

## 2<sup>nd</sup> Board of Studies Meeting

29/4/2025

The Board of Studies (BOS) meeting was held through online to discuss and finalize CR24 Syllabus

for B.Tech, 2<sup>nd</sup> year and M.Tech, 2<sup>nd</sup> year on 29/4/2025

@ 4PM.

### Agenda:

1. Introduction of BOS members
2. To discuss and finalize the proposed 2<sup>nd</sup> year B.Tech I & II Semester of CR-24 Regulation.
3. To discuss and finalize the proposed 2<sup>nd</sup> year M.Tech I & II Semester VLSI Design Course of CR-24 regulation.
4. Finalization of Model paper & List of paper Setts.
5. To finalize the evaluation procedure for continuous internal evaluation (CIE) and semester end evaluation (SEE).
6. Ratification of Course Objectives and Course outcomes, CO-PO mapping for the proposed subjects.
7. Finalization of text-books & Reference books
8. Any other item with the permission of the chair

Minutes of BoS meeting:

The following resolutions are proposed by the BoS members on B. Tech Second year & M.Tech 2<sup>nd</sup> Sem Syllabus.

B.Tech, Second year I-Semester:1. Probability theory & Stochastic Process:

The following topics are deleted and added to Unit V.

Unit-III: Random Signal Response of Linear System  
System Response - Convolution, Mean & mean square value of System response, autocorrelation function of response, Cross-correlation function of I/P & O/P.

Unit-IV: Spectral characteristics of System response  
power density Spectrum of response, Cross-power density Spectrum of I/P and O/P.

The above deleted topics are added in Unit-V.

The following topics are deleted in Unit-V.

Unit-V: Entropy, Information rate, Source coding, Huffman coding, Shannon-Fano coding, Mutual information, channel Capacity of discrete channel, Shannon-Hartley law, Trade-off b/w BW and SNR.

2. Signals & Systems:

The following topics from Unit-I are deleted  
Unit-I: Analogy b/w Vectors & Signals, Orthogonal Signal space, Signal approximation using orthogonal function, Mean square error, closed or complete set of orthogonal function, orthogonality of complex function. Related problems.

These deleted topics will be added in one of the

further courses. i.e., DSP in the Semesters to come.

The following topics are added in Unit-I.

Unit-I: System properties; Causality, Stability & Linearity.

No changes are took place in the remaining units of the Syllabus.

3. No changes are took place in the rest of the courses in 2<sup>nd</sup> year 2<sup>nd</sup> Semester.

4. No change took place in "Embedded Systems & IoT" course to be handled for B.Tech, II<sup>nd</sup> year, I<sup>st</sup> Sem of Mechanical Engineering.

B.Tech, Second year, II-Semester:

No significant changes were took place in the second semester courses. Hence, the syllabus is as per INTUK R13 regulations.

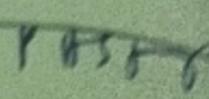
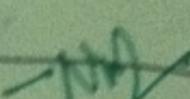
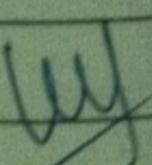
M.Tech, Second year (I & II Semesters):

No changes were took place in the M.Tech, 2<sup>nd</sup> year I, II<sup>nd</sup> Semesters. Hence, the syllabus is as per INTUK R19 regulations.

Minor & Honour Degrees:

Resolution passed to include minor & Honour degrees in the CR 24 regulations.

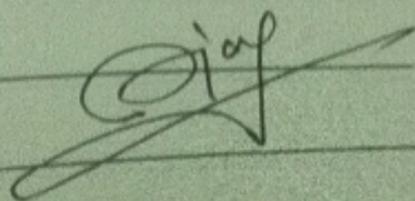
The following members are ~~attending~~ attended to 2<sup>nd</sup> Board of Studies (BOS) meeting held on 29/4/2025 @ 4PM.

- |    |   | Signature   |
|----|---|---|
| 1. | Dr. P. H. S. Tejo Murthy<br>Chairperson<br>HOD-ECE                                  |    |
| 2. | Dr. N. Balaji<br>Member, University<br>Noninee, Professor<br>ECE Dept, JNTUK        |   |
| 3. | Dr. P. Sreehari Rao<br>Member, Subject Expert<br>Professor in ECE<br>NIT, Warangal  | online  |
| 4. | Dr. P. Kishore Kumar<br>Member, Subject Expert<br>Professor, ECE Dept<br>NIT-AP     | online  |
| 5. | Dr. K. Musali Krishna<br>Member, Industrial Expert<br>HOD, Mechatronics<br>MSME, AP | online  |
| 6. | Dr. CH. Mahesh<br>Member, Alumni<br>Director, Airport<br>Authority of India         | online  |
| 7. | Dr. M. Ravi Kumar<br>Member<br>Professor, ECE Dept<br>Sir CR Reddy College of Engg. |  |

8. Dr. R. Satish Member, Professor  
Dept of ECE, CRR

L.S. 26

9. Dr. D. Ajay Kumar M.Tech Coordinator  
Assoc. Prof, Dept of ECE  
Sr CRRCOE



10. Dr. Ch. Jayaprakash Member, Assoc. Prof  
Dept. of ECE  
Sr CRRCOE.

Ch. Jayaprakash

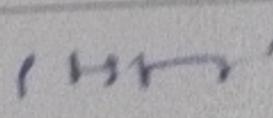
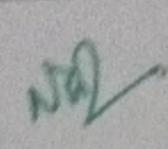
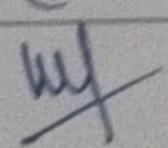
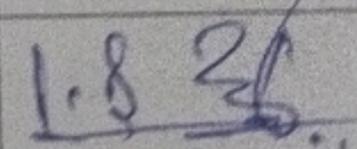
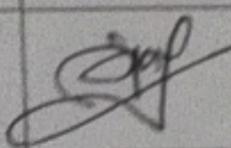
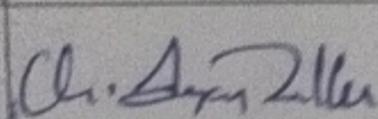
**Sir C R REDDY COLLEGE OF ENGINEERING (A)  
ELURU**

**Department of Electronics and Communication Engineering**

**Minutes of BoS Meeting**

The Board of Studies (BoS) meeting was held through online to discuss and finalize CR 24 Syllabus for B.Tech (second year) and M.Tech (second year) on 29.4.2025 at 4PM.

**Members present:**

| S. No | Name of the Member     | Designation                             | Designation                    | Signature   |
|-------|------------------------|---|--------------------------------|---|
| 1     | Dr. P.H.S.TejoMurthy   | Professor & HOD,<br>Sir CRRCOE          | Chairperson                    |    |
| 2     | Dr. N. Balaji.         | Professor in ECE<br>JNTU, Kakinada      | Member<br>(University Nominee) |  |
| 3     | Dr. P. Sreehari Rao    | Professor in ECE<br>NIT, Warangal.      | Member<br>(Subject Expert)     | on line   |
| 4     | Dr. Puli Kishore Kumar | Professor in ECE<br>NIT, T.P.Gudem      | Member<br>(Subject Expert)     | on line   |
| 5     | Dr. Murali Krishna     | HOD. Mechatronics<br>MSME,              | Member<br>(Industrial Expert)  | on line   |
| 6     | Dr. Chilaka Mahesh     | Director, Airport<br>Authority of India | Member<br>(College Alumni)     | on line<br>(Absent)   |
| 7     | Dr. M. Ravi Kumar      | Professor in ECE<br>Sir CRRCOE          | Member                         |  |
| 8     | Dr. R. Satish          | Professor in ECE<br>Sir CRRCOE          | Member                         |  |
| 9     | Dr. D. Ajay Kumar      | Assoc.Professor in ECE<br>Sir CRRCOE    | M.Tech Coordinator             |  |
| 10    | Dr. Ch. Jaya Prakash   | Assoc.Professor in ECE<br>Sir CRRCOE    | Member                         |  |

## Agenda:

1. Introduction of BOS members
2. To discuss and finalize the proposed SECOND YEAR year B. Tech I&II Semester (Theory) course of CR -24 regulations.
3. To discuss and finalize the proposed SECOND YEAR Year M. Tech. I&II Semester VLSI Design (Theory and Lab) courses of CR -24 regulations.
4. Finalization of Model Paper and List of Paper Setters.
5. To finalize the evaluation procedure for continuous internal evaluation (CIE) and semester end evaluation (SEE)
6. Ratification of Course Objectives and Course Outcomes, CO-PO Mapping for the proposed subjects.
7. Finalization of Text Books and Reference Books.
8. Any other item with the permission of the chairman.

## Minutes of BoS meeting:

The following resolutions are proposed by the BoS Members on B.Tech Second Year and M.Tech Second Year Syllabus.

### B.Tech, Second year ( I - Semester)

1. **Probability theory and stochastic process (PTSP):** The deleted topics in Unit III & IV are added in Unit V as follows as

#### **The following topics are deleted and added to Unit V**

**Unit-III:** Random Signal Response of Linear Systems: System Response – Convolution, Mean and Mean-squared Value of System Response, autocorrelation Function of Response, Cross-Correlation Functions of Input and Output.

**Unit-IV:** Spectral Characteristics of System Response: Power Density Spectrum of Response, Cross-Power Density Spectrums of Input and Output.

#### **The following topics are deleted from Unit V**

**Unit-V:** Entropy, Information rate, Source coding: Huffman coding, Shannon Fanon coding, Mutual information, Channel capacity of discrete channel, Shannon-Hartley law; Trade -off between bandwidth and SNR.

**Therefore the modified Unit: V is given as follows.**

#### **Unit-V: Linear Systems with Random inputs and Noise Sources:**

Random Signal Response of Linear Systems: System Response – Convolution, Mean and Mean-squared Value of System Response, autocorrelation Function of Response, Cross-Correlation Functions of Input and Output. Spectral Characteristics of System Response: Power Density Spectrum of Response, Cross-Power Density Spectrums of Input and Output. Resistive/Thermal Noise Source, Arbitrary Noise Sources, Effective Noise Temperature, Noise equivalent bandwidth, Average Noise Figures, Average Noise Figure of

cascaded networks, Narrow Band noise, Quadrature representation of narrow band noise & its properties.

No changes took place in remaining units.

2. **Signals and Systems:** The deleted topics in Unit I are to be added in one of the further courses. eg: DSP and new topic is added in Unit I.

### **The following topics are deleted in Unit I**

**Unit-I:** Analogy between vectors and signals, orthogonal signal space, Signal approximation using orthogonal functions, Mean square error, closed or complete set of orthogonal functions, Orthogonality in complex functions. Related problems.  
new topic is added in Unit I

### **The following topic is added in Unit I**

System properties: causality, stability and linearity.

**Therefore the modified Unit: I is given as follows.**

**Unit I: Introduction:** Definition of Signals and Systems, Classification of Signals, Classification of Systems, Operations on signals: time-shifting, time-scaling, amplitude-shifting, amplitude-scaling. Problems on classification and characteristics of Signals and Systems. Complex exponential and sinusoidal signals, Singularity functions and related functions: impulse function, step function signum function and ramp function, System properties: causality, stability and linearity.

No changes took place in remaining units.

3. No changes took place in rest of the courses. Hence the syllabus is as per JNTUK.

4. No change took place in "Embedded Systems & IoT" course to be handled for B.Tech, Second Year (I-Semester) Mechanical Engineering.

### **B.Tech, Second year ( II - Semester)**

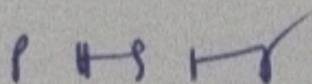
5. No changes took place in second semester courses. Hence the syllabus is as per JNTUK.

### **M.Tech, Second year ( I & II Semesters)**

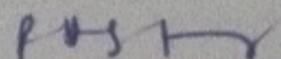
6. No changes took place in first and second semester courses. Hence the syllabus is as per JNTUK.

### **Minor and Honour Degree**

7. Resolved to include minor and honour degrees in the CR 24 Curriculum.



**BoS Chairperson**



**HOD-ECE**

Head of the Department  
Electronics & Communication Engg.  
Sir C.R.R. College of Engineering  
Eluru - 534 007