

# RAJARSHI SHAHU COLLEGE OF ENGINEERING TATHAWADE, PUNE-33



(An Autonomous Institute Affiliated to Savitribai Phule Pune University, Pune)

# Department of Electronics and Telecommunication Engineering Structure (2025 Pattern) W.e.f. 2025-26



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# Department of Electronics and Telecommunication Engineering

#### Vision

"To create an educational environment to meet the challenges of modern Electronics and Telecommunication engineering industry through state of art technical knowledge and

#### Mission

- To entrust the students with fundamentals of Electronics and Telecommunication Engineering for successful carrier
- To enable students to pursue higher education, research and promote Entrepreneurship
- To serve the nation through techno-social development.

Dr. S. C. Wagaj B.O.S. Chairman Dr. A. M. Badadhe Dean Academics





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# **Department of Electronics and Telecommunication Engineering**



# **Program Outcomes (POs)**

Engineering Post graduates will be able to:

- 1. Independently carry out research/investigation and development work to solve practical problems.
- 2. Write and present a substantial technical report/document.
- 3. Demonstrate degree of mastery over the area as per the specialization of the program.
- 4. Acknowledge the responsibility to contribute for sustainable development of society.
- 5. Engage in lifelong learning, inculcating professional practices and ethics.

## **Highlights of the Syllabus**

Curriculum of Electronics and Telecommunication Engineering course is designed in consultation with







The salient features of curriculum designed in association with KPIT, Nayan Electronics and Matrix automations.

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# JSPM

#### JSPM's

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#### Unique features of the curriculum

#### 1. Curriculum centered at Outcome Based Education:

The new Curriculum is based on student-centered instruction models that focus on measuring student performance through outcomes. The outcomes include subject knowledge, industry required skills and attitudes.

#### 2. Emphasize on Advanced courses:

The nature of the new curriculum is rigorous and well prescribed so that the students can spend more time on preparation and self-study. This will benefit them to grasp and get expertise in the most effective **Creativity and Innovation:** 

Along with experiential learning, the curriculum also motivates the students to inculcate creativity and innovation. Apart from conventional lab, the curriculum provides a freedom for students to perform industry assignments, pilot projects, innovative development, etc.

- 3. Three Tracks in M-Tech: The curriculum provides three tracks in the curriculum as
  - I. VLSI

- II. Embedded System
- **4. Industry Induced Internship Program** To support ever demanding industry requirements, the curriculum has included an industry internship with an objective to learn technologies pertaining to their discipline and enhance their technical knowledge with a support of the live platform of Industry.

#### 5. Motivation for Self Learning:

The curriculum also offers a freedom to students to take the initiatives in their learning needs and set the goals with the help of online learning platforms like MOOCs, NPTEL, Swayam, etc.

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# F Y. M. Tech (VLSI & Embedded system) Semester -I (2025 Pattern)

		Teaching Scheme			Examination Scheme				Credits	
<b>Course Code</b>	Course	ТН	TU	PR	ISE (20)	MSE (30)	ESE 50)	TW	TOTAL	TOTAL
EC5301T	Digital CMOS Design	3			20	30	50		100	3
EC5302T	Embedded System Design	3			20	30	50		100	3
EC5303T	Research Methodology and Intellectual Property Rights	3			20	30	50		100	3
EC5304T	Elective-I	3			20	30	50		100	3
EC5305T	Elective-II	3			20	30	50		100	3
EC5306L	Lab Practice I			4	ISCI	E60	40		100	2
EC5307L	Lab Practice II			2	ISCI	E30	20		50	1
EC5308L	Online course Certification			4	ISCI	E60	40		100	2
EC5309 Audit Course			Non credit							
Total		15		10					750	20

	Elective-I	Elective-II				
Code No.	Title	Code No.	Title			
EC5304T- A	Advanced Device Physics	EC5305T- A	System Design Through Verilog			
EC5304T- B	Embedded Automotive System	EC5305T- B	Embedded Product Design			

Name of Audit Courses								
Code No.	Title	Code No.	Title					
EC5309	Technical Paper writing	ME5208	Value Education In Engineering					
CE5208	Disaster Management	CS5209	Constitution of India					

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## F. Y. M. Tech. (VLSI& Embedded Systems) Semester-II (2025 Pattern)

		<b>Teaching Scheme</b>			Examination Scheme					Credits
Course Code	Course	ТН	TU	PR	ISE (20)	MSE (30)	ESE (50)	TW	TOTAL	TOTAL
EC5310T	Analog CMOS Design	3			20	30	50		100	3
EC5311T	Embedded Signal Processor Architecture	3			20	30	50		100	3
ES5204T	Advance Engineering Mathematics	3	-1		20	30	50		100	3
EC5312T	Elective-III	3			20	30	50		100	3
EC5313T	Elective-IV	3			20	30	50		100	3
EC5314L	Lab Practice III			4	ISC	E60	40	-	100	2
EC5315L	Lab Practice IV			2	ISCE30		20	-	50	1
EC5316L	Seminar	-	-	4	ISCE60		40	-	100	2
Total		15		10					750	20

	Elective-III	<b>Elective-IV</b>			
Code No.	Title	Code No.	Title		
EC5312T-A	Nano Electronics	EC5313T-A	Display Material and Technologies		
EC5312T-B	Artificial Intelligence and Machine Learning	EC5313T-B	Industrial IoT		

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