

## **SREE VIDYANIKETHAN ENGINEERING COLLEGE**

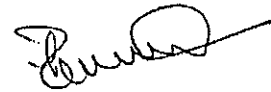
(Autonomous)

Sree Sainath Nagar, A. Rangampet-517 102

9<sup>th</sup> BOS  
26.05.2018

### **Agenda for 9<sup>th</sup> Meeting of Board of Studies for B. Tech. in Electronics and Instrumentation Engineering on 26.05.2018 @ 9:30 AM**

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 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.



Dr. M.Saravanan  
Chairman (BOS)



**SREE VIDYANIKETHAN ENGINEERING COLLEGE**  
(AUTONOMOUS)

Sree Sainath Nagar, Tirupati - 517102

**Department of Electronics and Instrumentation Engineering**

**9<sup>th</sup> Board of Studies Meeting held on 26<sup>th</sup> May 2018 at 09.30 AM**

**Minutes**

**Members Present:**

1	Dr. M. Saravanan	Chairman
2	Dr. P. Thirusakthimurugan	External Member (Academics)
3	Mr. S. Venugopal Rao	External Member (Industry)
4	Mr. G. V. Sunil Kumar	Internal Member
5	Mr. C. Ravindra murthy	Internal Member
6	Dr. A. Yasmine Begum	Internal Member
7	Dr. Y. Dileep Kumar	Internal Member

**1. Action taken report on minutes / resolutions of BOS Meeting held on 25-03-2017**

The Chairman BOS appraised the members the action taken on the minutes/ resolutions of BOS meeting held on 25<sup>th</sup> March 2017. After deliberations the members ratified the report and the same is placed at Annexure – I.

**2. Report on implementation of autonomy**

Chairman BOS presented a report on implementation of autonomy to the members. The board has congratulated the college authorities for successful implementation of SVEC 14 course structure & syllabi for IV year and SVEC16 regulations and course structure & syllabi for II year. The report is accepted after discussions and the same is placed at Annexure-II.

**3. Academic Calendar**

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 approved 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.

#### **AICTE Model Curriculum-2018, Induction Training, Course Structure and Syllabi.**

The Chairman BOS appraised the model course structure by AICTE and the proposed course structure for SVEC19. After deliberations and discussions, the members have suggested certain changes in the course structure. The modified course structure (SVEC19) is placed at Annexure-IV. It is resolved to authorize the Chairman BOS to adapt the improvements suggested, finalize the course structure and submit to the Chairman (Academic Council) for further processing. They also suggested conducting supplementary exams separately without merging with regular examinations. To avoid load on 1<sup>st</sup> year students, they suggested, year pattern instead of semester for 1<sup>st</sup> year.

#### **Teaching, Learning and Evaluation**

The members of BOS have appreciated the good practices followed by the department in the conduct of diagnostic, formative tests, remedial and reinforcement classes as well as offering of the necessary add on courses as desired.

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, remedial classes and suggested to continue the same.

#### **6. Research Activities**

The Chairman BOS has briefed the members about,

- a. Establishment of Bio Signal Research laboratory & Industrial Automation laboratory
- b. Visit to Relysis Medical devices Pvt. Ltd., Hyderabad and Involute Automation Pvt. Ltd., Hyderabad for MoU's.
- c. Sanction of research grant of Rs.54.13 Lakh from TIDE, DST for the research project of " Frequency modulated hearing aid for elderly with hearing disability"
- d. Activities of Research Clusters

The members have appreciated the efforts of faculty and students of the department.

#### **7. Faculty Development Activities**

The Chairman BOS has presented the members information on the research publications/ presentations by the faculty, 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.

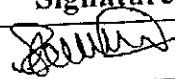
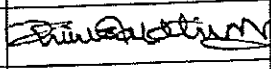
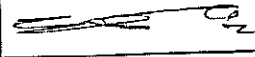
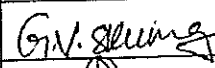


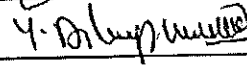
### 8. Staff Development Activities

The Chairman BOS has presented the members the staff development program planned by the non teaching staff for the academic year 2018-19. The members suggested to improve the staff development activities by conducting in-house SDP's.

### 9. Student Support

The members perused and noted the information provided on Gold medals, Guest and Expert Lectures organized, Add-on courses conducted, 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.

Meeting concluded with thanks to the Chair.

S. No.	Name of the Member	Designation	Signature
1	Dr. M. Saravanan	Chairman	
2	Dr. P. Thirusakthimurugan	External Member (Academics)	
3	Mr. S. Venugopal Rao	External Member (Industry)	
4	Mr. G. V. Sunil Kumar	Internal Member	
5	Mr. C. Ravindra Murthy	Internal Member	
6	Dr. A. Yasmine Begum	Internal Member	
7	Dr. Y. Dileep Kumar	Internal Member	



Dr. M. SARAVANAN  
Chairman  
BOS in EIE

**Approved Course Structure**

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

**Regulations: SVEC-16**

S. No.	Course Code	Course Title	Course Category	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	BS	3	1	0	4	3	30	70	100
2.	16BT1BS03	Matrices and Numerical Methods	BS	3	1	0	4	3	30	70	100
3.	16BT1BS04	Multi-Variable calculus and Differential Equations	BS	3	1	0	4	3	30	70	100
4.	16BT10241	Network Analysis	ES	4	1	0	5	4	30	70	100
5.	16BT10501	Programming in C	ES	3	1	0	4	3	30	70	100
6.	16BT1BS32	Engineering Physics Lab	BS	0	0	3	3	2	50	50	100
7.	16BT10232	Electrical and Electronics Workshop Practice	ES	0	0	3	3	2	50	50	100
8.	16BT10251	Network Analysis Lab	ES	0	0	3	3	2	50	50	100
9.	16BT10531	Programming in C Lab	ES	0	0	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	Course Category	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	HS	3	1	0	4	3	30	70	100
2.	16BT1BS01	Engineering Chemistry	BS	3	1	0	4	3	30	70	100
3.	16BT2BS01	Transformation Techniques and Partial Differential Equations	BS	3	1	0	4	3	30	70	100
4.	16BT20401	Electronic Devices and Circuits	ES	3	1	0	4	3	30	70	100
5.	16BT20541	Foundations of Data Structures	ES	3	1	0	4	3	30	70	100
6.	16BT1HS31	English Language Lab	HS	0	0	3	3	2	50	50	100
7.	16BT1BS31	Engineering Chemistry Lab	BS	0	0	3	3	2	50	50	100
8.	16BT10331	Computer Aided Engineering Drawing	ES	0	1	6	7	3	50	50	100
9.	16BT20551	Foundations of Data structures Lab	ES	0	0	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	Course Category	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	HS	3	0	0	3	3	30	70	100
2.	16BT3BS02	Special Functions and Complex Analysis	BS	3	1	0	4	3	30	70	100
3.	16BT31001	Electrical and Electronic Measurements	PC	3	1	0	4	3	30	70	100
4.	16BT31002	Sensors and Transducers	PC	3	1	0	4	3	30	70	100
5.	16BT30403	Switching Theory and Logic Design	PC	3	1	0	4	3	30	70	100
6.	16BT30241	Electrical Technology	PC	3	1	0	4	3	30	70	100
7.	16BT30431	Basic Electronics and Digital Design Lab	PC	0	0	3	3	2	50	50	100
8.	16BT31031	Measurements and Transducers Lab	PC	0	0	3	3	2	50	50	100
9.	16BT30251	Electrical Technology Lab	PC	0	0	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	Course Category	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.	16BT50201	Control Systems	PC	3	1	0	4	3	30	70	100
2.	16BT30401	Electronic Circuit Analysis & Design	PC	3	1	0	4	3	30	70	100
3.	16BT41001	Industrial Instrumentation – I	PC	3	1	0	4	3	30	70	100
4.	16BT41002	Linear and Digital ICs	PC	3	1	0	4	3	30	70	100
5.	16BT30402	Signals and Systems	PC	3	1	0	4	3	30	70	100
6.	16BT40406	Pulse and Digital Circuits	PC	3	1	0	4	3	30	70	100
7.	16BT41031	Analog Electronics Lab	PC	0	0	3	3	2	50	50	100
8.	16BT41032	Control Systems Design Lab	PC	0	0	3	3	2	50	50	100
9.	16BT41033	Linear and Digital ICs Lab	PC	0	0	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	Course Category	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	HS	3	1	0	4	3	30	70	100
2.	16BT51001	Biomedical Instrumentation	PC	3	1	0	4	3	30	70	100
3.	16BT51002	Industrial Instrumentation – II	PC	3	1	0	4	3	30	70	100
4.	16BT51003	Principles of Communication	PC	3	1	0	4	3	30	70	100
5.	16BT60402	Digital Signal Processing	PC	3	1	0	4	3	30	70	100
6.	<b>Interdisciplinary Elective-1</b>		IDE	3	1	0	4	3	30	70	100
	16BT51004	Computer Organization and Architecture									
	16BT51241	Objected Oriented Programming									
	16BT31501	Operating Systems									
	16BT60502	Soft Computing									
7.	16BT51031	Industrial Instrumentation Lab	PC	0	0	3	3	2	50	50	100
8.	16BT51032	Signal Processing Lab	PC	0	0	3	3	2	50	50	100
9.	16BT4HS31	Soft Skills Lab	HS	0	0	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>

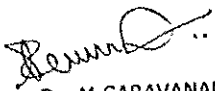


S. No.	Course Code	Course Title	Course Category	Contact Periods/ Week				Credits (C)	Scheme of Examination Max. Marks		
				L	T	P	Total		Internal Marks	External Marks	Total Marks
<b>III Year - II Semester</b>											
1.	16BT5HS01	Management Science	HS	3	1	0	4	3	30	70	100
2.	16BT61001	ARM Processors and PIC Microcontrollers	PC	3	1	0	4	3	30	70	100
3.	16BT61002	Process Control Instrumentation	PC	3	1	0	4	3	30	70	100
4.	<b>Interdisciplinary Elective - 2</b>		IDE	3	1	0	4	3	30	70	100
	16BT60305	Hydraulics and Pneumatics									
	16BT50308	Mechatronics									
	16BT60341	Thermodynamics and Fluid Mechanics									
	16BT61003	Instrumentation System Design									
<b>Program Elective - 1</b>											
5.	16BT70309	Industrial Robotics	PE	3	1	0	4	3	30	70	100
	16BT70404	Advanced Digital Signal Processing									
	16BT61004	Electromagnetic Theory									
	16BT61005	Opto-Electronics and Laser Instrumentation									
<b>Program Elective - 2</b>											
6.	10BT60207	Advanced Control Systems	PE	3	1	0	4	3	30	70	100
	16BT50403	VLSI Design									
	16BT61006	Aircraft Instrumentation									
	16BT61007	Telemetry and Tele-control									
7.	16BT61031	ARM Processors and PIC Microcontrollers Lab	PC	0	0	3	3	2	50	50	100
8.	16BT61032	Process Control Lab	PC	0	0	3	3	2	50	50	100
9.	16BT61033	Seminar	EEC	0	0	0	0	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	Course Category	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.	16BT71001	Analytical Instrumentation	PC	3	1	0	4	3	30	70	100
2.	16BT71002	Biomedical Signal Processing	PC	3	1	0	4	3	30	70	100
3.	16BT71003	Industrial Automation	PC	3	1	0	4	3	30	70	100
<b>Program Elective – 3</b>			PE	3	1	0	4	3	30	70	100
4.	16BT50501	Computer Networks									
	16BT71004	Automotive Instrumentation									
	16BT71005	Computer Control of Process									
	16BT71006	Industrial Electronics									
<b>Program Elective – 4</b>			PE	3	1	0	4	3	30	70	100
5.	16BT71007	Instrumentation in Petrochemical Industries									
	16BT71008	Intelligent Control									
	16BT71009	Power Plant Instrumentation									
	16BT71010	System Design using Microcontrollers									
6.	<b>Open Elective</b>		OE	3	1	0	4	3	30	70	100
7.	16BT71031	Analytical and Biomedical Instrumentation Lab	PC	0	0	3	3	2	50	50	100
8.	16BT71032	Industrial Automation Lab	PC	0	0	3	3	2	50	50	100
9.	16BT71033	Comprehensive Assessment	EEC	0	0	0	0	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>

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

S. No.	Course Code	Course Title	Course Category	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.	16BT81031	Project Work *	EEC	0	0	0	0	12	100	100	200
<b>Total</b>				<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>12</b>	<b>100</b>	<b>100</b>	<b>200</b>

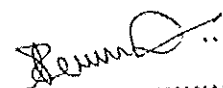
  
 Dr. M. SARAVANAN  
 Chairman  
 BOS in EIE

**LIST OF NEW COURSES INTRODUCED**

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

**Regulations : SVEC-16**

Course Code	Name of the course
16BT41032	Control systems Design lab
16BT51031	Industrial Instrumentation -Lab
16BT61001	ARM Processors and PIC Microcontrollers
16BT61003	Instrumentation System Design
16BT61031	ARM processors and PIC Microcontrollers lab
16BT71002	Biomedical Signal Processing
16BT71007	Instrumentation in petrochemical industries
16BT71010	System Design using microcontrollers
16BT2BS01	Transformation Techniques and Partial Differential Equations
16BT4HS31	Soft Skills Lab
16BT6HS05	French Language
16BT6HS06	German Language
16BT6HS07	Indian Constitution
16BT6HS08	Indian Economy
16BT6HS09	Indian Heritage and Culture
16BT6HS10	Indian History
16BT6HS11	Personality Development
16BT6HS13	Philosophy of Education
16BT6HS13	Public Administration
16BT60112	Building Maintenance and Repair
16BT30431	Basic Electronics and Digital Design Lab
16BT10232	Electrical and Electronics Workshop Practice
16BT60305	Hydraulics and Pneumatics
16BT70413	Introduction to Nanoscience and Nanotechnology

  
Dr. M.SARAVANAN  
Chairman  
BOS in EIE