

### **SCHOOL OF ENGINEERING AND TECHNOLOGY**

**AMBI, TALEGAON, PUNE** 

### **Department of Electronics & Telecommunication Engineering**

# B. TECH.\_ELECTRONICS AND TELECOMMUNICATION ENGINEERING \_PROGRAMME FOR ACADEMIC YEAR 2020-21

**BATCH 2020 - 2024** 

**SUBJECT BASKET** 

FIRST YEAR SEMESTER - I	FIRST YEAR SEMESTER - II	SECOND YEAR SEMESTER - III	SECOND YEAR SEMESTER - IV
Electronics & Telecommunication Engineering	Electronics & Telecommunication Engineering	Electronics & Telecommunication Engineering	Electronics & Telecommunication Engineering
Engineering Mathematics-I  Engineering Physics / Engineering Chemistry	Engineering Mathematics-II  Engineering Physics / Engineering Chemistry	Engineering Mathematics-III  Electronic Devices and circuits	Engineering Mathematics IV  Electromagnetic Field Theory & Transmission Lines
Engineering Graphics	Engineering Mechanics	Digital logic design	Analog Communication Engineering
Basic Electrical Engineering	C Programming	Feedback Control System	Discrete Time signal Processing
Basic Workshop Practices - I	English for Engineers	Electrical Networks	Linear Integrated circuits and Applications
Business Analytics	Basic Workshop Practices - II	Electronic Workshop	
	Environmental Studies		
	Economics for Engineers		

<sup>\*</sup>The School/College has all the rights to revise the syllabus/curriculum at any time.

HIRD YEAR SEMESTER - V	THIRD YEAR SEMESTER - VI	FOURTH YEAR SEMESTER - VII	FOURTH YEAR SEMESTER - VIII
Electronics & Telecommunication Engineering			
Computer Networks	Antenna Theory and Design	Optical Communication	Project stage / Internship
Digital Communication	Stream Elective-I	Stream Elective IV	
Digital Image Processing	Stream Elective-II	Stream Elective V	
Microcontrollers and Application	Stream Elective-III	Stream Elective VI	
Data Structures and Algorithms	Open Elective-I	Open Elective-II	
Professional Communication and Ethics lab		Mini Project -I	

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- STREAM & OPEN ELECTIVES (SEMESTER 6&7)

  1. Electronics and Telecommunication Engineering (Generic)

  2. Wireless Sensor Networks (WSN)

Stream Elective I - 602			Stream Elective II - 603		
S. N.	SEM 6	Code	S. N.	SEM 6	Code
1	Wireless & Mobile Comm*	602A	1	Advanced Technologies in Wireless Networks *	603A
2	Statistical Signal Processing	602B	2	Embedded Systems	603B
3	RF Design	602C	3	Machine Learning	603C
4	Radar Engineering	602D	4	Software Defined N/W	603D

Stream Elective III - 604			Open Elective I - 605			
S. N.	SEM 6	Code	S. N.	SEM 6	Code	
1	Sensor & signal conditioning*	604A	1	Computer Aided PCB Design	605A	
2	Multimedia Systems	604B	2	Network Security	605B	
3	Microwave Engineering	604C	3	EV Batteries, Standards& Testing	605C	
4	Data Base Manage System	604D	4	PLC & SCADA Applications	605D	
	Stream Elective IV - 702			Stream Elective V - 703	3	
S. N.	SEM 7	Code	S. N.	SEM 7	Code	
1	Adhoc & wireless sensor network *	702A	1	Network Protocol and routing Algorithm *	703A	
2	Internet of Things (IoT)	702B	2	Biomedical Signal Processing	703B	
3	Introduction to Deep learning	702C	3	Satellite Communication networks	703C	
4	Advanced Mobile Comm.	702D	4	Big Data Analysis	703D	
Stream Elective VI - 704		Open Elective II - 705				
S. N.	SEM 7	Code	S. N.	SEM 7	Code	
1	Cognitive Radio *	704A	1	Project Management	705A	
2	Speech Processing	704B	2	Intellectual Property Rights	705B	
3	Robotics	704C	3	Entrepreneurships & business start-ups	705C	
4	Data Compression and Encryption	704D	4	Cyber and Data Laws	705D	

Note :- \* indicates compulsory subjects for specialization in Wireless Sensor Networks

# STREAM & OPEN ELECTIVES (SEMESTER 6&7) 3. Internet of Things (IoT)

Stream Elective I - 602			Stream Elective II - 603				
S. N.	SEM 6	Code	S. N.	SEM 6	Code		
1	Machine Learning for IoT	602A	1	Embedded IOT Application	603A		
				Development			
2	Artificial Intelligence	602B	2	Advanced Sensors	603B		
3	Automotive Sensors	602C	3	Machine Learning	603C		
4	IoT Controller	602D	4	Software Defined Network	603D		
Stream Elective III - 604			Open Elective I - 605				
S. N.	SEM 6	Code	S. N.	SEM 6	Code		
1	Cloud Deployment Models in IOT	604A	1	Computer Aided PCB Design	605A		
2	Mechatronics	604B	2	Network Security	605B		
3	Cloud Computing Architecture	604C	3	EV Batteries, Standards&	605C		
				Testing			
4	Data base management system	604D	4	PLC & SCADA Applications	605D		
	Stream Elective IV - 702			Stream Elective V - 703			
S. N.	SEM 7	Code	S. N.	SEM 7	Code		
1	Industrial IoT and Application	702A	1	Network Protocol and routing	703A		
				Algorithm			
2	Deep Learning	702B	2	Biomedical Sensors	703B		
3	5G wireless System	702C	3	Neural Networks	703C		
4	Wired and Wireless System using IoT	702D	4	Big Data Analysis	703D		

Stream Elective VI - 704			Open Elective II - 705		
S. N.	SEM 7	Code	S. N.	SEM 7	Code
1	Robotics Process Automation	704A	1	Project Management	705A
2	IoT Protocols	704B	2	Intellectual Property Rights	705B
3	IOT Sensor, Devices & Components	704C	3	Entrepreneurships & business start-ups	705C
4	Data Compression and Encryption	704D	4	Cyber and Data Laws	705D