SRI VENKATESWARA COLLEGE OF ENGINEERING
(An Autonomous Institution, affiliated to Anna University Chennai)
Pennalur, Sriperumbudur-Tk
DEPARTMENT OF CIVIL ENGINEERING

MINUTES OF THE BOARD OF STUDIES MEETING

Date of meeting : 19-09-2023 (Tuesday) , Online Mode Time:1.30 P.M
Google meet link : meet.google.com/dgg-cvtn-swu

The Board of Studies meeting for the Faculty of Civil Engineering was held on 19.09.2023 at 1.30 pm through Online mode and the following members were present:

S.No.	Name with Designation and Address	Category
1.	**Dr. R. Kumutha** Professor & Head Dept. of Civil Engineering, SVCE	Chairman, BoS
2.	**Dr. P. Ramadoss** Professor, Dept. of Civil Engineering Puducherry Technological University Pillaichavadi, Puducherry - 605014	University Nominee
3.	**Dr. S. T. Ramesh** Professor & Head, Dept. of Civil Engineering, National Institute of Technology Tiruchirapalli - 620015	Member -Subject Expert
4.	**Dr. R. Saravanan** Professor Department of Civil Engineering, College of Engineering Guindy Anna University, Chennai – 600025.	Member -Subject Expert
5.	**Dr. S. Justin** Joint General Manager - Design Engineering Design & Research Centre, Buildings and Factories, Health Division Larsen & Toubro construction, Chennai	Member -Industrial Expert
6.	**Mr. Sai Prasad Vijayakumar** Associate Proposals Manager Global Competence Centre (G3C) NKT Operations India Pvt. Ltd, Guindy Chennai – 600032	Member -Alumnus
7.	Dr. P. Venkateswara Rao, Professor/Civil, SVCE	Member
8.	Dr. M. Selvakumar, Associate Professor/Civil, SVCE	Member
9.	Dr. R. Sathia, Associate Professor/Civil, SVCE	Member

10.	Ms. Ruby Freya, Assistant Professor/Civil, SVCE	Member
11.	Mr. G. Arun, Assistant Professor/Civil, SVCE	Member
12.	Mr. R. Mathiyazhagan, Assistant Professor/Civil, SVCE	Member
13.	Mr. R. Kalaivannan, Assistant Professor/Civil, SVCE	Member
14.	Mr.S.Hariswaran, Assistant Professor/Civil, SVCE	Member

AGENDA:

- Approval of List of Verticals and Courses – Professional Electives in R2022
- Approval of Syllabi for Open Elective and Value added Courses - R2022
- Approval of Syllabus for the General Vertical Courses – Vertical on Environment and Sustainability
- Any Other

The Chairman welcomed the Board of Studies members.

1. The Chairman thanked the previous University nominee, Dr. S. Krishnamoorthi, Professor, Department of Civil Engineering, Kongu Engineering College, Perundurai, Erode.
2. The current Anna University nominee, Dr. P. Ramadoss, Professor, Dept. of Civil Engineering, Puducherry Technological University was welcomed to the BoS.
3. The agenda of the meeting was briefed to the members.
4. Chairman presented the department profile.
5. The salient features of Regulations -2022 were highlighted.

   5.1 Dr. S. T. Ramesh suggested to have NBA nomenclature for Continuous assessments and end semester examination since the formative and summative assessment means a different type of formats of tests.
6. The previously approved curriculum of 168 credits of the Regulation 2022 was presented.
7. The list of verticals and the syllabi of the courses were presented.

S. No	Course Title	L	T	P	C
Vertical I - Structural Engineering					
1	Structural Dynamics	3	0	0	3
2	Smart Materials and Structures	3	0	0	3
3	Concrete Technology	3	0	0	3
4	Prefabricated Structures	3	0	0	3
5	Prestressed Concrete Structures	3	0	0	3
6	Advanced Strength of Materials	3	0	0	3
7	Earthquake Resistant Design of Structures	3	0	0	3
8	Repair and Rehabilitation of Structures	3	0	0	3
9	Mini Project	0	0	4	2
Vertical II- Environmental Engineering					
1	Municipal Solid Waste Management	3	0	0	3
2	Industrial Waste Management	3	0	0	3
3	Air Pollution Management	3	0	0	3
4	Disaster Mitigation and Management	3	0	0	3

S. No	Course Title	L	T	P	C
5	Global Climate Change	3	0	0	3
6	Sustainability and Social Development	3	0	0	3
7	Environmental Policy and Legislations	3	0	0	3
8	Environment, Health and Safety	3	0	0	3
9	Mini Project	0	0	4	2
Vertical III - Construction Management					
1	Construction Equipment and Management	3	0	0	3
2	Construction Materials and Management	3	0	0	3
3	Formwork, Scaffolding and Shoring	3	0	0	3
4	Contract Management and Dispute Resolution	3	0	0	3
5	Building Services and Maintenance	3	0	0	3
6	Risk Management in Construction Projects	3	0	0	3
7	Construction Quality and Safety Management	3	0	0	3
8	Sustainable Construction	3	0	0	3
9	Mini Project	0	0	4	2
Vertical IV - Transportation Engineering					
1	Urban Planning and Development	3	0	0	3
2	Traffic Engineering and Management	3	0	0	3
3	Airport and Harbour Engineering	3	0	0	3
4	Pavement Engineering	3	0	0	3
5	Design of Pedestrian and Bicycle Tracks	3	0	0	3
6	Smart Cities	3	0	0	3
7	Intelligent Transportation Systems	3	0	0	3
8	Traffic Management Plan for Construction Site	3	0	0	3
9	Mini Project	0	0	4	2
Vertical V - Geo-Informatics					
1	GIS	3	0	0	3
2	Photogrammetry	3	0	0	3
3	Cartography	3	0	0	3
4	Airborne and Terrestrial Laser Mapping	3	0	0	3
5	Satellite Image Processing	3	0	0	3
6	Total Station and GPS Surveying	3	0	0	3
7	Cadastral and Hydrographic Surveying	3	0	0	3
8	Geo informatics Applications for Civil Engineers	3	0	0	3
9	Mini Project	0	0	4	2
Vertical VI - Geotechnical Engineering					
1	Subsurface Investigation and Instrumentation	3	0	0	3
2	Earth Pressure and Earth Retaining Structures	3	0	0	3
3	Ground Improvement Techniques	3	0	0	3
4	Geosynthetics Design and Applications	3	0	0	3
5	Deep Foundation	3	0	0	3
6	Tunneling	3	0	0	3
7	Rock Mechanics	3	0	0	3
8	Soil Dynamics and Machine Foundations	3	0	0	3
9	Mini Project	0	0	4	2
Vertical VII - Water Resources Engineering					
1	Coastal Engineering	3	0	0	3

S. No	Course Title	L	T	P	C
2	Groundwater Engineering	3	0	0	3
3	Water Resources Systems Engineering	3	0	0	3
4	Integrated Water Resources Management	3	0	0	3
5	Participatory Water Resources Management	3	0	0	3
6	Urban Water Infrastructure	3	0	0	3
7	Watershed Conservation and Management	3	0	0	3
8	River Engineering	3	0	0	3
9	Mini Project	0	0	4	2

7.1. Dr. S. T. Ramesh suggested to have prerequisites for the elective courses or if not to prioritise the courses under the vertical in a schematic order such a way that the students can easily choose semester wise. The course codes may be changed accordingly.

7.2. Structural Engineering – Concrete Technology, Prestressed Concrete Structures, and Prefabricated Structures may be the first course. Structural Dynamics can be lowered.

7.3. Environmental Engineering – Disaster Mitigation and Management, Global Climate Change and Sustainability and Social Development may be lowered.

7.4. Construction Management – Construction Materials and Management can be the first in the list. Construction Quality and Safety Management can be before Risk Management in Construction Projects. Building Services and Maintenance may be the last in the list.

7.5. Transportation Engineering – The order could be Pavement Engineering, Design of Pedestrian and Bicycle Tracks, Airport and Harbour Engineering, Urban Planning and Development and Traffic Engineering and Management.

7.6. Geo-Informatics – Total Station and GPS Surveying and Geo informatics Applications for Civil Engineers may be moved up.

7.7. Geotechnical Engineering – Ground Improvement Techniques and Geosynthetics Design and Applications shall be moved lower.

7.8. Water Resources Engineering – Water Resources Systems Engineering and Integrated Water Resources Management can be lowered in the order. Dr. R Saravanan opinioned that Coastal Engineering may be replaced by Environmental Hydraulics or Virtual Water / Circular Economy. Coastal hydro dynamics will be totally different and will be difficult for the students.

7.9. It can be mentioned explicitly that mini project is to be done in the particular vertical.

8. The list of courses and their syllabi under General Vertical – Environment and Sustainability were presented.

- Sustainable Infrastructure Development
- Sustainable Agriculture and Environmental Management
- Sustainable Bio Materials
- Materials for Energy Sustainability
- Green Technology
- Environmental Quality Monitoring and Analytics
- Integrated Energy Planning for Sustainable Development
- Energy Efficiency for Sustainable Development
- Mini Project

8.1 Dr. R. Saravanan approved the syllabi since its already approved after review by the Academic Council of Anna University.

9. The list of proposed Open Electives was presented.

- Basic Civil Engineering
- Fundamentals of Remote Sensing and GIS
- Electronic Waste Management
- Basics and Principles of Green Building Design
- Principles of Vastu in Interior Design
- Integrated Solid Waste Management
- Life Cycle Assessment
- Water Pollution and its Management

9.1 Dr. S. T. Ramesh suggested to review the entire syllabus and refine the syllabus for the Electronic Waste Management. The unit 3 is not relevant. It is desirable to include the guidelines, rules and regulations of E-waste management Rules 2016.

10. The list of proposed Value Added Courses and the syllabi were presented.

Course Title	Credits
Application of Planning Tool in Construction Projects	2
GIS Tools in Civil Engineering	2
Finite Element Analysis using Computer Tools	2
Water Conservation Techniques	2
Vastu in Construction	2
Practical Valuation	2
Design of Multistorey Building – A practical Approach	2
Corrosion of Steel in Concrete and Preventive Measures	2
Wastewater Treatment Techniques	2
Automation in Construction	2
Biomimicry in Civil Engineering	2
Architectural Acoustics	2
Forensic Civil Engineering	2
Optimization Techniques	2
In-Situ Soil Testing and Instrumentation	2
Non Destructive Testing Techniques	2
Base Isolation and Damping Techniques in Aseismic Design	2
Interior Designing	2
Exterior Designing and Landscaping	2
Green Building Concepts	2
Basics of Steel Concrete Composite Construction	2
BIM Fundamentals for Engineers	2

10.1 Dr. S. T. Ramesh suggested to review the entire syllabus and refine the syllabus for the

Electronic Waste Management. The unit 3 is not relevant. It is desirable to include the guidelines, rules and regulations of E-waste management Rules 2016.

10.2 Dr. S. T. Ramesh enquired if the syllabus of the Wastewater Treatment Techniques and Water Conservation Techniques will be different from the topics covered in the core courses.

10.3 Dr. S. T. Ramesh and Dr. R. Saravanan suggested to add latest topics as courses like Machine Learning, AI applications in Civil Engineering, Sensor Applications or any other course for placement and industry needs. National Curriculum framework and course content from Foreign Colleges also may be reviewed and adopted.

10.4 Mr. Sai Prasad V clarified if the MSP or Primavera will be introduced to the students in the course Application of Planning Tool in Construction Projects.

10.5 Dr. S. T. Ramesh suggested that the course content in Water Conservation Techniques should be put in order. Dr. R. Saravanan also added that precipitation should be the first topic.

10.6 The Chairman said that DAC members suggested for Chinese Vastu in the contents of Vastu in Construction. Dr. S. T. Ramesh said that the course content is not enough for 30 hours. Literatures could be added. Topics on Vastu principles in layout, room orientation, septic tanks, ventilation, etc. may also be added.

10.7 Dr. R. Saravanan enquired how the course Practical Valuation is different from the core course on Estimation and Valuation. Dr. S. T. Ramesh suggested to add Guidelines for valuation of properties by bank. Dr. R. Saravanan suggested that the course title is not relevant and may be changed to Building Valuation or Valuation of Properties.

10.8 Dr. R. Saravanan suggested to modify title of Design of Multi storey Building – A Practical Approach as tall or high rise buildings.

10.9 Dr. R. Saravanan clarified if the course Corrosion of Steel in Concrete and Preventive Measures deals with on shore or offshore structures. The Chairman clarified that it deals with general corrosion.

10.10 Dr. S. T. Ramesh suggested to review the topics in the course Wastewater Treatment Techniques so that there should not be any repletion of the contents.

10.11 Dr. R. Saravanan suggested that the course content for the course Biomimicry in Civil Engineering needs to be with scientific / technical concepts and should be of enough content.

10.12 Dr.R. Saravanan suggested to clarified about the contents of the course Architectural Acoustics and suggested that the title can be Building Acoustics.

10.13 Dr. R. Saravanan suggested that advanced techniques may be added in the course Optimization Techniques.

10.14 Dr. S. T. Ramesh suggested that latest NDT equipment may be added as topics in the course Non Destructive Testing Techniques.

10.15 Dr. R. Saravanan highlighted that more content could be added in the course Interior Designing. Also the topic analytical drawing could be modified as computer aided drawing.

10.16 Dr. R. Saravanan suggested that the course title Exterior Designing and Landscaping may be modified as “Landscaping Architecture” based on the content.

10.17 Dr. R. Saravanan suggested to include the Lighting and ventilation concepts explicitly as

topics in the content of Green Building Concepts. Topic on energy calculation / audit shall be included.

10.18 Dr. R. Saravanan suggested to modify the title of BIM Fundamentals for Engineers to BIM for Civil Engineers.

10.19 Dr. P. Ramadoss suggested not to have the content in one paragraph but as 2 units for Value added courses.

11. The Chairman informed that the suggestions and recommendations made by the members will be carried out and will be forwarded to the Academic Council of SVCE for approval.

The Chairman proposed the vote of thanks thanking all the members for their presence and valuable suggestions.

Resolutions:

1. It is resolved to approve the list of proposed verticals and courses under them with modifications suggested in the curriculum under Regulation-2022.
2. It is resolved to approve the list of courses and syllabi under general vertical – Environment and Sustainability.
3. It is resolved to approve the list of Open Elective courses and their syllabi under Regulation-2022.
4. It is resolved to approve the proposed list of Value Added Courses and their syllabi under Regulation-2022.

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