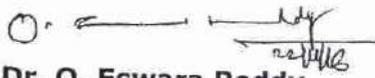


**Agenda for 7<sup>th</sup> Meeting of Board of Studies**  
**for B.Tech. in Civil Engineering on 22.4.2016 @ 2:15 PM**

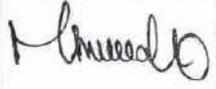
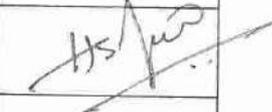
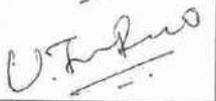
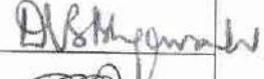
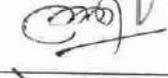
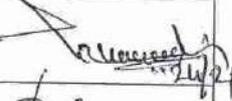
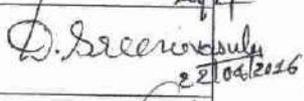
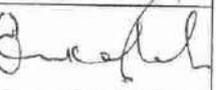
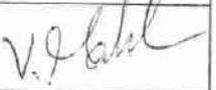
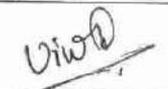
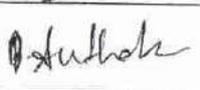
1. Action Taken Report on Minutes/ Resolutions of 6<sup>th</sup> BOS Meeting.
2. Report on implementation of autonomy with respect to syllabi and regulations (SVEC14 II B.Tech.).
3. B.Tech. Academic Calendar for 2016-17.
4. Vision and Mission of the Department, PEOs, POs & PSOs and Course Structure of B. Tech. Program.
5. Syllabi with Course Objectives & Outcomes, Lesson Plans and Question Banks of Courses of I B. Tech.
6. Panel of Paper Setters for II Semester Courses of I B. Tech.
7. Model Question Papers
8. Substitute Subjects
9. Teaching, Learning and Evaluation
10. Research and Consultancy
11. Industry – Institution Interaction
12. Faculty Development Activities
13. Staff Development Activities
14. Student Developmental Activities
15. Student Support Systems
16. Extension Activities
17. Any other Item.

  
**Dr. O. Eswara Reddy**  
Chairman, BOS  
Civil Engineering

**7<sup>th</sup> Meeting of Board of Studies**  
**for B.Tech. in Civil Engineering on 22.4.2016 @ 2:15 PM**

**MINUTES**

**Members Present:**

S. No.	Name	Designation	Signature
1.	<b>Dr. O. Eswara Reddy</b> Professor of Civil Engineering, Sree Vidyanikethan Engineering College (Autonomous), Tirupati - 517 102.	Chairman	
2.	<b>Dr. M. Srimurali</b> Professor of Civil Engineering, S.V.U. College of Engineering, S.V. University, Tirupati - 517502.	External Member (Academics)	
3.	<b>Dr. H. Sudarshan Rao</b> Director (ICS) and Professor of Civil Engineering, JNTUA, Anantapuramu - 515 002.	External Member (Academics)	
4.	<b>Dr. V. Trinadha Rao</b> Director - Projects, Cognizant, DLP IT Park, No. 1/124, Shivaji Gardens, Poonamallee High Road, Chennai.	External Member (Industry)	
5.	<b>Dr. D. V. S. Bhagavanulu</b> Professor of Civil Engineering & Director, SVEC, Tirupati	Internal Member (Academics)	
6.	<b>Dr. M. V. Subba Reddy</b> Asst. Professor & Head, Dept. of Civil Engineering, SVEC, Tirupati	Internal Member (Academics)	
7.	<b>Dr. P. Ramesh</b> Associate Professor, Dept. of Civil Engineering, SVEC, Tirupati.	Internal Member (Academics)	
8.	<b>Dr. D. Sreenivasulu</b> Associate Professor, Dept. of Civil Engineering, SVEC, Tirupati.	Internal Member (Academics)	 22/04/2016
9.	<b>Mr. P. Venkateswarlu</b> Assistant Professor (SL), Dept. of Civil Engineering, SVEC, Tirupati.	Internal Member (Academics)	
10.	<b>Mr. D. Srinivasa Murthy</b> Assistant Professor, Dept. of Civil Engineering, SVEC, Tirupati.	Internal Member (Academics)	
11.	<b>Mr. V. Mahesh</b> Assistant Professor, Dept. of Civil Engineering, SVEC, Tirupati.	Internal Member (Academics)	
12.	<b>Mr. R. Vinod Kumar</b> Assistant Professor, Dept. of Civil Engineering, SVEC, Tirupati.	Internal Member (Academics)	
13.	<b>Mr. B. Sudhakar</b> Assistant Professor, Dept. of Civil Engineering, SVEC, Tirupati.	Internal Member (Academics)	

**1. Action Taken Report on “Minutes of BOS Meeting held on 13-04-2015”:**

Chairman Dr. O. Eswara Reddy apprised the members the Minutes/Resolutions of BOS Meeting held on 13-04-2015.

<b>Minutes of BOS Meeting held on 13-04-2015</b>	<b>Action Taken</b>
Course Structure and Syllabi of II, III, and IV B.Tech. Civil Engineering were approved in the Board of Studies in Civil Engineering (SVEC14).	Implemented for II B.Tech. (Civil Engineering) from the academic year 2014-2015.
Panels of Question Paper Setters and Model Question Papers for II B.Tech. Civil Engineering I Semester and II Semester (SVEC14)..	Panels and Model Question Papers were submitted to the Principal.
B.Tech. Academic Calendar for 2015-16	Implemented for II, III and IV B.Tech. for the academic year 2015-2016.
Vision and Mission of the Department, PEOs and POs of B.Tech. Civil Engineering (SVEC14).	Implemented from the academic year 2014-2015.
Administrative Setup of Curriculum Development for B.Tech. in Civil Engineering	Implemented from the academic year 2014-2015.

The above Action Taken Report is noted for record.

**2. Report on implementation of autonomy with respect to syllabi and regulations (SVEC14 II B.Tech.):**

Chairman-BOS presented a report on implementation of autonomy to the members. The board has congratulated the college authorities for successful implementation of SVEC14 regulations and syllabus for II B.Tech. (**ANNEXURE-I**).

**3. Academic Calendar for the Year 2016-17:**

BOS Members approved the proposed academic calendar for I, II, III and IV B.Tech Programmes (**ANNEXURE-II**).

**4. Vision and Mission of the Department, PEOs, POs & PSOs and Course Structure of B. Tech. Program in Civil Engineering:**

BOS Members approved the proposed Vision and Mission of the Department, PEOs, POs & PSOs and Course Structure of B. Tech. in Civil Engineering Program of SVEC16 Regulations with appreciation (**ANNEXURE-III**). The members suggested the following modifications in the course structure.

- i) Inclusion of one core course to the group of courses under Interdisciplinary Elective to comply with CBCS.

Members have appreciated the efforts of Chairman and Internal Members of BOS and the Department in designing contemporary course structure. Further, they valued the inclusion of the following courses which are highly beneficial for civil engineering aspirants.

- i) MATLAB Practice for Civil Engineers
- ii) Basic Electrical and Electronics Engineering
- iii) Building Materials and Construction Technology Lab
- iv) Civil Engineering Software Lab
- v) Structural Health Monitoring

**5. Syllabi with Course Objectives & Outcomes, Lesson Plans and Question Banks of Courses of I B. Tech. Civil Engineering:**

BOS Members approved the proposed Syllabi with Course Objectives & Outcomes, Lesson Plans and Question Banks of civil engineering core courses of I B. Tech. Civil Engineering of SVEC16 Regulations (**ANNEXURE-IV**). Members have appreciated the efforts of Chairman and Internal Members of BOS and the Department in framing syllabi in a best possible way. Members were apprised of the Syllabi of other courses of I B.Tech. Civil Engineering.

**6. Panel of Paper Setters for II Semester Courses of I B. Tech.:**

Members were apprised of the Panel of Question Paper Setters for core courses of I B.Tech. in Civil Engineering (SVEC16) (**ANNEXURE-V**). Resolved to authorize the Chairman, BOS in Civil Engineering to make changes if necessary in Panel of Question Paper Setters for each core theory courses of I B.Tech. and furnish to the Chairman, Academic Council for further action within fifteen days after the commencement of the semester.

**7. Model Question Papers:**

Model question papers for core theory courses of I B.Tech. Civil Engineering were presented to the members. It is resolved to authorize the Chairman, BOS (CE) to make changes if necessary and submit to the Chairman, Academic Council well in advance of the commencement of class work for further action (**ANNEXURE-VI**).

**8. Substitute subjects:**

Resolved to authorize the Chairman, BOS in Civil Engineering to finalize the substitute subjects as and when required and forward the same to the Chairman, Academic Council for further action.

**9. Teaching, Learning and Evaluation:**

Members were apprised of the workload distribution, time tables, teaching plan and schedules. The members have appreciated the good practices followed by the department in conducting diagnostic test, formative tests, remedial and reinforcement classes as well as offering of the necessary add-on courses (**ANNEXURE-VII**).

For further improvement of student curriculum, it is suggested to concentrate more on reinforcement classes, student seminars, workshops, symposia and technical paper presentations.

**10. Research and Consultancy:**

Members were apprised of the Research Initiatives at the Departmental level. They suggested certain thrust areas in which research proposals may be sent to the funding agencies. Members took note of the technical talks by the faculty of the Department (**ANNEXURE-VIII**).

**11. Industry - Institution Interaction:**

Members were apprised of the initiatives taken by the department to improve industry - institution interaction with respect to training, research and consultancy through internships, guest lectures, workshops, seminars. Members suggested to invite more industry experts to the campus and make use of them (**ANNEXURE-IX**).

**12. Faculty Development Activities:**

Members noted the list of publications and paper presentations by the members of the faculty. Also they were informed of the incentives given by the Management for their academic achievements (**ANNEXURE-X**).

The faculty members are advised to publish only in reputed refereed journals having good impact factor.

Members were apprised of the faculty who had attended and organized the Faculty Development Programmes. Members suggested the thrust areas in which faculty are to be trained. Further, the Members taken note of Training Need Analysis for the academic year 2016-17. Resolved to authorize the head of the department to update TNA as and when required.

Members noted the feedback mechanism followed by the Department for monitoring and improvement in teaching.

**13. Staff Development Activities:**

Members were apprised the staff development programmes attended by the non-teaching personnel to improve their productive outcome for the benefit of self and department. Further, they took note of the staff development programmes organized by the department and TNA for the academic year 2016-17 (**ANNEXURE-XI**).

**14. Student Development Activities:**

Members were informed about equity action plan & remediation, guest/expert lectures, industrial/site visits organized by the Department for the benefit of students. (**ANNEXURE-XII**).

Members took note of the paper presentations by the students at National level Seminar/Symposia/Conferences etc. and in Mohana Mantra, a Student National Level Techno Cultural Fest Symposium conducted every year in the College.

Members were apprised the prizes, awards and recognitions achieved by the students both in co-curricular and extra-curricular activities. Members have expressed their satisfaction regarding the student development activities.

**15. Student Support Systems:**

Members took note of the counseling mechanisms followed for overall improvement of the students and also the Campus Placement Related Skills (CPRS) programme conducted for better performance in placement related activities. They were apprised of the details of placement and entrepreneurship during the last one year (**ANNEXURE-XIII**).

**16. Extension Activities:**

Members were informed about the students' active participation in various extension activities like NSS, blood donation camps, outreach activities, activities Intellectual Association of Civil Engineers (IACE) etc. (**ANNEXURE-XIV**).

Meeting concluded with thanks to the Members.

  
22/11/16

**Dr. O. Eswara Reddy**  
Chairman  
Board of Studies in Civil Engineering

## Approved Course Structure

**Program: B.Tech.- Civil Engineering**

**Regulations: SVEC-14**

I Year

S. No.	Courses Category	Course Code	Course Name	Periods per week			C	Scheme of Examination Max. Marks		
				L	T	P		Int.	Ext.	Total
1.	HS	14BT1HS01	Technical English	2	–	–	4	30	70	100
2.	BS	14BT1BS01	Engineering Physics	2	1	–	4	30	70	100
3.	BS	14BT1BS02	Engineering Chemistry	2	1	–	4	30	70	100
4.	BS	14BT1BS03	Engineering Mathematics – I	3	1	–	6	30	70	100
5.	ES	14BT10101	Engineering Mechanics	3	1	–	6	30	70	100
6.	ES	14BT1ES01	Programming in C and Data Structures	3	1	–	6	30	70	100
7.	ES	14BT1ES02	Engineering Drawing	–	1	3	3	25	50	75
8.	BS	14BT1BS04	Engineering Physics and Engineering Chemistry Lab.	–	–	3	3	25	50	75
9.	ES	14BT1ES03	Programming in C and Data Structures Lab.	–	–	3	3	25	50	75
10.	ES	14BT1ES04	Engineering and IT Workshop	–	–	3	3	25	50	75
11.	HS	14BT1HS02	English Language Communication Skills Lab.	–	–	3	3	25	50	75
<b>Total:</b>				<b>15</b>	<b>6</b>	<b>15</b>	<b>45</b>	<b>305</b>	<b>670</b>	<b>975</b>

**II Year – I Semester**

S. No.	Courses Category	Course code	Course Name	Periods per week			C	Scheme of Examination Max. Marks		
				L	T	P		Int.	Ext.	Total
1.	BS	14BT3BS01	Matrices & Numerical Methods	3	1	–	3	30	70	100
2.	ES	14BT30101	Engineering Geology	3	1	–	3	30	70	100
3.	ES	14BT30233	Basics of Electrical and Mechanical Technology	3	1	–	3	30	70	100
4.	PC	14BT30102	Mechanics of Solids	3	1	–	3	30	70	100
5.	PC	14BT30103	Building Materials and Concrete Technology	3	1	–	3	30	70	100
6.	PC	14BT30104	Fluid Mechanics–I	3	1	–	3	30	70	100
7.	ES	14BT30121	Engineering Geology Lab	–	–	3	2	25	50	75
8.	PC	14BT30122	Strength of Materials Lab	–	–	3	2	25	50	75
<b>Total:</b>				<b>18</b>	<b>6</b>	<b>6</b>	<b>22</b>	<b>230</b>	<b>520</b>	<b>750</b>

**II Year – II Semester**

S. No.	Courses Category	Course code	Course Name	Periods per week			C	Scheme of Examination Max. Marks		
				L	T	P		Int.	Ext.	Total
1.	BS	14BT3BS03	Probability & Statistics	3	1	–	3	30	70	100
2.	HS	14BT3HS01	Environmental Sciences	3	1	–	3	30	70	100
3.	HS	14BT4HS01	Business Communication and Presentation Skills	3	1	–	3	30	70	100
4.	PC	14BT40101	Structural Analysis – I	3	1	–	3	30	70	100
5.	PC	14BT40102	Construction, Planning & Project Management	3	1	–	3	30	70	100
6.	PC	14BT40103	Surveying	3	1	–	3	30	70	100
7.	PC	14BT40104	Fluid Mechanics–II	3	1	–	3	30	70	100
8.	PC	14BT40121	Surveying Lab	–	–	3	2	25	50	75
9.	PC	14BT40122	Fluid Mechanics & Hydraulic Machinery Lab	–	–	3	2	25	50	75
<b>Total</b>				<b>21</b>	<b>7</b>	<b>6</b>	<b>25</b>	<b>260</b>	<b>590</b>	<b>850</b>

**III Year – I Semester**

S. No.	Courses Category	Course code	Course Name	Periods per week			C	Scheme of Examination Max. Marks		
				L	T	P		Int.	Ext.	Total
1.	HS	14BT5HS02	Management Science	3	1	–	3	30	70	100
2.	HS	14BT4HS02	Professional Ethics	3	1	–	3	30	70	100
3.	PC	14BT50101	Structural Analysis – II	3	1	–	3	30	70	100
4.	PC	14BT50102	Reinforced Cement Concrete Structures – I	3	1	–	3	30	70	100
5.	PC	14BT50103	Water Supply Engineering	3	1	–	3	30	70	100
6.	PC	14BT50104	Soil Mechanics	3	1	–	3	30	70	100
7.	PC	14BT50105	Engineering Hydrology	3	1	–	3	30	70	100
8.	PC	14BT50121	Computer Aided Building Planning & Drawing Lab	–	–	3	2	25	50	75
9.	PC	14BT50122	Geotechnical Engineering Laboratory	–	–	3	2	25	50	75
<b>Total:</b>				<b>21</b>	<b>7</b>	<b>6</b>	<b>25</b>	<b>260</b>	<b>590</b>	<b>850</b>

**III Year – II Semester**

S. No.	Courses Category	Course code	Course Name	Periods per week			C	Scheme of Examination Max. Marks		
				L	T	P		Int.	Ext.	Total
1.	HS	14BT5HS01	Managerial Economics and Principles of Accountancy	3	1	–	3	30	70	100
2.	PC	14BT60101	Reinforced Cement Concrete Structures – II	3	1	–	3	30	70	100
3.	PC	14BT60102	Foundation Engineering	3	1	–	3	30	70	100
4.	PC	14BT60103	Transportation Engineering –I	3	1	–	3	30	70	100
5.	PC	14BT60104	Wastewater Technology	3	1	–	3	30	70	100
<b>Professional Elective– I</b>										
6.	PE	14BT60105	1. Advanced Structural Analysis	3	1	–	3	30	70	100
7.		14BT60106	2. Geoenvironmental Engineering							
8.		14BT60107	3. Ground Water Development and Management							
9.		14BT60108	4. Solid Waste Management							
10.	PC	14BT60121	Concrete and Highway Materials Lab	–	–	3	2	25	50	75
11.	PC	14BT60122	Environmental Engineering Lab	–	–	3	2	25	50	75
<b>Total:</b>				<b>18</b>	<b>6</b>	<b>6</b>	<b>22</b>	<b>230</b>	<b>520</b>	<b>750</b>

**IV Year – I Semester**

S. No.	Courses Category	Courses code	Course Name	Periods per week			C	Scheme of Examination Max. Marks		
				L	T	P		Int.	Ext.	Total
1.	PC	14BT70101	Steel Structures	3	1	–	3	30	70	100
2.	PC	14BT70102	Water Resources Engineering	3	1	–	3	30	70	100
3.	PC	14BT70103	Geospatial Technologies	3	1	–	3	30	70	100
4.	PC	14BT70104	Transportation Engineering– II	3	1	–	3	30	70	100
5.	OE	OPEN ELECTIVES		3	1	–	3	30	70	100
<b>Professional Elective II</b>										
6.	PE	14BT70110	1. Structural Dynamics	3	1	–	3	30	70	100
		14BT70111	2. Advanced Foundation Engineering							
		14BT70112	3. Water Resources Systems Planning and Management							
		14BT70113	4. Transportation Management							
		14BT70114	5. Environmental Impact Assessment and Management							
7.	PE	14BT70121	Remote Sensing and Geographical Information Systems Lab	–	–	3	2	25	50	75
8.	PE	14BT70122	Computer Aided Design and Detailing Lab	–	–	3	2	25	50	75
9.	PC	14BT70123	Seminar	–	–	–	2	–	50	50
<b>Total</b>				<b>18</b>	<b>6</b>	<b>6</b>	<b>24</b>	<b>230</b>	<b>570</b>	<b>800</b>

**IV Year – II Semester**

S. No.	Course Category	Courses Code	Course Name	Periods per week			C	Scheme of Examination Max. Marks		
				L	T	P		Int.	Ext.	Total
1.	PC	14BT80101	Prestressed Concrete	3	1	–	3	30	70	100
2.	PC	14BT80102	Estimation, Costing & Valuation	3	1	–	3	30	70	100
<b>Professional Elective– III</b>										
3	PE	14BT80103	1. Advanced Steel Structures	3	1	–	3	30	70	100
		14BT80104	2. Soil Dynamics and Machine Foundations							
		14BT80105	3. Watershed Management							
		14BT80106	4. Industrial Waste Water Treatment							
		14BT80107	5. Infrastructure Development and Management							
		14BT80108	6. Earth Resistant Design of Structures							
<b>Professional Elective– IV</b>										
4	PE	14BT80109	1. Bridge Engineering	3	1	–	3	30	70	100
		14BT80110	2. Ground Improvement Techniques							
		14BT80111	3. Rehabilitation and Retrofitting of Structures							
		14BT80112	4. Design and Drawing of Irrigation Structures							
		14BT80113	5. Architecture and Town Planning							
		14BT80114	6. Railway, Harbour and Airport Engineering							
5	PC	14BT80121	Comprehensive Viva–Voce	–	–	–	2	–	100	100
	PC	14BT80122	Project Work	–	–	20	10	60	140	200
<b>Total:</b>				<b>12</b>	<b>4</b>	<b>20</b>	<b>24</b>	<b>180</b>	<b>520</b>	<b>700</b>

**Final list of Open Elective Courses**

Sl. No.	Offering Dept.	Course Code	Course Name
1	BS&H	14BT6HS01	Banking and Insurance
2		14BT6HS02	Cost and Financial Management
3		14BT6HS03	Entrepreneurship for Micro, Small and Medium Enterprises
4	CE	14BT70105	Disaster Mitigation and Management
5		14BT70106	Environmental Pollution and Control
6		14BT70107	Contract Laws and Regulations
7		14BT70108	Planning for Sustainable Development
8		14BT70109	Rural Technology
9	ME	14BT60305	Artificial Intelligence and Robotics
10		14BT60306	Global Strategy and Technology
11		14BT60307	IPR and Management
12		14BT60308	Managing Innovation and Entrepreneurship
13		14BT60309	Material Science
14	CSE	14BT60502	Engineering System Analysis and Design
15	EIE	14BT71005	Microelectromechanical Systems
16	IT	14BT61203	Bio-Informatics
17		14BT61204	Cyber Security and Laws



**BOS, Chairman**



# SREE VIDYANIKETHAN ENGINEERING COLLEGE

(AUTONOMOUS)

Sree Sainath Nagar, Tirupati

## Department of Civil Engineering

### LIST OF NEW COURSES INTRODUCED

Program: **B.Tech.- Civil Engineering**

Regulations: **SVEC-14**

Department	Course Code	Name of the course
CE	14BT60106	Geo-environmental Engineering
CE	14BT60108	Solid Waste Management
CE	14BT70103	Geospatial Technologies
CE	14BT70113	Transportation Management
CE	14BT70121	Remote Sensing and Geographical Information Systems Lab
CE	14BT70106	Environmental Pollution and Control
CE	14BT70107	Contract Laws and Regulations
CE	14BT70108	Planning for Sustainable Development
CE	14BT70109	Rural Technology
CE	14BT80103	Advanced Steel Structures
CE	14BT80107	Infrastructure Development and Management
CE	14BT80109	Bridge Engineering
CE	14BT80111	Rehabilitation and Retrofitting of Structures
CE	14BT80114	Railway, Harbour and Airport Engineering

BOS, Chairman