



St. XAVIER'S
CATHOLIC COLLEGE OF ENGINEERING
(Autonomous)

Chunkankadai, Nagercoil - 629003
Kanyakumari District, Tamil Nadu

An Autonomous Institution Affiliated to Anna University, Chennai
Accredited with 'A' Grade by NAAC
UG Programs(ECE,EEE,Mech,Civil,CSE & IT) Accredited by NBA
Recognized under section 2(f) & 12(B) of UGC Act, 1956
UG Programs(ECE,EEE,Mech,Civil,CSE & IT) ,
MBA & MCA Programs Permanently Affiliated

DEPARTMENT OF CIVIL ENGINEERING

BOARD OF STUDIES MEETING -02

Dated: 22-05-2023

Time: 10.30 AM to 01.30 PM

Venue: Hybrid Mode (Civil Computer lab)

Members Present: Enclosed

Minutes of Meeting

The 2nd Meeting of the Board of studies started with a prayer and welcome address. Principal addressed a special mention about the experts in the panel and gave an introductory talk. With the introduction, the HOD was asked to present.

Agenda

02.01: Confirmation of first BOS meeting minutes held on 11-11-2022 and decision/action taken report.

The HOD started presenting the action taken report for the previous meeting minutes. The BOS members gave the following suggestions.

Suggestions	Action taken	Remarks
UG		
For the subjects SOM, Structural Analysis and other Analytical subjects, tutorial hours can be added.	One tutorial hour has been added to all the analytical subjects.	Confirmed in the BOS meeting.
Engineering Mechanics can be added to the curriculum as it is the basic for other courses.	If Engineering Mechanics is added, the total credits will increase. Hence, the important topics of Engineering Mechanics are added to SOM.	Confirmed in the BOS meeting.

In vertical 4, Finite element Analysis can be preferred instead of Matrix method.	In Vertical 4, the course Matrix Method has been replaced with Basics of Finite Element Analysis.	Confirmed in the BOS meeting.
Railways, Airport and Docks can be avoided as a single subject.	The course was renamed as Airport and Harbour Engineering and the topics from Railways have been added to the course Transportation Engineering in fourth semester.	Confirmed in the BOS meeting.
Experiment should be added in syllabus only for which equipment is available in the concerned lab.	Based on the equipment availability, the experiments have been included.	Confirmed in the BOS meeting.
For every subject, 2 textbooks and 5 references can be provided with the latest edition.	In second semester, textbooks and references have been modified as per the suggestion for the core course.	Confirmed in the BOS meeting.
For practical courses, Number of Experiments should be limited as 6 for 1 credit and 12 for 2 credit subjects.	2 Experiments have been added for the Building Material Laboratory course.	Confirmed in the BOS meeting.
PG		
Suggestions	Action taken	Remarks
Software like MATLAB can be added in tools for Research	MATLAB have been added in the syllabus	Confirmed in the BOS meeting.
Instead of project work I, II, can be renamed as Project Phase I and Project Phase II.	Project Work I & II have been renamed as Project Phase I and Project Phase II.	Confirmed in the BOS meeting.
For the subject Finite Element Analysis of Structures, reference book C S Krishnamurthy can be added.	In the references, C S Krishnamurthy have been added.	Confirmed in the BOS meeting.
Latest edition can be preferred	Reference books of latest edi-	Confirmed in the BOS

in reference.	tion have been added.	meeting.
The syllabus of Advanced concrete Technology and Prestressed Concrete can be verified with UG	The syllabus has been cross checked and there was no overlapping of topics.	Confirmed in the BOS meeting.
Subject title Digital Design and Construction can be renamed as Digital Construction.	Digital Design and Construction have been renamed as Digital Construction.	Confirmed in the BOS meeting.
Mathematics in first semester can be refined as related to Civil Engineering. Taguchi's method can be added.	For structural Engineering, Taguchi's method has been added in the unit 2.	Confirmed in the BOS meeting.
Forensic Engineering subject can be added.	Topics related to Forensic Engineering have been added to the course Maintenance and Rehabilitation of Structures.	The possibility of adding forensic engineering in Repair and Rehabilitation was discussed and confirmed.

02.02. Discussion on the Suggestions / Recommendations offered by the members in the I Academic Council meeting and the I Governing Body meeting.

The first Academic Council meeting of St. Xavier's Catholic College of Engineering was conducted on 09.12.2022 (Friday) at 10:00 am at Einstein Hall.

Suggestions / Recommendations	Decisions / Actions taken	BOS Recommendations
It is suggested to get approval from the BoS for the online courses that are going to be offered from NPTEL/SWAYAM platform before offering them to the students.	The online courses will be offered from the Fifth Semester. It is decided to get the approval from BoS in the next meeting.	The departments identified the NPTEL / SWAYAM courses which are equivalent to 5th and 6th semesters Professional Elective courses for UG Programmes and 3rd semester PG programmes and got the recommendation from BoS. IIT Spoken tutorial courses with assessment and grade

		sheet with credits can also be considered.
It is suggested to have One Credit Courses to be handled by Industry Experts.	It will be discussed in the next BoS meetings.	Two credits Naan Mudhalvan courses on cutting edge technologies are offered to the students by industrial experts in each semester, which is one of the initiatives of Tamilnadu Government. In addition to this seminar by Industrial experts can be arranged as per the requirement
It is recommended to have the Journal Publication as optional instead of Mandatory for the Programmes.	Changed in the Regulation.	The BoS recommended to make the Journal / Conference publications as Desirable and those students who are doing that can be honoured by providing higher grades in the particular course. It should not be made as a mandate since it required more time.

Suggestions / Recommendations	Decisions / Action taken	BOS Recommendations
It is suggested to use Bloom's Taxonomy Keywords while formulating the Course Outcomes.	Incorporated in the syllabi.	Confirmed
It is recommended to include the latest versions of the text books.	Incorporated in the syllabi.	Confirmed
The total credit for the PG programmes may be increased	Will be discussed in the next BoS meeting.	As per the Anna University the Total Credits for M.E. Programmes is - 70-75

		Our Curriculum Credit for M.E. Structural Engineering and M.E. Construction Engineering and Management is - 70 The BOS recommended not to change the minimum total credit required to complete the programme.
It is suggested to avoid 1.5 credits Laboratory Courses.	Will be presented in the next BoS meeting.	For the detailed Hands on Experience it is suggested to have 2 credit Laboratory Courses.
It is suggested not to offer NPTEL/SWAYAM online course for P.G. Programmes.	Will be presented in the next BoS meeting.	Anna university is offering this facility. On considering the benefit of the students it is recommended to offer NPTEL/SWAYAM online courses to PG students also.
It is suggested to rename the course "Research Tools in Engineering to "Research Tool Laboratory" for the P.G. Programmes.	Modified in the Curriculum and Syllabi.	Confirmed
It is suggested to change label for the elective courses track from "Verticals" to some other appropriate label.	Will be presented in the next BoS meeting.	"Verticals" is the generic name used by the Anna University. To avoid the confusion the same terminology is recommended. It is recommended to have a unique name for each verticals and it should be clearly bifurcated from the other verticals.
It is suggested to have two text books and five reference books for UG courses and five reference books for PG courses.	Incorporated in the syllabi.	Confirmed
It is suggested to change the course title of Placement training courses.	Will be presented in the next BoS meeting.	It is recommended to rename the "Placement training course" to "Skill Development Courses".
It is observed that the	Will be discussed in the next	The course "Value Education" is

number of courses in the 3 rd semester of the U.G. Programmes is high in number.	BoS meeting and will do the needful.	made as a 0 credit mandatory course.
It is suggested to change the title of the course "Higher Order Thinking"	Will be presented in the next BoS meeting.	The syllabus of this course includes both Critical Thinking and Creative thinking. So "Higher Order Thinking" is the right title for this course.

Suggestions / Recommendations	Decisions / Action taken	Plan for BoS Meeting	Recommendation by BoS
UG			
Open Elective Course title of "Selection of Materials" can be changed as "Selection of Construction Materials".	Will be presented in the next of BoS meeting	Since the syllabus cover multidisciplinary contents. That cannot be named as construction material and so the subject is replaced by another subject, Environmental Quality Monitoring and Analysis.	Replacing the subject Selection of materials will not be fair and so instructed to retain the subject and make the necessary changes in the syllabus.

02.03. Presentation of the proposed curriculum and getting recommendation for approval for the II year detailed draft syllabi of both UG and PG Programmes for regulation 2022.

Suggestions for the Syllabus are as follows:

UG- Civil Engineering:

- Credit for practical subjects marked as 1.5 can be replaced by 2.
- Semester 3 is heavy. The subjects Concrete Technology and Strength of Materials were very vast. Concrete Technology can be changed to 3 credits.
- The course title must be ordered based on the domain order and then rearrange the course code.
- The importance of coding and soft skills was discussed, as this helps for industry readiness. As this course is common for all branches, the decision will be taken based on other department BOS meetings.

- Structural Analysis syllabus is huge.
- The contents in units aren't uniform. Uniformity in each unit can be done.
- In Surveying, drones and their application can be added in the unit 5.
- In computer aided building drawing, the list of experiments can be changed to list of drawings. The type of building can be mentioned with it, BIM can also be added.
- In surveying lab, hydrographic survey can be removed and more importance can be given to total station.
- Spreadsheets for Structural Analysis, Design and Estimation subjects can be taught.
- Elective on modern matrix method can be added.
- In transportation engineering, all 4 modes are clubbed together. This can be split as highway and railway as one and airport, harbour and docks as other subject.
- In environmental engineering, syllabus can be arranged in proper sequence. Contents can be ordered logically.
- In hydraulics engineering lab, Experiments headed under flow measurement was not correct, that has to be changed. Experiments under pumps should be changed as characteristics study.

PG Structural Engineering:

- In Masonry structures, few topics of unit 4 such as, use of capacity and use of software is a wide area. There is no capacity based design for RCC or push over analysis. The unit can be deduced.
- In shell structures, without the idea of plates, folded plates cannot be introduced. Theory of plates and methods of plate modelling can be added. Title can be changed as Design of plates and shells.
- In soil structure interaction, Ground improvement techniques and plaxis software can be added.
- In design of bridges, launching of girders can be added.

PG Construction Engineering and Management:

- In Project Safety Management subject, contents are repetitive. Title should be modified.
- In Resource Management and Control in Construction, unit 5 title and contents should be ordered.
- In Environmental Impact Assessment subject, the content should be altered based on Construction Engineering.
- The Elective composite will not be needed for Construction Engineering and Management.

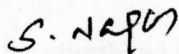
Considering the above suggestions, the BOS recommended the curriculum and the syllabus of 3rd and 4th semester courses of UG and PG Programmes.

02.04. Ratification for including NaanMudhalvan courses and Tamil courses as per the directions of Anna University & Government of Tamilnadu.

The BOS Ratified the inclusion of Naan Mudhalvan courses and Tamil courses as per the directions of Anna University & Government of Tamilnadu.

02.05. Other matters if any.

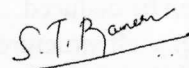
- While selecting an open elective, application based subjects like ACT, NDT, IOT rather than theory subject should be chosen. This may attract the students of other department towards civil engineering.
- At the end of each online course, a challenge for students can be given. Prototype/ design / exhibit type.



Dr. S. Nagan
(Anna University Nominee)



Dr. G. Prince Arulraj
(Academic Expert)



Dr. S.T. Ramesh
(Academic Expert)



Ms. T. PremaLatha
(Industry Expert)



Dr. C. Shermi
(Aluminous)



Dr. I. Jessie Mol
(HOD/ CIVIL)



Dr. R.P. Anto Kumar
(Academic Dean)



Dr. J. Maheswaran
(Principal)

External Members present:

S. No	Members as per UGC Norms	Members Nominated
1	One Expert nominated by the Vice Chancellor from a panel of six recommended by the college Principal	Dr. S. Nagan Professor, Department of Civil Engineering, Thiagarajar College of Engineering, Madurai.
2	One of the experts in the subject from outside the college nominated by the Academic Council	Dr. S.T. Ramesh, (Online) Professor, Department of Civil Engineering, NIT, Trichy.
3	One representative from industry/corporate sector/allied area relating to placement	Ms. T. PremaLatha, (Online) Manager, Structural, Kavin Engineering and services Private Ltd, Coimbatore, Tamil Nadu, India.
4	One Post Graduate meritorious aluminous nominated by the Principal	Dr. C. Shermi Senior Scientist, Environment Technology Division, CSIR- Government of India, Trivandrum, Kerala.

Internal Members Present:

S. No	Name of the Member	Designation
1	Dr. I. Jessy Mol	Head, CE
2	Dr. J.Jerlin Regin	Asso. Prof/CE
3	Ms. S.Shiela Balanta	Asst. Prof/CE
4	Dr. P. Antony Vimal	Asst. Prof/CE
6	Dr. S. Frank Stephen	Asst. Prof/CE
7	Mr. M.InigoValan	Asst. Prof/CE

8	Mr. J.Jeya Suren Raj	Asst. Prof/CE
9	Mr. F. John Paul	Asst. Prof/CE
11	Ms. D.Smiline Shiny	Asst. Prof/CE
12	Ms. Flora Dani C. M.	Asst. Prof/CE
13	Ms. R. Sumithra Jaya	Asst. Prof/CE
14	Dr. D. Mary Metalin	Asso. Prof/H&S

Ex-Officio members present:

S. No	EX OFFICIO MEMBERS	
1	Dr.J. Maheswaran	Principal, St. Xavier's Catholic College of Engineering, Chunkankadai.
2	Dr. R. P. Anto Kumar, Asso. Prof, CSE Dept	Dean Academics, St. Xavier's Catholic College of Engineering, Chunkankadai.

Members Absent:

S. No	Members as per UGC Norms	Members Nominated	Reason
1	One of the experts in the subject from outside the college nominated by the Academic Council	Dr.G. Prince Arulraj , Professor& Dean E&T, Department of Civil Engineering, Karunya Institute of Technology and Sciences, Coimbatore, Tamil Nadu, India.	AICTE Inspection
2	Member	Mr. M.Galesh, Asst. Prof/CE	Wedding of brother
3	Member	Ms. L.Porcia Asst. Prof/CE	Health issue



		by another subject, Environmental Quality Monitoring and Analysis.
CE22682	SELECTION OF MATERIALS	LPTC 3003
OBJECTIVE The subject exposes students to the basics parameter for selection of materials and different classes of materials, manufacturing processes and their properties, applications of materials.		
UNIT I ENGINEERING MATERIALS		9