

**Agenda for 10<sup>th</sup> Meeting of Board of Studies for B. Tech.**  
**(Civil Engineering) on 10.6.2019 at 02:15 PM**



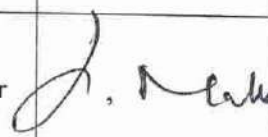
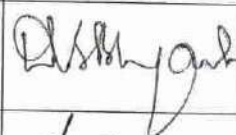
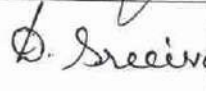
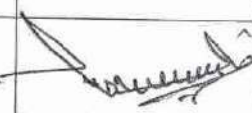

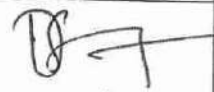
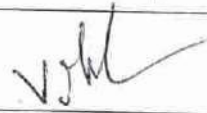
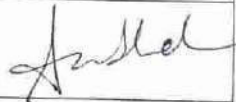

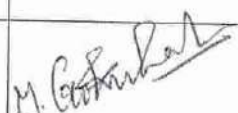

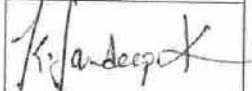
1. Action Taken Report on Minutes/ Resolutions of 9<sup>th</sup> BOS Meeting
2. Report on Implementation of Autonomy with Respect to Syllabi & Academic Regulations for III B.Tech. (under SVEC16)
3. Academic Calendar for II, III and IV Year B.Tech. for 2019-20
4. Vision and Mission of the Department, PEOs, POs & PSOs and Course Structure (All 4 years) of B.Tech. Program under SVEC-19 Curriculum
5. Administrative set-up for B.Tech. Program
6. Syllabi with Course Objectives & Course Outcomes, Lesson Plans and Model Question Papers for Courses of I B.Tech. (Under SVEC-19)
7. Panel of Examiners for Question Paper Setting for I B.Tech. Courses (Under SVEC-19)
8. Implementation of Teaching, Learning and Evaluation Process
9. Substitute Courses
10. Research and Consultancy
11. Faculty Development Activities
12. Staff Development Activities
13. Student Development Activities
14. Student Support Systems
15. Extension Activities
16. Any other Item

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

**10<sup>th</sup> Meeting of Board of Studies**  
**for B.Tech. in Civil Engineering on 10.6.2019 @ 02:15 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. T. D. Gunneswara Rao,</b> Professor, Department of Civil Engg., National Institute of Technology, Warangal – 506004.	External Member (Academics)	
3.	<b>Dr. P. Mallikarjuna</b> Professor, Dept. of Civil Engineering, S. V. U. College of Engineering, S. V. University, Tirupati-517502	External Member (Academics)	
4.	<b>Dr. D. V. S. Bhagavanulu</b> Professor of Civil Engineering & Director, SVEC, Tirupati	Internal Member (Academics)	
5.	<b>Dr. D. Sreenivasulu</b> Associate Professor & Head, Dept. of Civil Engineering, SVEC, Tirupati.	Internal Member (Academics)	 10/6/2019
6.	<b>Dr. P. Ramesh</b> Associate Professor, Dept. of Civil Engineering, SVEC, Tirupati.	Internal Member (Academics)	
7.	<b>Dr. Hemadri Prasad Raju</b> Associate Professor, Dept. of Civil Engineering, SVEC, Tirupati.	Internal Member (Academics)	
8.	<b>Mr. D. Srinivasa Murthy</b> Assistant Professor, Dept. of Civil Engineering, SVEC, Tirupati.	Internal Member (Academics)	
9.	<b>Mr. V. Mahesh</b> Assistant Professor, Dept. of Civil Engineering, SVEC, Tirupati.	Internal Member (Academics)	
10.	<b>Mr. B. Sudhakar</b> Assistant Professor, Dept. of Civil Engineering, SVEC, Tirupati.	Internal Member (Academics)	
11.	<b>Mr. D. V. Purushotham</b> Assistant Professor, Dept. of Civil Engineering, SVEC, Tirupati.	Internal Member (Academics)	
12.	<b>Mr. M. Gokulnath,</b> Assistant Professor, Dept. of Civil Engineering, SVEC, Tirupati.	Internal Member (Academics)	
13.	<b>Mrs. G. Gnana Prasanna,</b> Assistant Professor, Dept. of Civil Engineering, SVEC, Tirupati.	Internal Member (Academics)	
14.	<b>Mr. K. Sandeep Kumar,</b> Assistant Professor, Dept. of Civil Engineering, SVEC, Tirupati.	Internal Member (Academics)	



**1. Action Taken Report on "Minutes of BOS Meeting held on 26-05-2018":**

Chairman Dr. O. Eswara Reddy apprised the members the Minutes/Resolutions of BOS Meeting held on 26-05-2018.

Minutes of BOS Meeting held on 26-05-2018	Action Taken
Syllabi of II, III & IV B.Tech. Civil Engineering of SVEC16 Regulations were approved in the Board of Studies in Civil Engineering Meeting held on 25-03-2017.	Implemented for III B.Tech. Civil Engineering I & II Semesters from the academic year 2018-2019.
Panels of Question Paper Setters and Model Question Papers for III B.Tech. Civil Engineering (SVEC16 Regulations).	Panels and Model Question Papers were submitted to the Principal.
B.Tech. Academic Calendar for 2018-19	Implemented for I, II, III and IV B.Tech. for the academic year 2018-2019.
Administrative Setup of Curriculum Development for B.Tech. in Civil Engineering	Implemented from the academic year 2014-2015.
AICTE Model Curriculum-2018-Induction Training, Course Structure and Syllabi.	Considered for SVEC19 Regulations B.Tech. CE Curriculum Development.
Proposed B.Tech. Civil Engineering Course Structure for the next Regulations and the corresponding Suggestions.	Considered for SVEC19 Regulations B.Tech. CE Curriculum Development.

The above Action Taken Report is noted for record.

**2. Report on implementation of autonomy with respect to syllabi and regulations (SVEC16 Regulations: III B.Tech. CE I & II Semesters):**

Chairman-BOS presented a report on implementation of autonomy to the members. The board has congratulated the college authorities for successful implementation of SVEC16 regulations and syllabi for III B.Tech. CE I & II (ANNEXURE-I).

**3. Academic Calendar for the Year 2019-20:**

BOS Members approved the proposed academic calendar for II, III and IV B.Tech Programmes for the year 2019-20. (ANNEXURE-II).

**4. Vision and Mission of the Department, PEOs, POs & PSOs and Course Structure (All 4 years) of B. Tech. Program in Civil Engineering under SVEC-19 Curriculum:**

BOS Members approved the proposed Vision and Mission of the Department, PEOs, POs & PSOs and Course Structure (All 4 Years) of B.Tech. in Civil Engineering Program of SVEC19 Regulations (ANNEXURE-III). Members have appreciated the efforts of Chairman and Internal Members of BOS and the Department in framing B.Tech. Civil Engineering Course Structure in a best possible way. In addition the following suggestions are made for further improvement of the proposed B.Tech. Civil Engineering course structure.

1. In academic calendar, the number of instruction days can be mentioned instead of number of instruction weeks.
2. A clause on "Ranks/Prizes/Awards/Rewards/Incentives for students at institutional level" in the SVEC19 Regulations.
3. In PSO1, the words 'analyze' and 'materials' can be included at appropriate place.



4. In PSO3, the "irrigation structures; manage water resources" can be replaced with "maintain and manage water resources systems".
5. The title "Open Elective-2" can be changed to "Open Elective-1" to avoid confusion.
6. In IV B.Tech. I Semester, under Professional Elective-4, the title of the course on "Sustainable Construction Methods" can be changed to "Sustainable Construction Materials" or "Sustainable Construction Techniques" or "Sustainable Construction" or any other title appropriately avoiding the word "methods".
7. For Minor Degree, the courses Engineering Mechanics, Fluid Mechanics, Mechanics of Solids and Strength of Materials Lab can be replaced with Civil Engineering Materials and Concrete Technology; Construction, Planning and Project Management; Surveying; Environmental Engineering; Soil Mechanics Transportation Engineering and Surveying Lab.
8. For Honors Degree, the courses can be earmarked for each semester based on the prerequisite satisfaction and course codes can be allocated accordingly to avoid confusion in understanding and course registration.
9. For Honors Degree, the course on "Mini Project" can be replaced with some advanced application courses in Civil Engineering such as Software Applications in Civil Engineering, Modern Techniques in Modelling and Simulation, Advanced Numerical Methods in Civil Engineering, Soft Computing in Civil Engineering etc. since a course on "Project Work" is already exists in IV B.Tech. II Semester.
10. Outcomes of MoUs signed such as Internships, Placements, Visits and Guest Lectures etc. can be highlighted.
11. Social relevant projects can be taken up by the department and the reports generated can be submitted to the concerned local bodies and government departments for their use. The same can be covered in news papers.
12. Collaborations can be established with the local government institutions such as S.V. University, IIT-Tirupati, JNTU-Kalikiri to execute part of their consultancy/research projects.
13. Regular visits can be made to local government institutions for good interaction and collaboration in various aspects.
14. Paperfree BOS Meetings can be organized.

**5. Administrative set-up for B.Tech. Program in Civil Engineering:**

The BOS members were apprised the administrative set-up followed in curriculum development for B.Tech. Civil Engineering program since the academic year 2014-2015. Members appreciated the process.

**6. Syllabi with Course Objectives & Course Outcomes, Lesson Plans and Model Question Papers for Courses of I B.Tech. Civil Engineering (Under SVEC-19):**

BOS Members approved the proposed Syllabi with Course Objectives & Outcomes, Lesson Plans and Question Papers of civil engineering core courses of I B. Tech. Civil Engineering of SVEC19 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.

**7. Panel of Examiners for Question Paper Setting for I B.Tech. Civil Engineering Courses (Under SVEC-19):**

Members were apprised of the Panel of Examiners for Question Paper Setting for core courses of I B.Tech. in Civil Engineering (SVEC19) (**ANNEXURE-V**). Resolved to authorize the Chairman, BOS in Civil Engineering to make changes if necessary in Panel of Examiners for Question Paper Setting 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.



**8. Implementation of Teaching, Learning and Evaluation Process:**

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-VI)**.

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

**9. 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.

**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. **(ANNEXURE-VII)**.

**11. 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-VIII)**.

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 2019-20. Resolved to authorize the Chairman, BOS in Civil Engineering to approve the TNA after updation by the head of the department as and when required.

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

**12. 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 2019-20 **(ANNEXURE-IX)**.

**13. 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-X)**.

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.

**14. 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, QEEE training and training on Entrepreneurship during the last one year (**ANNEXURE-XI**).

**15. Extension Activities:**

Members were informed about the students' active participation in various extension activities like NSS, blood donation camps, outreach activities, American Society of Civil Engineers Sree Vidyanikethan Engineering College (ASCE SVEC) Student Chapter activities, Indian Geotechnical Society Sree Vidyanikethan Engineering College (IGS SVEC) Student Chapter activities and Intellectual Association of Civil Engineers (IACE) activities setc. (**ANNEXURE-XII**).

Meeting concluded with thanks to the Members.



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



## Approved Course Structure

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

**Regulations: SVEC-16**

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
I Year - I Semester										
1.	16BT1HS01	Technical English	3	1	0	4	3	30	70	100
2.	16BT1BS01	Engineering Chemistry	3	1	0	4	3	30	70	100
3.	16BT1BS03	Matrices and Numerical Methods	3	1	0	4	3	30	70	100
4.	16BT1BS04	Multi-Variable Calculus and Differential Equations	3	1	0	4	3	30	70	100
5.	16BT10501	Programming in C	3	1	0	4	3	30	70	100
6.	16BT1HS31	English Language Lab	0	0	3	3	2	50	50	100
7.	16BT1BS31	Engineering Chemistry Lab	0	0	3	3	2	50	50	100
8.	16BT10331	Computer Aided Engineering Drawing	0	1	6	7	3	50	50	100
9.	16BT10531	Programming in C Lab	0	0	3	3	2	50	50	100
Total			15	6	15	36	24	350	550	900

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
I Year - II Semester										
1.	16BT1BS02	Engineering Physics	3	1	0	4	3	30	70	100
2.	16BT2BS01	Transformation Techniques and Partial Differential Equations	3	1	0	4	3	30	70	100
3.	16BT20101	Building Materials and Construction Technology	3	1	0	4	3	30	70	100
4.	16BT20102	Engineering Mechanics	4	1	0	5	4	30	70	100
5.	16BT20241	Basic Electrical and Electronics Engineering	3	1	0	4	3	30	70	100
6.	16BT1BS32	Engineering Physics Lab	0	0	3	3	2	50	50	100
7.	16BT20131	Building Materials and Construction Technology Lab	0	0	3	3	2	50	50	100
8.	16BT20252	MATLAB Practice for Civil Engineers	0	1	3	4	2	50	50	100
9.	16BT20331	Engineering Workshop Practice	0	0	3	3	2	50	50	100
Total			16	6	12	34	24	350	550	900

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
II Year - I Semester											
1.	16BT3BS01	Probability Distributions and Statistical Methods	BS	3	1	0	4	3	30	70	100
2.	16BT3HS02	Managerial Economics and Principles of Accountancy	HS	3	1	0	4	3	30	70	100
3.	16BT30101	Construction Planning and Project Management	PC	3	1	0	4	3	30	70	100
4.	16BT30102	Fluid Mechanics and Hydraulic Machinery	PC	3	1	0	4	3	30	70	100
5.	16BT30103	Mechanics of Solids	ES	3	1	0	4	3	30	70	100
6.	16BT30104	Surveying	PC	3	1	0	4	3	30	70	100
7.	16BT30131	Fluid Mechanics and Hydraulic Machinery Lab	PC	0	0	3	3	2	50	50	100
8.	16BT30132	Strength of Materials Lab	PC	0	0	3	3	2	50	50	100
9.	16BT30133	Surveying Lab	PC	0	0	3	3	2	50	50	100
Total				18	6	9	33	24	330	570	900



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
II Year - II Semester											
1.	16BT3HS01	Environmental Studies	HS	3	0	0	3	3	30	70	100
2.	16BT40101	Concrete Technology	PC	3	1	0	4	3	30	70	100
3.	16BT40102	Engineering Geology	PC	3	1	0	4	3	30	70	100
4.	16BT40103	Engineering Hydrology	PC	3	1	0	4	3	30	70	100
5.	16BT40104	Structural Analysis-I	PC	3	1	0	4	3	30	70	100
6.	16BT40105	Water Supply Engineering	PC	3	1	0	4	3	30	70	100
7.	16BT40131	Concrete Technology Lab	PC	0	0	3	3	2	50	50	100
8.	16BT40132	Engineering Geology Lab	PC	0	0	3	3	2	50	50	100
9.	16BT4HS31	Soft Skills Lab	HS	0	0	3	3	2	50	50	100
Total				18	5	9	32	24	330	570	900

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
III Year - I Semester											
1.	16BT50101	Irrigation Engineering	PC	3	1	0	4	3	30	70	100
2.	16BT50102	Reinforced Cement Concrete Structures	PC	3	1	0	4	3	30	70	100
3.	16BT50103	Soil Mechanics	PC	3	1	0	4	3	30	70	100
4.	16BT50104	Structural Analysis-II	PC	3	1	0	4	3	30	70	100
5.	16BT50105	Wastewater Technology	PC	3	1	0	4	3	30	70	100
6.	Interdisciplinary Elective-1		IDE	3	1	0	4	3	30	70	100
	16BT50441 16BT5HS02 16BT50241 16BT70308	1. Principles of Image Processing 2. Costing and Finance Management for Civil Engineers 3. Renewable Energy 4. Computational Fluid Dynamics									
7.	16BT50131	Computer Aided Building Planning and Drawing	PC	0	1	3	4	2	50	50	100
8.	16BT50132	Environmental Engineering Lab	PC	0	0	3	3	2	50	50	100
9.	16BT50133	Geotechnical Engineering Lab	PC	0	0	3	3	2	50	50	100
Total				18	7	9	34	24	330	570	900



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
III Year - II Semester											
1.	16BT60101	Foundation Engineering	PC	3	1	0	4	3	30	70	100
2.	16BT60102	Highway and Traffic Engineering	PC	3	1	0	4	3	30	70	100
3.	16BT60103	Steel Structures	PC	3	1	0	4	3	30	70	100
4.	Interdisciplinary Elective-2		IDE	3	1	0	4	3	30	70	100
	16BT40502 16BT50341 16BT60104 16BT60241	1. Data Base Management Systems 2. Optimization Techniques 3. Fire Engineering 4. Energy Audit and Conservation									
5.	Program Elective – 1		PE	3	1	0	4	3	30	70	100
	16BT60105 16BT60106 16BT60107 16BT60108 16BT60109  16BT60110 16BT60111	1. Advanced Reinforced Cement Concrete Structures 2. Advanced Structural Analysis 3. Advanced Surveying 4. Geoenvironmental Engineering 5. Groundwater Development and Management 6. Solid Waste Management 7. Structural Health Monitoring									
6.		Open Elective	OE	3	1	0	4	3	30	70	100
7.	16BT60131	Computer Aided Design and Detailing Lab	PC	0	0	3	3	2	50	50	100
8.	16BT60132	Highway Engineering Lab	PC	0	0	3	3	2	50	50	100
9.	16BT60133	Seminar	EEC	0	0	0	0	2	-	100	100
10.	16BT6MOOC	MOOC	-	-	-	-	-	-	-	-	-
Total				18	6	6	30	24	280	620	900

### LIST OF OPEN ELECTIVES

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
IV Year - I Semester											
1.	16BT70101	Estimation and Quantity Surveying	PC	3	1	0	4	3	30	70	100
2.	16BT70102	Geospatial Technologies	PC	3	1	0	4	3	30	70	100
3.	16BT70103	Railway, Airport and Harbour Engineering	PC	3	1	0	4	3	30	70	100
4.	Program Elective – 2		PE	3	1	0	4	3	30	70	100
	16BT70104	Advanced Foundation Engineering									
	16BT70105	Architecture and Town Planning									
	16BT70106	Environmental Impact Assessment and Management									
	16BT70107	Global Positioning System (GPS)									
	16BT70108	Structural Dynamics									
	16BT70109	Transportation Planning and Management									
	16BT70110	Water Resources Systems Planning and Management									
5.	Program Elective – 3		PE	3	1	0	4	3	30	70	100
	16BT70111	Advanced Steel Structures									
	16BT70112	Earthquake Resistant Design of Structures									
	16BT70113	Highway Construction and Maintenance									
	16BT70114	Industrial Wastewater Treatment									
	16BT70115	Infrastructure Development and Management									
	16BT70116	Soil Dynamics and Machine Foundations									
	16BT70117	Watershed Management									
6.	Program Elective – 4		PE	3	1	0	4	3	30	70	100
	16BT70118	Air Pollution and Control									
	16BT70119	Bridge Engineering									
	16BT70120	Ground Improvement Techniques									
	16BT70121	Hydro Power Engineering									
	16BT70122	Pavement Analysis and Design									
	16BT70123	Prestressed Concrete Rehabilitation and Retrofitting of Structures									
	16BT70124										
7.	16BT70131	Civil Engineering Software Lab	EEC	0	0	3	3	2	50	50	100
8.	16BT70132	Remote Sensing and Geographical Information Systems Lab	PC	0	0	3	3	2	50	50	100
9.	16BT70133	Comprehensive Assessment	EEC	0	0	0	0	2	-	100	100
Total				18	6	6	30	24	280	620	900

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
IV Year - II Semester											
1.	16BT80131	Project Work*	EEC	0	0	0	0	12	100	100	200
Total				0	0	0	0	12	100	100	200



**BOS, Chairman**