AVANTHI INSTITUTE OF ENGINEERING & TECHNOLOGY

(Autonomous)

(Approved by A.I.C.T.E., New Delhi & Permanently Affiliated to JNTU-GV, Vizianagaram)
NAAC Accredited with A+ grade
Tamaram (V), Makavarapalem, Narsipatnam (RD), Anakapalle Dist., Pin-531113.
www.avanthienggcollege.ac.in, mail: principal@avanthienggcollege.ac.in

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Minutes of the 3rd Board of Studies Meeting on Curriculum and Syllabus Approval

Mode: Through Hybrid Mode **Venue:** Conference Hall

Link:

https://us06web.zoom.us/j/9030986321?pwd=yNgcL3EMa8YbLCXp4hfvfPhHnXS1Ga.1&omn=86991349765

Date: 26/05/2026

Meeting Proceedings:

1. Welcome and introduction:

- BoS Chairman (**Dr. E. Govinda**) welcomed the BoS members along with the Principal **Dr. C.P.V.N.J. Mohan Rao**, and briefed the members about the agenda of the 3rd BoS Meeting.

2. Agenda 1: Discussion, review, and approval of the proposed curriculum for III B.Tech – I & II Semesters (ECE), under R24 Regulations, effective from the Academic Year 2026–2027.

Resolution: The BoS Chairman proposed the following course structure for III B.Tech – I Semester (ECE):

1. Linear IC Applications
2. Microprocessors and Microcontrollers
3. Linear Control Systems
4. Professional Elective – I
5. Open Elective – I
6. Linear IC Applications Lab
7. Microprocessors and Microcontrollers Lab
8. Machine Learning using Python Lab
9. Employability Skills – 1: Competitive Coding
10. Constitution of India
11. Evaluation of Community Service Internship / Industry Internship (8 weeks, II-II summer)

Professional Elective – I (any one):

1. Electronic Measurements and Instrumentation
2. Computer Architecture & Organization
3. Antenna Analysis and Design
4. Information Theory and Coding Techniques

5. 8/12-week MOOC SWAYAM / NPTEL Course recommended by BoS

The BoS Chairman further proposed the following course structure for III B.Tech – II Semester (ECE):

1. VLSI Design
2. Advanced Digital Communications
3. Professional Elective – II
4. Professional Elective – III
5. Open Elective – II
6. VLSI and HDL Design Lab
7. Advanced Digital Communications Lab
8. ARM / Arduino based Programming and Embedded C Lab
9. Employability Skills – 2: Advanced Aptitude and Communication Skills
10. Technical Paper Writing and Intellectual Property Rights

Professional Elective – II (any one):

1. DSP Processors and Architectures
2. Digital Design through HDL
3. Communication Networks
4. Embedded and Real Time Systems
5. 8/12-week MOOC SWAYAM / NPTEL Course approved by Chairman, BoS and communicated to Dean Academics

Professional Elective – III (any one):

1. Optimization Methods for Engineering Applications
2. Mobile and Cellular Communication
3. Sensors & Signal Conditioning
4. System-on-Chip Design and RTL Implementation
5. 8/12-week MOOC SWAYAM / NPTEL Course approved by Chairman, BoS and communicated to Dean Academics

- Dr. B.K.N. Srinivas and Dr. M. Hema suggested incorporating ARM Processors as part of the Microprocessors and Microcontrollers (MPMC) theory course to align the syllabus with present-day embedded systems and industry requirements.
- Dr. M. Satya Prasad raised a query regarding the availability of the Machine Learning Lab infrastructure for offering the Machine Learning using Python Lab course. The BoS Chairman clarified that the lab is already operational with sufficient computing resources.
- Dr. M. Satya Prasad raised a query on offering Machine Learning – Chip Design as Open Elective – II, citing that students may struggle with the course without prior Machine Learning fundamentals. The Principal, Dr. C.P.V.N.J. Mohan Rao, and the BoS Chairman clarified that this course is offered as an Open Elective to allied branches such as CSE, CSD, and CSM, whose students are already equipped with Machine Learning fundamentals through their core

curriculum. They further emphasized that Machine Learning is an ongoing and rapidly evolving technology reshaping VLSI and chip design, making it essential for engineering graduates to remain industry-relevant and future-ready. The BoS members were satisfied with the clarification and approved the offering of Machine Learning – Chip Design as Open Elective.

- All expert members enquired about the inclusion of NPTEL / SWAYAM courses in the proposed curriculum. The BoS Chairman and the Principal clarified that NPTEL / SWAYAM courses shall be opted from the Professional Elective basket itself, and that the BoS will take suggestions from the expert members on the specific NPTEL courses to be approved each semester.
- The BoS members unanimously approved the proposed curriculum for III B.Tech – I & II Semesters under R24 Regulations, incorporating the recommended inclusion of ARM Processors in the MPMC theory course.

3. Agenda 2: Discussion, review, and approval of the proposed curriculum for IV B.Tech – I & II Semesters (ECE), under R24 Regulations, effective from the Academic Year 2027–2028.

Resolution: The BoS Chairman proposed the following course structure for IV B.Tech – I Semester (ECE):

1. Microwave Engineering & Optical Communications
2. Digital Image and Video Processing
3. E-Waste Management (Management Course – II)
4. Professional Elective – IV
5. Open Elective – III
6. Microwave Engineering & Optical Communications Lab
7. AI Tools for Engineering Applications Lab
8. Employability Skills – 3: Corporate Readiness for IT
9. Value Education
10. Evaluation of Industry Internship (8 weeks, III-II summer)

Professional Elective – IV (any one):

1. RADAR Engineering
2. FPGA based System Design
3. Pattern Recognition & Machine Learning
4. Industrial IoT & Automation
5. 8/12-week MOOC SWAYAM / NPTEL Course approved by Chairman, BoS and communicated to Dean Academics

The BoS Chairman further proposed the following course structure for IV B.Tech – II Semester (ECE):

1. Professional Elective – V
2. Open Elective – IV
3. Internship & Project

Professional Elective – V (any one):

1. VLSI Physical Design
2. Neural Networks & Deep Learning
3. Introduction to Quantum Communication
4. Satellite Communication
5. 8/12-week MOOC SWAYAM / NPTEL Course approved by Chairman, BoS and communicated to Dean Academics

The BoS members reviewed and approved the proposed curriculum for IV B.Tech – I & II Semesters under R24 Regulations, effective from the Academic Year 2027–2028.

Open Electives (offered to other departments):

1. Global Navigation Satellite Systems
2. Introduction to Sensors and Actuators
3. Communication Systems
4. Fundamentals of Microprocessors and Microcontrollers
5. Internet of Things
6. Data Networks & Protocols
7. Introduction to MEMS
8. Introduction to Embedded Systems
9. Fundamentals of Digital Signal Processing
10. Soft Computing and Intelligent Systems
11. Electronic Design Automation Tools
12. Fundamentals of AI-IoT
13. Remote Sensing and GIS
14. Introduction to Quantum Sensing
15. Fundamentals of Cellular and Mobile Communications
16. Drone Technology
17. Fundamentals of VLSI Design
18. Machine Learning – Chip Design

Note: Students may opt for 8/12-week MOOC SWAYAM / NPTEL Course approved by Chairman, BoS and communicated to Dean Academics

The BoS members reviewed the proposed open electives offered to other departments and approved the same with no modifications.

4. Agenda 3: Continuation of M.Tech (VLSI Design) and M.Tech (DECS) curriculum under the existing R24 Regulations for the Academic Year 2026–2027.

Resolution: The BoS Chairman informed the members that the complete two-year framework for M.Tech (VLSI Design) and M.Tech (DECS) had already been approved in the 1st and 2nd BoS Meetings.

- The BoS members noted and approved the continuation of the existing M.Tech (VLSI Design) and M.Tech (DECS) curriculum without any modifications for the Academic Year 2026–2027.
- It was further recorded that the next set of Regulations (R27) shall be framed and introduced from the Academic Year 2027–2028.

5. Agenda 4: Any other academic matter and miscellaneous issues.

- Mr. L. Chandra Sekhar (Industry / Alumni nominee) mentioned that he would forward additional suggestions regarding industry-aligned electives via email.
- Dr. M. Satya Prasad suggested sharing the finalized syllabi of Microprocessors and Microcontrollers and ARM / Arduino based Programming and Embedded C Lab with industry experts to validate their relevance to Industry 4.0 applications.
- The BoS members appreciated the comprehensive structure of the proposed R24 curriculum and acknowledged its alignment with the latest AICTE Model Curriculum and NEP-2020 guidelines.

Conclusion:

- The meeting was successfully concluded. The BoS members accepted and approved the proposed III B.Tech and IV B.Tech curriculum under R24 Regulations and the detailed syllabi incorporating all recommendations of the members and the M.Tech frameworks were approved earlier; R27 Regulations will be introduced from 2027–2028.
- It was agreed to forward the final version of the course structure and syllabi to all the BoS members through email.
- BoS Chairperson Dr. E. Govinda expressed gratitude to all the members, University nominee, Academic Council nominees, Industry expert, Alumni member, and Internal faculty for their valuable inputs and contributions.

Yours truly,

(Dr. E. Govinda)

BoS Chairperson (ECE)

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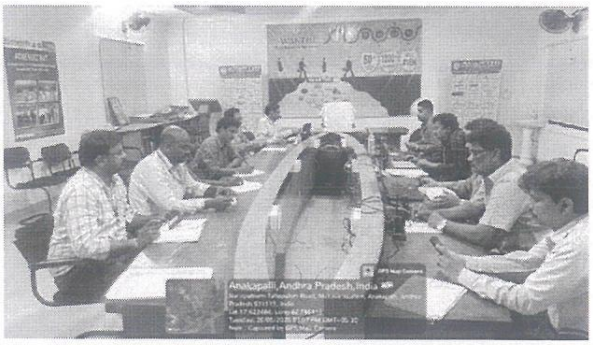

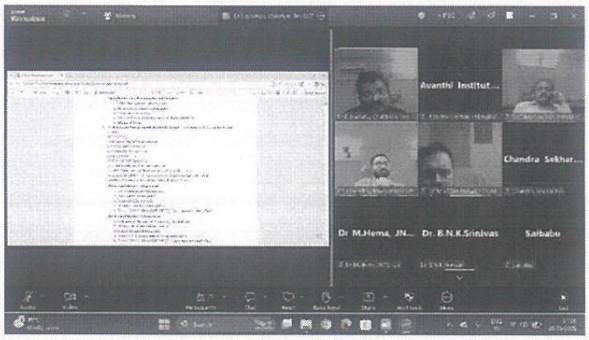

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

3rd Board of Studies Meeting

BoS Members – Academic Year: 2026-2027 to 2027-2028

Dt: 26-05-2026

S.No	NAME OF THE MEMBER & AFFILIATION	NOMINATION	SIGNATURE
1	**Dr. M. Hema** Department of Electronics and Communication Engineering Asst. Professor, JNTU-GV (CEV) A, VZM. e-Mail: mhema.ece@jntugvcev.edu.in Mobile: 9246660360	Expert member nominated by University (JNTU-GV)	
2	**Dr. M. Subrahmanyam** Department of Electrical Engineering Assistant Professor, IIT Palakkad e-Mail: svmula@iitpkd.ac.in Mobile: 9880080048	Expert member nominated by Academic Council	
3	**Dr. B. K. N. Srinivas** Department of Electronics and Communication Engineering Assistant Professor, NIT Warangal e-Mail: srinu.bkn@nitw.ac.in Mobile: 9800296596	Expert member nominated by Academic Council	
4	**Dr. M. Satya Prasad** DGM Enterprise Business, Transmission and Training BSNL, Visakhapatnam e-Mail: spmalla31@gmail.com Mobile: 9490000137	Nominated from Industry	
5	**Mr. L. Chandra Sekhar** FOUNDER & CEO, INV Technologies e-Mail: director@invtechnologies.in Mobile: 9704808143	Nominated from Alumni	
6	**Dr.C.P.V.N.J.Mohan Rao** Principal, AIET(A) Email: principal_aiet@yahoo.com Mobile: 9849147304		

(Dr. E. Govinda)
Head and BoS Chairperson
Board of Studies (ECE)

Chairperson
Board of Studies (ECE)
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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Board of Studies (Internal) : Faculty Signatures

S.NO	NAME OF THE MEMBER	SIGNATURE
1.	Dr. RAYAVARAPU PRASAD RAO	
2.	Dr. RAVI KUMAR KOLAKALURI	
3.	Dr. SEMAL SEKHAR MUMMANA	
4.	Mr. TAMARANA PATTALA NAIDU	
5.	Ms. POLAMARASETTY LALITHA	
6.	Ms. VUDIMUDI ROJA BHARATHI	
7.	Ms. SUJATHA JAKKALA	
8.	Mr. DEEPAK ADIRAJU VARAHA SANTHOSH	
9.	Ms. NATHALA NAGAMANI	
10.	Ms. POLAKI RAGHAVA KUMARI	
11.	Mr. MAKKAPATI RANGANATH SARATH	
12.	Mr. KINTHADA UMA SHANKAR	
13.	Mr. DOGGA SREENIVASA RAO	
14.	Mr. PANDIPATI PRASANT KUMAR	
15.	Ms. BELLAPUKONDA AJITHA TEJA	
16.	Ms. SISTU PHANI VARA PRASAD	
17.	Mr. ADIGARLA RAMANABABU	
18.	Mr. KAGUPATI VENKATA SIVA GANESH	
19.	Ms.DEVARAPALLI PAVANA KUMARI	
20.	Ms.BODHIREDDY SANDHYA	
21.	Mr. CHENNA PRATAP	
22.	Ms. SIREESHA RONGALI	
23.	Ms. GORLI UMA DEVI	
24.	Ms. GANTYADA NAGASUDHA	
25.	Mr. BONDA RAMESH KUMAR	
26.	Ms. KANDRAKOTA SANDHYA	
27.	Mr. PARISAM SAIBABU	

S.NO	NAME OF THE MEMBER	SIGNATURE
28.	Ms. SETTI SIRISHA	
29.	Mr. VARADA RAJU	
30.	Ms. ANUSHA DOKKARA	
31.	Ms. JAKKA VANDANA	

(Dr. E. Govinda)
Head and BoS, Chairperson

Chairperson
Board of Studies (ECE)
Avanthi Inst. of Engg. & Tech. (Autonomous)
Makavarapalem (V), Anakapalle (Dist)-531113

(Dr. C.P.V.N.J. Mohan Rao)
Principal