

7thBoard of Studies Meeting in the Department of Electrical and Electronics Engineering

Mode: Offline Venue: EEE Seminar Hall/Francis Xavier Engineering College Date & Time:22.08.2022& 11.00 am

AGENDA

BoS / EEE7.1: Welcome address and Opening Remarks by Chairman, Board of studies in the Department of Electrical and Electronics Engineering.

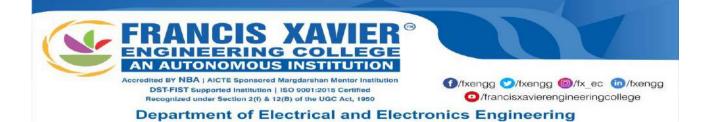
BoS / EEE7.2: Confirmation of the Minutes of the 6thmeeting of Board of studies in the department of Electrical and Electronics Engineering held on 17thDecember 2021 and Action taken report of 6thmeeting of Board of studies.

BoS / EEE7.3: Business brought forward by the Chairman, Board of Studies

- 7.3.1. Review of 7th BoS meeting minutes
- 7.3.2. NPTEL course for 2019 R /2021 R Students
- 7.3.3. Industrial supported course for 2019 R /2021 R Students
- 7.3.4. Value added courses for 2019 R UG/2021 R Students
- 7.3.5. Amendments in UG syllabus for 2019(V and VII Semester) & 2021 (II,III and IV Semester)
- 7.3.6. Minor/Specialization Honor Degree courses

BoS / EEE7.4: Suggestions given by the BOS Members

BoS / EEE7.5: Any other items for discussion



MINUTES OF THE MEETING

The 7thMeeting of the Board of studies of the Electrical and Electronics Engineering washeld on 22nd August 2022 at 11.00am in the Presentation Hall The following members were present:

- 1. Dr.J.Jasper Gnana Chandran Prof & Head Chairman, BoS.
- 2. Dr.C.Ponmani,M.E.Ph.d., Professor, EEE, GCE, Tirunelveli-University Nominee.
- 3. Mr.Sathakkathulla, Embedded Specialist , TATA ELSXI Pvt Ltd.
- 4. Dr.P.Annapandi-InternalMember
- 5. Dr.A.JustinDiraviam-Internal Member
- 6. Dr.A.Ravi Internal Member
- 7. Dr.A.Gnanasarvanan-Internal Member
- 8. Mr.J.DanielSathyaraj-Internal Member
- 9. Mr.J.Antony Robinson-Internal Member
- 10. Dr.R.Rajagopal-Internal Member
- 11. Dr.U.Muthuraman-Internal Member
- 12. Mr.N.Subramanian Internal Member
- 13. Mr.S.Selvakumar-Internal Member
- 14. Mr.N.V.Selvam-Internal Member
- 15. Mrs.R.Aandal-Internal Member
- 16. Mrs.S.Chithra-Internal Member
- 17. Mrs.A.Amala Manuela-Internal Member
- 18. Mr.A.Sheik Siddik-Internal Member
- 19. Dr.J.Kohila-Internal Member
- 20. Mr.G.Guna-Internal Member
- 21. Ms.M.Krithika-Internal Member

BoS / EEE7.1: Welcome Address and Opening Remarks by Chairman, Board of Studies in the Department of Electrical and Electronics Engineering

Dr.A.Ravi Professor of the Electrical and Electronics Engineering welcomed all the members for the 7th Board of studies meeting; BoS chairman introduced the BoS Members.

BoS / EEE7.2: To confirm the Minutes of 6thBoS Meeting held on 17thDecember 2021.

The minutes of the Sixth Board of Studies meeting held on 17thDecember 2021 were communicated to the members. The comments received have been incorporated and placed for confirmation. The same was approved by the 6thAcademicCouncil.



Annexure I: Action Taken Report

BoS / EEE7.3.1: Review of 6thBoS meeting minutes

The Board Chairman Dr.J.Jasper Gnana Chandran presented the changes carried out in Regulation 2021 Syllabus based on the recommendations given in sixth BoS meeting. All the Suggestions given by BoS Members were taken into account and incorporated in the Regulation 2021 syllabus.

Sl. No.	Semester	Course Code	Course Name	Recommendations given by BOS Members
1	I	-	All courses	Accepted
2	II	21EE2601	Electric Circuits and Network Analysis	The BoS members suggested to include a topic "Unbalanced three phase system" in the Unit-I. They also suggested that source transformation should be taught along with voltage and current division rule. They suggested to change the Unit II title as Network Theorems and Topology, in which the theorems should taught first followed by the network topology.
3	III	21EE3601	Electronic Devices and Integrated Circuits Design	Suggested to change the name as "Analog and Integrated Circuits", They also suggested to add elaborated heading and applications in Unit-I and Expression for Frequency in Unit-II.
		21EE3602	DC Machines and Transformers.	The BoS members suggested to rearrange the Units in the following manner. Unit III & IV will be taken as Unit II & III. Unit II will be takes as Unit-IV.



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Department of Electrical and Electronics Engineering					
			In the Unit-V, the braking		
			concept to be removed		
			and that can be added in		
			Unit-III DC motor.		
			The BoS members		
		Electronic Devices and	suggested to change the		
	21EE3611	Integrated Circuits	name as "Analog and		
		Lab	Integrated Circuit Design		
			Lab".		
	04550(40	DC Machines and	Suggested to change the		
	21EE3612	Transformers	objectives of the course.		
		laboratory			
	21EE4601	Signals and Systems	BoS members Suggested to		
			make the following		
			changes.		
			_		
			Unit I syllabus to be		
			reduced up to power		
			signal. Remaining part of		
			Unit I to be included in		
			Unit II.		
			In Unit II & Unit-III		
			Laplace Transform		
			repeated twice, that		
			should be corrected.		
4 IV			Unit IV syllabus to		
			expanded.		
			Unit V syllabus to be		
			rearranged.		
	21EE4602	Digital Electronics	BoS members Suggested to		
			have the syllabus in the		
			following order in Unit I		
			Min terms/Max Terms,		
			Karnaugh Map to be shift		
			to Unit II.		
			Unit II title to be changed		
			as Combinational logic		
			Circuits		
			Unit IV & V will be		
			sequential circuits.		



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Department of Electrical and Electronics Engineering					
			The VHDL in Unit –V to be		
			removed.		

21E	E4603	Control Theory	The BoS members suggested to exclude the topics Digital control system and state variable
21E	E4604	AC Machines	analysis. The BoS members suggested to change the sequence of Units in the following manner. Unit I &II(Synchronous Machines) will be taken as Unit III & IV. Unit III & IV. Unit III &IV(Induction machines) will be taken as Unit I & II. In the Unit-V, the special
21E	E4605	Modern Electronics Measuring Instruments	machines is taken. Suggested to exclude the topic B-H curve in Unit-I., that can be accomplished practically. Unit II & III to be swapped.
21E	EE4611	Control Theory Laboratory	Suggested to change the name as "Control Systems and Simulation Laboratory".
21E	E4612	AC Machines Laboratory	Suggested to change the objectives of the course.

BoS / EEE 7.3.2: NPTEL course for 2019 R/2021 R students.

The Board Chairman stated that as per 2019& 2021curriculum, the students can opt for credit transfer by studying the online NPTEL courses instead of Professional Elective courses, Value added courses. The Board Chairman presented the list of online NPTEL courses and the NPTEL courses suggested by the BoS members for the Academic Year 2022-23 Odd semester which can be taken by the students.

BoS / EEE7.3.3: Industrial supported course for 2019 R /2021 R Students



Department of Electrical and Electronics Engineering

The Board chairman presented the list of Industrial Supported Courses offered by L & T Edutech based upon the MoU signed with L & T Edutech on 13.07.2022 which could be included in the curriculum as professional elective.

- Integrated Engineering and MV Substation-PE III
- A Practitioner's approach to Power System Protection and Switch gear- PE II
- Advanced electrical system design for building- PE I
- Extra low voltage system design for buildings-PE IV
- Renewable energy and Power evacuation -PE V
- Smart grid technologies-PE IV
- Cyber physical systems for Industrial applications-PE VI
- FPGA design for Industrial Applications (VLSI) -PE IV
- AI and Edge Computing- PE I

The BoS members suggested the following points.

1. To verify the syllabus of Industrial Supported courses to avoid the correlation of the syllabus between courses and Design tools must be handled by students for Industrial Supported courses.

BoS / EEE 7.3.4: Value added courses for 2019 R UG/2021 R Students.

The Board chairman presented the list of Value Added Courses offered by EEE Department. The BoS members gave suggestions to make the changes in the following subjects:

1. The Title of VAC -Applications of synchronous generator in industries should be changed as Applications of synchronous machines in industries.

2. The members verified the syllabus for VAC "EMBEDDED SYSTEM DESIGN USING ARDUINO" and expressed their satisfaction.

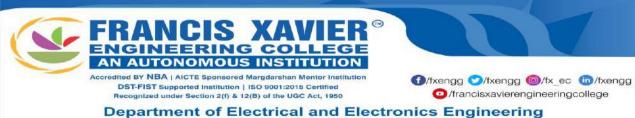
BoS / EEE 7.3.5: Amendments in UG syllabus for 2019(V and VII Semester) & 2021 (II,III and IV Semester).

The Board chairman presented the Amendments in UG syllabus for 2019(V and VII Semester) & 2021 (II,III and IV Semester).

• Inclusion of Test Projects in each Laboratory courses.

Changes in 2021 curriculum:

1. Total credit is reduced from 168 to 165



- 2. 21EE3604- Signals and Systems shifted from 4th semester to third semester
- 3. 21GE4M01-Indian Constitution and Cultural Heritage Moved from 3rd to 4th semester
- 4. 21EE4604- Transmission and Distribution in Power Systems Moved from 5th to 4th Semester.
- 5. Professional Elective II is shifted from 6th to 5th semester
- 6. 21GE2M02 Environmental and Sustainable Engineering shifted from 4th semester to 6th semester
- 7. Principles of management is changed to Total Quality Management in 7th semester.
- 8. Professional Elective IV is shifted from 7th to 6th semester
- 9. Project Work-I Phase A is changed to Mini Project
- 10.Professional Elective VI is shifted from 8th to 7th semester
- 11.0pen Elective IV is shifted from 8th to 7th semester
- 12. Project Work-I Phase B is removed.
- 13. Project Work is credit is reduced from 12 to 10 credit
- 14.Number of courses in Elective 7 is distributed across other electives

15. Industrial supported courses is added in electives

BoS / EEE 7.3.6: Minor/Specialization Honor Degree courses.

The Board chairman presented the list of Minor/Specialization offered by EEE Department. The BoS members accepted all the courses.

Semester	Course Code	Course Name	
IV	21EH401	Sensors and Actuators	
V	21EH501	Industry 4.0	
VI	21EH601	Artificial Intelligence for Robotics (Theory cum Lab)	
VII	21EH701	Digital Image Processing of Machine Vision	



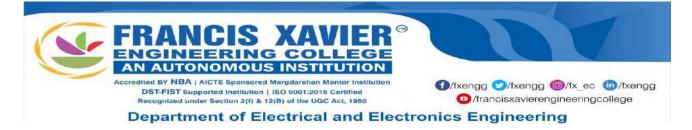
BoS / EEE 7.4 : Suggestions Given by the Members

Sl. No.	Semester	Course Code	Course Name	Recommendations given by BOS Members
1	Ι	21ME1502	Basic Civil and Mechanical Engineering	The BoS members suggested to shift the course 21ME1502- Basic Civil and Mechanical Engineering to second semester from I semester and 21ME1513-Computed Aided Engineering Graphics can be shifted from II semester to I Semester
2	II	21EE2601	Electric Circuits and Network Analysis	The BoS members suggested to include a topic "Star Delta Transformation" after Kirchoff's law in the Unit-I. They also suggested that source transformation should be taught along with voltage and current division rule.
3	III	21EE3602	DC Machines and Transformers.	Suggested to include "Electric Circuits and Network Analysis" in pre requisite. They also suggested splitting the Unit I content and that can be added to Unit II. The Topic comparison with two windage transformer can be removed. They suggested remove the topic stray losses and include the sumpner's test in Unit V.
4	III	21EE3612	DC Machines and Transformers laboratory	Suggested to include Three phase transformer Testing .

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·	Departme		ical and Electroni			
		21EE4605	Modern	Suggested to convert this as		
			Electronics	theory course instead of		
			Measuring Instruments	theory cum practical and Title		
5	IV		mstruments	as "Measurements and		
5	ĨV			modern Instruments". The		
				instrumentation experiments		
				can be added in Control theory		
				lab.		
		21EE4602	Digital Electronics	Suggested to convert this as		
6	IV			theory cum practical course		
				instead of theory.		
	IV	21EE4604	AC Machines	The Equivalent circuit topic		
				should be included after No		
7				load and Blocked rotor test.		
				The Magnetic Levitation		
/				concept can be included in		
				Unit V. Applications have to be		
				added. Remove Phasor		
				Diagram Xd and Xq in Unit V.		







The BoS members appreciated the effort taken by the FXEC/EEE Department for framing the syllabus in excellent manner.

The members had a brainstorming discussion, deliberation and interaction among themselves. After discussion, productive suggestions were incorporated appropriately in the UG and PG Curriculum and Syllabi.

Based on the suggestions given by the members, BOS resolved to recommend the following to the Academic Council for further approval.

7.3.1. Review of 7th BoS meeting minutes

7.3.2. NPTEL course for 2019 R Students

7.3.3. Industrial supported course for 2019 R Students

7.3.4. Value added courses for 2019 R UG Students

7.3.5. Amendments in UG syllabus for 2019(V and VII Semester) & 2021 (II,III and IV Semester)

7.3.6. Minor/Specialization Honor Degree courses

The Board Chairman Dr.J.Jasper Gnana Chandran thanked all the members for their valuable suggestions and sparing their precious time with us.

CHAIRMAN

BOARD OF STUDIES