MALLA REDDY ENGINEERING COLLEGE (Autonomous)

Maisammaguda, Dhulapally (Post via Kompally), Secunderabad-500 100.

Department of Electronics and Communication Engineering

Minutes of Meeting B. Tech (ECE) - BOS

July 3rd, 2018

The 9th Board of Studies meeting for the B. Tech (ECE) - BOS was conducted on 03-07-2018 at 10.00 AM. in the conference hall, Malla Reddy Engineering College (Autonomous), Hyderabad.

The following BOS members have attended the meeting:

1.	Dr. S Sudhakara Reddy	Principal, MREC(A)	Special Invitee
2.	P.S.Indrani	Chairman-BOS, Assoc. Professor, ECED, MREC(A)	Chairman-BOS
3.	Dr. D. Srinivasa Rao	Professor & Director, Academic & Planning, ECED, JNTUHCEH, Hyderabad	University Nominee
4.	Dr. B. Rajendra Naik	Professor, ECED, OU, Hyderabad	Subject Expert
5.	Dr. J. Ravi Kumar	Professor, ECED, Dept of ECE National Institute of Technology, Warangal	Subject Expert
6.	Mr. K. Raghavendra	Sr. Manager, A&T, HAL, Hyderabad	Industry Expert
7.	Dr. T. Swapna	Professor, ECED, MREC(A)	Faculty Member
8.	Dr. T Srinivasa Reddy	Assoc. Professor, ECED, MREC(A)	Faculty Member
9.	Dr. N. Subbu Lakshmi	Assoc. Professor, ECED, MREC(A)	Faculty Member
10.	Mrs. C Silpa	Assoc. Professor, ECED, MREC(A)	Faculty Member
11.	Mr. J. Sunil Kumar	Asst. Professor, ECED, MREC(A)	Faculty Member
12	Mr. B. Shiva Kumar	Hardware Application Engineer. Unistring Tech Solutions	Alumni

The following was the agenda for the meeting.

1. Discussion and review of B. Tech (ECE) MR18 regulations course schema and syllabus.
   - Analog Electronics
   - Network Theory and Transmission lines
   - Advanced Digital Communication
   - Bio-Medical Electronics
   - JAVA Programming
   - Fundamentals Of Artificial Intelligence
   - Internet of Things(IOT) and Applications
   - ADHOC Wireless Sensor Networks
   - System on Chip Architecture
   - Wavelets & Its Applications
   - Principles Of Communication Engineering
   - Basics Of VLSI Design
   - Embedded System Design

2. Suggestion and approval of open source softwares'
3. Suggestion and approval of list of additional topics beyond the syllabus approved in the BOS and Academic council, to be covered in the class room for both theory and practical courses, that can be taught in about 3 to 5 hours / semester / course.
4. Delegation of power to the Chairman-BoS for inclusion and exclusion of any item as per requirements.
5. Approval of any other item with the permission of the Chairman.

At the outset, P.S Indrani , Assoc. Professor, ECE Department and Chairman of the B. Tech (ECE) - Board of Studies, welcomed the members to the Board of Studies meeting and appraised the purpose of the meeting. He also briefed about the previous BOS meeting, resolutions and placed on record, the existing syllabus of MR 17 regulations and also proposed modifications for MR18 regulations syllabus (Batches admitted from 2018-19 onwards).

The following resolutions are made after careful discussion and observations.

1. The BOS Members have thoroughly reviewed and discussed the Scheme of instructions, periods per week, and number of credits for all 4 years of B. Tech (ECE) course as per the guide lines of the AICTE and JNTUH, Hyderabad.

2 A After formulation of scheme of Instructions, the BOS members has reviewed and approved New courses , the following subjects are introduced for the academic year 2018-19 (MR 18).

Advanced Digital Communication
Bio-Medical Electronics
JAVA Programming
Fundamentals Of Artificial Intelligence
Internet of Things(IOT) and Applications
ADHOC Wireless Sensor Networks
System on Chip Architecture
Wavelets & Its Applications
Principles Of Communication Engineering
Basics Of VLSI Design.
Radio Frequency Circuit Design
Television and Video Engineering
Low Power VLSI Design
Digital Signal Processors and Architectures and Applications
Advanced Programmable Logic Device Architectures
CPLD and FPGA Architectures and Applications
CMOS Mixed Signal Circuit Design
Digital Control Systems

2 B The Structure and Syllabus for B.Tech MR18 batch have been approved with the following suggestions

Year	Semester	Name of the Subject	Modifications Suggested
II	I	Analog Electronics lab	The following Experiments are added 1.Voltage Shunt Feedback Amplifier 2. Common Drain Amplifier 3. Voltage Series Amplifier. 4. Current Series Amplifier
III	I	Computer Organization and Operating Systems	New Modules are added MODULE IV: Operating Systems Overview MODULE V: File System Interface
III	I	Data Communications and Computer Networks	New Modules are added MODULE I: Basics of Networking and Physical layer MODULE V: Application layer
III	I	Digital Signal Processing Lab	The following Experiments are added 1.Verification of linearity and Time Invariance Properties of a given Discrete-Time System 2.Computation of Unit Sample, Unit Step and Sinusoidal responses of the given LTI Discrete-Time System
III	II	VLSI Design Lab	The following Experiments are added 1. Design and Implementation of SISO shift registers on FPGA Board. 2. Design of Sequence Detector using Melay Machines on FPGA Board. 3. Design and Implementation of SIPO shift registers on FPGA Board 4. Design of Sequence Detector using Moore Machines on FPGA Board. 5. Design of Barrel shifter. 6. Design of Carry select adder 7. Design of Serial Multiplier 8. Design of Booth Multiplier
IV	I	Microwave Engineering and Radar Systems	New Modules are added MODULE IV: Basics of Radar MODULE V: CW Modulated Radar
IV	I	WIRELESS COMMUNICATIONS	New Modules are added MODULE IV: Capacity of Wireless Channels MODULE V: : Equalization and Diversity Techniques

3 All the BOS members have unanimously approved the department vision, department mission & programme educational objectives (PEOs) which are given below.

Item Name	Old	Modified
Department vision	Attempting to develop innovative, competent and quality electronic engineers. To impart state of art technology and to foster a climate of professionalism and ethical values.	To produce innovative, globally competent and ethical Electronics and communication Engineers to cater socio-economic needs.
Department mission	To enrich the knowledge of students through value based education and organize various effective training programs in order to compete the advanced technology and produce employable under graduates and post graduates.	To impart quality education in Electronics and Communication Engineering discipline and produce employable graduates To improve the thought process of students by exposing them to advanced technologies and make them innovative in their career To provide ethical and value-based education by encouraging activities addressing the• societal needs.
programme educational objectives (PEOs)	PEO I: Graduates should emphasize their insight in mathematics, sciences, computing and fundamentals of engineering including breadth to meet global demand and competitiveness in terms of technological aspects. PEO II: Our graduates should excel in the best post graduate schools, reaching advanced degrees in engineering and related disciplines; should have skills for continued independent, learning to become experts in their professions. PEO III: Graduates should succeed with effective communicative skills and work efficiently on team based projects in electronics, communication, computational, or manufacturing firms with a sense of social responsibility	PEO1: Graduates acquire insights into mathematics, sciences, computing and fundamentals of electronics and communication engineering including breadth to meet global demand and competitiveness in terms of technological aspects. PEO2: Graduates excel in best postgraduate schools, reaching advanced degrees in engineering and related disciplines; will have skills for continued independent, lifelong learning to become experts in their profession. PEO3: Graduates possess best communicative skills and work efficiently on team-based projects in electronics, communication, computational and manufacturing firms with a sense of social responsibility.

4 The BOS Members unanimously approved to use the following Open Source software for execution of programmes in the respective laboratories.

S. No.	Lab Name	Software Required
1	Analog Electronics	TINA /Multisim /Any Equivalent Open Source Software
2	Signals and Stochastic Process Lab	MATLAB/Octave/Any Equivalent open Source Software
3	Analog and Digital communications Lab	Octave/Any equivalent open source software
4	Micro Processors and Micro Controllers lab	MASM,KEIL & Flash Magic/ Any equivalent open source software
5	Digital Signal Processing Lab	MATLAB/Octave/Any Equivalent Open Source Software
6	VLSI Design Lab	Cadence/Xilinx/Any Equivalent Open Source Software
7	Digital Image Processing Lab	MATLAB/ Octave/ Any Equivalent Open Source Software
8	Computer Networks Lab	Packet tracer/NS-2& NS-3/ Wireshark/ Any Equivalent Open Source Software

5 The BOS members have agreed to suggest a panel for paper setters and valuers / examiners for both theory and practical of all the subjects of B. Tech (ECE) Course.

6 The BOS has also resolved for delegation of power to the Chairman of BOS for inclusion / exclusion / modification of any of the above item as per the requirements.

The following suggestions were made by the members of the Board of studies.

Finally, Dr. S. Madhu Babu, Assoc. Professor, ECE Department and Chairman of the B. Tech (ECE) - Board of Studies, expressed his sincere thanks to all the members of the Board of Studies for their active participation and contribution. The meeting concluded at 1:30 p.m.

1. Committee has suggested Based on the content of the syllabus the title of the course (Mathematics-I & Mathematics-II) must be changed.
2. Committee has suggested Electronics Workshop Instead of Engineering Workshop.
3. Committee has instructed Tuned amplifier need to be included in Analog Electronics.
4. Scripting Languages subject has to include instead of Biomedical Instrumentation
5. Digital Image Processing Lab need to be done with Python and the Raspberry Boards.
6. Committee is suggested some of the professional electives to be replaced
   Software Defined Radio
   Network Security and Cryptography
   Low Power VLSI
   Optimization Techniques

Dr. S. Madhu Babu

Chairman, B.Tech (ECE) - BOS

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