

## SREE VIDYANIKETHAN ENGINEERING COLLEGE

(Autonomous)  
Sree Sainath Nagar, A. Rangampet-517 102

### Convening 9<sup>th</sup> Meeting of Board of Studies for B. Tech. in Electronics and Communication Engineering

As Chairman of Board of Studies for B. Tech. in ECE, I convene 9<sup>th</sup> meeting.

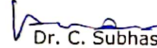
**Venue** : ECE Dept. ECAD Laboratory

**Date & Time**: 29.5.2018 @ 9:30 AM

**Agenda** :

1. Action taken report on minutes/ resolutions of 8<sup>th</sup> BOS meeting.
2. Report on implementation of autonomy with respect to syllabi and regulations (SVEC16 II B. Tech. & SVEC14 IV B. Tech.).
3. B. Tech. Academic Calendar for 2018-19.
4. AICTE Model Curriculum-2018 based Induction Training, Course Structure and Syllabi.
5. Teaching, Learning and Evaluation.
6. Research Activities.
7. Faculty Development Activities.
8. Staff Development Activities.
9. Student Development Activities.
10. Student Support Systems.
11. Extension Activities.
12. Any other item.




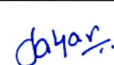

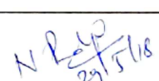
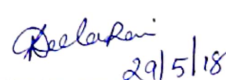

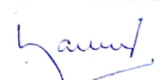
All the members of Board of Studies are requested to attend the meeting and give valuable suggestions.

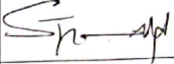

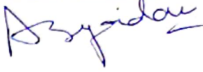


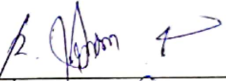
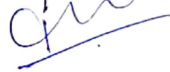


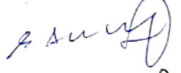
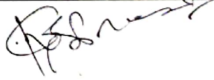
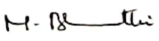
  
Dr. C. Subhas  
Chairman (BOS)

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

**9<sup>th</sup> Meeting held on 29<sup>th</sup> May 2018 @ 9:30AM**

**Members Present:**

S.No.	Name and Address of the member	Signature
1.	<b>Dr. C. Subhas,</b> Professor of ECE & Dean (Academics), Sree Vidyanikethan Engineering College, Sree Sainath Nagar – 517102, Tirupati.	
2.	<b>Dr. N. V. S. Narasimha Sarma</b> Professor of ECE National Institute of Technology Warangal WARANGAL – 506 004	
3.	<b>Dr. Srinath Settur</b> Head, Transfer of Technology, Centre for Development of Telematics (C-DOT) Electronic City, Phase-I, Hosur Road, BENGALURU – 560 100	
4.	<b>Mr. K. Sagar</b> Design Engineer-II Advanced Micro Devices India Pvt. Ltd. Building No. 11, Mind Space, Madhapur HYDERABAD – 500 081	
5.	<b>Dr. P. Venkata Ramana,</b> Professor and Head, Dept. of ECE. Sree Vidyanikethan Engineering College, Sree Sainath Nagar – 517102, Tirupati.	
6.	<b>Dr. N. Padmaja,</b> Professor, Dept. of ECE. Sree Vidyanikethan Engineering College, Sree Sainath Nagar – 517102, Tirupati.	
7.	<b>Dr. D. Leela Rani,</b> Professor, Dept. of ECE. Sree Vidyanikethan Engineering College, Sree Sainath Nagar – 517102, Tirupati.	
8.	<b>Dr. N. Gireesh,</b> Professor, Dept. of ECE. Sree Vidyanikethan Engineering College, Sree Sainath Nagar – 517102, Tirupati.	
9.	<b>Mr. K. S. Chakradhar</b> Associate Professor, Dept. of ECE. Sree Vidyanikethan Engineering College, Sree Sainath Nagar – 517102, Tirupati.	

10.	<b>Mr. S. Tulasi Prasad,</b> Associate Professor, Dept. of ECE. Sree Vidyanikethan Engineering College, Sree Sainath Nagar – 517102, Tirupati.	
11.	<b>Dr. P. Geetha</b> Associate Professor, Dept. of ECE. Sree Vidyanikethan Engineering College, Sree Sainath Nagar – 517102, Tirupati.	
12.	<b>Dr. A. B. Yadav</b> Associate Professor, Dept. of ECE. Sree Vidyanikethan Engineering College, Sree Sainath Nagar – 517102, Tirupati.	
13.	<b>Dr. P. Srinivasa Rao,</b> Associate Professor, Dept. of ECE. Sree Vidyanikethan Engineering College, Sree Sainath Nagar – 517102, Tirupati.	
14.	<b>Dr. N. Vithya Lakshmi,</b> Associate Professor, Dept. of ECE. Sree Vidyanikethan Engineering College, Sree Sainath Nagar – 517102, Tirupati.	
15.	<b>Dr. B. Senthil Kumar</b> Associate Professor, Dept. of ECE. Sree Vidyanikethan Engineering College, Sree Sainath Nagar – 517102, Tirupati.	
16.	<b>Dr. V. V. Satyanarayana Tallapragada</b> Associate Professor, Dept. of ECE. Sree Vidyanikethan Engineering College, Sree Sainath Nagar – 517102, Tirupati.	
17.	<b>Dr. N. Ashok Kumar</b> Associate Professor, Dept. of ECE. Sree Vidyanikethan Engineering College, Sree Sainath Nagar – 517102, Tirupati.	
18.	<b>Dr. P. Nagarajan</b> Associate Professor, Dept. of ECE. Sree Vidyanikethan Engineering College, Sree Sainath Nagar – 517102, Tirupati.	
19.	<b>Dr. G. Arul Elango</b> Associate Professor, Dept. of ECE. Sree Vidyanikethan Engineering College, Sree Sainath Nagar – 517102, Tirupati.	
20.	<b>Dr. TVS Gowtham Prasad</b> Associate Professor, Dept. of ECE. Sree Vidyanikethan Engineering College, Sree Sainath Nagar – 517102, Tirupati.	
21.	<b>Ms. M. Bharathi</b> Assistant Professor, Dept. of ECE. Sree Vidyanikethan Engineering College, Sree Sainath Nagar – 517102, Tirupati.	

**Minutes:**

- 1. Action Taken Report on minutes of 8<sup>th</sup> BOS meeting held on 22<sup>nd</sup> March 2017**

The Chairman BOS appraised the members the action taken on the minutes/ resolutions of 8<sup>th</sup> BOS meeting held on 22<sup>nd</sup> March 2017. After deliberations the members ratified the report and the same is placed at Annexure – I.

## **2. Report on implementation of Autonomy**

The Chairman BOS presented a report on implementation of autonomy pertaining to SVEC14 regulations and course structure & syllabi for IV years and SVEC16 regulations and course structure & syllabi for II years to the members. The report is accepted after discussions and the same is placed at Annexure-II.

## **3. Academic Calendars**

The Chairman BOS presented the members the academic calendars for II, III and IV B. Tech. classes for the academic year 2018-'19. After deliberations and discussions the calendars are recommended for approval by AC and the same are placed at Annexure-III. As the admission dates are not finalized for I B. Tech. classes during the academic year 2018-'19, it is resolved to authorize the Chairman BOS to prepare academic calendar for I B. Tech. and to submit to the Chairman (Academic Council) for approval.

## **4. Induction Program**

The Chairman BOS has appraised the members the induction program suggested by AICTE in its model curriculum - 2018. After deliberations and discussions, the members suggested that the philosophy behind the AICTE suggested induction training can be adapted suiting to the local conditions (infrastructure/ student quality/ residential/ non-residential campus etc.) for our students and it is not necessarily to take it as it is. The outline of the induction program is placed at Annexure-IV.

## **5. AICTE Model Curriculum**

The Chairman BOS presented the tentative course structure, placed at Annexure-V, prepared based on AICTE model curriculum and requested the members for deliberations on adaptability. After deliberations and discussions, the members have made certain suggestions which are placed at Annexure-VI. The suggestions will be considered while preparing the curriculum to be implemented from the academic year 2019-20. It is resolved to recommend model curriculum to AC for further deliberations on adaptability.

## **6. Teaching, Learning and Evaluation**

The Chairman 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. Faculty should continuously improve their teaching skills, communication skills, body language, board management etc.
2. Interaction among faculties handling the same subjects are required.
3. ICT techniques to be used liberally for teaching.
4. Recording the classes and listening at least once in a month will improve the teaching skills.
5. The simulated results can be verified with Hardware results in lab courses.

## **7. Research Activities**

The Chairman 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 Chairman BoS highlighted increase in number of projects sanctioned and applied during the present academic year. The chairman also appraised the members that the renowned researchers namely Dr. Prahlada, Dr. Lazar Mathew and Dr. Madhusudan V Atre keep visiting the campus for guiding 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.

## **8. Faculty Development Activities**

The Chairman 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 also suggested that more orientation towards Pedagogy is required and the faculty members should be trained to utilize Virtual Labs of AICTE model curriculum.

## **9. Staff Development Activities**

The Chairman BOS has presented the members the staff development programs organized and attended. The members have appreciated the efforts of the department and suggested to continue the same.

## **10. 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.

## **11. Student Support Systems**

The members noted the information on good practices such as Counseling Mechanism, CPRS, 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.

## **12. 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.



### **13. Quality Initiatives**

The Chairman BOS appraised the members that the B. Tech. program is accredited by NBA for a period of three years w.e.f. 01.07.2017. The Chairman BOS also appraised the members that the NAAC peer team is visiting the college in the month of July 2018 for first round of reaccreditation. The members have appreciated the efforts of the department in the quality initiatives. They suggested to work for six years of accreditation next time. The feedback from the committee has to be followed for further improvement.

Meeting concluded with thanks to the Chair.

  
Chairman, BoS in ECE

**SREE VIDYANIKETHAN ENGINEERING COLLEGE**

(Autonomous)

Sree Sainath Nagar, Tirupati – 517 102.

**Department of Electronics and Communication Engineering****SVEC16 B. Tech. Course Structure**

S. No.	Course Code	Course Title	Contact Periods/ Week				Credits (C)	Scheme of Examination Max. Marks		
			L	T	P	Total		Internal Marks	External Marks	Total Marks
<b>I Year - I Semester</b>										
1.	16BT1BS02	Engineering Physics	3	1	-	4	3	30	70	100
2.	16BT1BS03	Matrices and Numerical Methods	3	1	-	4	3	30	70	100
3.	16BT1BS04	Multi-variable calculus and Differential equations	3	1	-	4	3	30	70	100
4.	16BT10241	Network Analysis	4	1	-	5	4	30	70	100
5.	16BT10501	Programming in C	3	1	-	4	3	30	70	100
6.	16BT1BS32	Engineering Physics Lab	-	-	3	3	2	50	50	100
7.	16BT10232	Electrical and Electronics Workshop Practice	-	-	3	3	2	50	50	100
8.	16BT10251	Network Analysis Lab	-	-	3	3	2	50	50	100
9.	16BT10531	Programming in C Lab	-	-	3	3	2	50	50	100
<b>Total</b>			<b>16</b>	<b>5</b>	<b>12</b>	<b>33</b>	<b>24</b>	<b>350</b>	<b>550</b>	<b>900</b>

S. No.	Course Code	Course Title	Contact Periods/ Week				Credits (C)	Scheme of Examination Max. Marks		
			L	T	P	Total		Internal Marks	External Marks	Total Marks
<b>I Year - II Semester</b>										
1.	16BT1HS01	Technical English	3	1	-	4	3	30	70	100
2.	16BT1BS01	Engineering Chemistry	3	1	-	4	3	30	70	100
3.	16BT2BS01	Transformation Techniques and Partial Differential Equations	3	1	-	4	3	30	70	100
4.	16BT20401	Electronic Devices and Circuits	3	1	-	4	3	30	70	100
5.	16BT20541	Foundations of Data Structures	3	1	-	4	3	30	70	100
6.	16BT1HS31	English Language Lab	-	-	3	3	2	50	50	100
7.	16BT1BS31	Engineering Chemistry Lab	-	-	3	3	2	50	50	100
8.	16BT10331	Computer Aided Engineering Drawing	-	1	6	7	3	50	50	100
9.	16BT20551	Foundations of Data structures Lab	-	-	3	3	2	50	50	100
<b>Total</b>			<b>15</b>	<b>6</b>	<b>15</b>	<b>36</b>	<b>24</b>	<b>350</b>	<b>550</b>	<b>900</b>

S. No.	Course Code	Course Title	Contact Periods/ Week				Credits (C)	Scheme of Examination Max. Marks		
			L	T	P	Total		Internal Marks	External Marks	Total Marks
<b>II Year - I Semester</b>										
1.	16BT3HS01	Environmental Studies	3	-	-	3	3	30	70	100
2.	16BT3BS02	Special Functions and Complex Analysis	3	1	-	4	3	30	70	100
3.	16BT30401	Electronic Circuit Analysis and Design	3	1	-	4	3	30	70	100
4.	16BT30402	Signals and Systems	3	1	-	4	3	30	70	100
5.	16BT30403	Switching Theory and Logic Design	3	1	-	4	3	30	70	100
6.	16BT30241	Electrical Technology	3	1	-	4	3	30	70	100
7.	16BT30251	Electrical Technology Lab	-	-	3	3	2	50	50	100
8.	16BT30431	Basic Electronics and Digital Design Lab	-	-	3	3	2	50	50	100
9.	16BT30432	Signal and Systems Lab	-	-	3	3	2	50	50	100
<b>Total</b>			<b>18</b>	<b>5</b>	<b>9</b>	<b>32</b>	<b>24</b>	<b>330</b>	<b>570</b>	<b>900</b>

S. No.	Course Code	Course Title	Contact Periods/ Week				Credits (C)	Scheme of Examination Max. Marks		
			L	T	P	Total		Internal Marks	External Marks	Total Marks
<b>II Year - II Semester</b>										
1.	16BT40401	Analog Communications	3	1	-	4	3	30	70	100
2.	16BT40402	Digital IC Applications	3	1	-	4	3	30	70	100
3.	16BT40403	Electromagnetic Theory and Transmission Lines	3	1	-	4	3	30	70	100
4.	16BT40404	Linear IC Applications	3	1	-	4	3	30	70	100
5.	16BT40405	Probability and Stochastic Process	3	1	-	4	3	30	70	100
6.	16BT40406	Pulse and Digital Circuits	3	1	-	4	3	30	70	100
7.	16BT40431	Analog Communications Lab	-	-	3	3	2	50	50	100
8.	16BT40432	Electronic Circuit Analysis and Design Lab	-	-	3	3	2	50	50	100
9.	16BT40433	Pulse and Digital Circuits Lab	-	-	3	3	2	50	50	100
<b>Total</b>			<b>18</b>	<b>6</b>	<b>9</b>	<b>33</b>	<b>24</b>	<b>330</b>	<b>570</b>	<b>900</b>



S. No.	Course Code	Course Title	Contact Periods/ Week				Credits (C)	Scheme of Examination Max. Marks		
			L	T	P	Total		Internal Marks	External Marks	Total Marks
<b>III Year - I Semester</b>										
1.	16BT3HS02	Managerial Economics and Principles of Accountancy	3	1	-	4	3	30	70	100
2.	16BT50201	Control Systems	3	1	-	4	3	30	70	100
3.	16BT50401	Digital Communications	3	1	-	4	3	30	70	100
4.	16BT50402	Microprocessors and Microcontrollers	3	1	-	4	3	30	70	100
5.	16BT50403	VLSI Design	3	1	-	4	3	30	70	100
		<b>Interdisciplinary Elective-1</b>								
6.	16BT50404	Electronic Measurements and Instrumentation	3	1	-	4	3	30	70	100
	16BT50501	Computer Networks								
	16BT30501	Computer Organization								
	16BT51241	Object Oriented Programming								
7.	16BT50431	Linear and Digital IC Applications Lab	-	-	3	3	2	50	50	100
8.	16BT50432	Microprocessors and Microcontrollers Lab	-	-	3	3	2	50	50	100
9.	16BT4HS31	Soft Skills Lab	-	-	3	3	2	50	50	100
<b>Total</b>			<b>18</b>	<b>6</b>	<b>9</b>	<b>33</b>	<b>24</b>	<b>330</b>	<b>570</b>	<b>900</b>

S. No.	Course Code	Course Title	Contact Periods/ Week				Credits (C)	Scheme of Examination Max. Marks		
			L	T	P	Total		Internal Marks	External Marks	Total Marks
<b>III Year - II Semester</b>										
1.	16BT5HS01	Management Science	3	1	-	4	3	30	70	100
2.	16BT60401	Antennas and Waveguides	3	1	-	4	3	30	70	100
3.	16BT60402	Digital Signal Processing	3	1	-	4	3	30	70	100
		<b>Interdisciplinary Elective-2</b>								
4.	16BT40502	Database Management Systems	3	1	-	4	3	30	70	100
	16BT71205	Cryptography and Network Security								
	16BT31501	Operating Systems								
	16BT61241	Wireless Sensor Networks								
		<b>Program Elective - 1</b>								
5.	16BT60403	Analog IC Design	3	1	-	4	3	30	70	100
	16BT60404	Image Processing								
	16BT60405	Radar Engineering								
	16BT60406	Telecommunication Switching Systems								
		<b>Program Elective - 2</b>								
6.	16BT60407	Digital CMOS IC Design	3	1	-	4	3	30	70	100
	16BT60408	Information Theory and Coding								
	16BT60409	Light Wave Communications								
	16BT60410	Nanoelectronics								
7.	16BT60431	Digital Communications Lab	-	-	3	3	2	50	50	100
8.	16BT60432	Digital Signal Processing Lab	-	-	3	3	2	50	50	100
9.	16BT60433	Seminar	-	-	-	-	2	-	100	100
10.	16BT6MOOC	MOOC	-	-	-	-	-	-	-	-
<b>Total</b>			<b>18</b>	<b>6</b>	<b>6</b>	<b>30</b>	<b>24</b>	<b>280</b>	<b>620</b>	<b>900</b>

S. No.	Course Code	Course Title	Contact Periods/ Week				Credits (C)	Scheme of Examination Max. Marks		
			L	T	P	Total		Internal Marks	External Marks	Total Marks
<b>IV Year - I Semester</b>										
1.	16BT70401	Cellular and Mobile Communications	3	1	-	4	3	30	70	100
2.	16BT70402	Embedded Systems	3	1	-	4	3	30	70	100
3.	16BT70403	Microwave Engineering	3	1	-	4	3	30	70	100
		<b>Program Elective - 3</b>								
4.	16BT70404	Advanced Digital Signal Processing	3	1	-	4	3	30	70	100
	16BT70405	Mixed Signal Design								
	16BT70406	Satellite Communications								
	16BT70407	Wireless Communication and Networks								
		<b>Program Elective - 4</b>								
5.	16BT70408	Low Power CMOS VLSI Design	3	1	-	4	3	30	70	100
	16BT70409	RF Engineering								
	16BT70410	Speech Processing								
	16BT70411	Spread Spectrum Communication								
6.		<b>Open Elective</b>	3	1	-	4	3	30	70	100
7.	16BT70431	Antennas and Microwave Engineering Lab	-	-	3	3	2	50	50	100
8.	16BT70432	Embedded Systems Lab	-	-	3	3	2	50	50	100
9.	16BT70433	Comprehensive Assessment	-	-	-	-	2	-	100	100
<b>Total</b>			<b>18</b>	<b>6</b>	<b>6</b>	<b>30</b>	<b>24</b>	<b>280</b>	<b>620</b>	<b>900</b>

<b>Sl. No.</b>	<b>Course Code</b>	<b>Open Elective Course Title</b>
1.	16BT6HS01	Banking and Insurance
2.	16BT6HS02	Business Communication and Career Skills
3.	16BT6HS03	Cost Accounting and Financial Management
4.	16BT6HS04	Entrepreneurship for Micro, Small and Medium Enterprises
5.	16BT6HS05	French Language
6.	16BT6HS06	German Language
7.	16BT6HS07	Indian Constitution
8.	16BT6HS08	Indian Economy
9.	16BT6HS09	Indian Heritage and Culture
10.	16BT6HS10	Indian History
11.	16BT6HS11	Personality Development
12.	16BT6HS12	Philosophy of Education
13.	16BT6HS13	Public Administration
14.	16BT60112	Building Maintenance and Repair
15.	16BT60113	Contract Laws and Regulations
16.	16BT60114	Disaster Mitigation and Management
17.	16BT60115	Environmental Pollution and Control
18.	16BT60116	Planning for Sustainable Development
19.	16BT60117	Professional Ethics
20.	16BT60118	Rural Technology
21.	16BT60308	Global Strategy and Technology
22.	16BT60309	Intellectual Property Rights and Management
23.	16BT60310	Managing Innovation and Entrepreneurship
24.	16BT60311	Materials Science
25.	16BT70412	Green Technologies
26.	16BT70413	Introduction to Nanoscience and Technology
27.	16BT60505	Engineering System Analysis and Design
28.	16BT71011	Micro-Electro-Mechanical Systems
29.	16BT61205	Cyber Security and Laws
30.	16BT61505	Bio-informatics

S. No.	Course Code	Course Title	Contact Periods/ Week				Credits (C)	Scheme of Examination Max. Marks		
			L	T	P	Total		Internal Marks	External Marks	Total Marks
<b>IV Year - II Semester</b>										
1.	16BT80431	Project Work *	-	-	-	-	12	100	100	200
<b>Total</b>			-	-	-	-	<b>12</b>	<b>100</b>	<b>100</b>	<b>200</b>

\*Full-time project work

  
Chairman, BOS in ECE

**LIST OF NEW COURSES INTRODUCED**

**Program: B.Tech.- Electronics and Communication Engineering**

**Regulations : SVEC-16**

Course Code	Name of the course
16BT10232	Electrical and Electronics Workshop Practice
16BT2BS01	Transformation Techniques and Partial Differential Equations
16BT20541	Foundations of Data Structures
16BT20551	Foundations of Data structures Lab
16BT30431	Basic Electronics and Digital Design Lab
16BT4HS31	Soft Skills Lab
16BT50431	Linear and Digital IC Applications Lab
16BT60408	Information Theory and Coding
16BT60410	Nanoelectronics
16BT60431	Digital Communications Lab
16BT6HS05	French Language
16BT6HS06	German Language
16BT6HS07	Indian Constitution
16BT6HS08	Indian Economy
16BT6HS09	Indian Heritage and Culture
16BT6HS10	Indian History
16BT6HS11	Personality Development
16BT6HS12	Philosophy of Education
16BT6HS13	Public Administration
16BT60112	Building Maintenance and Repair
16BT70407	Wireless Communication and Networks
16BT70409	RF Engineering
16BT70432	Embedded Systems Lab
16BT70413	Introduction to Nanoscience and Nanotechnology