Date: 05/12/2022

MINUTES OF MEETING -BOARD OF STUDIES (BOS)

Minutes of the Meeting of the Board of Studies of Electronics and Communication Engineering held on 5th December 2022 at 10.00 AM in IQAC Room, MG Block.

Members Present:

S. No.	Name of the Faculty	Designation	Signature
1	Dr. B. Hari Krishna, Professor & HOD, ECE, SMEC.	Chairman	
2	Dr. B. Prabhakar, Professor of ECE, JNTUH, CEJ.	University Nominee	
3	Dr. K. Niranjan Reddy, Professor & HOD of ECE, CMRIT.	Educationist	
4	Dr. D. Bhaskar, Professor of ECE, CMREC.	Educationist	
5	Mr. V. Sai Charan Reddy, SOC Design Engineer, INTEL Hyderabad.	Industrialist	
6	Dr. S.V.S Rama Krishnam Raju, Professor of ECE & Dean Academics, SMEC.	Member	
7	Dr. D. Ranadheer Reddy, Professor of Mathematics & HOD, H&S, SMEC.	Member	
8	Dr. Sanjay Kumar Suman, Professor of ECE and Dean R&D, SMEC.	Faculty Member	
9	Dr. M. Thirupathi, Associate Professor of ECE, SMEC.	Faculty Member	
10	Dr. A. Chaitanya Krishna, Associate Professor of ECE, SMEC.	Faculty Member	
11	Mr. S. Ravi Kumar, Associate Professor of ECE, SMEC.	Faculty Member	
12	Mr. G. Ramesh Reddy, Associate Professor of ECE, SMEC.	Faculty Member	
13	Mr. Ch. Uneendra, Specialist Programmer, Infosys.	Alumni Member	

The Chairman of BOS Committee, Dr. B. Hari Krishna has extended a warm welcome to the University Nominee, Dr. B. Prabhakar, Professor of ECE, JNTUH, CEJ, Educationists from reputed Autonomous Institutions, Industrialist, Alumni member and all other BOS members.

The following points were discussed and approved during the meeting

1. The following SMEC R22 course structure and detailed syllabus of B.Tech ECE I-I, I-II II-I and II-II were presented, discussed and approved. The total credits for the programme were discussed, finalized and approved.

I YEAR I SEMESTER

S. No.	Course Code	Course Title	Hours per Week			Credits	Maximum Marks		
			L	T	P		Internal (CIE)	External (SEE)	Total
1	MA101BS	Matrices and Calculus	3	1	0	4	40	60	100
2	AP102BS	Applied Physics	3	1	0	4	40	60	100
3	CS108ES	C Programming for Engineers	3	0	0	3	40	60	100
4	ME107ES	Engineering Workshop	0	1	3	2.5	40	60	100
5	EN104HS	English for Skill Enhancement	2	0	0	2	40	60	100
6	EC106ES	Elements of Electronics and Communication Engineering	0	0	2	1	50	-	50
7	AP103BS	Applied Physics Laboratory	0	0	3	1.5	40	60	100
8	EN105HS	English Language and Communication Skills Laboratory	0	0	2	1	40	60	100
9	CS109ES	C Programming for Engineers Laboratory	0	0	2	1	40	60	100
		Total	**11**	**3**	**12**	**20**	**370**	**480**	**850**
Mandatory Course (Non-Credit)									
10	*CH109MC	Environmental Science	3	0	0	-	100	-	100
11		Induction Programme	-	-	-	-	-	-	-

I YEAR II SEMESTER

S. No.	Course Code	Course Title	Hours per Week			Credits	Maximum Marks		
			L	T	P		Internal (CIE)	External (SEE)	Total
1	MA201BS	Ordinary Differential Equations and Vector Calculus	3	1	0	4	40	60	100
2	CH202BS	Engineering Chemistry	3	1	0	4	40	60	100
3	ME208ES	Computer Aided Engineering Graphics	1	0	4	3	40	60	100
4	EE206ES	Basic Electrical Engineering	2	0	0	2	40	60	100
5	EC203ES	Electronic Devices and Circuits	2	0	0	2	40	60	100
6	CS208ES	Applied Python Programming Laboratory	0	1	2	2	40	60	100
7	CH204BS	Engineering Chemistry Laboratory	0	0	2	1	40	60	100
8	EE208ES	Basic Electrical Engineering Laboratory	0	0	2	1	40	60	100
9	EC204ES	Electronic Devices and Circuits Laboratory	0	0	2	1	40	60	100
		Total	**11**	**3**	**12**	**20**	**360**	**540**	**900**

***MC – Satisfactory/Unsatisfactory**

II YEAR I SEMESTER

S. No.	Course Code	Course Title	Hours per Week			Credits	Maximum Marks		
			L	T	P		Internal (CIE)	External (SEE)	Total
1	MA301BS	Numerical Methods and Complex Variables	3	1	0	4	40	60	100
2	EC302PC	Analog Circuits	3	0	0	3	40	60	100
3	EE310PC	Network analysis and Synthesis	3	0	0	3	40	60	100
4	EC303PC	Digital Logic Design	3	0	0	3	40	60	100
5	EC304PC	Signals and Systems	3	1	0	4	40	60	100
6	EC305PC	Analog Circuits Laboratory	0	0	2	1	40	60	100
7	EC306PC	Digital logic Design Laboratory	0	0	2	1	40	60	100
8	EC307ES	Basic Simulation Laboratory	0	0	2	1	40	60	100
		Total	**15**	**2**	**6**	**20**	**320**	**480**	**800**
Mandatory Course (Non-Credit)									
9	*CI309MC	Constitution of India	3	0	0	-	100	-	100

II YEAR II SEMESTER

S. No.	Course Code	Course Title	Hours per Week			Credits	Maximum Marks		
			L	T	P		Internal (CIE)	External (SEE)	Total
1	EC401ES	Probability Theory and Stochastic Processes	3	0	0	3	40	60	100
2	EC402PC	Electromagnetic Fields and Transmission Lines	3	0	0	3	40	60	100
3	EC403PC	Analog and Digital Communications	3	0	0	3	40	60	100
4	EC404PC	Linear and Digital IC Applications	3	0	0	3	40	60	100
5	EC405PC	Electronic Circuit Analysis	3	0	0	3	40	60	100
6	EC406PC	Analog and Digital Communications Laboratory	0	0	2	1	40	60	100
7	EC407PC	Linear and Digital IC Applications Laboratory	0	0	2	1	40	60	100
8	EC408PC	Electronic Circuit Analysis Laboratory	0	0	2	1	40	60	100
9	EC409PC	Real Time Project/ Field Based Project	0	0	4	2	50	-	50
		Total	**15**	**0**	**12**	**20**	**370**	**480**	**850**
Mandatory Course (Non-Credit)									
10	*GS409MC	Gender Sensitization Lab	0	0	2	-	100	-	100

***MC – Satisfied/Unsatisfied**

2. The following SMEC R22 Course Structure of B. Tech ECE III-I, III-II, IV-I and IV-II were presented, discussed and approved. The total credits for the programme were discussed, finalized and approved.

III YEAR I SEMESTER

S. No.	Course Title	Hours per Week			Credits	Maximum Marks		
		L	T	P		Internal (CIE)	External (SEE)	Total
1	Microcontrollers	3	1	0	4	40	60	100
2	IoT Architectures and Protocols	3	0	0	3	40	60	100
3	Control Systems	3	1	0	4	40	60	100
4	Business Economics & Financial Analysis	3	0	0	3	40	60	100
5	Professional Elective-I	3	0	0	3	40	60	100
6	Microcontrollers Laboratory	0	0	2	1	40	60	100
7	IoT Architectures and Protocols Laboratory	0	0	2	1	40	60	100
8	Advanced English Communication Skills Laboratory	0	0	2	1	40	60	100
	Total	**15**	**2**	**6**	**20**	**320**	**480**	**800**
Mandatory Course (Non-Credit)								
9	Intellectual Property Rights	3	0	0	0	100	-	100

III YEAR II SEMESTER

S. No.	Course Title	Hours per Week			Credits	Maximum Marks		
		L	T	P		Internal (CIE)	External (SEE)	Total
1	Antennas and Wave Propagation	3	0	0	3	40	60	100
2	Digital Signal Processing	3	0	0	3	40	60	100
3	CMOS VLSI Design	3	0	0	3	40	60	100
4	**Professional Elective II**	3	0	0	3	40	60	100
5	**Open Elective I**	3	0	0	3	40	60	100
6	Digital Signal Processing Lab	0	0	2	1	40	60	100
7	CMOS VLSI Design Lab	0	0	2	1	40	60	100
8	Advanced Communication Laboratory	0	0	2	1	40	60	100
9	Industry Oriented Mini Project/ Internship	0	0	4	2	-	100	100
	Total	**15**	**0**	**10**	**20**	**320**	**580**	**900**
Mandatory Course (Non-Credit)								
10	Environmental Science	3	0	0	0	100	-	100

***MC - Environmental Science – Should be Registered by Lateral Entry Students Only**

IV YEAR I SEMESTER

S. No.	Course Title	Hours per Week			Credits	Maximum Marks		
		L	T	P		Internal (CIE)	External (SEE)	Total
1	Microwave and Optical Communications	3	1	0	4	40	60	100
2	**Professional Elective - III**	3	0	0	3	40	60	100
3	**Professional Elective - IV**	3	0	0	3	40	60	100
4	**Open Elective - II**	3	0	0	3	40	60	100
5	Professional Practice, Law & Ethics	3	0	0	2	40	60	100
6	Microwave and Optical Communications Lab	0	0	4	2	40	60	100
7	Project Stage-I	0	0	6	3	-	-	-
	Total	**15**	**1**	**10**	**20**	**240**	**360**	**600**

IV YEAR II SEMESTER

S. No.	Course Title	Hours per Week			Credits	Maximum Marks		
		L	T	P		Internal (CIE)	External (SEE)	Total
1	**Professional Elective V**	3	0	0	3	40	60	100
2	**Professional Elective VI**	3	0	0	3	40	60	100
3	**Open Elective III**	3	0	0	3	40	60	100
4	Project Stage-II including Seminar	0	0	22	11	40	60	100
	Total	**9**	**0**	**22**	**20**	**160**	**240**	**400**

***MC – Satisfactory/Unsatisfactory**

Professional Electives:

Professional Elective – I	**Professional Elective – II**
Computer Organization & Operating Systems	Digital Image Processing
Data Communications and Computer Networks	Mobile Communications and Networks
Electronic Measurements and Instrumentation	Embedded System Design
Professional Elective – III	**Professional Elective – IV**
Radar Systems	Network Security and Cryptography
CMOS Analog IC Design	Satellite Communications
Artificial Neural Networks	Biomedical Instrumentation
Professional Elective – V	**Professional Elective – VI**
Artificial Intelligence	Multimedia Database Management Systems
5G and beyond Communication	System on Chip Architecture
Machine learning	Wireless sensor Networks

Open Electives:

Open Elective (OE – I)	Open Elective (OE – II)	Open Elective (OE – III)
Fundamentals of Internet of Things	Electronic Sensors	Measuring Instruments
Principles of Signal Processing	Electronics for Health Care	CommunicationTechnologies
Digital Electronics for Engineering	Telecommunications for Society	Fundamentals of Social Networks

3. **Suggestions.**

- Suggested to conduct hands on workshops in the Core areas of Electronics and Communication.
- Suggested to conduct Guest Lectures by Women Experts on Gender Sensitization.

The meeting ended with chairman thanking members for their lively and useful interaction to evolve a best possible course structure and syllabus for the B.Tech ECE programme.

Chairman, BoS

Dr. B. Hari Krishna

HOD, ECE

Copy to:

1. Principal
2. IQAC

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