



# **ERODE SENGUNTHAR ENGINEERING COLLEGE**

**(An Autonomous Institution, Affiliated to Anna  
University, Chennai)**



**PERUNDURAI, ERODE – 638 057**



**Department of Civil Engineering**  
**6<sup>th</sup> BOARD OF STUDIES MEETING**

**17<sup>th</sup> JUNE, 2023 @ 10.30 am**

**ZOOM ONLINE MEET**

<https://us06web.zoom.us/j/88430891034?pwd=V202d1VpY2xkNk84QnJnL1lXbHVmUT09>



# ERODE SENGUNTHAR ENGINEERING COLLEGE

(An Autonomous Institution)

Approved by AICTE, New Delhi, Permanently Affiliated to Anna University- Chennai,  
Accredited by National Board of Accreditation (NBA), New Delhi &  
National Assessment and Accreditation Council (NAAC), Bangalore with A Grade  
**PERUNDURAI -638 057, TAMILNADU, INDIA.**



## DEPARTMENT OF CIVIL ENGINEERING 6<sup>th</sup> Board of Studies Meeting – AGENDA

ITEM	PARTICULARS
BOS / CIVIL 6.1	Welcoming new Board of Studies members and opening remarks by the Chairman, Board of Studies, Department of Civil Engineering.
BOS / CIVIL 6.2	Confirmation of the Minutes of 6 <sup>th</sup> Board of Studies Meeting and Action taken report of 6 <sup>th</sup> Board of Studies meeting.
BOS / CIVIL 6.3	Review of curriculum for the B.E. Civil Engineering programme offered under Regulation 2023.
BOS / CIVIL 6.4	Review of syllabus for the first 2 semesters for the B.E. Civil Engineering programme offered under Regulation 2023.
BOS / CIVIL 6.5	Review of vertical courses identified for the B.E. Civil Engineering programme offered under Regulation 2023.
BOS / CIVIL 6.6	Review of Tamil courses for the B.E. Civil Engineering programme students admitted in 2022-23 and 2023-24 as per Anna University direction.
BOS / CIVIL 6.7	Review of curriculum for the M.E. Environmental Engineering programme offered under Regulation 2023.
BOS / CIVIL 6.8	Review of syllabus for the first 2 semesters for the M.E. Environmental Engineering programme offered under Regulation 2023.
BOS / CIVIL 6.9	Review of Professional Elective courses identified for the M.E. Environmental Engineering programme offered under Regulation 2023.
BOS / CIVIL 6.10	Review of curriculum for the M.E. Structural Engineering programme offered under Regulation 2023.
BOS / CIVIL 6.11	Review of syllabus for the first 2 semesters for the M.E. Structural Engineering programme offered under Regulation 2023.
BOS / CIVIL 6.12	Review of Professional Elective courses identified for the M.E. Structural Engineering programme offered under Regulation 2023.
BOS / CIVIL 6.13	Review of syllabi of courses offered to other departments
BOS / CIVIL 6.14	Suggestions for Revisions in curriculum & syllabi needed for Regulations 2023.
BOS / CIVIL 6.15	Any other items
BOS / CIVIL 6.16	Vote of Thanks

The following members were present in the Board of Studies Meeting

S. No.	Name & Designation	Category
1.	<b>Dr. K. M. Gopalakrishnan,</b> Professor & HoD, Department of Civil Engineering, Erode Sengunthar Engineering College.	Chairman
2.	<b>Dr. K. Nalina,</b> Professor, Department of Civil Engineering, PSG College of Technology, Coimbatore.	University Nominee
3.	<b>Mr. A. Punitha Kumar</b> Associate Professor/HoD, Department of Structural and Geotechnical Engineering, Vellore Institute of Technology, Vellore Campus, Vellore.	Academic Experts
4.	<b>Dr.A.Geetha Selvarani</b> Professor & Head, Department of Civil Engineering, Vel Tech Rangarajan Dr.Sagunthala R&D Institute of Science and Technology, Avadi, Chennai.	
5.	<b>Er.Ravishankar Subramanaian,</b> Director, Integino Structural Solutions Pvt. Ltd., No.58/61, Kandan Nagar, 2 <sup>nd</sup> Street, Nungambakkam, Chennai.	Representative from Industry/ Corporate Sector
6.	<b>Mr. Habbis Mohameed,</b> TPK Infra Projects, Tiruppur.	Alumni
7.	<b>Dr. S. Christian Johnson,</b> Professor, Department of Civil Engineering, Erode Sengunthar Engineering College, Perundurai.	Internal Members
8.	<b>Dr.A.Gopalan,</b> Professor, Department of Civil Engineering, Erode Sengunthar Engineering College, Perundurai.	
9.	<b>Dr.P.Balamurugan,</b> Associate Professor, Department of Civil Engineering, Erode Sengunthar Engineering College, Perundurai.	
10.	<b>Dr.S.Arulmozhi,</b> Associate Professor, Department of Civil Engineering, Erode Sengunthar Engineering College, Perundurai.	

BOS/CIVIL/6.1	<p>Welcoming Board of Studies members and opening remarks by the Chairman, Board of Studies, Department of Civil Engineering.</p> <p><b>Discussion</b></p> <p>The Chairman, Board of Studies welcomed all the members of the meeting for discussing B.E - Civil Engineering, M.E Environmental Engineering and M.E Structural Engineering curriculum and syllabus of I &amp; II semesters under Regulations 2023. The members presented in the Board of Studies Meeting are given in Annexure I.</p>
BOS/CIVIL/6.2	<p>Confirmation of the Minutes of 05<sup>th</sup> Board of Studies Meeting and Action taken report of 05th Board of Studies meeting.</p> <p><b>Discussion</b></p> <p>The Chairman presented the Minutes of 5th Board of Studies Meeting which was held on 23.07.2022 and action taken report of the same.</p> <p><b>Resolution</b></p> <p>It is resolved to recommend the Minutes of 5th Board of Studies Meeting and action taken report of the same is submitted to the Academic Council for approval.</p>
BOS/CIVIL/6.3	<p>Approval of Curriculum for the B.E. Civil Engineering programme offered under Regulations 2023.</p> <p><b>Discussion</b></p> <p>The Chairman presented the Curriculum for B.E Civil Engineering of all semesters and syllabus of I &amp; II semesters under the Regulations 2023.</p> <p><b>Dr. A. Geetha Selvarani</b> enquired about the syllabus framed by common forum or from department. The chairman replied that, the first two semester's syllabuses are framed by the Science &amp; Humanities department.</p> <p><b>Resolution</b></p> <p>The curriculum for the B.E. Civil Engineering programme under -Regulations 2023 is recommended and the same is submitted to the Academic Council for approval.</p>
BOS/CIVIL/6.4	<p>Review of syllabus belongs to first and second semester for the B.E. Civil Engineering programme offered under Regulations 2023.</p>

	<p><b>Discussion</b></p> <p><b>Dr. K. Nalina</b> enquired about the Mechanics for Engineers is common to all the branches and the syllabus framing. The chairman replied that the syllabus is common to all the branches and the syllabus was framed by Mechanical Engineering Department. The Members suggested to inter-change the unit IV and V. He also asked to members to their suggestion, if there is suggestion we can incorporate in the syllabus.</p> <p><b>Resolution</b></p> <p>It is resolved to recommend the syllabus for the B.E. Civil Engineering programme under Regulations 2023 and the same is submitted to the Academic Council for approval.</p>
BOS/CIVIL/6.5 :	<p>Approval of Curriculum for the M.E. Environmental Engineering programme offered under Regulations 2023.</p> <p><b>Discussion</b></p> <p>The Chairman presented the Curriculum for M.E Environmental Engineering of all semesters and syllabus of all semester under the Regulations 2023 and asked the members to give their suggestion, if there is suggestion we can incorporate in the syllabus.</p> <p><b>Dr. A. Geetha Selvarani</b> suggested to include Remote Sensing &amp; GIS in core or Professional Elective. The Chairman agreed to include the same.</p> <p><b>Resolution</b></p> <p>The curriculum for the M.E. Environmental Engineering programme under - Regulations 2023 is recommended and the same is submitted to the Academic Council for approval.</p>
BOS/CIVIL/6.6 :	<p>Review of syllabus belongs to M.E. Environmental Engineering programme offered under Regulations 2023.</p> <p><b>Dr. A. Geetha Selvarani</b> suggested to check and review the Unit 3, 4 and 5 and to include case studies in unit 5 in Physical and Chemical Treatment Systems for Water and Wastewater. The Chairman agreed to change the same.</p> <p><b>Dr.A.Punitha Kumar</b> suggested to change the Environmental Chemistry Lab as per the experiment wise. The Chairman agreed to change the same.</p>

	<p><b>Dr. A. Geetha Selvarani</b> suggested to add one case study in all the units in Biological Treatment Process for Wastewater. The Chairman agreed to include the same.</p> <p><b>Dr.A.Punitha Kumar</b> suggested to provide at least one text books for each subject.</p> <p><b>Dr. K. Nalina and Dr. A. Geetha Selvarani</b> suggested that single text books is not possible for PG courses and suggested to include latest edition as references.</p> <p><b>Dr.A.Punitha Kumar</b> suggested that as per NBA guidelines, five POs are only available for PG course. Check it and provide. The Chairman agreed to include the same.</p> <p><b>Resolution</b></p> <p>It is resolved to recommend the syllabus for the M.E Environmental Engineering programme under Regulations 2023 and the same is submitted to the Academic Council for approval.</p>
BOS/CIVIL/6.7 :	<p>Approval of Curriculum for M.E. Structural Engineering programme offered under Regulations 2023.</p> <p><b>Discussion</b></p> <p>The Chairman presented the Curriculum for M.E Structural Engineering of all semesters and syllabus of all semester under the Regulations 2023 and asked the members to give their suggestion, if there is suggestion we can incorporate in the syllabus.</p> <p><b>Resolution</b></p> <p>The curriculum for the M.E. Structural Engineering programme under -Regulations 2023 is recommended and the same is submitted to the Academic Council for approval.</p>
BOS/CIVIL/6.8 :	<p>Review of syllabus belongs to M.E. Structural Engineering programme offered under Regulations 2023.</p> <p><b>Dr.K.Nalina and Dr. A. Punitha Kumar</b> suggested to include Code of Practice and also include IS codes in reference for Structural Dynamics and Earthquake Engineering subject.</p> <p><b>Dr.A.Punitha Kumar</b> suggested to include conduct bridge course, design of tension members in Unit 1, wind load calculation in unit 3, provide IS codes such</p>

	<p>as IS1875, IS1893 in reference for the Advanced Steel Structures subject.</p> <p><b>Dr.A.Punitha Kumar</b> suggested to include plane where two dimensional is used and solid where three dimensional is used in unit 4 and also to include Rajasekaran and Reddy books in reference for Finite Element Analysis in Structural Engineering.</p> <p><b>Dr.K.Nalina</b> considered to add fire resistant design or measures for Advanced Concrete Structures.</p> <p><b>Dr.K.Nalina</b> suggested to include ABACUS and SAP 2000 in Structural Design Studio Lab.</p> <p><b>Dr.K.Nalina and Dr.A.Punitha Kumar</b> suggested to include Structural Stability subject as core or select it as mandatory during Elective selection and also to include Shang Lee book in reference.</p> <p><b>Dr.A.Punitha Kumar</b> suggested to include Advanced Structural Design by Krishnaraju book in reference for Prefabricated Structures.</p> <p><b>Dr.K.Nalina and Dr.A.Punitha Kumar</b> suggested to change Advanced Prestressed Concrete as Design of Prestressed Concrete Structures subject.</p> <p><b>Dr.A.Punitha Kumar</b> suggested to include P.C.Varghese, Punmia, Ashok K.Jain, Subramaniya book in Advanced Design of Foundation Structures subject.</p> <p><b>Dr.K.Nalina</b> suggested that all the units should have near equal contact hours. there should not be more deviation in contact hours.</p> <p><b>Resolution</b></p> <p>It is resolved to recommend the syllabus for the M.E Structural Engineering programme under Regulations 2023 and the same is submitted to the Academic Council for approval.</p>
BOS/CIVIL/6.9	<p>Confirmation and approvals of verticals for awarding Honours, Honours with Specialization and Minor Degree - B.E Civil Engineering in Regulations 2019 for students admitted in the Academic Year 2021-22 onwards as per the direction of Anna University (L.No.5749/AU/CAC/Honours/2022 dated 16.11.2022).</p> <p>Discussion</p> <p>The chairman presented the verticals for awarding Honours, Honours with Specialization and Minor Degree - B.E Civil Engineering in Regulations 2019 for</p>

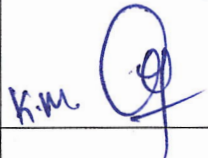




	<p>students admitted in the Academic Year 2021-22 onwards as per the direction of Anna University. The BoS members approved the same.</p> <p>Resolution</p> <p>It is resolved verticals for awarding Honours, Honours with Specialization and Minor Degree - B.E Civil Engineering in Regulations 2019 for students admitted in the Academic Year 2021-22 onwards as per the direction of Anna University to the Academic Council for Approval.</p>
BOS/CIVIL/6.10 :	<p>Any other items</p> <p>Common points suggested by the members as concluding remark</p> <ul style="list-style-type: none"> <li>• Suggested to update the text and reference books with latest edition and include on-line resources. The chairman of Board of Studies agreed and assured to incorporate the changes suggested by the members wherever possible.</li> <li>• The chairman thanked all the members for their valuable suggestions and coordination.</li> </ul>

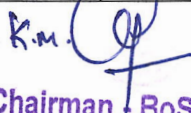
  
**Chairman**  
**BoS - Civil.**  
**Chairman - BoS**  
**Dept. of Civil Engg. - ESEC**



## ANNEXURE – I

The following members presented in the Board of Studies Meeting.

S. No.	Name & Designation	Category	Signature
1.	<b>Dr. K. M. Gopalakrishnan,</b> Professor & HoD, Department of Civil Engineering, Erode Sengunthar Engineering College.	Chairman	
2.	<b>Dr. K. Nalina,</b> Professor, Department of Civil Engineering, PSG College of Technology, Coimbatore.	University Nominee	ONLINE MODE
3.	<b>Mr. A. Punitha Kumar</b> Associate Professor/HoD, Department of Structural and Geotechnical Engineering, Vellore Institute of Technology, Vellore Campus, Vellore.	Academic Experts	
4.	<b>Dr.A.Geetha Selvarani</b> Professor & Head, Department of Civil Engineering, Vel Tech Rangarajan Dr.Sagunthala R&D Institute of Science and Technology, Avadi, Chennai.		
5.	<b>Er.Ravishankar Subramanaian,</b> Director, Integino Structural Solutions Pvt. Ltd., No.58/61, Kandan Nagar, 2 <sup>nd</sup> Street, Nungambakkam, Chennai.	Representative from Industry/ Corporate Sector	
6.	<b>Mr. Habbis Mohameed,</b> TPK Infra Projects, Tiruppur.	Alumni	
7.	<b>Dr. S. Christian Johnson,</b> Professor, Department of Civil Engineering, Erode Sengunthar Engineering College, Perundurai.	Internal Members	
8.	<b>Dr.A.Gopalan,</b> Professor, Department of Civil Engineering, Erode Sengunthar Engineering College, Perundurai.		
9.	<b>Dr.P.Balamurugan,</b> Associate Professor, Department of Civil Engineering, Erode Sengunthar Engineering College, Perundurai.		
10.	<b>Dr.S.Arulmozhi,</b> Associate Professor, Department of Civil Engineering, Erode Sengunthar Engineering College, Perundurai.		

  
**Chairman, BOS**  
**Dept. of Civil Engg. - ESEC**

## ANNEXURE – II DEPARTMENT OF CIVIL ENGINEERING

### Screen Shots of 06<sup>th</sup> Board of Studies Meeting

Name of the Department : Civil Engineering  
 Name of the Board : Civil Engineering  
 Programmes : B.E. – Civil Engineering  
 Date, Time & Mode : 17.06.2023 - 10.30 AM & ONLINE  
 Zoom Link :

<https://us06web.zoom.us/j/88430891034?pwd=V202d1VpY2xkNk84QnJnL1lXbHVmUT09>

**NUMERICAL AND FINITE ELEMENT ANALYSIS LABORATORY**

**Course Objective (CO):** The purpose of learning this course is to:

- To solve the mathematical equations and finite element analysis with computational methods like MATLAB and finite element software using software like ANSYS, ABAQUS, etc.

**Course Outcomes:** At the end of this course, students will be able to:

- Thorough knowledge to handle FE software
- Dynamic analysis of frames
- Analysis of thin and thick plates
- Stability Analysis
- Learn to use MATLAB and import MATLAB codes for FE modeling

CO	PO	PO	PO
1	1	2	3
2	1	2	3
3	1	2	3
4	1	2	3
5	1	2	3
Avg	2	2.4	2.4

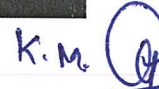
S.No	Code No	Course	L	T	P	C	Maximum Marks
1	23CE001	Project Work	-	-	20	10	60
<b>TOTAL</b>							100

**PROFESSIONAL ELECTIVE COURSES - VERTICALS**  
**VERTICAL STREAM - 1 STRUCTURES**

S.No	Code No	Course	L	T	P	C	Maximum Marks
							100

**Participants (20)**

- Deputy CoE (RM, participant ID: 408090)
- ESEC-CIVIL-HOD
- Dr.K.Nalinaa
- PUNITHA KUMAR
- Dhivakar Karthick
- Dr. A GOPALAN
- Dr. A. Geetha Selvarani
- Dr. M. Dhananiretha
- Dr. MDN
- Dr. T.Senthil Kumar, Principal Sr...
- HABBIS
- Lakshmanakumar
- Mr K Vallarasu
- PRABHAKARAN A
- R KRISHNASAMY

  
**Chairman - Bos**  
**Dept of Civil Engg. - ESEC**



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## DEPARTMENT OF CIVIL ENGINEERING

### 6<sup>th</sup> Board of Studies-Action taken report

Sl.No.	Name of the Expert	Suggestion Given	Action Taken	Remarks
1	<b>Dr. K. Nalina</b> Professor / Civil / PSG / Coimbatore	Suggested to inter-change the unit IV and V in Mechanics for Engineers subjects	Unit IV and V in Mechanics for Engineers subjects are interchanged.	
		Suggested to include Code of Practice and also include IS codes in reference for Structural Dynamics and Earthquake Engineering subject.	Included IS 4326, IS 1893 and IS 13920.	
		Considered to add fire resistant design or measures for Advanced Concrete Structures.	Included fire resistant design for structural elements in Unit III.	
		Suggested to include ABACUS and SAP 2000 in Structural Design Studio Lab.	ABACUS and SAP 2000 is included in Structural Design Studio Lab.	
		Suggested to include Structural Stability subject as core or select it as mandatory during Elective selection and also to include Shang Lee book in reference.	Sung C. Lee, "Stability of Structures: Principles and Applications" book is included in reference.	
		Suggested to change Advanced Prestressed Concrete as Design of Prestressed Concrete Structures subject.	Revised the title as "Design of Prestressed Concrete Structures"	
		Suggested that all the units should have near equal contact hours. There should not be more deviation in contact hours.	Maintained equal contact hours.	

2	<b>Dr. A. Geetha Selvarani</b> Professor / Civil / Vel-Tech Chennai	Suggested to include Remote Sensing & GIS in core or Professional Elective.	Included the Remote Sensing & GIS in Professional Elective - I	
		Suggested to check and review the Unit 3, 4 and 5 and to include case studies in unit 5 in Physical and Chemical Treatment Systems for Water and Wastewater.	Physical and Chemical Treatment Systems for Water and Wastewater syllabus is reviewed, 3 <sup>rd</sup> and 4 <sup>th</sup> unit is revised, Case study is provided in 5 <sup>th</sup> unit.	
		Suggested to add one case study in all the units in Biological Treatment Process for Wastewater.	Case study is provided in all the units of Biological Treatment Process for Wastewater	
3	<b>Dr.A.Punitha Kumar</b> Associate Professor / Department of Structural and Geotechnical Engineering / VIT / Chennai	Suggested to change the Environmental Chemistry Lab as per the experiment wise.	Environmental Chemistry Lab as per the experiment wise is revised as per the experiments	
		Suggested to provide at least one text books for each subject.	The other members suggested that single text books are not possible for PG courses and suggested to include latest edition as references. Hence latest edition books are included.	
		Suggested that as per NBA guidelines, five POs are only available for PG course. Check it and provide.	Three POs and PSOs are provided.	
		Suggested to conduct bridge course, design of tension members in Unit 1, wind load calculation in unit 3, provide IS codes such as IS1875, IS1893 in reference for the Advanced Steel Structures subject.	Design of tension members is included in Unit 1 and wind load calculation in unit 3. IS codes such as IS1875, IS1893 is included in reference for the Advanced Steel Structures subject.	
		Suggested to include plane where two dimensional is used and solid where three dimensional is used in unit 4 and also to include Rajasekaran and Reddy books in reference for Finite Element Analysis in Structural Engineering.	Planes are provided where two dimensional is used and solid is provided where three dimensional is used in unit 4. Rajasekaran and Reddy books are included in reference for Finite Element Analysis in Structural Engineering	
		Suggested to include Advanced Structural Design	Advanced Structural Design by	

		by Krishnaraju book in reference for Prefabricated Structures.	Krishnaraju book is included in reference for Prefabricated Structures.	
		Suggested to include P.C.Varghese, Punmia, Ashok K.Jain, Subramaniya book in Advanced Design of Foundation Structures subject.	P.C.Varghese, Punmia, Ashok K.Jain, Subramaniya book is included in Advanced Design of Foundation Structures subject.	

5

  
CHAIRMAN

**BOARD OF STUDIES  
CIVIL ENGINEERING  
Chairman - BoS  
Dept. of Civil Engg. - ESEC**