

# St. Xavier's Catholic College of Engineering

Chunkankadai, Nagercoil-629003, Tamilnadu, India.

## Department of Mechanical Engineering

Date & Time : 24<sup>th</sup> May 2023 at 11.30 a.m. – 01.30 p.m.

Venue : Board Room, SXCCE

### AGENDA

02.01. Confirmation of First BoS meeting minutes held on 19.11.2022 and Decision/Action Taken report.

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

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.

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

02.05. Other matters if any.

**Members Present :** enclosed

### Minutes of the Second Board of Studies meeting

Second Board of Studies (BOS) meeting was conducted on 24.05.2023 by online and offline mode using Google Meet at 11.30 A.M. Dr. M. Antony Forster Raj has initiated the second BOS meeting by introducing the external members and internal members. Dr. J. Maheshwarsn, Principal, SXCCE gave facilitation and spoken about the importance of BOS meeting. Dr. G. Antony Miraculous, chairman of the BOS shared the proposed curriculum and subjects of 2<sup>nd</sup> year UG and 2<sup>nd</sup> year PG of Mechanical Engineering and started the discussion.

#### 02.01. Confirmation of First BoS meeting minutes held on 19.11.2022 and Decision/Action Taken report.

Sl. No.	Minutes of 1 <sup>st</sup> BOS meeting	Action taken	Remarks
1	Instead of the subject name manufacturing technology, use	Changed the subject name as Manufacturing process.	Conformed by BoS

	mechanical operation names in the subject itself.		
2	Consider adding Jigs, fixtures and press tools, added in verticals or incorporate with any one subject as a unit.	Jigs, fixtures and press tools has been added in one of the verticals	Conformed by BoS
3	In the 3 <sup>rd</sup> sem., instead of Electrical Engineering Laboratory replace electrical and electronics with drives.	Electrical drives and control subject has been converted into TP subject.	Conformed by BoS
<u>Semester wise discussion:</u>			
First Semester:			
Second semester:			
4	In the second semester, total credits are 26. Members asked to keep the total credits not to exceed 24 per semester, if possible.	It has been accepted to have 26 credits in the second semester in the BOS and Academic Council.	Conformed by BoS
5	In the Computer Aided design and Drafting Laboratory must add the standard SP46-2003 to study about the fundamentals. Also, add production drawing as a part of this lab and add a reference book for the same as titled production drawing by K. L. Narayana.	In the Computer Aided design and Drafting Laboratory the standard SP46-2003 is added and also production drawing has been added as a part of this lab. A reference book for the same as titled production drawing by K. L. Narayana has also been added	Conformed by BoS
6	In any lab, avoid the words such as study, demo, etc. and make a sentence for better understanding the students.	The words such as study, demo has been avoided in the laboratory syllabus.	Conformed by BoS
Third Semester			
7	Change all the CO's of fluid mechanics and machinery subject.	COs has been changed	Conformed by BoS
8	In manufacturing technology subject, change the subject name and make a new name which should contain the process names like metal forming and removal process or metal additive process.	Manufacturing technology subject has been renamed as Manufacturing Processes.	Conformed by BoS
9	Constitution of India subject should be taken by an advocate.	Guest Lectures has been planned	Conformed by BoS
10	Change the name manufacturing lab	Re named as	Conformed by BoS

	into manufacturing process lab.	Manufacturing Processes Lab.	
Fourth semester			
11	Invite guest lecturer from suitable industry or safety engineers to handle the audit course Industrial Safety Engineering.	Guest Lectures has been planned.	Conformed by BoS
Seventh semester:			
PG – ENERGY ENGINEERING			
First semester			
1	Change the entire subject CO's and all must have the cognizant level 'Ap'.	CO's has been changed.	Conformed by BoS
2	In renewable energy systems cum lab, correct the credits and reduce the number of experiments since theory cum practical subject 30% practical portion is enough.	Credits have been corrected and number of experiments has been reduced.	Conformed by BoS
3	In technical seminar, change the objectives and also in guidelines add published reputed journal for reference.	Objective has been changed and journal reference has been added.	Conformed by BoS
Second semester:			
4	Change the subject name Analysis and Simulation Laboratory for Energy Engineering into analysis and simulation of energy systems laboratory.	Analysis and Simulation Laboratory for Energy Engineering has been renamed as Simulation and Analysis laboratory for Energy Systems.	Conformed by BoS
Third semester			
5	Change the subject name for advanced power plant engineering and give a specific name like waste heat recovery systems.	Title has been changed as Power plant Engineering and Carbon Capture. Additional topic on carbon capture from power generation has been included.	Conformed by BoS

**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. The academic council meeting



has given some suggestions and recommendations, which are also discussed in detail in the BOS meeting.

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.	Department 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.	BoS recommended to make the Journal / Conference publications as Desirable and those students who are doing that can be honored 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.	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 P.G. 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 Syllbi.	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 number of courses in the 3 <sup>rd</sup> semester of the U.G. Programmes is high in number.	Will be discussed in the next BoS meeting and will do the needful.	The course "Value Education" is 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

Programme	Suggestions / Recommendations	Decisions / Action taken	Recommendation by BoS
Faculty of Mechanical Engineering	It is suggested to modify the course title "Analysis and Simulation Lab" to "Simulation and Analysis Lab for Energy Systems"	Will be presented in the next BoS meeting.	Conformed by BoS

**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**


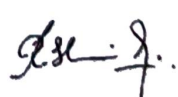
**2<sup>nd</sup> BOS meeting minutes**

- ✦ In the consolidated mark sheet, we have to describe the theory cum practical subjects separately.





- ✚ If any student completed a non-mandatory NPTEL course, then they can skip one elective.
  - ✚ For UG students, publications are not mandatory.
  - ✚ In the Naan Muthalvan scheme (total 6 credits), students can skip one 3 credit course from 5<sup>th</sup> semester and another 3 credit course from 7<sup>th</sup> semester.
  - ✚ In theory cum practical subjects, limit the number of experiments up to 7.
  - ✚ Change the name manufacturing technology lab into manufacturing process lab.
  - ✚ For PG, change the subject Design and analysis of Turbo machines into another one like electric vehicle.
  - ✚ For PG, during 4<sup>th</sup> semester students can do their project related relevant courses at NPTEL/Swayam. Assessment might be done by their mentor through a internal test.
  - ✚ PG, Students can go for summer internship and based on the days, can be given the credit as per AICTE norms. This summer internship credit must add in the 2<sup>nd</sup> semester.
- One week – 1 credits

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

The BoS ratified the inclusion of the Naan Muthalvan courses and Tamil courses in the curriculum of UG program as per the directions of Anna University and Government of Tamilnadu.

Sl. No.	Name of the Expert	Details	Signature
1	Dr. C. Paramasivan, Professor, Department of Mechanical Engineering, Thiagarajar College of Engineering, Thiruparankundram, Madurai, Tamilndau.	University Nominee	
2	Dr. R. Edwin Raj, Program Coordinator & Professor, Department of Mechanical Engineering, National Rail and Transportation Institute, Vadodara, Gujarat	External stakeholder (Subject Expert)	



3	Dr. S. C. Vettivel, Professor, Department of Mechanical Engineering, Chandigarh College of Engineering and Technology (Degree wing), Department of Technical Education, Chandigarh Administration, Section - 26, Chandigarh	External stakeholder (Subject Expert)	
4	Mr. R. Justine, Assistant General Manager, Howden Solyvent (India) Private Limited, 147, Poonamallee high road, Numbai, Chennai - 77.	External stakeholder (Industrial Expert)	
5	Mr. J. C. Manohar Lal, Manager Maintenance, GAIL (India) Limited, Petrochemical Complex, PATA, Auraiya, Kanpur, Uttar Pradesh.	External stakeholder (Alumni Member)	
6.	Dr. G. Antony Miraculas, Associate Professor, Mechanical Engineering, St. Xaviers Catholic College of Engineering, Nagercoil - 629004	HOD Mechanical Engineering	



DEAN (ACADEMICS)  
Dr. R.P. Anto Kumar



PRINCIPAL  
Dr. J. Maheswaran