

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>			13	05	10	100	450	550	1100	22

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

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

Sl. 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 V <sup>th</sup> Semester)
Total			11	05	12	130	430	540	1100	22

Part-I

Sub Code	Semester-I	Contact Hrs/Week				Examination Scheme						Duration of Theory Examination
	Subject	L	T	P	Total	CT	TH	TW	PR	Total	credits	
BSH201	Engineering Mathematics -III	4	--	--	4	20	80	--	--	100	4	3 Hrs
ETC202	Electronic Devices & Circuits	4	--	--	4	20	80	--	--	100	4	3 Hrs
ETC203	Analog Communication Engineering	4	--	--	4	20	80	--	--	100	4	3 Hrs
ETC204	Network Analysis	4	--	--	4	20	80	--	--	100	4	3 Hrs
ETC205	Data Structure and Linux	4	--	--	4	20	80	--	--	100	4	3 Hrs
ETC221	Lab 1: Electronic Devices & Circuits	--	--	2	2	--	--	--	50	50	1	
ETC222	Lab 2: Analog Communication Engineering	--	--	2	2	--	--	--	50	50	1	
ETC223	Lab 3: Network Analysis	--	--	2	2	--	--	--	50	50	1	
ETC224	Lab 4: Data Structure and Linux	--	--	2	2	--	--	50	--	50	1	
ETC225	Lab 5: Electronic Workshop - I	--	--	4	4	--	--	50	--	50	2	
	Total	20	--	12	32	100	400	100	150	750	26	

L: Lecture hours per week

T: Tutorial hours per

CT: Class Test

TW: Term Work

TH: University Theory Examination week

P: Practical hours per

PR: Practical/Oral Examination

DR. BABASAHEB AMBEDKAR MARATHIWADA UNIVERSITY, AURANGABAD  
FACULTY OF ENGINEERING AND TECHNOLOGY  
SECOND YEAR (EC/ECT/IE&C/IE) ENGINEERING

Sr.No	Semester-I Subject	Contact Hrs/Week				Examination Scheme (Marks)					Duration of Theory Examination
		L	T	P	Total	CT	TH	TW	P	Total	
<b>Part-I</b>											
BSH201	Engineering Maths-III	4	-	-	4	20	80	-	-	100	3 Hrs.
EXD202	Electronic Devices & Circuits-I	4	-	-	4	20	80	-	-	100	3 Hrs.
EXD203	Network Analysis	4	-	-	4	20	80	-	-	100	3 Hrs.
EXD204	Communication Engineering	4	-	-	4	20	80	-	-	100	3 Hrs.
EXD205	Data Structure	4	-	-	4	20	80	-	-	100	3 Hrs.
EXD221	Lab-1 Electronic Devices & Circuits-I	-	-	2	2	-	-	-	50	50	
EXD222	Lab-2 Network Analysis	-	-	2	2	-	-	-	50	50	
EXD223	Lab-3 Communication Engineering	-	-	2	2	-	-	-	50	50	
EXD224	Lab-4 Data Structure	-	-	2	2	-	-	50	-	50	
EXD225	Lab-5 Electronic Workshop -I	-	-	2	2	-	-	50	-	50	
<b>Total of Part - I</b>		20		10	30	100	400	100	150	750	

L: Lecture hours per week

T: Tutorial Hours per week

P: Practical hours per week

CT: Class Test

TH: University Theory Examination

TW: Term Work

P: Practical / Oral Examination

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

7	BTETL507	Control System Engineering Lab	0	0	2	--	30	20	50	I
8	BTETL508	Digital Signal Processing Lab	0	0	2	--	30	20	50	I
9	BTETL509	Microcontroller and its Applications Lab	0	0	2	--	30	20	50	I
✓ 10	BTETP510	Mini Project	0	0	2	--	30	20	50	I
11	BTETS511	Seminar	0	0	2	--	30	20	50	I
✓ 12	BTECF412	Field Training/ Internship/ Industrial Training Evaluation	--	--	--	--	--	50	50	I
<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>

FACULTY OF SCIENCE AND TECHNOLOGY

Revised Structure w.e.f. 2018-2019

T.E. (ECT/EC/E&C/IE)

Sub Code / Faculty Name	SEMESTER-V	Contact Hrs / Week				Examination Scheme						Duration of Theory Exam
	Subject	L	T	P	Total	CT	TH	TW	P	Total	Credits	
ETC 301	Electromagnetic Engineering	4	-	-	4	20	80	-	-	100	4	3 Hrs
ETC 302	Microprocessors and Microcontroller	4	-	-	4	20	80	-	-	100	4	3 Hrs
ETC303	Digital Communication	4	-	-	4	20	80	-	-	100	4	3 Hrs
ETC304	Digital Signal Processing	4	-	-	4	20	80	-	-	100	4	3 Hrs
ETC341-43	Elective I	4	-	-	4	20	80	-	-	100	4	3Hrs
ETC321	Lab I: Microprocessors and Microcontroller	-	-	2	2	-	-	-	50	50	1	
ETC322	Lab II: Digital Communication	-	-	2	2	-	-	-	50	50	1	
ETC323	LabIII: Digital Signal Processing	-	-	2	2	-	-	-	50	50	1	
ETC324-26	Lab IV: Elective -I	-	-	2	2	-	-	50	-	50	1	
BSH305	*Lab V: Communication Skills-II	-	-	2	2	-	50	-	-	50	2	
Total of semester-		20	-	10	30	100	400	100	15	750	26	
Sub Code / Faculty Name	SEMESTER-VI	Contact Hrs / Week				Examination Scheme						Duration of Theory Exam
	Subject	L	T	P	Total	CT	TH	TW	P	Total	Credits	
ETC351	Embedded System	4	-	-	4	20	80	-	-	100	4	3 Hrs
ETC352	Feedback Control System	4	-	-	4	20	80	-	-	100	4	3 Hrs
BSH353	Power Electronics and Drives	4	-	-	4	20	80	-	-	100	4	3 Hrs
ETC354	Electronic Circuit Technology	4	-	-	4	20	80	-	-	100	4	4Hrs
ETC391-93	Elective-II	4	-	-	4	20	80	-	-	100	4	3 Hrs
ETC371	Lab V: Embedded System	-	-	2	2	-	-	-	50	50	1	
ETC372	Lab VI: Feedback Control System	-	-	2	2	-	-	-	50	50	1	
ETC373	Lab VII: Power Electronics and Drives	-	-	2	2	-	-	-	50	50	1	
ETC374	Lab VIII: Electronic Circuit Technology	-	-	2	2	-	-	50	-	50	1	
ETC375	Mini Project I	-	-	2	2	-	-	50	-	50	2	
Total of semester-		20	-	10	30	100	400	100	150	750	26	
Grand Total of V& VI										1500	52	

L: Lecture hours per week T: Tutorial hours per P: Practical hours per week CT: Class Test

TH: University Theory Examination TW: Term Work P: Practical/Oral Exam

\*Lab V: Communication Skills-II- Online Exam

Elective I: Programming in JAVA (ETC341)

Information Theory and Coding (ETC342)

Computer Architecture and Operating System (ETC343)

Elective II: Robotics (ETC391)

Industrial Automation (ETC392)

Speech Processing (ETC393)

**Dr. Babasaheb Ambedkar Marathwada University Aurangabad**  
**Faculty of Engineering & Technology**  
**Tentative structure of Third Year (ECT/EC/E&C/IE)**

Sr.No.	Semester - I	Contact Hrs/Week				Examination Scheme (Marks)					Durati on of Theory Exam.
		L	T	P	Total	CT	TH	TW	PR	Total	
Sub Code	Subject										
<b>Part- I</b>											
EXD301	Digital Signal Processing	4	-	-	4	20	80	-	-	100	3 hrs.
EXD302	Electromagnetic Engineering	4	-	-	4	20	80	-	-	100	3 hrs.
EXD303	Microprocessors and Peripheral	4	-	-	4	20	80	-	-	100	3 hrs.
EXD304	Digital Communication	4	-	-	4	20	80	-	-	100	3 hrs.
EXD305	Analog Integrated Circuit and Applications	4	-	-	4	20	80	-	-	100	3 hrs.
EXD321	Lab-1- Digital Signal Processing	-	-	2	2	-	-	50	-	50	
EXD322	Lab-2- Microprocessors and Peripheral	-	-	2	2	-	-	-	50	50	
EXD323	Lab-3- Digital Communication	-	-	2	2	-	-	-	50	50	
EXD324	Lab-4- Analog Integrated Circuit and Applications	-	-	2	2	-	-	-	50	50	
BSH331	Lab-5 –Communication Skills –II	-	-	2	2	-	-	-	50	50	
Total of Part-I		20		10	30	100	400	50	200	750	
<b>Part- II</b>											
EXD351	Power Electronics	4	-	-	4	20	80	-	-	100	3 hrs.
EXD352(a)	Signal Coding & Estimation Theory (EC/ECT/E&C)	4	-	-	4	20	80	-	-	100	3 hrs.
EXD353	Advanced Processors & Microcontroller	4	-	-	4	20	80	-	-	100	3 hrs.
EXD354	Feedback Control System	4	-	-	4	20	80	-	-	100	3 hrs.
EXD352(b)	Industrial Drives & Control (IE)	4	-	-	4	20	80	-	-	100	3 hrs.
EXD355	Electronic System Design	4	-	-	4	20	80	-	-	100	3 hrs.
EXD371	Lab 1- Power Electronics	-	-	2	2	-	-	-	50	50	4 hrs.
EXD372	Lab 2 -Advanced Processors & Microcontroller	-	-	2	2	-	-	-	50	50	
EXD373	Lab 3-Feedback Control System	-	-	2	2	-	-	-	50	50	
EXD374	Lab 4- Electronic System Design	-	-	2	2	-	-	50	-	50	
EXD375	Seminar	-	-	2	2	-	-	50	-	50	
Total of Part-II		20	-	10	30	100	400	100	150	750	
Total of Part-I & II		40		20	60	200	800	150	350	1500	

Note: 1. Minimum two tests should be conducted for each theory subject and average of best two tests should be considered.  
2. If feasible, all the students shall undergo In-plant Training of two to four weeks in concerned Industry, during summer vacation. They should submit a report and give presentation on the same during Final Year.

L: Lecture hrs/ week, T: Tutorial hrs/ week, P: Practical hrs/ week, TH: University Theory Exam, TW : Term Work, PR: Practical or Oral Exam.



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
Total				14	0	14	100	240	460	800	22

# Dr. Babasaheb Ambedkar Technological University, Lonere.

## 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"> <li>Introduction to Internet of Things</li> <li>Computer Vision and Image Processing</li> <li>Biomedical Signal Processing</li> <li>Industrial Automation and Control</li> <li>Cryptography and Network Security</li> <li>Digital IC Design</li> </ul>	3	-	--	20*	20*	60*	100	3
		# Student to opt any two subjects from above list	3	-	--	20*	20*	60*	100	3
BTMEPS03	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

FACULTY OF SCIENCE AND TECHNOLOGY  
Revised Structure w.e.f. 2019-2020  
B.E. (ECT/EC/E&C/IE)

Sub Code / Faculty Name	SEMESTER-VII	Examination Scheme									Credits	Duration of Theory Exam
	Subject	L	P	Total	CT	TH	TW	P	Total			
ETC401	Digital Image Processing	4	---	4	20	80	---	---	100	4	3 Hrs	
ETC402	Microwave and Radar Engineering	4	---	4	20	80	---	---	100	4	3 Hrs	
ETC403	Advance Embedded System Design	4	---	4	20	80	---	---	100	4	3 Hrs	
ETC404	VLSI Design	4	---	4	20	80	---	---	100	4	3 Hrs	
ETC441-443	Elective - I	4	---	4	20	80	---	---	100	4	3 Hrs	
ETC421	Lab: Digital Image Processing	---	2	2	--	---	---	50	50	1	---	
ETC422	Lab: Microwave and Radar Engineering	---	2	2	--	---	25	---	25	1	---	
ETC423	Lab: Advance Embedded	---	2	2	--	---	---	50	50	1	---	
ETC424	Lab: VLSI Design	---	2	2	--	---	---	50	50	1	---	
ETC425-427	Lab: Elective - I	---	2	2	--	---	25	--	25	1	---	
ETC428	Project Part I	---	2	2	--	---	---	50	50	1	---	
Total of		20	12	32	100	400	50	200	750	26	---	
Sub Code / Faculty Name	SEMESTER-VIII	Examination Scheme									Credits	Duration of Theory Exam
	Subject	L	P	Total	CT	TH	TW	P	Total			
ETC451	Computer Network & Security	4	---	4	20	80	---	---	100	4	3 Hrs	
ETC452	Antenna Theory	4	---	4	20	80	---	---	100	4	3 Hrs	
ETC453	Wireless Mobile Communication	4	---	4	20	80	---	---	100	4	3 Hrs	
ETC491-493	Elective -II	4	---	4	20	80	---	---	100	4	3 Hrs	
ETC471	Lab: Computer Network	---	2	2	---	---	---	50	50	1	---	
ETC472	Lab: Antenna Theory	---	2	2	---	---	50	---	50	1	---	
ETC473	Lab: Wireless Mobile Communication	---	2	2	---	---	---	50	50	1	---	
ETC474-476	Lab: Elective -II	---	2	2	---	---	---	50	50	1	---	
ETC477	Project Part -II	---	6	6	---	---	50	100	150	6	---	
Total		16	14	30	80	320	100	250	750	26	---	

L: Lecture hours per week  
P: Practical/Oral Exam  
Elective I: Internet of Things (ETC441)  
AI and ML (ETC442)  
Industry 4.0 (ETC443)

P: Practical Hours per week  
TW: Term Work  
Elective II: FOC (ETC491)  
Cloud Computing (ETC492)  
Android Programing (ETC493)

**DR. BABASAHEB AMBEDKAR MARATHWADA UNIVERSITY, AURANGABAD**  
**FACULTY OF ENGINEERING AND TECHNOLOGY**  
**FINAL YEAR SYLLABUS FOR (EC/ECT/E&C) ENGINEERING**

Sr.No.	Semester - I	Contact Hrs/Week				Examination Scheme (Marks)					Duration of Theory Examination	
		L	T	P	Total	CT	TH	TW	P	Total		
<b>Part-I</b>												
EXD401	Digital Image Processing	4	-	-	4	20	80	-	-	-	100	3 hrs.
EXD402	Embedded Systems	4	-	-	4	20	80	-	-	-	100	3 hrs.
EXD403	VLSI Design	4	-	-	4	20	80	-	-	-	100	3 hrs.
EXD404	Microwave & Radar Engineering (ECT/E & C)	4	-	-	4	20	80	-	-	-	100	3 hrs.
EXD405	Robotics (EC)	4	-	-	4	20	80	-	-	-	100	3 hrs.
EXD441-4	EL-I	4	-	-	4	20	80	-	-	-	100	3 hrs.
EXD421	Lab-1- Digital Image Processing	-	-	2	2	-	-	-	-	50	50	
EXD422	Lab-2- Embedded Systems	-	-	2	2	-	-	-	-	50	50	
EXD423	Lab-3- VLSI Design	-	-	2	2	-	-	-	-	50	50	
EXD424	Lab-4- Microwave & Radar Engineering (ECT/E & C)	-	-	2	2	-	-	25	-	25	50	
EXD425	Lab-5- Robotics (EC)	-	-	2	2	-	-	25	-	25	50	
EXD426	Lab-6- EL-I	-	-	2	2	-	-	-	-	50	50	
EXD427	Lab-7- Project -I	-	-	2	2	-	-	-	-	50	50	
<b>Total of Part-I</b>		<b>20</b>	<b>-</b>	<b>12</b>	<b>32</b>	<b>100</b>	<b>400</b>	<b>50</b>	<b>200</b>	<b>750</b>		

**Elective -I**  
**ECT**

EXD 441 - Artificial Neural Network & Fuzzy Logic  
 EXD 442 - Wireless Mobile Communication  
 EXD 443 - Biomedical Electronics  
 EXD 444 - Advanced Industrial Automation  
 EXD 445 - Open Elective-I

**EC**

EXD 441 - Advanced Power  
 EXD 442 - Consumer Electronics  
 EXD 443 - Biomedical Electronics  
 EXD 444 - Advanced Industrial Automation  
 EXD 445 - Open Elective-I

**Electronics & Communication**

EXD 441 - Artificial Neural Network & Fuzzy Logic  
 EXD 442 - Wireless Mobile Communication  
 EXD 443 - Biomedical Electronics  
 EXD 444 - Advanced Industrial Automation  
 EXD 445 - Open Elective-I

Dr. U. B. Shinde  
 Chairman, Dr. BAMU, Aurangabad

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Sr.No.	Semester - II	Contact Hrs/Week				Examination Scheme (Marks)						
		Sub Code	Subject	L	T	P	Total	CT	TH	TW	P	Total
<b>Part- II</b>												
EXD451	Computer Communication Network	4	-	-	4	20	80	-	-	-	100	3 hrs.
EXD452	Optical Fiber Communication	4	-	-	4	20	80	-	-	-	100	3 hrs.
EXD453	Consumer Electronics(ICT/E& C)	4	-	-	4	20	80	-	-	-	100	3 hrs.
EXD454	Applied Digital Signal Processing (EC)	4	-	-	4	20	80	-	-	-	100	3 hrs.
EXD491	EL- II	4	-	-	4	20	80	-	-	-	100	3 hrs.
EXD471	Lab 1- Computer Communication Network	-	-	2	2	-	-	-	-	50	50	
EXD472	Lab 2 - Optical Fiber Communication	-	-	2	2	-	-	-	-	50	50	
EXD473	Lab 3-Consumer Electronics(ICT/E& C)	-	-	2	2	-	-	-	-	50	50	
EXD474	Lab 4- Applied Digital Signal Processing (EC)	-	-	2	2	-	-	-	-	50	50	
EXD475	LAB-5-EL-II	-	-	2	2	-	-	50	-	50		
EXD476	Lab 6- Project II	-	-	6	2	-	-	50	100	150		
<b>Total of Part-II</b>		16	-	14	30	80	320	100	250	750		
<b>Total of Part-I &amp; II</b>		36	-	26	62	180	720	150	450	1500		

Note: 1. Minimum two tests should be conducted for each theory subject and average of best two tests should be considered. 2. If feasible, all the students shall undergo to plant Training of two to four weeks in concerned industry, during summer vacation. They should submit a report and give presentation on the same during First Year.

L: Lecture Hours per week T: Tutorial Hours per week P: Practical Hours per week CT: Class Test  
 TE: University Theory Examination TW: Term Work P: Practical/Oral Examination

**Elective -II**

ECT

EC/E

Electronics & Communication

- EXD 491- Antenna Theory & Wave Propagation
- EXD 492- ADSP
- EXD 493 -Robotics
- EXD 494 -Satellite Communication
- EXD 495 -Open Elective-II

- EXD491 -Microwave and R EXD 491 -Antenna Theory & Wave
- EXD 492-Mobile Com EXD 492 -ADSP
- EXD 493- Satellite Commun EXD 493- Robotics
- EXD 494 -Industrial Drives EXD 494 -Satellite Communication
- EXD 495 -Open Elective-II EXD 495 -Open Elective-II

Dr. U. B. Shinde  
 Chairman, Dr. BAMU, Aurangabad

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# 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				
							Theory		IA	PR/OR	TOTAL
			TH	Test							
<b>First Semester</b>											
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	MTETC108	Communication Skills	02	--	--	02	--	--	25	25	50
07	MTETL107	PG Lab-I*	--	03	--	02	--	--	25	25	50
<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	--	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	MTEYS206	Seminar-I	--	04	--	02	--	--	50	50	100
07	MTETP207	Mini-Project	--	04	--	02	--	--	50	50	100
<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	100
2	MTETP302	Project-I	--	--	--	10	--	--	50	50	100
<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	200
<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.

**Dr Babasaheb Ambedkar Marathwada University, Aurangabad**  
Proposed Syllabus Structure of M.E. (Electronic and Telecommunication Engineering) w.e.f. Academic Year 2013-14

Semester-I

Course code	Name of the Subject	Teaching Scheme Contact hours per week				Examination scheme Marks					Duration of Theory Exam	Credit
		L	T	P	Total hrs	Theory	Class Test	Term Work	Viva voce	Total		
ME0601	Advanced Digital Signal Processing	3	1		4	80	20			100	3 Hrs	4
ME0602	Advanced Digital Communication System	3	1		4	80	20			100	3 Hrs	4
MET603	Detection & Estimation Theory	3	1		4	80	20			100	3 Hrs	4
MET604	Wireless & Mobile Communication Systems	3	1		4	80	20			100	3 Hrs	4
MET(641-643)	Elective -I	3	1		4	80	20			100	3 Hrs	4
MET621	Digital Signal Processing Simulation Lab			4	4			50	-	50		2
MET622	System Lab-I			2	2				50	50		1
MET623	Seminar-I			2	2				50	50		1
	<b>Total</b>	<b>15</b>	<b>5</b>	<b>8</b>	<b>28</b>	<b>400</b>	<b>100</b>	<b>50</b>	<b>100</b>	<b>650</b>		<b>24</b>

Semester-II

Course code	Name of the Subject	Teaching Scheme Contact hours per week				Examination scheme Marks					Duration of Theory Exam	Credit
		L	T	P	Total hrs	Theory	Class Test	Term Work	Viva voce	Total		
ME0651	Advanced Optimization Techniques	3	1		4	80	20			100	3	4
ME0652	Audio Signal Processing & Coding	3	1		4	80	20			100	3	4
MET653	Advanced Satellite Communication	3	1		4	80	20			100	3	4
ME0654	Image & Video Processing	3	1		4	80	20			100	3	4
MET691-693	Elective-II	3	1		4	80	20			100	3	4
MET671	Audio Processing & Coding Lab			4	4			50	-	50	3	4
MET672	System Lab-II			2	2				50	50		2
MET673	Seminar-II			2	2				50	50		1
	<b>Total</b>	<b>15</b>	<b>5</b>	<b>8</b>	<b>28</b>	<b>400</b>	<b>100</b>	<b>50</b>	<b>100</b>	<b>650</b>	<b>15</b>	<b>24</b>

Semester III

Course code	Name of the Subject	Teaching Scheme Hrs per week			Examination scheme Marks				Credit
		L	CH	Total hrs	Theory	Term work	Viva voce	Total	
MET 731	Dissertation Phase I	–	12	12	–	50	50	100	12
	Total	–	12	12	–	50	50	100	12

Semester IV

Course code	Name of the Subject	Teaching scheme Hrs per week			Examination scheme Marks				Credit
		L	CH	Total hrs	Theory	Term work	Viva voce	Total	
MET 781	Dissertation Phase II	–	20	20	–	100	200	300	20
	Total	–	20	20	–	100	200	300	20
	Grand Total							1700	80

Elective - I

MET641 - Advance Digital Image Processing
MET642 - CMOS VLSI Design
MET643- Digital Signal Compression

Elective - II

MET691- Embedded System Design
MET692- Pattern Recognition
MET693- Statistical Signal Processing

L: Lecture hours per week

T: Tutorial Hours per week

P: Practical hours per week

CH: Contact hours

$$\begin{aligned}
 \text{Total Credits} &= \text{SEM I} + \text{SEM II} + \text{SEM III} + \text{SEM IV} \\
 &= 24 + 24 + 12 + 20 \\
 &= 80
 \end{aligned}$$