

SHRI G.S. INSTITUTE OF TECHNOLOGY AND SCIENCE, INDORE (M.P.) – 3  
CIVIL ENGINEERING AND APPLIED MECHANICS DEPARTMENT

No. : CE-AMD/HOD/HKM/BOS-MINUTES/2022/

Dated: 12-07-2022

MINUTES OF BOARD OF STUDIES OF  
CIVIL ENGINEERING & APPLIED MECHANICS HELD ON 03-06-2022.

A meeting of Board of Studies of Civil Engineering & Applied Mechanics Board was held on 03-06-2022 at 12: 00 PM in Board Room of the department.

Following Members were present:

- |     |                        |   |  |
|-----|------------------------|---|--|
| 1.  | Dr. H.K. Mahiyar       | : | Chairman (HOD, CE-AMD)                             |
| 2.  | Dr. V. R. Rodc         | : | Member   |
| 3.  | Dr. (Mrs.) V. Tare     | : | Member   |
| 4.  | Dr. S.M. Narulkar      | : | Member   |
| 5.  | Dr. S.B. Ajmera        | : | Member   |
| 6.  | Prof. M.K. Laghate     | : | Member   |
| 7.  | Prof. Devendra Dohare  | : | Member   |
| 8.  | Prof. S.K. Ahirwar     | : | Member   |
| 9.  | Prof. V. Tiwari        | : | Member   |
| 10. | Prof. T.K. Narnaure.   | : | Member   |
| 11. | Prof Ashish Verma      | : | External Member, (Professor CED, IISc., Bangalore) |
| 12. | Dr. Sandeep Choudhary  | : | External Member ((Prof. CED IIT Indore))           |
| 13. | Prof. Y. D. Patil      | : | External Expert (Associate Prof. NIT, Surat)       |
| 14. | Er. Govind Parchani.   | : | External Member (Chief Engineer, RRCAT, Indore)    |
| 15. | Er. Himanshu Tilwankar | : | External Member (Head, EHS, RSPL Ltd.)             |
| 16. | Ms. Bhavya Mittal      | : | Special Invitee (Add. Commissioner PMAY)           |

At the outset the Chairman welcomed all the members.

The deliberations of the meeting are summarized below:

1. Item No. 1: Regarding Under Graduate Course.

The following changes in the scheme and syllabus of undergraduate course of Civil Engineering are Proposed by BOS :

1. In IV<sup>th</sup> semester the subject Transportation Engineering (CE-21503) is proposed to be renamed as Transportation Engineering-I. The existing and proposed syllabus is enclosed for approval.(Annexure I/01)
2. In V<sup>th</sup> Semester, Elective-I subject namely Advanced Highway and Airport Engineering (CE-31601) is proposed to be renamed as Transportation Engineering II. The existing and proposed syllabus is enclosed for approval.(Annexure I/02)
3. it is proposed that two topics namely "Design of Septic Tanks and Imhoff Tanks shall be added to Unit 5 of the existing syllabus of Elective-II i.e. Water and Wastewater Treatment Technologies (CE-31703) of VI<sup>th</sup> Semester. The existing and proposed syllabus is enclosed for approval. (Annexure I/03)
4. The list of subjects shown under Elective-V & Elective-VI are reshuffled and the revised list is enclosed in Annexure I/04.
5. In VIII<sup>th</sup> semester, possibility of introducing a new subject "Alternate & Innovative Construction Practices For Housing" was discussed but the same was not found appropriate looking to the content & decided to defer it future.

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2. **Item No. 2: Regarding Post Graduate Courses :**  
The following changes in the scheme and syllabus for four different M. Tech. courses of Post-Graduate course are proposed by BOS

I. **Regarding M. Tech. Transportation Engineering :**

1. In the I<sup>st</sup> semester, it is proposed that the subject Airport Infrastructure Planning and Design (CE-54211) is to be removed from the list of Elective-I and in place of it, new subject viz. Railway and Airport Infrastructure Planning and Design (CE.....) to be added in the list of Elective-I. The existing and proposed syllabi are attached for approval. (Annexure II/01)
2. In the I<sup>st</sup> Semester, it is proposed that the Railway Infrastructure Planning and Design (CE-54311) is to be removed from the list of Elective-II and also proposed to reshuffle the Elective-II and Elective-III. The existing and proposed syllabi are attached for approval. (Annexure II/02)
3. In the II<sup>nd</sup> semester, minor changes have been proposed in the syllabus of the subject Transportation Planning and Infrastructure Design (CE-54761). A new topic Intelligent Transport System (ITS) is to be introduced as unit II. The existing and proposed syllabi are attached for approval. (Annexure II/03)

II. **Regarding M. Tech. Water Resource and Env. Engg. :**

Following Changes are Proposed:

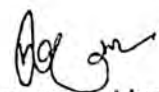
1. The course of M.E. Water Resources and Environmental Engineering was started from year 2021. In I<sup>st</sup> semester, it is proposed to introduce a subject namely Environmental Chemistry with 3 theory credits and practicals without credit in place of the subject System Mathematics and Mathematical Modelling. The syllabus of the subject Environmental Chemistry is enclosed. (Annexure II/04)
2. It is also proposed to make minor changes in the syllabus of Stochastic Hydrology in order to meet requirement of removal of subject System Mathematics and Mathematical Modelling. The proposed and previous syllabus is also attached here. (Annexure II/06)
3. In the II<sup>nd</sup> semester, it is proposed to introduce Elective-III Lab., Elective-IV Lab and Storage Structure Lab in place of seminar, term paper and minor project. The modified scheme along enclosed. (Annexure II/05)

III. **Regarding M. Tech. Environmental Engineering :** Following Changes are Proposed:

1. In the I<sup>st</sup> Semester for the subject Advanced Concrete Technology Lab the Credit under Practical is reduced to 1 in place of 2 for making the similarity with other specializations viz. M. Tech. structures, M. Tech. Transportation and M. Tech. Water Resource and Environmental Engineering. It is also proposed to Introduce Seminar in I<sup>st</sup> Semester with 1 credit under Practical.
2. In the II<sup>nd</sup> Semester it is proposed to introduce Elective-IV lab with 1 Credit under Practical in place of Seminar. The old and new scheme of exam is enclosed. (Annexure II/07).
3. In the II<sup>nd</sup> Semester, a lab in Elective-IV has been introduced in place of term paper.

The meeting ended with vote of thanks to the chair.



  
(Dr. H. K. Mahiyar)  
Chairman, BOS, CE-AMD Board.

## LIST OF ELECTIVES

S. No.	Elective I
1	Railway and Airport Infrastructure Planning and Design
2	Finite Element Method
3	Instrumentation and Experimental Techniques

S. No.	Elective II
1	Bridge and Tunnel Engineering
2	Quality and safety in Construction
3	Research Methodology

S. No.	Elective III
1	Transportation Geotechnics
2	Intelligent Transportation System
3	Analysis & Design of Bridges

S. No.	Elective IV
1	Transportation Planning and Infrastructure Design
2	Advanced Construction Practices
3	Numerical & System Methods

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**SHRI GS INSTITUTE OF TECHNOLOGY & SCIENCE, INDORE**  
**M.TECH. [ENVIRONMENTAL ENGINEERING]**  
**PROPOSED REVISED SCHEME W.e.f. 2022-2023**

**SEMESTER - I**

S. No.	Sub. Code	Subject	Hours per Week			Th. Credit	Pr. Credit	Maximum Marks				
			L	T	P			TH	CW	SW	Pr.	Total
1	CE59001	Environmental Chemistry	3	-	-	3	-	70	30	-	-	100
2	CE59002	Environmental Microbiology	3	-	-	3	-	70	30	-	-	100
3	CE 50009	Advance Concrete Technology	3	-	-	3	-	70	30	-	-	100
4	CE 59253	Elective - I	3	-	-	3	-	70	30	-	-	100
5	CE 59351	Elective - II	3	-	-	3	-	70	30	-	-	100
6	CE59451	Environmental Chemistry Lab.	-	-	2	-	1	-	-	40	60	100
7	CE59452	Microbiology Lab.	-	-	2	-	1	-	-	40	60	100
8	CE 59456	Concrete Technology Lab	-	-	2	-	1	-	-	40	60	100
9	CE59454	Seminar	-	-	2	-	1	-	-	grade	-	Grade
10	CE59500	Comprehensive Viva	-	-	-	-	-	-	-	-	Grade	Grade
Total			15	0	8	15	4	350	150	120	180	800

**SEMESTER - II**

S. No.	Sub. Code	Subject	Hours per Week			Th. Credit	Pr. Credit	Maximum Marks				
			L	T	P			TH	CW	SW	Pr.	Total
1	CE59505	Unit Operation II : advance Sewage Treatment	3	-	-	3	-	70	30	-	-	100
2	CE59506	Unit Operation I : advance Water Treatment	3	-	-	3	-	70	30	-	-	100
3	CE59507	Industrial Waste and Pollution Management	3	-	-	3	-	70	30	-	-	100
4		Elective - III	3	-	-	3	-	70	30	-	-	100
5		Elective - IV	3	-	-	3	-	70	30	-	-	100
6	CE59851	Unit Operation-I Lab.	-	-	2	-	1	-	-	40	60	100
7	CE59852	Unit Operation-II Lab.	-	-	4	-	2	-	-	40	60	100
8		Elective-IV Lab	-	-	2	-	1	-	-	40	60	100
9	CE59900	Comprehensive Viva	-	-	-	-	-	-	-	-	Grade	Grade
Total			15	0	8	15	4	350	150	120	180	800

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**SHRI G S INSTITUTE OF TECHNOLOGY & SCIENCE, INDORE**  
**II M.TECH. ENVIRONMENTAL ENGINEERING**

**SEMESTER - III**

S. No.	Sub. Code	Subject	Hours per Week			Th. Credit	Pr. Credit	Maximum Marks				
			L	T	P			TH	CW	SW	Pr.	Total
1	CE59931	*Industrial Training	-	-	8		4			50		50
2	CE59901	Dissertation Phase - I	-	-	20		10			40	60	100
3	MA59902	**Research Methodology & IPR	2	-	-	2	-	70	30			100
<b>TOTAL</b>			<b>2</b>	<b>0</b>	<b>28</b>	<b>2</b>	<b>14</b>	<b>70</b>	<b>30</b>	<b>90</b>	<b>60</b>	<b>250</b>

\* Industrial training to be carried out between II and III semester during vacation

\*\* This course can be studied online with prior permission of HOD. however, End-semester examination will be conducted

**Semester: IV**

S. No.	Sub. Code	Subject	Hours per Week			Th. Credit	Pr. Credit	Maximum Marks				
			L	T	P			TH	CW	SW	Pr.	Total
1	CE59951	Dissertation Phase - II			32		16			80	120	200
<b>TOTAL</b>			<b>0</b>	<b>0</b>	<b>32</b>	<b>0</b>	<b>16</b>	<b>0</b>	<b>0</b>	<b>80</b>	<b>120</b>	<b>200</b>

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SHRI G S INSTITUTE OF TECHNOLOGY & SCIENCE, INDORE

Scheme 2022/23

Elective - I		Semester I
S.No	Sub. Code	Subject
1	CE59251	Environmental Ecology, Sanitation and Health
2	CE59252	Applied Statistics and Environmental System Modelling
3	CE59253	Air Pollution & Control Technology

Elective - II		Semester I
S.No	Sub. Code	Subject
4	CE59351	Hydrology, Applied Hydraulics & Ground Water
5	CE59352	Systems Engg. Approach to Environmental Engg.
6	CE59353	Design of PIIE structures

Elective - III		Semester II
S.No	Sub. Code	Subject
7	CE59711	Remote Sensing & its Applications to Environmental Engg
8	CE59712	Environmental Impact Assessment, Case Study & Env. Laws & Policies
9	CE59713	Environmental Geotechnics

Elective - IV		Semester II
S.No	Sub. Code	Subject
10	CE59751	Solid Waste Management
11	CE59752	Numerical & System Methods
12	CE59753	Instrumentation and its applications to Environmental Engg