

(An Autonomous Institution - AFFILIATED TO ANNA UNIVERSITY, CHENNAI)
S.P.G.Chidambara Nadar - C.Nagammal Campus

S.P.G.C. Nagar, K.Vellakulam - 625 701 (Near VIRUDHUNAGAR).

#### DEPARTMENT OF CIVIL ENGINEERING

MINUTES OF THE MEETING OF THIRD BOARD OF STUDIES MEETING HELD ON 20-11-2021 AT 2:00 PM IN ONLINE TOWARDS CONSIDERING THE PROPOSED R2020 UG PROGRAMME, B.E. - CIVIL ENGINEERING CURRICULUM & SYLLABI (V SEMESTER AND VI SEMESTER), UG AND PG REGULATION RELATED AMENDMENTS AND DISCUSSIONS, COMMON CURRICULUM FOR FIRST YEAR (R2021) IN THE DEPARTMENT OF CIVIL ENGINEERING.

Platform: Microsoft Teams

Meeting Link: https://tinyurl.com/3ezndpnj

Dr. R. Lakshmi /Head of the Department - (Department of Civil Engineering) welcomed all the members of the Board of Studies and Faculty members of Civil Engineering department to the III BOS meeting.

#### The following members were present:

S.No	Name of the Expert	Designation	Capacity
1	Dr.G.Chitra	Professor	Anna University
	a	Department of Civil Engineering	Nominee
		Thiagarajar College of Engineering	
	7	Madurai	
2	Dr.S.Jeyalekshmi	Professor	Expert member
	*	Department of Civil Engineering	Nominated by
		NIT	Academic council
		Trichy	

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	3	Dr.G.Janarthanan	Associate Professor	Expert member
			Center for Environmental	Nominated by
		ii go	Management	Academic council
			NITTTR	
			CSIR Road	,
		e e e	Chennai	
	4	Er.L.Balaji	International Professional Engineer	Industrialist Nominee
			& Registered Valuer	
			3	
		*		
	5	Er.P.Karthick	Project Associate	Alumni Nominee
		98	SERC	
		1 * *	Chennai	
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8	Internal Members of Bo	S – CIVIL Department
S.No	Name	Designation
1.	Dr.R.Lakshmi	Professor and Head / CIVIL,
	*	Chairman of BoS – CIVIL
2.	Dr. S.P.Murali Kannan	Assistant Professor / CIVIL
3.	Mrs.S.Thahira Banu (Ph.D.,)	Assistant Professor / CIVIL
4.	Mr.P.Ponkarthikeyan (Ph.D.,)	Assistant Professor / CIVIL
5.	Mr.N.Jegan Durai (Ph.D.,)	Assistant Professor / CIVIL
6.	Mr.D.Velumani (Ph.D.,)	Assistant Professor / CIVIL
7.	Mr.A.Krishnamoorthy	Assistant Professor / CIVIL
8.	Mr.M.Subahar (Ph.D.,)	Assistant Professor / CIVIL
9.	Mr.P.Ganesh prabhu (Ph.D.,)	Assistant Professor / CIVIL
10.	Mrs.B.Deepa (Ph.D.,)	Assistant Professor / CIVIL
11.	Ms.J.Christiarani (Ph.D.,)	Assistant Professor / CIVIL
12.	Mr.R.Ganesh	Assistant Professor / CIVIL
13.	Ms.S.Brintha	Assistant Professor / CIVIL
14.	Mrs.R.Sangeetha	Assistant Professor / CIVIL
15.	Mr.K.Hariharan	Assistant Professor / CIVIL

Dr.R.Lakshmi (Head of the Department) Department of Civil Engineering welcomed the gathering and gave a brief introduction about the Expert members, alumni and faculty members from the Department of Civil Engineering, followed by the discussion of the program agenda. Dr. S.P.Murali Kannan (Coordinator UG Courses) started the discussion with R2020 UG Programme curriculum and syllabi of 5<sup>th</sup> and 6<sup>th</sup> semester of Civil Engineering and then continued with the suggestions and recommendations received from all stake holders.

## **Discussions and Recommendations:**

- HOD/CIVIL gave a brief presentation for the Approval of the Minutes of the Second BoS meeting.
- Dr. S.P.Murali Kannan (Coordinator UG Courses CIVIL) presented the R2020 UG Curriculum, B.E. Civil Engineering for B.E. CIVIL (5<sup>th</sup> and 6<sup>th</sup> semester.)

# CURRICULUM V AND VI SEMESTER (R2020) SEMESTER V

S.No	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
a e		T	THEORY					
1.		Design of Reinforced Cement Concrete Elements	PC	3	3	1	0	4
2.	CE1502	Foundation Engineering	PC	3	3	0	0	3
3.	CE1503	Structural Analysis I	PC	3	3	0	0	3
4.	CE1504	Water Supply Engineering	PC	3	3	0	0	3
5.	CE1505	Concrete and Highway Engineering (Theory cum Lab)	PC	5	3	0	2	4
6.		Open Elective*	OE	3	3	0	0	3
7.		Audit Course	AC	3	3	0	0	0

			PRACTICALS				(e) (a) (a) (a) (a) (a) (a) (a) (a) (a) (a	
8.	CE1511	Hydraulic Engineering Laboratory	PC	4	0	0	4	2
9.	CE1521	Survey Camp	EEC	0	0	0	0	2
10.	HS1521	Professional Communication	EEC	2	0	0	2	$\frac{2}{1}$
			TOTAL	29	21	1	8	25

## SEMESTER VI

S.No	COURSE CODE	COURSETITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
			THEORY		5 (80) 8	8 - 1 1 1 1		4 25 g
1.		Design of Steel Structural Elements	PC	3	3	1	0	4
2.	CE1602	Structural Analysis II	PC	3	3	0	0	3
<ol> <li>4.</li> </ol>		Wastewater Engineering	PC	3	3	0	0	3
5.		Professiona I Elective I Professional	PE	3	3	0	0	3
6.		Elective II Online	PE	3	3	0	0	3
w ,		Course	OL	NPTEL/S	SWA	YAM		2
		PI	RACTICALS					V 1
7.		Computer Aided Design and Drafting Laboratory	PC	4	0	0	4	2
8.	CE1612 V	Vater and Waste Vater Analysis aboratory	PC	4	0	0	4	2
			TOTAL	23	15	1	8	22

## LIST OF PROFESSIONAL ELECTIVE COURSES

## SEMESTER VI

## **ELECTIVE -I**

S.No	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
1.		Environmental Impact Assessment	PE	3	3	0	0	3
2.		Construction Planning and Scheduling	PE	3	3	0	0	3
3.	CE1633	Remote Sensing Techniques and GIS	PE	3	3	0	0	3
4.	CE1634	Industrial Safety	PE	3	3	0	0	3
5.	CE1635	Maintenance, Repair and rehabilitation of	PE	3	3	0	0	3
	=	structures		y er		-		
6.	CE1636	Railways, Airport, Docks and Harbour Engineering	PE	3	3	0	0	3

## ELECTIVE -II

S.No	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
1.	i i i i	Air Pollution and Control Engineering	PE	3 .	3	0	0	3
2.	CE1638	Housing Planning and Management	PE	3	3	0	0	3
3.	CE1639	Hydrology	PE	3	3	0	0	3
4.	CE1640	Municipal Solid Waste Management	PE	3	3	0	0	3
5.	CE1641	Soil Dynamics	PE	3	3	0	0	3
6.	CE1642	Urban Planning and Development	PE	3	3	0	0	3

### LIST OF OPEN ELECTIVES

## Open Elective I (Semester V) - Offered to other departments

S.No	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
1	OCE151	Air Pollution and	OE	3	3	0	0	3
2	OCE152	Control Engineering Environment and	OE	3	3	0	0	3
	0.071.50	Agriculture				-	Sp.	
3	OCE153	Geographic Information System	OE	3	3	0	0	3

### LIST OF AUDIT COURSES

## Audit Courses (Offered to all departments)

S.	Course			Cred	lits	
No	Code	Course Name	L	T	P	С
1	AUD101	Constitution of India	3	0	0	0
2	AUD102	Value Education	3	0	0	0
3	AUD103	Teaching and Learning	3	. 0	0	0
4	AUD104	Stress Relieving Management by Yoga	3	0	0	0
5	AUD105	Developing your Personality	3	0	0	0
6	AUD106	Essence of Indian Knowledge and Tradition	3	0	0	0
7	AUD107	Appreciation of Sangam era Tamil Literature	3	0	0	0
8	AUD108	Design Thinking	3	0	0	0

### **ONLINE COURSES**

List of Online Courses (NPTEL / Swayam ) - need to be updated based on the current semester.

## LIST OF VALUE ADDED COURSES

Year	Course Name
II	Microsoft office and Sketchup
III	Revit Architecture and Total Station Surveying
IV	Navisworks and Tekla Structures

## The following suggestions were given by the BOS Members:

#### II BoS:

- HOD/CIVIL briefed about the minutes of the previous BoS meeting to all the stake holders.
- Based on the previous BoS committee meeting discussion some specific electives like Construction Planning and Scheduling and Industrial Structures has been added as new subjects in the professional elective buckets.
- Revision of syllabus of subjects in the semester V and VI was discussed. As Design of reinforced concrete elements paper involves both working stress as well as limit state design concepts with design of all concrete elements, the previously allotted credit of 3 needs to be upgraded. Design of reinforced concrete elements is allotted with 60hr and a credit of 4 with the approval of the committee.
- Similarly Design of Steel Structures a 3 credit paper with 45hrs, course in sixth semester has been modified based on the recommendations and converted to 4 credit and 60hrs paper.
- As the credits has been increased a major change of total credits of 167 has been increased to 169 and the allowable credits was 170.
- Discussion on various Audit courses, Open elective courses (NPTEL/SWAYAM) were also done. The experts reviewed and confirmed the specialized courses which are added in the list of elective papers.
- Approval of Second BoS recommendations was done.

#### **Minutes of Meeting of III BoS:**

- Following the above discussions the Amendments made in UG, PG syllabus and online courses were also briefed.
- Placement offers of current final year UG and PG students were displayed and explained to the stake holders.

Dr.G.Chitra, Professor/Department of Civil Engineering, Thiagarajar College of Engineering - confirmed the credits for the Online courses. HOD/CIVIL explained about the credit distribution of the online courses based on the duration of the courses.

The students should do two 12weeks course or three 8 weeks course and need to confirm whether their overall credits in online courses reaches six within the stipulated period.

- Expert suggested that the NPTEL course list need to be discussed and updated every semester.
- Members asked about the changes between regulation R2020 and R2021 and HOD/CIVIL explained that as four additional UG courses are yet to be started, new courses like Principle of Engineering, Coding Techniques are added newly to the syllabus of the First year course. The credits with the addition of new courses increased from 22 to 24 in regulation 2021/Semester I and II.
- Members suggested to introduce Industry supported courses like Practical Valuation with one or two credits in the syllabus which will make a good rapport with Industries. Since the students need some industrial exposure it may be suggested that these courses offered by the industry can be completed during V,VI,VII semester itself so that students finds an prompt way to approach company regarding their intern and placement in VIII semester.
- A credit of three is suggested for each industry oriented courses such that a student may complete industry supported courses with totally nine credits during V, VI, VII semester.
- Members opined that value addition will be done during the industry supported course along with his project work in higher semesters.

Dr.S.Jeyalekshmi, Professor/Department of Civil Engineering, NIT, Trichy - Anna University nominated expert member shared the inputs for the subjects as mentioned below.

- In CE 1502-Foundation Engineering course elaboration of contents in syllabus is not needed instead it can be given as brief points under specific topics.
- Codal provisions reaffirmations need to be checked.
- It is suggested to do revisions of Co's in the subjects based with the Bloom's taxonomy level.

Er.L.Balaji, International Professional Engineer & Registered Valuer - Suggested to add practical knowledge with field experience.ie. Including case studies mentioned in the syllabus can be related with real time works so that students will get exposure to practical knowledge and hands on practice rather than theoretical approach.

• Expert mentioned to add new emerging techniques like Piling techniques, Guniting etc., in the rehabilitation course.

Dr.G.Chitra, Professor/Department of Civil Engineering, Thiagarajar College of Engineering - emphasized that mapping of the Co's with Po's can be relooked and proper consideration should be given for including the relevancy of PO5, PO6 and PO7.

- In some of the subjects like Waste Water Engineering, Water Supply Engineering, prefabricated structures Indian standard Codal provisions shall be included in the references.
- Standard green rating component shall be included in Green building design.
- Expert mentioned that the syllabus of Construction planning scheduling course seems to be vast and the topics shall be optimized.
- Credit distribution for the subject Construction planning scheduling course was discussed and tutorial hour should be allotted since it covers problem oriented discussions also.

Dr.G.Janarthanan, Associate Professor/Center for Environmental Management,

**NITTTR, Chennai** - requested to include standard manuals in the references of some subjects like Waste Water Engineering in theory or laboratory contents.

He also suggested the corresponding Co's of the Waste Water Engineering subject to map with the Po's related to environment.

Alumni Er.S.Karthik, Project Associate SERC, Chennai suggested that TEKLA Structures shall be added as Value added Course as most of the industries prefer this practice. He also shared that the students should make use of the opportunity to develop business ideas provided by Indian Institute of Information Technology, Design and Manufacturing, Kancheepuram.

## **Date of next Meeting:**

The tentative date for the Next BoS Meeting (CIVIL Board) is proposed during May 2022.

The meeting ended with the Vote of Thanks by Dr.R.Lakshmi (HOD/CIVIL).

Dr. S.P. Muschi Kannan Bos (i/c)

(Dr. R.Lakshmi)

BoS Chairman – HOD / CIVIL