Agenda for 7th Meeting of Board of Studies for
UG Programme B.Tech. (Electrical and Electronics Engineering) on
22nd April, 2016

1. Action taken report on minutes/resolutions of 6th BOS meeting.

2. Report on implementation of autonomy with respect to syllabi and regulations of II B. Tech. EEE under SVEC-14 regulations

3. Academic Calendar for B. Tech programme

4. Vision and Mission of the Department, Program Educational Objectives, Program Outcomes and Program Specific Outcomes of B.Tech. Electrical and Electronics Engineering

5. Course structure of B. Tech (Electrical and Electronics Engineering) under SVEC-16 regulations

6. Panel of paper setters and model question papers for Courses of II B. Tech. EEE

7. Teaching, Learning and Evaluation Practices

8. Research activities

9. Faculty development activities

10. Staff development activities

11. Student development activities

12. Student support systems

13. Extension activities

14. Any other item

Chairman, BOS-EEE

SREE VIDYANIKETHAN ENGINEERING COLLEGE

(Autonomous)

(Sree Sainath Nagar, Tirupati – 517102)

Meeting of Board of Studies

Electrical and Electronics Engineering

on

22nd April, 2016

Minutes:

Members Present:

S. No.	Name	Designation
1.	Prof.T.Devaraju Professor of EEE	Chairman
2.	Prof. DVSS Siva Sarma Dept. of EEE, NIT, Warangal	External Member (Academics)
3.	Prof. M. Damodara Reddy Dept. of EEE, SVUCE, Tirupati	External Member (Academics)
4.	Mr. K. Ramanjulu R & D Engineer, QUADIO Devices, Pune	External Member (Alumni)
5.	Prof.T.Nageswara Prasad	Internal Member
6.	Prof.P.Umapathi Reddy	Internal Member
7.	Prof.M.S.Sujatha	Internal Member
8.	Prof.P.Nagaraju Mandadi	Internal Member
9.	Prof.N.M.G.Kumar	Internal Member
10.	Dr.S.Farook	Internal Member
11.	Mr.S.Hemachandra	Internal Member

1. **Action taken report (ATR) on resolutions of BOS meeting held on 19th April, 2015.**
    The chairman Dr. T. Devaraju presented the Action taken report on the resolutions of BOS meeting held on 19th April, 2015.

2. **Report on implementation of autonomy for B.Tech. Programme.**
    Appraised that the SVEC-14 Regulations have been implemented for I B.Tech. and II B.Tech successfully.

3. **Approval of Academic calendar for B. Tech. course (s)**
    Perused and approved the academic calendar of B.Tech Programme.

4. **Vision and Mission of the Department, PEOs, POs and PSOs:**
    The Chairman, BoS has appraised the members about the Vision & Mission of the dept. and

and PEOs, POs & PSOs of B.Tech (EEE). The approved Vision, Mission of the department, PEOs & PSOs of B.Tech. (EEE) program under SVEC16 regulations is sent to the Academic Council for perusal and ratification.

Also, the Chairman, BOS has informed all the members, the practice of writing Program Specific Outcomes. NBA has suggested to use generic graduate attributes as Program Outcomes and articulate Program Specific Outcomes. As a result, the Program Outcomes defined under SVEC14 regulations shall be dispensed and use generic graduate attributes as POs defined by NBA. The chairman, BOS presented the POs and PSOs to be followed for the batches admitted in 2014 and 2015. The members resolved to use the POs and PSOs proposed by the Chairman, BOS for the batches admitted in 2014 and 2015.

5. **B. Tech. (EEE) Course Structure**

The Chairman, BoS has appraised the members about the course structure of B.Tech. (EEE). The chairman has presented the detailed syllabi for I B.Tech (EEE) and the courses for other departments viz., network analysis, Basic electrical and electronics Engineering, Network analysis laboratory, BEE laboratory (Mechanical), Electrical and Electronics workshop Practice and MATLAB practice for Civil Engineers under SVEC-16 regulations. After deliberate discussion, the members have suggested the following to make the syllabi more effective.

After detailed discussion BoS Members suggested to

- o Incorporate basics of thermodynamics and Engineering mechanics if possible.
- o Strengthen the I B.Tech Electrical and Electronics workshop by placing some Hardware models, insulators, fuses, cables, windings and construction of different motors and their applications.

The courses for other departments framed by the department of EEE were also discussed and approved with minor changes.

6. **Panel of question paper setters:**

The chairman BOS is authorized to prepare the panel of question paper setters and submit as and when required.

After thorough discussion, the question Bank for the proposed courses were approved and suggested to take care while generating the end question paper.

7. **Teaching, Learning and Evaluation**

The Chairman BoS presented the teaching, learning and evaluation practices followed in the department. The members of BOS appreciated the good practices being followed by the department. The Assessment manual is discussed and ratified by the BoS and is sent to the Academic Council for approval.

8. **Development activities in the Department.**

Perused the information provided under the following heads

   (i)   Teaching, learning and Evaluation Practices.

   (ii)   Research activities.

   (iii)   Faculty development activities

   (iv)   Student development activities

   (v)   Student support systems

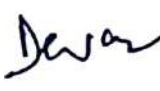Perused and appreciated the efforts made by the department.
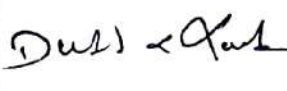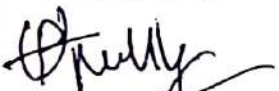
9. **Any other item**

The members suggested to

a) Encourage the students to do hardware oriented projects.

b) Arrange Industrial visits to various organizations for B.Tech. Students.

c) Arrange seminars on recent advances in electrical engineering like Smart grid, FACTS controllers and Integration of Renewable energy sources.

The external Members of BOS, appreciated the healthy practices for the holistic development of the department and in achieving NBA Accreditation for two years under TIER-I for M.Tech. (EPS) Program. The members appreciated the pro-active approach of college management and efforts taken by department.

The meeting concluded with thanks to the external members for their valuable suggestions.

S. No.	Name	Designation	Signature
1.	**Prof. T. Devaraju** Professor, Dept.of EEE, SVEC	Chairman	
2.	**Prof. DVSS Siva Sarma** Dept. of EEE, NIT, Warangal	External Member (Academics)	
3.	**Prof. M. Damodara Reddy** Dept. of EEE, SVUCE, Tirupati	External Member (Academics)	
4.	**Mr. K. Ramanjulu** R & D Engineer, QUADIO Devices, Pune	Alumni (Industry)	
5.	**Prof. T. Nageswara Prasad** Professor, Head, Dept.of EEE, SVEC	Internal Member	
6.	**Prof. P. Umapathi Reddy** Professor, Dept.of EEE, SVEC	Internal Member	
7.	**Prof. P. Nagaraju Mandadi** Professor, Dept.of EEE, SVEC	Internal Member	
8.	**Prof. M. S. Sujatha** Professor, Dept.of EEE, SVEC	Internal Member	
9.	**Prof. N.M.G. Kumar** Professor, Dept.of EEE, SVEC	Internal Member	
10.	**Dr. S. Farook** Associate Professor, Dept. of EEE, SVEC	Internal Member	
11.	**Mr. S. Hema Chandra** Associate Professor, Dept. of EEE, SVEC	Internal Member	

Department of Electrical and Electronics Engineering

Approved Course Structure

Program: B.Tech. - Electrical and Electronics Engineering

Regulations: SVEC - 16

I B.Tech. (I Semester)

S. No.	Course	Course Title	Contact Periods/ Week				Credits	Scheme of Examination Max. Marks		
			L	T	P	Total		Internal Marks	External Marks	Total Marks
						I Year - I Semester				
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	16BT10201	Electric Circuits	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	16BT10231	Electric Circuits Lab	--	--	3	3	2	50	50	100
8	16BT10232	Electrical and Electronics Workshop Practice	--	--	3	3	2	50	50	100
9	16BT10531	Programming in C Lab	--	--	3	3	2	50	50	100
		Total	16	5	12	33	24	350	550	900

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(AUTONOMOUS)
SREE SAINATH NAGAR, A. RANGAMPET –517 102.

Department of Electrical and Electronics Engineering

I B.Tech. (II Semester)

S. No.	Course	Course Title	Contact Periods/ Week				Credits	Scheme of Examination Max. Marks		
			L	T	P	Total		Internal Marks	External Marks	Total Marks
			I Year - II Semester							
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
		Total	15	6	15	36	24	350	550	900

II B.Tech. (I Semester)

S. No.	Course Code	Course Title	Contact Periods/ Week				Credits	Scheme of Examination Max. Marks		
			L	T	P	Total		Internal Marks	External Marks	Total Marks
II Year - I Semester										
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	16BT30201	DC Machines	3	1	--	4	3	30	70	100
4	16BT30202	Electromagnetic Fields	3	1	--	4	3	30	70	100
5	16BT30203	Signals, Systems and Networks	3	1	--	4	3	30	70	100
6	16BT30441	Analog Electronic Circuits	3	1	--	4	3	30	70	100
7	16BT30231	DC Machines Lab	--	--	3	3	2	50	50	100
8	16BT30232	Signals and Networks Lab	--	--	3	3	2	50	50	100
9	16BT30451	Analog Electronic Circuits Lab	--	--	3	3	2	50	50	100
		TOTAL	18	5	9	32	24	330	570	900

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II B.Tech. (II Semester)

S. No.	Course Code	Course Title	Contact Periods/ Week				Credits	Scheme of Examination Max. Marks		
			L	T	P	Total		Internal Marks	External Marks	Total Marks
II Year - II Semester										
1	16BT40201	Electrical Measurements	3	1	--	4	3	30	70	100
2	16BT40202	Generation of Electric Power	3	1	--	4	3	30	70	100
3	16BT40203	Transformers and Induction Machines	3	1	--	4	3	30	70	100
4	16BT41002	Linear and Digital ICs	3	1	--	4	3	30	70	100
5	16BT30403	Switching Theory and Logic Design	3	1	--	4	3	30	70	100
6	16BT41041	Computer Architecture and Organization	3	1	--	4	3	30	70	100
7	16BT40231	Electrical Measurements Lab	--	--	3	3	2	50	50	100
8	16BT40232	Transformers and Induction Machines Lab	--	--	3	3	2	50	50	100
9	16BT41033	Linear and Digital ICs lab	--	--	3	3	2	50	50	100
		Total	18	6	9	33	24	330	570	900

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III B.Tech. (I Semester)

S. No.	Course Code	Course Title	Contact Periods/ Week				Credits	Scheme of Examination Max. Marks		
			L	T	P	Total		Internal Marks	External Marks	Total Marks
		III Year - I Semester								
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	16BT50202	Power Electronics	3	1	--	4	3	30	70	100
4	16BT50203	Synchronous Machines	3	1	--	4	3	30	70	100
5	16BT50204	Transmission and Distribution	3	1	--	4	3	30	70	100
		Interdisciplinary Elective-1								
6	16BT40502	Database Management Systems	3	1	--	4	3	30	70	100
	16BT51003	Principles of Communications								
	16BT51041	Sensors and Signal Conditioning								
	16BT31501	Operating Systems								
7	16BT50231	Control Systems Lab	--	--	3	3	2	50	50	100
8	16BT50232	Synchronous Machines Lab	--	--	3	3	2	50	50	100
9	16BT4HS31	Soft Skills Lab	--	--	3	3	2	50	50	100
		Total	18	6	9	33	24	330	570	900

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Department of Electrical and Electronics Engineering

III B.Tech. (II Semester)

S. No.	Course Code	Course Title	Contact Periods / Week				Credits	Scheme of Examination Max. Marks		
			L	T	P	Total		Internal Marks	External Marks	Total Marks
III Year - II Semester										
1	16BT5HS01	Management Science	3	1	--	4	3	30	70	100
2	16BT60201	Power Semiconductor Drives	3	1	--	4	3	30	70	100
3	16BT60202	Power System Analysis	3	1	--	4	3	30	70	100
Interdisciplinary Elective-2										
4	16BT50501	Computer Networks	3	1	--	4	3	30	70	100
	16BT61001	ARM Processors and PIC Microcontrollers								
	16BT61041	Programmable Logic Controllers								
	16BT51241	Object Oriented Programming								
Program Elective-1										
5	16BT60203	Design and Estimation of Electrical Systems	3	1	--	4	3	30	70	100
	16BT60204	Digital Signal Processing for Electrical Engineers								
	16BT60205	Electrical Machine Design								
	16BT60206	HVDC Transmission								
Program Elective-2										
6	16BT60207	Advanced Control Systems	3	1	--	4	3	30	70	100
	16BT60208	High Voltage Engineering								
	16BT60209	Instrumentation								
	16BT60210	Special Electrical Machines								
7	16BT60231	Power Electronics and Drives Lab	--	--	3	3	2	50	50	100
8	16BT60232	Power System – I Lab	--	--	3	3	2	50	50	100

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Department of Electrical and Electronics Engineering

IV B.Tech. (I Semester)

S. No.	Course Code	Course Title	Contact Periods/ Week				Credits	Scheme of Examination Max. Marks		
			L	T	P	Total		Internal Marks	External Marks	Total Marks
		IV Year - I Semester								
1	16BT70201	Power System Operation and Control	3	1	--	4	3	30	70	100
2	16BT70402	Embedded Systems	3	1	--	4	3	30	70	100
3	16BT70202	Switchgear and Protection	3	1	--	4	3	30	70	100
4	Program Elective-3									
	16BT70203	Energy Conservation and Management	3	1	--	4	3	30	70	100
	16BT70204	Flexible AC Transmission systems								
	16BT70205	Power System Automation								
	16BT70206	Power System Reliability								
5	Program Elective-4									
	16BT70207	Analysis of Power Electronic Converters	3	1	--	4	3	30	70	100
	16BT70208	Power Quality								
	16BT70209	Smart Grid Technology								
	16BT70210	Soft Computing Techniques								
6	Open Elective		3	1	--	4	3	30	70	100
7	16BT70231	Power System – II Lab	--	--	3	3	2	50	50	100
8	16BT70432	Embedded Systems Lab	--	--	3	3	2	50	50	100
9	16BT70232	Comprehensive Assessment	--	--	--	--	2	--	100	100
		Total	18	6	6	30	24	280	620	900

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Department of Electrical and Electronics Engineering

IV B.Tech. (II Semester)

S. No.	Course Code	Course Title	Contact Periods/ Week				Credits	Scheme of Examination Max. Marks		
			L	T	P	Total		Internal Marks	External Marks	Total Marks
IV Year - II Semester										
1	16BT80231	Project Work *	--	--	--	--	12	100	100	200
		Total	--	--	--	--	12	100	100	200

*Full-time project work

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Department of Electrical and Electronics Engineering

Sl. No.	Course Code	Open Elective Course Title
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

Chairman, BOS-EEE

LIST OF NEW COURSES INTRODUCED

Program: B.Tech.- Electrical and Electronics Engineering

Regulations: SVEC - 16

16BT10232	Electrical and Electronics Workshop Practice
16BT20541	Foundations of Data Structures
16BT20551	Foundations of Data Structures Lab
16BT2BS01	Transformation Techniques and Partial Differential Equations
16BT30203	Signals, Systems and Networks
16BT4HS31	Soft Skills Lab
16BT51041	Sensors and Signal Conditioning
16BT51041	Sensors and Signal Conditioning
16BT61001	ARM Processors and PIC Microcontrollers
16BT61041	Programmable Logic Controllers
16BT60203	Design and Estimation of Electrical Systems
16BT60210	Special Electrical Machines
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
16BT70205	Power System Automation
16BT70207	Analysis of Power Electronic Converters
16BT70209	Smart Grid Technology
16BT70432	Embedded Systems Lab
16BT70413	Introduction to Nanoscience and Technology

Chairman, BOS-EEE