

**Board of Studies for B. Tech. in Electronics and
Communication Engineering**

11th Meeting held on 12th July 2020 @ 10:00 AM

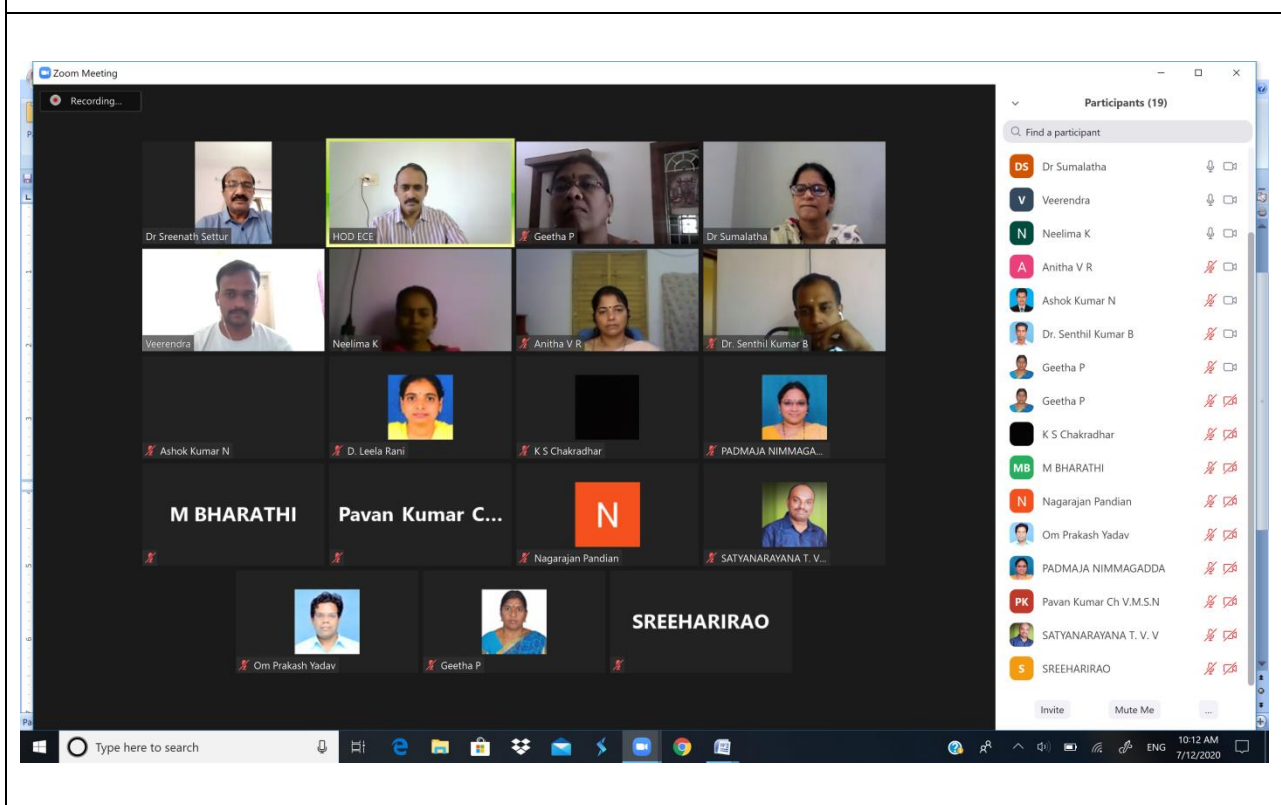
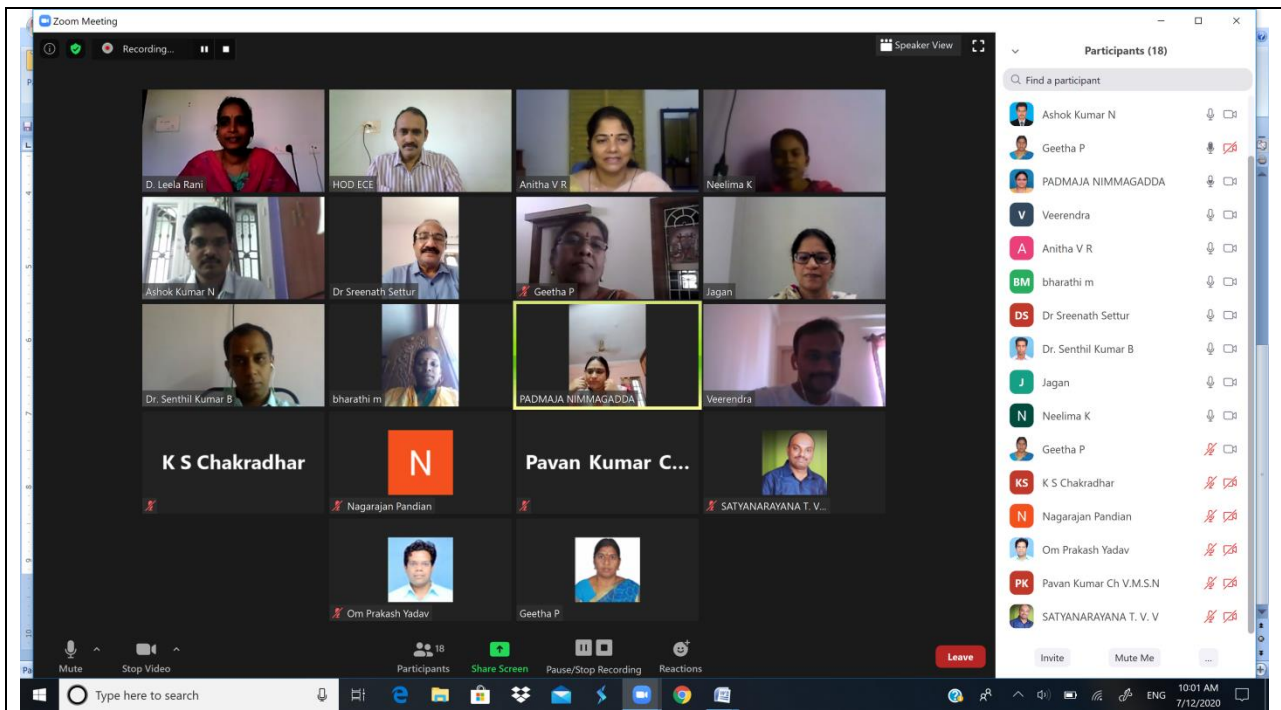
Members Present:

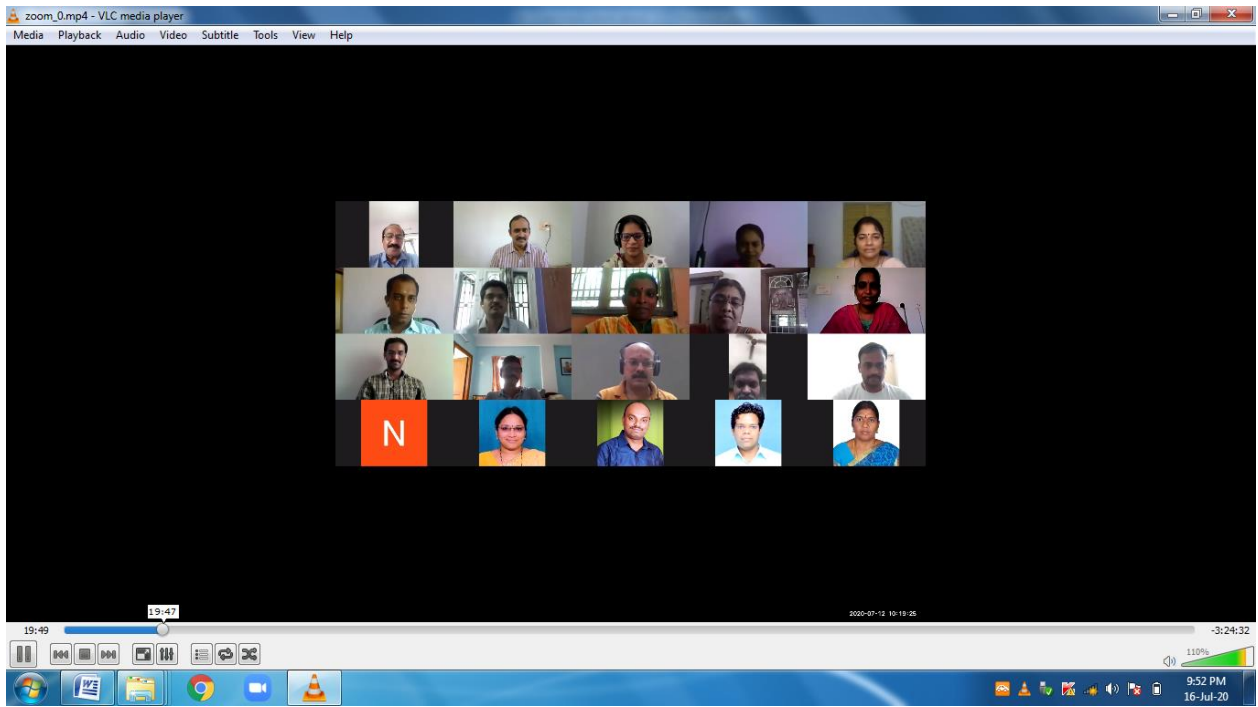
S. No.	Name and Address of the member	Member Type
1.	Dr. D. Leela Rani, Professor & Chairperson BoS Dept. of ECE. Sree Vidyanikethan Engineering College, Sree Sainath Nagar – 517102, Tirupati.	Chairperson
2.	Dr. V. Sumalatha Professor of ECE & Director (Industrial Relations and Placements), JNT University Anantapur, ANANTAPURAMU – 515002 Mail ID: dirap@jntua.ac.in Mob: +91 9440982344	External
3.	Prof. G. Sasi Bhushana Rao Senior Professor, Dept. of ECE, Andhra University College of Engineering, VISAKHAPATNAM - 530 003 Mail ID: sasigps@gmail.com Mob: +91 9849747131	External
4.	Dr. P. Sreehari Rao Associate Professor of ECE National Institute of Technology, WARANGAL-506004 Mail ID: patri@nitw.ac.in Mob: +91 9441342324	External
5.	Dr. Srinath Settur Head, Transfer of Technology, Centre for Development of Telematics (C-DOT) Electronic City, Phase-I, Hosur Road, BENGALURU – 560 100 Mail ID: sns0104@yahoo.co.in Mob: +91 9448988749	External
6.	Mr. P. Veerendra Reddy Senior Staff Design Engineer Ampere computing LLC, Kadubeesanahalli, BENGALURU -560103, Karnataka Mail ID: veeru_mtech@rediffmail.com Mob: +91 7676875449	External
7.	Dr. P. Venkata Ramana, Professor and Head, Dept.of ECE. Sree Vidyanikethan Engineering College, Sree Sainath Nagar – 517102, Tirupati.	Internal
8.	Dr. V. R. Anitha Professor, Dept. of ECE. Sree Vidyanikethan Engineering College, Sree Sainath Nagar – 517102, Tirupati.	Internal

9.	Dr. N. Padmaja, Professor, Dept. of ECE. Sree Vidyanikethan Engineering College, Sree Sainath Nagar – 517102, Tirupati.	Internal
10.	Mr. K. S. Chakradhar Associate Professor, Dept. of ECE. Sree Vidyanikethan Engineering College, Sree Sainath Nagar – 517102, Tirupati.	Internal
11.	Dr. P. Geetha Associate Professor, Dept. of ECE. Sree Vidyanikethan Engineering College, Sree Sainath Nagar – 517102, Tirupati.	Internal
12.	Dr. B. Senthil Kumar Associate Professor, Dept. of ECE. Sree Vidyanikethan Engineering College, Sree Sainath Nagar – 517102, Tirupati.	Internal
13.	Dr. V. V. Satyanarayana Tallapragada Associate Professor, Dept. of ECE. Sree Vidyanikethan Engineering College, Sree Sainath Nagar – 517102, Tirupati.	Internal
14.	Dr. N. Ashok Kumar Associate Professor, Dept. of ECE. Sree Vidyanikethan Engineering College, Sree Sainath Nagar – 517102, Tirupati.	Internal
15.	Dr. P. Nagarajan Associate Professor, Dept. of ECE. Sree Vidyanikethan Engineering College, Sree Sainath Nagar – 517102, Tirupati.	Internal
16.	Dr. TVS Gowtham Prasad Associate Professor, Dept. of ECE. Sree Vidyanikethan Engineering College, Sree Sainath Nagar – 517102, Tirupati.	Internal
17.	Dr. V. M. S. N. Pavan Kumar Ch Associate Professor, Dept. of ECE. Sree Vidyanikethan Engineering College, Sree Sainath Nagar – 517102, Tirupati.	Internal
18.	Dr. Argha Sarkar Associate Professor, Dept. of ECE. Sree Vidyanikethan Engineering College, Sree Sainath Nagar – 517102, Tirupati.	Internal
19.	Dr. Om Prakash Yadav Associate Professor, Dept. of ECE. Sree Vidyanikethan Engineering College, Sree Sainath Nagar – 517102, Tirupati.	Internal
20.	Mr. P. Madhu Kumar Assistant Professor (SL), Dept. of ECE. Sree Vidyanikethan Engineering College, Sree Sainath Nagar – 517102, Tirupati.	Internal
21.	Ms. K. Neelima Assistant Professor, Dept. of ECE. Sree Vidyanikethan Engineering College, Sree Sainath Nagar – 517102, Tirupati.	Internal
22.	Ms. M. Bharathi Assistant Professor, Dept. of ECE. Sree Vidyanikethan Engineering College, Sree Sainath Nagar – 517102, Tirupati.	Internal

11th Meeting of Board of Studies of Electronics and Communication Engineering (ECE) was conducted **through online video conferencing** using ZOOM platform on 12.07.2020. The screenshots taken during the meeting are shown below:

Screen Shots of 11th BoS Meeting, Dept. of ECE (12.07.2020)





SREE VIDYANIKETHAN ENGINEERING COLLEGE
(AUTONOMOUS)
SREE SAINATH NAGAR, A. RANGAMPET-517 102

Agenda for 11th Meeting of Board of Studies for B. Tech. (Electronics and Communication Engineering) on 12-07-2020 at 10 AM

1. Action taken report on minutes/ resolutions of 10th BOS meeting.
2. Report on implementation of autonomy with respect to syllabi & academic regulations for IV B. Tech (under SVEC16) and I B.Tech under SVEC-19 regulations.
3. Academic Calendar for II, III and IV Year B.Tech for 2020-21.
4. Vision and Mission of the Department, PEOs, POs & PSOs for B. Tech. (ECE) Program
5. Administrative set-up for B. Tech Program.
6. Syllabi with Course Objectives, Course Outcomes, Lesson Plans and Model Question Papers for the Courses of **II B. Tech** (Under SVEC-19).
7. Panel of Examiners for Question paper setting for **II B.Tech** courses (Under SVEC-19).

The screenshot also shows a Zoom meeting interface on the right side with video thumbnails for participants: HOD ECE, Dr Sreenath Settur, D. Leela Rani, and Veerendra. The name **SREEHARIRAO** is visible at the bottom of the Zoom window.

Zoom Meeting

Recording

B.Tech(ECE)-BOS Book.pdf - Adobe Acrobat Reader DC

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SREE VIDYANIKETHAN ENGINEERING COLLEGE (AUTONOMOUS)
SREE SAINATH NAGAR, A. RANGAMPET-517 102

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7. Panel of Examiners for Question paper setting for **II B.Tech** courses (Under SVEC-19).
8. Amendments to SVEC-19 B.Tech Academic Regulations
9. Implementation of Teaching, Learning and Evaluation Process.
10. Substitute Courses.

Participants (20)

Find a participant

- Dr. G Sasibhushana Rao
- Anitha V R
- Ashok Kumar N
- Dr. Senthil Kumar B
- Geetha P
- Geetha P
- K S Chakradhar
- M BHARATHI
- Nagarajan Pandian
- Neelima K
- Om Prakash Yadav
- PADMAJA NIMMAGADDA
- Pavan Kumar Ch V.M.S.N
- SATYANARAYANA T. V. V
- SREEHARIRAO
- Veerendra

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10:21 AM 7/12/2020

Zoom Meeting

Recording

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SREEHARIRAO

CO1: Design multistage amplifiers and determine Gain, Bandwidth, input and output impedances for specified applications.

CO2: Analyze negative feedback amplifiers to determine Gain, Bandwidth, Input and Output Impedances

CO3: Analyze Oscillator circuits to generate sustained oscillations

CO4: Analyze power amplifiers to determine efficiency.

CO5: Work individually and in groups to solve problems with effective communication.

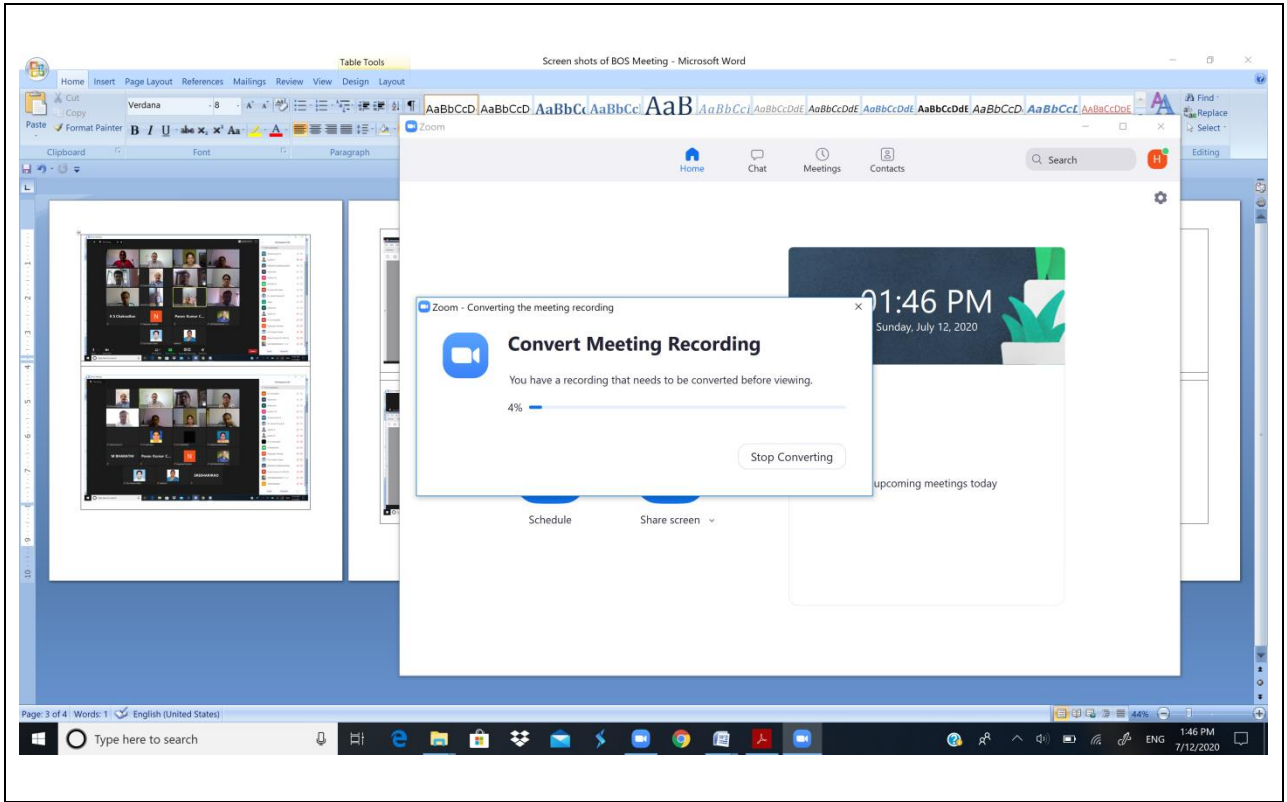
List of Exercises/List of Experiments:

Part-A: Simulation of the following circuits using simulation software
(Minimum seven Experiments are to be conducted):

1. Design Two Stage RC Coupled Amplifier
2. Design Cascode Amplifier
3. Determine Gain, Bandwidth, Input and Output Impedances of Common Source MOSFET amplifier
4. Determine Gain, Bandwidth, Input and Output Impedances of Current shunt Feedback Amplifier
5. Determine Gain, Bandwidth, Input and Output Impedances of Voltage Series Feedback Amplifier
6. Wien Bridge Oscillator using Transistors
7. RC Phase Shift Oscillator using Transistor
8. Determine efficiency of Class A Power Amplifier (Transformer less)


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12:57 PM 7/12/2020



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8. Amendments to SVEC-19 B. Tech Academic Regulations
9. Implementation of Teaching, Learning and Evaluation Process.
10. Substitute Courses.
11. Research Activities.
12. Faculty Development Activities.
13. Staff Development Activities.
14. Student Development Activities.
15. Student Support Systems.
16. Extension Activities.
17. Any other item.


Dr. D. Leela Rani
Chairperson, BOS (ECE)

Minutes:

1. Action Taken Report on minutes of 10th BOS meeting held on 10th June 2019

The Chairperson BOS appraised the members the action taken on the minutes/resolutions of 10th BOS meeting held on 10th June 2019. After deliberations the members ratified the report and the same is placed at **Annexure – I**.

2. Report on implementation of Autonomy

The Chairperson BOS presented a report on implementation of autonomy pertaining to syllabi & academic regulations for IV B. Tech (under SVEC16) and I B.Tech under SVEC-19 regulations to the members. The Chairperson BOS also briefed about the online classes handled by faculty through zoom platform for the completion of I B. Tech – II semester syllabus. The report is accepted after discussions and the same is placed at **Annexure-II**.

3. Academic Calendars

External Members of B.O.S have been apprised that due to Covid-19 pandemic, the Chairman, Academic Council is empowered to prepare the Academic calendar pertaining to I, II, III and IV B.Tech. program for the academic year 2020-21, in accordance with the A. P. State Government/APSCH/JNTUA, Ananthapuramu directives.

4. Vision and Mission of the Department, PEOs, POs and PSOs for B.Tech.(ECE) Program

The chairperson Bos has appraised the members the Vision & Mission of the Department, program Education Objectives, Program Outcomes and Program Specific Outcomes which were already approved, for continuity.

5. Administrative Setup for B.Tech Program

The Chairperson BOS appraised the members that the syllabi is prepared in a decentralized way involving all the faculty members and keeping checks at multiple levels to ensure quality output. The Administrative Setup for II, III & IV B.Tech courses under SVEC-19 regulations was presented and is placed at **Annexure-III**. The members have appreciated the efforts of the Department and ratified the same after discussions.

6. Course structure, Syllabi with Course Objectives, Course Outcomes, Lesson Plans and Model Question Papers for the Courses of II B. Tech (Under SVEC-19)

The chairperson BOS presented the Course Structure proposed by APSCH during the last academic year meeting the guidelines of AICTE, draft syllabi with Course Objectives, Course Outcomes, Lesson Plans and Model Question Papers for the Courses of II B. Tech prepared by the department. The Chairperson BOS appraised the members with the procedure followed in articulation of CEOs, COs and mapping of COs with POs & PSOs. The members have suggested certain changes in the course structure and improvements in the syllabi. After deliberations and discussions, the members have ratified the Course Structure and the same is placed at **Annexure-IV**. The suggestions given by the board are placed in **Annexure-V**. It is resolved to authorize the Chairperson BOS to adapt the improvements suggested and submit to the Chairman(Academic council) for further processing.

7. Panel of Examiners for Question paper setting for II B.Tech courses (Under SVEC-19)

The Chairperson BOS presented the Panel of Examiners for Question paper setting of II B.Tech courses (Under SVEC-19). The Chairperson BOS was suggested to submit the same to the Chairman Academic council for further processing.

8. Amendments to SVEC-19 B.Tech Academic Regulations

The Chairperson BOS presented the amendments to SVEC-19 B.Tech Academic Regulations. The members have appreciated the introduction of Assignments for attainment of program outcomes. The members suggested to follow the University guidelines in case of challenging Evaluation and Re-Registration for Improvement of Internal Marks. The amendments are ratified after discussions.

9. Teaching, Learning and Evaluation

The Chairperson BOS presented the teaching, learning and evaluation practices followed in the department. The members of BOS have appreciated the good practices followed by the department in the conduct of diagnostic and formative tests and remedial classes and suggested to continue the same. They also gave following suggestions for improvement .

1. ICT techniques to be used liberally for teaching.
2. Recording the classes and listening at least once in a month will improve the teaching skills.
3. The simulated results can be verified with Hardware results in lab courses.
4. External members suggested to conduct class review meeting to know the status of syllabus completion and to improve teaching and learning process.

10. Substitute courses

The board authorized Head of the Department and BOS chairperson to identify substitute courses for students who rejoin B.Tech program under other regulations and submit to the Chairman(Academic council) for further processing.

11. Research Activities

The Chairperson BOS has briefed the members about the research initiatives, such as thrust areas of research, research clusters and technical talks and research project sanctioned and submitted. The Chairperson BoS highlighted increase in number of projects sanctioned and applied during the present academic year. The Chairperson also appraised the members that the renowned researchers and academicians keep visiting the campus as resource persons of the sponsored STTPs, FDPs organized by the department and guide the faculty members in research activities. The members have appreciated the efforts of the college in providing such expert guidance. They also suggested to motivate more and more faculty members to publish papers in SCI-indexed and other reputed journals.

12. Faculty Development Activities

The Chairperson BOS has presented the members information on the research publications/ presentations by the faculty, books published, faculty incentives, qualification up-gradation, FDPs attended, FDPs organized, and student feedback on faculty. The members have appreciated the efforts of the department and suggested to continue the same. They suggested that proposals can be submitted to E & ICT academy to conduct FDPs in joint collaboration with NIT Warangal, so that, faculty can have interaction with Academicians and Industry experts of premier institution's and organizations. They also suggested that the faculty members should be trained to utilize Virtual Labs.

13. Staff Development Activities

The Chairperson BOS has presented the members the activities carried out under staff development. The members suggested to organize more number of staff development programs.

14. Students Development Activities

The members perused and noted the information provided on Gold medals, Guest and Expert Lectures organized, Add-on courses conducted, Student paper publications, Prizes won in Co-curricular and extra-curricular activities. The members have appreciated the student centric activities of the department and suggested to continue the same.

15. Student Support Systems

The members noted the information on good practices such as Counseling Mechanism, Training Activities by the Companies, Campus Selections, Companies visited for placement, Entrepreneurship Activities, and IIIC activities followed for all round growth and development of students. The BOS members have appreciated the proactive approach of the college in organizing the above activities for increasing the employability of the students and suggested to continue the same. They also suggested improving oral communication skills of the students by arranging seminars for better placement opportunities. Placements in core companies are suggested.

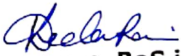
16. Extension Activities

The members have perused, noted and appreciated the efforts of department/ college in organizing professional, technical and community development activities. The BOS members have suggested to continue the same.

17. Any other item

The HOD and Chairperson BOS appraised the members that the B. Tech. program is accredited by NBA for a period of three years. The members have appreciated the efforts of the department in the quality initiatives.

Meeting concluded with thanks to the Chair.


Chairperson, BoS in ECE

SVEC-19 CURRICULUM

Course Structure for B.Tech Program
(Effective from the Academic year 2019-20 onwards)

ELECTRONICS AND COMMUNICATION ENGINEERING

Mandatory Induction Program	03 weeks duration
Induction program offered before commencement of the I-Semester course work	Physical activity
	Creative Arts
	Universal Human Values
	Literary
	Proficiency Modules
	Lectures by Eminent People
	Visits to local Areas
	Familiarization to Department/Branch and Innovations

Course Structure
Electronics and Communication Engineering
I B.Tech. – I Semester

Sl. No.	Subject Code	Course Title	Contact Periods per week				C	Scheme of Examination Max. Marks		
			L	T	P	Total		Int. Marks	Ext. Marks	Total Marks
1.	19BT1BS01	Differential Equations and Multivariable Calculus	3	1	-	4	4	40	60	100
2.	19BT1BS02	Biology for Engineers	2	-	-	2	2	40	60	100
3.	19BT1BS03	Engineering Physics	3	-	-	3	3	40	60	100
4.	19BT10341	Basic Civil and Mechanical Engineering	3	-	-	3	3	40	60	100
5.	19BT10201	Basic Electrical and Electronics Engineering	3	-	-	3	3	40	60	100
6.	19BT1BS31	Engineering Physics Lab	-	-	2	2	1	50	50	100
7.	19BT10231	Basic Electrical and Electronics Engineering Lab	-	-	2	2	1	50	50	100
8.	19BT20331	Engineering Workshop	-	-	2	2	1	50	50	100
Total:			14	1	6	21	18	350	450	800
9.	19BT1AC01	Spoken English	2	-	-	2	-	-	-	-

I B.Tech. – II Semester

Sl. No.	Subject Code	Course Title	Contact Periods per week				C	Scheme of Examination Max. Marks		
			L	T	P	Total		Int. Marks	Ext. Marks	Total Marks
1.	19BT2BS01	Transformation Techniques and Linear Algebra	3	1	-	4	4	40	60	100
2.	19BT1BS04	Engineering Chemistry	3	-	-	3	3	40	60	100
3.	19BT1HS01	Communicative English	3	-	-	3	3	40	60	100
4.	19BT10501	Programming for Problem Solving	3	1	-	4	4	40	60	100
5.	19BT20241	Network Analysis	3	1	-	4	4	40	60	100
6.	19BT1BS32	Engineering Chemistry Lab	-	-	2	2	1	50	50	100
7.	19BT1HS31	Communicative English Lab	-	-	2	2	1	50	50	100
8.	19BT10331	Computer Aided Engineering Drawing	-	1	2	3	2	50	50	100
9.	19BT10531	Programming for Problem Solving Lab	-	-	2	2	1	50	50	100
10.	19BT20251	Network Analysis Lab	-	-	2	2	1	50	50	100
Total:			15	4	10	29	24	450	550	1000

II B.Tech. – I Semester

Sl. No.	Subject Code	Course Title	Contact Periods per week				C	Scheme of Examination Max. Marks		
			L	T	P	Total		Int. Marks	Ext. Marks	Total Marks
1.	19BT3BS02	Special Functions and Complex Analysis	3	1	-	4	4	40	60	100
2.	19BT30401	Electromagnetic Fields and Transmission Lines	3	1	-	4	4	40	60	100
3.	19BT30402	Electronic Devices and Circuits	3	-	-	3	3	40	60	100
4.	19BT30403	Signals and Systems	3	-	-	3	3	40	60	100
5.	19BT30404	Switching Theory and Logic Design	3	-	-	3	3	40	60	100
6.	19BT3HS31	Soft Skills Lab	-	-	2	2	1	50	50	100
7.	19BT30431	Electromagnetic Fields and Transmission Lines Lab	-	-	2	2	1	50	50	100
8.	19BT30432	Electronic Devices and Circuits Lab	-	-	2	2	1	50	50	100
9.	19BT30433	Signals and Systems Lab	-	-	2	2	1	50	50	100
Total:			15	2	8	25	21	400	500	900
10.	19BT3MC01	Environmental Science	2	-	-	2	-	40	-	40

II B.Tech. – II Semester

Sl. No.	Subject Code	Course Title	Contact Periods per week				C	Scheme of Examination Max. Marks		
			L	T	P	Total		Int. Marks	Ext. Marks	Total Marks
1.	19BT50201	Control Systems	3	-	-	3	3	40	60	100
2.	19BT40401	Analog Communications	3	-	-	3	3	40	60	100
3.	19BT40402	Electronic Circuit Analysis and Design	3	1	-	4	4	40	60	100
4.	19BT40403	Linear and Digital IC Applications	3	-	-	3	3	40	60	100
5.	19BT40404	Probability and Stochastic Processes	3	-	-	3	3	40	60	100
6.	Open Elective – 1		3	-	-	3	3	40	60	100
7.	19BT40431	Digital Design Workshop	-	-	2	2	1	50	50	100
8.	19BT40432	Electronic Circuit Analysis and Design Lab	-	-	2	2	1	50	50	100
9.	19BT40433	Linear and Digital IC Applications Lab	-	-	2	2	1	50	50	100
Total:			18	1	6	25	22	390	510	900
10.	19BT315AC	Design Thinking	2	-	-	2	-	-	-	-

III B.Tech. – I Semester

Sl. No.	Subject Code	Course Title	Contact Periods per week				C	Scheme of Examination Max. Marks		
			L	T	P	Total		Int. Marks	Ext. Marks	Total Marks
1.	19BT50401	Digital Communications	3	-	-	3	3	40	60	100
2.	19BT50402	Digital Signal Processing	3	-	-	3	3	40	60	100
3.	19BT50403	VLSI Design	3	-	-	3	3	40	60	100
Professional Elective-1										
4.	19BT50404	Electronic Measurements and Instrumentation	3	-	-	3	3	40	60	100
	19BT50405	Fiber Optic Communications								
	19BT50406	FPGA Architectures and Applications								
	19BT50407	Radar Engineering								
5.	Open Elective-2		3	-	-	3	3	40	60	100
Inter Disciplinary Elective-1										
6.	19BT30502	Computer Organization	3	-	-	3	3	40	60	100
	19BT40501	Computer Networks								
	19BT21501	Object Oriented Programming Through Java								
	19BT50408	Microelectromechanical Systems								
7.	19BT61531	Internet of Things Lab	-	1	2	3	2	50	50	100
8.	19BT50431	Analog and Digital Communications Lab	-	-	2	2	1	50	50	100
9.	19BT50432	Socially Relevant Project-1	-	-	-	-	1	50	50	100
Total:			18	1	4	23	22	390	510	900
10.	19BT503AC	Foundations of Entrepreneurship	2	-	-	2	-	-	-	-

III B.Tech. – II Semester

Sl. No.	Subject Code	Course Title	Contact Periods per week				C	Scheme of Examination Max. Marks		
			L	T	P	Total		Int. Marks	Ext. Marks	Total Marks
1.	19BT6HS01	Principles of Business Economics and Accountancy	3	-	-	3	3	40	60	100
2.	19BT60401	Antennas and Propagation	3	-	-	3	3	40	60	100
3.	19BT60402	Microcontrollers	3	-	-	3	3	40	60	100
Professional Elective-2										
4.	19BT60403	Advanced Digital Signal Processing	3	-	-	3	3	40	60	100
	19BT60404	ARM and AVR Microcontrollers								
	19BT60405	Digital IC Design								
	19BT60406	Satellite Communications								
Professional Elective-3										
5.	19BT60407	Image Processing	3	-	-	3	3	40	60	100
	19BT60408	Nanostructures and Nanotechnology								
	19BT60409	Telecommunication Switching Systems								
	19BT60410	Testing and Testability								
Inter Disciplinary Elective-2										
6.	19BT50501	Machine Learning	3	-	-	3	3	40	60	100
	19BT60201	Power Electronics								
	19BT60502	Cryptography and Network Security								
	19BT71002	PLC and SCADA								
7.	19BT60431	Digital Signal Processing Lab	-	-	2	2	1	50	50	100
8.	19BT60432	Microcontrollers Lab	-	-	2	2	1	50	50	100
9.	19BT60433	Socially Relevant Project-2	-	-	-	-	1	50	50	100
Total:			18	-	4	22	21	390	510	900
10.	19BT5MC01	Universal Human Values	2	-	-	2	-	40	-	40

IV B.Tech. – I Semester

Sl. No.	Subject Code	Course Title	Contact Periods per week				C	Scheme of Examination Max. Marks		
			L	T	P	Total		Int. Marks	Ext. Marks	Total Marks
1.	19BT6HS02	Organizational Behavior	3	-	-	3	3	40	60	100
2.	19BT70401	Embedded Systems	3	-	-	3	3	40	60	100
3.	19BT70402	Microwave Theory and Techniques	3	-	-	3	3	40	60	100
Professional Elective-4										
4.	19BT71001	Biomedical Instrumentation								
	19BT70403	Analog IC Design	3	-	-	3	3	40	60	100
	19BT70404	Cellular and Mobile communications								
	19BT70405	Speech Processing								
Professional Elective-5										
5.	19BT70406	Adaptive Signal Processing								
	19BT70407	Information Theory and Coding Techniques	3	-	-	3	3	40	60	100
	19BT70408	Low Power CMOS VLSI Design								
	19BT70409	Real Time Operating Systems								
6.	19BT7MOOC	MOOC	-	-	-	-	3	-	100	100
7.	19BT70431	Antennas and Microwave Engineering Lab	-	-	2	2	1	50	50	100
8.	19BT70432	Embedded Systems Lab	-	-	2	2	1	50	50	100
9.	19BT70433	Internship	-	-	-	-	2	-	100	100
Total:			15	-	4	19	22	300	600	900
10.	19BT704AC	Principles of Operating Systems	2	-	-	2	-	-	-	-

IV B.Tech. – II Semester

Sl. No.	Subject Code	Course Title	Contact Periods per week				C	Scheme of Examination Max. Marks		
			L	T	P	Total		Int. Marks	Ext. Marks	Total Marks
1.	19BT80431	Project Work	-	-	-	-	10	100	100	200
Total:			-	-	-	-	10	100	100	200

LIST OF COURSES FOR **OPEN ELECTIVE-1 and OPEN ELECTIVE-2**

Course Code	Open Elective -1	Course Code	Open Elective -2
19BT4BS01	Material Science	19BT4HS01	Banking and Insurance
19BT4HS02	Business Communication and Career Skills	19BT4HS03	Cost Accounting and Financial Management
19BT4HS04	Entrepreneurship for Micro, Small and Medium Enterprises	19BT4HS05	Gender and Environment
19BT4HS06	German Language	19BT4HS07	Indian Economy
19BT4HS08	Indian History	19BT4HS09	Life Skills
19BT4HS10	Personality Development	19BT4HS11	Professional Ethics
19BT4HS12	Women Empowerment	19BT4HS13	Indian Tradition and Culture
19BT4HS14	Constitution of India	19BT40106	Disaster Mitigation and Management
19BT40205	Reliability and Safety Engineering	19BT40107	Sustainable Engineering
19BT50107	Environmental Pollution and Control	19BT40108	Contract Laws and Regulations
19BT50108	Planning for Sustainable Development	19BT40306	Global Strategy and Technology
19BT50109	Rural Technology	19BT40307	Management Science
19BT50505	Ethical Hacking	19BT40504	Cyber Laws and Security
19BT51207	AI in Healthcare	19BT50208	Intellectual Property Rights
19BT51506	Bioinformatics	19BT50409	Green Technologies

MINOR/HONORS DEGREE

IN VLSI AND EMBEDDED SYSTEMS

Semester	Course code	Course title	Minor/ Honors	Contact Periods per week				Scheme of Examination Max. Marks		
				L	T	P	C	Int. Marks	Ext. Marks	Total Marks
III B.Tech I-Sem	19BT50405	FPGA Architectures and Applications	Minor/ Honor	3	-	-	3	40	60	100
	19BT50410	Analog VLSI	Minor/ Honor	3	-	-	3	40	60	100
	19BT50411	Digital VLSI design	Minor	3	-	-	3	40	60	100
	19BT50412	Microprocessors and Microcontrollers	Minor	3	-	-	3	40	60	100
	19BT50433	VLSI Lab-1	Minor/ Honor	-	-	2	1	40	60	100
III B.Tech II-Sem	19BT60404	ARM and AVR Microcontrollers	Minor/ Honor	3	-	-	3	40	60	100
	19BT60411	ASIC Design	Minor/ Honor	3	-	-	3	40	60	100
	19BT60412	System-on-Chip Design	Minor/ Honor	3	-	-	3	40	60	100
	19BT60413	VLSI Testability	Minor/ Honor	3	-	-	3	40	60	100
	19BT60434	VLSI Lab-2	Minor/ Honor	-	-	2	1	40	60	100
IV B.Tech I-Sem	19BT70410	Robotics	Minor/ Honor	3	-	-	3	40	60	100
	19BT70434	Robotics Lab	Minor/ Honor	-	-	2	1	40	60	100

Note: If any student has chosen a CORE course from the above list in their curriculum then, he/she is not eligible to opt the same course/s for the Minor/Honor degree.


 Dr.D.Leela Rani
 Chairperson, BOS(ECE)

LIST OF NEW COURSES INTRODUCED

Program: B.Tech.- Electronics and Communication Engineering

Regulations : SVEC-19 (upto II B.Tech-II semester)

Course Code	Name of the course
19BT10201	Basic Electrical and Electronics Engineering
19BT10231	Basic Electrical and Electronics Engineering Lab
19BT10341	Basic Civil and Mechanical Engineering
19BT10501	Programming for Problem Solving
19BT10531	Programming for Problem Solving Lab
19BT1AC01	Spoken English
19BT1BS02	Biology for Engineers
19BT30431	Electromagnetic Fields and Transmission Lines Lab
19BT315AC	Design Thinking
19BT40403	Linear and Digital IC Applications
19BT40431	Digital Design Workshop
19BT4BS01	Material Science
19BT4HS05	Gender & Environment
19BT4HS09	Life Skills
19BT4HS11	Professional Ethics
19BT4HS12	Women Empowerment
19BT40107	Sustainable Engineering


Dr.D.Leela Rani
Chairperson, BOS(ECE)