	1	04	60	20	20	--	100
02	MTETC102	Radiation and Microwave Techniques	03	--	1	04	60	20	20	--	100
03	MTETC103	Signal Processing Algorithms & Applications	03	--	1	04	60	20	20	--	100
04	MTETE114	Elective-I	03	--	--	03	60	20	20	--	100
05	MTETE125	Elective-II	03	--	--	03	60	20	20	--	100
06	MTETC106	Communication Skills	02	--	--	02	--	--	25	25	50
07	MTETL107	PG Lab-I*	--	03	--	02	--	--	25	25	50
Total for Semester I			17	03	03	22	300	100	150	50	600
Second Semester											
01	MTETC201	Estimation and Detection Theory	03	--	1	04	60	20	20	--	100
02	MTETC202	Information Theory and Coding	03	--	1	04	60	20	20	--	100
03	MTETE233	Elective-III	03	--	--	03	60	20	20	--	100
04	MTETE244	Elective-IV	03	--	--	03	60	20	20	--	100
05	MTETE255	Elective-V- (Open to all)	03	--	--	03	60	20	20	--	100
06	MTETS206	Seminar-I	--	04	--	02	--	--	50	50	100
07	MTETP207	Mini-Project	--	04	--	02	--	--	50	50	100
Total for Semester II			15	8	02	21	300	100	200	100	700
Third Semester											
1	MTETC301	Project Management & Intellectual Property Rights (Self Study)#	--	--	--	02	--	--	50	50	100
2	MTETP302	Project-I	--	--	--	10	--	--	50	50	100
Total for Semester III			--	--	-	12	--	--	100	100	200
Fourth Semester											
1	MTETP401	Project-II	--	--	--	20	--	--	100	100	200
Total for Semester IV			--	--	--	20	--	--	100	100	200
GRAND TOTAL											1700

* 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.