



SCHOOL OF ENGINEERING AND TECHNOLOGY

AMBI, TALEGAON, PUNE

Department of Electronics & Telecommunication Engineering

Subject Basket for M. Tech (E&TC – VLSI and Embedded Systems)

School of Engineering and Technology

Ambi, Talegaon, Pune

M. Tech (E&TC – VLSI and Embedded Systems)

Programme for Academic Year 2020 - 2021

Batch 2020 - 2022

SUBJECT BASKET

SCHOOL OF ENGINEERING AND TECHNOLOGY

AMBI, TALEGAON, PUNE

Department of Electronics & Telecommunication Engineering

Subject Basket for M. Tech (E&TC – VLSI and Embedded Systems)

FIRST YEAR SEMESTER - I	FIRST YEAR SEMESTER - II	SECOND YEAR SEMESTER - III	SECOND YEAR SEMESTER - IV
<i>M. Tech. in E&TC Engg.</i>	<i>M. Tech. in E&TC Engg.</i>	<i>M. Tech. in E&TC Engg.</i>	<i>M. Tech. in E&TC Engg.</i>
RTL Simulation and Synthesis with PLDs & FPGAs	Analog & Digital CMOS VLSI Design	Testing and Verification of VLSI Circuits	Dissertation Phase II
Microcontrollers & Programmable Digital Signal Processor	Embedded Automotive Systems	ASIC Design	
Research Methodology and IPR	Program Elective III (1) Mixed Signal IC Design (2) Embedded SoC Design (3) Low Power VLSI Design	Program Elective V (1) Communication Network (2) Reconfigurable Computing (3) Engineering Risk – Benefit Analysis (4) Selected Topics in Mathematics (5) Nano Materials & Nano Technology	
Program Elective I (1) VLSI Signal Processing (2) MOS Device Modelling and Characteristics (3) Programming Languages for Embedded Software (4) Microelectromechanical Systems	Program Elective IV (1) IOT with Artificial Intelligence (2) Network Security and Cryptography (3) Embedded Signal Processor Architecture (4) Physical Design Automation	Open Elective (1) Industrial Safety (2) Real Time Operating System (3) Advanced Processor Architecture (4) Memory Technologies	
Program Elective II (1) CAD of Digital Systems (2) System Design with Embedded Linux (3) Parallel Processing	Seminar I / Mini Project	Seminar II / Mini Project	
Audit Course I	Audit Course II	Dissertation Phase I	

Audit Course- I & II

<i>M.Tech. in E&TC Engg VLSI & Embedded Systems</i>
Disaster Management
Value Education
Constitution of India
Foreign Language
Economics for Engineers
English for Research Paper Writing
Personality Development through Life Enlightening Skills
Renewable Energy Studies