

# **KAMARAJ COLLEGE OF ENGINEERING & TECHNOLOGY**

*(An Autonomous Institution, Affiliated to Anna University, Chennai)*

**S.P.G.Chidambara Nadar - C.Nagammal Campus**

**S.P.G.C.Nagar, K.Vellakulam – 625 701.**

**(Near VIRUDHUNAGAR)**



**SEVENTH BOARD OF  
STUDIES MEETING MINUTES**



(An Autonomous Institution - AFFILIATED TO ANNA UNIVERSITY, CHENNAI)

S.P.G.Chidambara Nadar - C.Nagamal Campus

S.P.G.C. Nagar, K.Vellakulam - 625 701 (Near VIRUDHUNAGAR).

## Department of Computer Science and Engineering

### B.E CSE Seventh BoS Meeting Minutes

**Date** : 27.09.2023

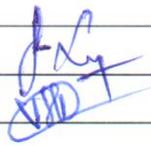
**Time** : 1.30 p.m to 2.30 p.m

**Venue** : CSE Conference Hall-I

The following members were present:

S.No.	Name of the Expert	Designation	Capacity	Signature
1	Dr.P. Chitra	Professor & Head Department of Computer Applications, Thiagarajar College of Engineering, Madurai. Email : pccse@tce.edu Mobile : Phone No:9842982776	Anna University Nominee	
2	Dr.G.R.Gangadharan	Associate Professor Department of Computer Applications, National Institute of Technology, Tiruchirapalli -620015. Email: ganga@nitt.edu Mobile : 77998 33300	Academic Council Nominee	
3	Dr.D.Jeya Mala	Associate Professor School of Computer Science Engineering Vellore Institute of Technology, Chennai Email : jeyamala.d@vit.ac.in Mobile : 99948 36867	Academic Council Nominee	
4	Mr.R.Anandha Murugan	Chief Technology Officer Privity HR Solutions Private Limited Anna Nagar, Madurai. Email: anandhamurugan.r@promptdxb.com Mobile : 86673 98310	Industrial Expert	
5	Mr.S. Venkatesh 2009-2013 Batch	Device Solution Engineer Exxonmobil, Bengaluru. Email: venkatesh.ashok16@gmail.com Mobile : 96293 49329	Alumni	

Internal faculty Members of BoS			
S.No	Name of the Faculty	Designation	Signature
1	DR.A.Meenakshi	Professor and Head	
2	Dr.R.Ramya	Associate Professor / CSE UG (B.E.CSE) Programme Co-ordinator	
3	Dr.A.Anandh	Associate Professor / CSE UG (B.Tech. AI &DS) Programme Co-ordinator	
4	Dr.G.Nirmala	Assistant Professor / CSE	
5	Dr.G.Mahalakshmi	Assistant Professor / CSE	
6	Dr.G.Uma Maheshwari	Assistant Professor / CSE	
7	Mr.V.Rajesh Kannan	Assistant Professor / CSE	
8	Mrs.S.Athilakshmi	Assistant Professor / CSE	
9	Mr.B.Muthukrishnavinayagam	Assistant Professor / CSE	
10	Mrs.K.Muthulakshmi	Assistant Professor / CSE	
11	Mr.G.Praveen Kumar	Assistant Professor / CSE	
12	Mr.J.John Livingston	Assistant Professor / CSE	
13	Ms.S.Hemaswathi	Assistant Professor / CSE	
14	Mrs.X.Ignatius Selvarani	Assistant Professor / CSE	
15	Mrs.E.Vijayalakshmi	Assistant Professor / CSE	
16	Ms.S.Janani	Assistant Professor / CSE	
17	Mr.D.Raj	Assistant Professor / CSE	
18	Mrs.K.Leelarani	Assistant Professor / CSE	
19	Mr.M.Rajasekaran	Assistant Professor / CSE	
20	Mrs.B.Santhi Priya	Assistant Professor / CSE	
21	Mrs.R.Hari Priya	Assistant Professor / CSE	
22	Mr.R.Kumaravel	Assistant Professor / CSE	
23	Mrs.D.Pradhiba	Assistant Professor / CSE	
24	Mr.D. Asir	Assistant Professor / CSE	
25	Dr.R.Muthuselvi	Professor/ AI & DS	
26	Dr P Praveen Kumar	Associate Professor / AI & DS	
27	Dr.U.Kumaran	Associate Professor / AI & DS	
28	Mrs.S.Nithya	Assistant Professor / AI & DS	
29	Mrs.R.Indhuja	Assistant Professor / AI & DS	
30	Mrs K Indumathi	Assistant Professor / AI & DS	

31	Mrs J Lavanya	Assistant Professor / AI & DS	
32	Mrs.V.Sangeetha	Assistant Professor / AI & DS	

**007.01.00 : Welcome address by HoD**

Dr. A. Meenakshi, Professor & Head, Department of Computer Science and Engineering, welcomed all the members of the Board of Studies and Faculty members of CSE Department to the 7<sup>th</sup> BOS meeting. After that Dr.A.Meenakshi presented the department history and highlights of CSE department.

**007.02.00: Department Level Significant Achievements 2023-2024**

Dr.A.Meenakshi presented the significant achievement of CSE department during the period 2023-2024.

**007.02.00 : Approval of 6<sup>th</sup> BoS Meeting Minutes & Action taken**

Item No.	Suggestions of BoS Members in 6 <sup>th</sup> BoS Meeting	Action Taken
1.	BoS Member Suggested that computer science faculty members may handle the Design Thinking subject that helps to design models for various problems.	Suggestion will be implemented in the next semester during the subject allocation of even semester.
2.	BoS Member Suggested to include tutorial hours for Artificial Intelligence subject.	Special hours are allotted to train the students in the domain of Artificial Intelligence to prepare for Hackathons.
3.	BoS Member Suggested to order the verticals based on the basic, advanced, and application level of the syllabus.	Vertical ordering is done.
4.	BoS Member Suggested to include security concepts in Block chain for the Institutional level verticals.	It is included as Unit IV: BLOCKCHAIN SECURITY Attacks on Blockchain - Sybil attacks - Denial-of-Service attacks - 51% attacks - Eclipse/ Routing attacks - Considerations for Secure Blockchain Design - Pseudo-anonymity versus Anonymity - Zcasand zk-SNARKs for anonymity preservation - Ring Signatures - Stealth Addresses.
5.	BoS Member Suggested to include the word block chain in the electives offered in the Institutional level verticals.	The subject is named as "Fundamentals of blockchain".

6.	BoS Member Suggested providing LinkedIn courses in addition to Swayam courses.	The suggestion was recommended to Dean Academics for further approval.
7.	BoS Member Suggested to include analyze (K4) level of outcomes and suggested to set questions at K4 level for the examinations	It is now insisted for final year subjects.
8.	BoS Member Suggested to frame last course outcome as K4 level.	Suggestion will be implemented.
9.	BoS Member Suggested to include recent version of text books.	Suggestions are incorporated.
10.	BoS Member Suggested to give more hours for doing mini project for the lab courses.	Suggestions are incorporated and in each laboratory subjects, students are given more hours for carrying out mini project.

➤ BoS members approved 6<sup>th</sup> BoS Meeting Minutes.

#### 007.03.00 : Discussion and approval of

HoD presented the curriculum and the syllabi of R2021 and listed the subjects of VII and VIII semester courses including the open elective courses offered by Department of Computer Science and Engineering for B.Tech., ADS Course.

#### 007.03.01 : Proposed Curriculum and Syllabi for VII and VIII Semester – R2021

##### VII Semester

S.NO.	COURSE TITLE	CATEGORY	PERIODS PER WEEK			CREDITS
			L	T	P	
<b>THEORY</b>						
1	Human Values and Professional Ethics	HS	2	0	0	2
2	Management Elective	HS	3	0	0	3
3	Open Elective – II	OE	3	0	0	3
4	Open Elective – III	OE	3	0	0	3
5	Open Elective – IV	OE	3	0	0	3
<b>PRACTICALS</b>						
6	Mini project	EM	0	0	3	1
<b>Total Credits</b>			<b>14</b>	<b>0</b>	<b>3</b>	<b>15</b>

##### Semester VIII

S.NO.	COURSE TITLE	CATEGORY	PERIODS PER WEEK			CREDITS
			L	T	P	
1	Project work	EM	0	0	20	10
<b>Total Credits</b>			<b>0</b>	<b>0</b>	<b>20</b>	<b>10</b>

➤ BOS members provided the consent for the syllabus

**007.03.02 : Approval of Open Elective courses 1, 2, 3 and 4**

The following courses are offered to other departments as an open elective course.

Sl. No.	Open Elective	Course Name	Offered to	Contact Periods	L	T	P	Credits
1	I	Fundamentals of Software Engineering	EEE, Mech, BT, Civil	3	3	0	0	3
2	III	Object Oriented Analysis and Design	ECE, EEE, Mech, BT, Civil	3	3	0	0	3
3		Introduction to Networking	ECE, EEE, Mech, BT, Civil	3	3	0	0	3
4	IV	Machine learning fundamentals	ECE, EEE, Mech, BT, Civil	3	3	0	0	3
5		Software Testing	ECE, EEE, Mech, BT, Civil	3	3	0	0	3

➤ BOS members provided the consent for the syllabus

**007.03.03 : List of NPTEL Courses (equivalence) offered for the students those who are opting for Honours / Minor degree / alternative to professional elective courses**

NPTEL COURSE	Equivalent Professional elective course
Deep Learning	Deep Learning
Computer Vision and Image Processing - Fundamentals and Applications	Image Analytics and Computer Vision
Natural Language Processing	Natural Language Processing Essentials
Software Testing	Software Testing and Quality Assurance
Block Chain and its Applications	Block Chain Technologies
Cloud Computing	Virtualization and Cloud Computing
Introduction to Marketing Essentials	Digital Marketing Essentials

➤ BOS members approved the courses.

**007.03.04 : Human Values and Ethics Courses**

➤ BOS members provided the consent for the courses.

**007.04.00 : ITEMS FOR RATIFICATION**

**007.04.01 : Changes or Corrections in the existing Curriculum of R2020 and R2021**

Sl.No	Course Code	Course Name	Category	Suggestions received
1	CS2201	Data Structures Using Python	PC	Some of the sorting techniques may be removed.

2	CS2204	Data Structures Using Python Laboratory	PC	Mini Projects may be included.
3	CS2253	Software Engineering with UML Design	PC	Syllabus is very vast. There is a need to reduce the syllabus to a moderate level..
4	CS2252	Design and Analysis of Algorithms	PC	Course content can be minimized in Unit 1, 2 and Unit 5
5	CS2301	Internet Programming	PC	Web 2.0 is removed.
6	VCS321	Agile Project Development with scrum	PE	For better understanding of the concept minimize the content in Unit 1 & Unit 4
7	VCS316	Information Retrieval Techniques	PE	Remove the entire Unit 3 Text Classification and Clustering due to the topics already covered in the core subject Machine Learning New Alterations. Unit 3 - Web Retrieval and Retrieval Evaluation. Unit 4 - Web Crawling
8	VCS313	Image Analytics and Computer Vision	PE	In unit 4, YOLO algorithm to be included since it gives more accuracy in object detection
9	VCS336	Multicore Architecture	PE	Syllabus is very vast. There is a need to reduce the syllabus to a moderate level.
10	VCS314	Big Data Systems	PE	Mini Projects may be included.
11	VCS334	Block Chain Technologies	PE	Implementation Language may be generalized.
12	VCS342	Image Processing	PE	Some of the topics in the first unit are need to be revised due to unrelated content. New contents are need to be added in the first unit syllabus related to image processing. Test book edition is to be changed. Edition 3 is to be used instead of old edition 2.
13	MCS101	Fundamentals of Data Structures	OE	It is difficult to cover circular and doubly Linked list in Minor course in addition to Singly Linked list, Stack and Queue in one unit. Hence, Circular Linked List and Doubly Linked List can be removed and Types of Linked List can be added to know the basic types of linked list
14	VCS341	Multi Media Systems	PE	Syllabus is very vast. There is a need to reduce the syllabus to a moderate level.
15	VCS343	Game Design Techniques	PE	Mini Projects may be included.
16	VCS322	Software testing and quality assurance	PE	The text book mentioned is not covering the syllabus.
17	VCS322	Software testing and quality assurance	PE	The text book mentioned is not covering the syllabus.
18	VCS337	Distributed Systems	PE	Book by George Coulouris may be prescribed as text book.
19	MCS102	Database Essentials	OE	Syllabus is heavy. Few concepts may be removed in Unit I, Unit II, and Unit V

20	VCS346	Emerging Advancements in Augmented Reality & Virtual Reality	PE	Syllabus is reframed and fine tuned.
21	MCS105	Artificial Intelligence & Machine Learning	OE	Syllabus is heavy. Few concepts may be removed

**007.04.02 : NPTEL Examination results (students performance) and action taken for the students who did not receive the certificates**

SEMESTER	2022-2023 ODD	2022-2023 EVEN
	CSE	
Total No of Students	105	
No. of Students Passed	94	77
Elite + Gold + Topper	2	-
Elite + Silver+ Topper	3	1
Elite + Silver	28	7
Elite	51	46
Successfully completed	10	22
No. of Students with no certificate (Failed)	12	28
No. of Students Cleared 2 courses	<b>73</b>	
No. of Students Cleared 1 courses	<b>25</b>	
No. of Students yet to clear 2 courses	<b>7</b>	

**Action taken for the students who did not receive the certificates**

- NPTEL mentors is assigned to monitor the progress of the assignment submission
- Encouraged the students to attend the courses with extra effort
- Recommended the courses which produced high pass percentage
- Practice the assignment questions that were done through 12 week course

**007.04.03 : Curriculum feedback and action taken if any**

- The syllabus for the above subjects discussed in **007.04.01** was revised based on the feedback and BOS members provided the consent for the syllabus.

**007.04.04 : Value Added Courses offered – ratification if any**

The courses that were conducted in 2022-2023

- MEAN Stack - VEI Technologies Pvt. Ltd, Chennai.
- Devops - SMI Infotech Solutions. Pvt Ltd
- MERN Stack - Lamdatech Softics, Virudhunagar
- Data Visualization using Tableau - Brainswig Edutech Pvt., Ltd, Chennai

- AWS cloud - School of Linux, Madurai
- Advanced Java Programming - VEI Technologies Pvt. Ltd, Chennai.
- Microsoft Azure Fundamentals - SMI Infotech Solutions. Pvt Ltd
- Data Analytics using R - Brainswig EduTech Pvt. Ltd. Chennai
- Django Frameworks - Lamdatech Softics, Virudhunagar.

The courses that were conducted in 2023-2024

- Figma - KEVELL CORP, Madurai
- React JS - KEVELL CORP, Madurai
- Angular JS - VEI technologies Pvt Ltd
- Data Analytics and Visualization using Power BI - Brainswig Edutech Pvt. Ltd., Chennai
- Flask - Phoenix Softech, Madurai

The courses that are planned to be conducted for II year students in 2023-2024

- Figma - KEVELL CORP, Madurai
- Data Analytics and Visualization using Power BI - Brainswig Edutech Pvt. Ltd., Chennai
- Flask - Phoenix Softech, Madurai
- AWS cloud - School of Linux, Madurai
- Advanced Java Programming - VEI Technologies Pvt. Ltd, Chennai.
- Microsoft Azure Fundamentals - SMI Infotech Solutions. Pvt Ltd
- Data Analytics using R - Brainswig EduTech Pvt. Ltd. Chennai
- Django Frameworks - Lamdatech Softics, Virudhunagar.
- Data Visualization using Tableau - Brainswig Edutech Pvt., Ltd, Chennai

- BoS member suggested to offer angular js and React js in Value Added Courses. BoS member suggested that Business cases can be discussed in Value Added Courses

**007.05.00: Information about the (Points Discussed in the following)**

Item No.	Description	Suggestions / Comments from the BoS Members
007.05.01	Number of students doing Honours / Honours with Specialization / Minors and its respective courses	The HOD presented the number of students doing Honours/ Honours with specialization/ Minors and its respective courses.
007.05.02	Student Internship Completion details	The HOD shared the statistical data of the student internship/ Inplant training details for R2020 & R2021.
007.05.03	Pass Percentage of students	The HOD presented the Pass percentage year wise and course wise.
007.05.04	Value Added Courses offered/ Planned for the academic year: 2023 – 2024	The HOD presented the Value added course planned for the academic year : 2023 -2024 II Year.
007.05.05	NBA eSAR / status /compliance preparation and its information	The HOD shared that the department has been re-accredited by NBA-AICTE for 3 years. (from 2023 for a period of 3 years)
007.05.06	Student Internship details (between 6 <sup>th</sup> and 7 <sup>th</sup> meeting)	Students Internship Details R2020 (2022-2023) ODD have been shared by HoD.

**007.06.00 : Any other Item**

The HOD shared that the department has been recognized as Research Centre by Anna University for a period of 3 years from 2023.

**General suggestions**

- BoS members suggested to have very lighter content for open electives and minor courses.
- BoS members requested to give clarification about minor/honour students' distinction norms if they get fail in the exams.

**007.07.00 : Vote of Thanks**

- The meeting ended with the Vote of Thanks by HoD Dr.A.Meenakshi Professor, Department of Computer Science and Engineering, Kamaraj College of Engineering and Technology, Virudhunagar.



BoS Coordinator  
(Dr.R.Ramya)



BoS Chairman  
(Dr.A.Meenakshi)  
HoD - CSE

**Department of Electronics and Communication Engineering**

**Seventh BoS Meeting Minutes**

Date : 30.09.2023  
Time : 2.00 PM  
Venue : VLSI Lab, ECE Department  
Link (hybrid mode) : <https://tinyurl.com/mu6nhaud>

The following members were present:

S.No.	Name of the Expert	Designation	Capacity
1.	Dr.E.S.Gopi, Ph.D.,	Associate Professor/ECE National Institute of Technology, Tiruchirappalli, Tamil Nadu	Anna University Nominee (online mode)
2.	Dr. M. Sabarimalai Manikandan Ph.D.,	Associate Professor, Department of Electrical Engineering, Indian Institute of Technology Palakkad	Academic Council Nominee Msabaraj 30/09/2023
3.	Dr. A Kannammal, Ph.D.,	Associate Professor/ ECE PSG College of Technology, Avinashi Rd, Peelamedu -641004, Coimbatore	Academic Council Nominee (Online mode)
4.	Mr.M.Chinnathambi, M.E.,	Technical Lead Viasat India, Global Infocity, Module 1&2, 5th Floor, Block C, No.40, MGR Salai, Perungudi- 600 097, Chennai.	Industrial Expert M. Chinnathambi
5.	Ms.A.Anto Amala, M.E.,	Associate Staff Engineer, Samsung Semiconductor India Research, Laxmi Sagar Layout, Mahadevapura, Bengaluru, Karnataka 560048	Alumni A. Anto Amala

Internal Faculty Members of BoS			
S.No.	Name of the Faculty	Designation	Signature
1.	Dr.R.Suresh Babu	Professor & Head	<i>R.S. - Babu</i>
2.	Dr.T.Pandiselvi	Associate Professor	<i>T.P. Pandiselvi</i> 30/09/2023
3.	Dr.N.M.Mary Sindhuja	Associate Professor	<i>N.M. Sindhuja</i> 30/9/2023
4.	Dr.T.Prathiba	Assistant Professor	<i>T. Prathiba</i> 30/9/23
5.	Dr.S.Nisha Rani	Assistant Professor	<i>S. Nisha Rani</i> 30/09/2023
6.	Mrs.C.Nagavani	Assistant Professor	<i>C. Nagavani</i> 30/9/23
7.	Mr.P.Aravind	Assistant Professor	<i>P. Aravind</i>
8.	Mr.R.Ashok	Assistant Professor	<i>R. Ashok</i>
9.	Mrs.M.Stella Mercy	Assistant Professor	<i>M. Stella Mercy</i>
10.	Mr.S.Alwyn Rajiv	Assistant Professor	<i>S. Alwyn Rajiv</i>
11.	Mrs.P.Muthumari	Assistant Professor	<i>P. Muthumari</i>
12.	Mrs.P.Ramalakshmi	Assistant Professor	<i>P. Ramalakshmi</i>
13.	Mr.R.Rajprabu	Assistant Professor	<i>R. Rajprabu</i>

**007.01.00 : Welcome address by HoD**

➤ Dr.R.Suresh Babu, Professor & Head welcomed the BoS members.

**007.02.00 : Approval of 6<sup>th</sup> BoS Meeting Minutes & Action taken**

Item No.	Suggestions of BoS Members in 6 <sup>th</sup> BoS Meeting	Action Taken
1.	Dr.E.S.Gopi, Ph.D., suggested to include prerequisites for each course in the Professional elective list.	Unit I is framed as basic for all the professional courses
2.	Dr.E.S.Gopi, Ph.D., insisted to have some of the courses as industry based and partially it can be handled by the experts from industry.	Semiconductor Test Engineering Course will be handled by the faculty members trained by Tessolve Semiconductor pvt Ltd, Bangalore. Tessolve Semiconductor Industrial persons will also handle some topics. Value added courses are completely handled by the industrial persons.
3.	Dr.E.S.Gopi, Ph.D., also suggested to have Data Analytics as a common course for all the departments.	Data Analytics course is included in Institute level minor courses.
4.	Dr. M. Sabarimalai Manikandan Ph.D., insisted to give Open ended projects across the departments.	Many students are doing projects with other department students
5.	Dr.E.S.Gopi, Ph.D., and Dr. M. Sabarimalai Manikandan Ph.D., suggested to include Microprocessor as 1 unit in Embedded and modify the course name as Microprocessor and Embedded Systems	Included Microprocessor as 1 unit in Embedded and modified the course name as Microprocessor and Embedded Systems
6.	Dr.E.S.Gopi, Ph.D., insisted to combine control systems with Signals and Systems. Include the course Statistical Theory of Communication which may include Detection, Estimation and Information Coding. Dr.T.Prathiba suggested to bring the course Artificial Intelligence and Machine Learning in VI Semester. Move the course Statistical Theory of Communication in VII Semester.	Control system is combined with sensors and is included as Professional Elective. Included the course Statistical Theory of Communication which may include Detection, Estimation and Information Coding. Artificial Intelligence and Machine Learning is brought to VI Semester
7.	Dr.E.S.Gopi, Ph.D., and Dr. M. Sabarimalai Manikandan Ph.D., suggested to include Microprocessor experiments also and modify the course title for Embedded	Microprocessor experiments are included and modified the course title as Microprocessor and Embedded Systems laboratory

	Systems laboratory as Microprocessor and Embedded Systems laboratory	
8.	Dr.E.S.Gopi, Ph.D., and Dr. M. Sabarimalai Manikandan Ph.D., suggested to rename the course VLSI Testing and Design for Testability as VLSI Architecture for Signal Processing and Machine Learning	VLSI Testing and Design for Testability course is renamed the course as VLSI Architecture for Signal Processing and Machine Learning
9.	Dr.E.S.Gopi, Ph.D., suggested to include the Acoustics also in Speech Processing course. Hence the course name is changed as Acoustics & Speech Processing	Included Acoustics and the course name is changed as Acoustics & Speech Processing
10.	Dr.E.S.Gopi, Ph.D., insisted to remove DSP Architecture and Programming course. Instead he suggested to include Pattern recognition and Computational Intelligence	Removed DSP Architecture and Programming course and included Pattern recognition and Computational Intelligence
11.	Dr. M. Sabarimalai Manikandan Ph.D., insisted to remove Multimedia Compression Techniques course. Instead he suggested to include Deep Learning	Removed the course Multimedia Compression Techniques. Included Deep Learning course
12.	Dr. M. Sabarimalai Manikandan Ph.D., suggested to include SONAR along with RADAR. So, the course name is changed to RADAR & SONAR Signal Processing	Included SONAR and the course name is changed to RADAR & SONAR Signal Processing
13.	Dr. M. Sabarimalai Manikandan Ph.D., insisted to remove Microprocessor and Microcontroller course. Instead he suggested to include Sensors and Control Systems.	Microprocessors are included in Microprocessor and Embedded Systems course. So, removed the course Microprocessor and Microcontroller. Included Sensors and Control Systems.
14.	Dr.E.S.Gopi, Ph.D., insisted to remove Bio-sensors and Instrumentation course. Instead he suggested to include MEMS & Nanoelectronics	Removed Bio-sensors and Instrumentation course. MEMS & Nanoelectronics course is included.
15.	Dr. M. Sabarimalai Manikandan Ph.D., suggested to remove the course RFID and include the topics of RFID and sensors in Internet of Things Course. Instead, basics of Wireless Technologies course may be included with various wireless technologies used for Sensor Technologies.	The course RFID is removed and included the topics of RFID and sensors in Internet of Things Course. Wireless Technologies Course is included.

16.	Dr. M. Sabarimalai Manikandan Ph.D., suggested to rename the course Communication Protocol and Network Security for IoT as Device and Data Security	Renamed the course Communication Protocol and Network Security for IoT as Device and Data Security
17.	Dr. M. Sabarimalai Manikandan Ph.D., suggested to rename the course Basic Electronics and its Applications as Analog Devices and Circuits.	The course Basic Electronics and its Applications is renamed as Analog Devices and Circuits.
18.	Dr.E.S.Gopi, Ph.D., and Dr. M. Sabarimalai Manikandan Ph.D., verified the syllabus of Machine Learning and Embedded Systems and insisted that machine learning and Embedded systems are two different courses and it is a dumped syllabus. Focus only on Machine Learning and the course name may be changed as Introduction to Machine Learning.	Machine Learning and Embedded Systems course is changed as Introduction to Machine Learning
19.	Dr. M. Sabarimalai Manikandan Ph.D., suggested to rename the course Electronic Product Design using PCB as Electronic System Design	The course Electronic Product Design using PCB is renamed as Electronic System Design
20.	<p>Dr.E.S.Gopi, Ph.D., insisted the following regarding NPTEL</p> <ul style="list-style-type: none"> <li>• In R2020, Online course is a core course. If NPTEL is the online course, then in the transcript it may be printed as NPTEL course or the NPTEL course name (Which is chosen by the student).</li> <li>• If a student fails in NPTEL, it should not be considered as arrear if he compensates with subjects handled by the department.</li> <li>• Mentor role is very important in NPTEL course.</li> </ul>	<p>Dr.E.S.Gopi, Ph.D., was discussed in Academic Council meeting.</p> <p>It is decided that the NPTEL course name will be printed on the manuscript.</p> <p>If a student could not pass until the seventh semester, he has to write the theory course in VIII semester. The name of the theory course will be mentioned in the transcript.</p>

➤ BoS members approved the action taken in 6<sup>th</sup> BoS Meeting Minutes

**007.03.00 : Discussion and approval of****007.03.01 : Proposed Curriculum and Syllabi for VII and VIII Semester****VII Semester**

Name of the Course	Suggestions from BoS members
Universal Human Values and Ethics	Approved the course and syllabus
Statistical Theory of Communication	Approved the course and syllabus

**VIII Semester**

Name of the Course	Suggestions from BoS members
Project Work	Approved the course

**007.03.02 : List of Open Elective 1,2,3 & 4 courses offered**

Name of the Course	Offered to	Suggestions from BoS members
Fundamentals of Electronic Devices and Circuits	CSE, IT, ADS, EEE, Mechanical, Civil, Mechatronics and Bio-Technology	<p>1. Dr.M.Sabarimalai Manikandan Ph.D., suggested that instead of wave shaping circuits, include linear Integrated circuits using op-amp with the topics of Integrator, Differentiator, differential amplifier and Instrumentation amplifier.</p> <p>2. Also he insisted to frame the new course as combine as follows. Unit I with Unit III contains special diodes. Add Basics of Digital Electronics as Unit V can be included with the topics of combinational and sequential circuits. For the digital electronics unit the text book "Digital Fundamentals" authored by, Thomas L. Floyd may be included.</p>
Telecommunication Network Management	CSE, IT, ADS, EEE, Mechanical, Civil, Mechatronics and Bio-Technology	<p>1. Dr.M.Sabarimalai Manikandan Ph.D., suggested that Telecommunication Network Management course may be replaced with "Sensors and Wireless Technologies" course because Telecommunication Network Management course is the outdated one.</p> <p>2. They also insisted to frame the new course as, Unit I &amp; Unit II can be framed with Sensors topics, Unit III - Basic Modulation scheme, Unit IV- Wireless Radios and standards including the topics of Wifi, Bluetooth, Zigbee, LoRa. RFID, LTE, Wimax,5G and Unit V with Wireless Network Topologies - Ring, Star, Mesh, Bus and ISO model.</p>

VLSI Design	CSE, IT, ADS, EEE, Mechanical, Civil, Mechatronics and Bio-Technology	<p>1. Dr.M.Sabarimalai Manikandan Ph.D., and Dr.E.S.Gopi, Ph.D., suggested that VLSI Design course is tough for other department students. So, they insisted to change the course as MEMS &amp; VLSI.</p> <p>2. They also insisted to frame the new course as follows. Digital Logic as Unit I covered with topics of Basic logic families. CMOS VLSI as Unit II, Unit III and Unit IV may be covered with MEMS concepts. Verilog programming as Unit V with programming of Analog &amp; Digital Design. More weightage may be given for programming.</p>
Industrial IoT and Industry 4.0	CSE, IT, ADS, EEE, Mechanical, Civil, Mechatronics and Bio-Technology	Dr.M.Sabarimalai Manikandan Ph.D., suggested to change the Industrial IoT and Industry 4.0 course title into Industry 4.0. Unit I title is changed as Introduction to Industry 4.0. Unit II may be based on IoT Components. Unit III Security Systems is about autonomous vehicles. Unit IV may be Data Analytics and Imaging Systems.
Medical Electronics	CSE, IT, ADS, EEE, Mechanical, Civil, Mechatronics and Bio-Technology	Dr.M.Sabarimalai Manikandan Ph.D., insisted to combine Unit I and Unit II. He also insisted that in Unit II, include topics under Medical Imaging Modalities such as X-ray, CT Scan, PET, Magnetic Resonance Imaging Systems, Ultrasonic Imaging Systems. Rangaraj M Rangayyan, 'Biomedical Signal Analysis-a case-study approach' may be included as one of the reference books

- Dr. E. S. Gopi, Ph.D., insisted that for all the open elective courses must be self-explanatory.
- Dr. E. S. Gopi, Ph.D., and Dr. M. Sabarimalai Manikandan Ph.D., insisted to add Introduction to Signal Processing as one of the open elective courses.

#### 007.03.03 : List of courses for PhD candidates

Name of the Course	Suggestions from BoS members
Advanced Design of Experiments	Approved the course and syllabus
Big Data	Approved the course and syllabus
Deep Learning	Approved the course and syllabus
Machine Learning	Approved the course and syllabus
Internet of Things	Approved the course and syllabus

- Dr. E. S. Gopi, Ph.D., and Dr. M. Sabarimalai Manikandan Ph.D., suggested to include Linear Algebra, Probability and Statistics, Numerical Methods and Computing and more courses for PhD course works

#### 007.03.04 : Human Values and Ethics Courses

Name of the Course	Suggestions from BoS members
Universal Human Values and Ethics	Approved the course and syllabus

#### 007.04.00 : ITEMS FOR RATIFICATION

##### 007.04.01 : Changes or Corrections in the existing Curriculum of R2020 and R2021

Existing	Corrections required and specify the reasons
Mini Project, R2021	To move from VII semester to VI semester because it will be helpful for students placement in VII semester.
Statistical Theory of Communication, R2021	To move from VII semester to VI semester
EC2352/Microprocessor and Embedded Systems, R2021	To move from VI semester to VII semester
EC2353/Microprocessor and Embedded Systems laboratory, R2021	To move from VI semester to VII semester

##### 007.04.02 : NPTEL Examination results (students performance) and action taken for the students who did not receive the certificates

- Students have to complete two 3 credits NPTEL courses mandatorily for R2020 curriculum.
- In IV ECE (2021-2024 Batch) under R2020, total number of students in the class is 61. In that, 3 students have cleared 3 courses, 48 students have completed 2 courses, 6 students have completed 1 course and 4 students didn't complete any of the NPTEL courses.

### NPTEL Online Exam (January to April 2022)

Sl.No	Course Id	Course Title	Offered Institute	No. of Students Registered	No. of Students attended	No. of Students passed	No. of Students failed	Pass %
1	noc22-ee45	Digital System Design	IIT Ropar	61	61	24	37	39.34

### NPTEL Online Exam (July to October 2022)

Sl.No	Course Id	Course Title	Offered Institute	No. of Students Registered	No. of Students attended	No. of Students passed	No. of Students failed	Pass %
1	noc22-hs76	Soft Skills	IIT, Roorkee	58	58	48	10	82.75
2	noc22-cs96	Introduction to Internet of Things	IIT, Kharagpur	10	10	10	--	100

### NPTEL Online Exam (January to April 2023)

Sl.No	Course Id	Course Title	Offered Institute	No. of Students Registered	No. of Students attended	No. of Students passed	No. of Students failed	Pass %
1	noc23-mg33	Principles of Management	IIT, Roorkee	23	23	9	14	39.1
2	noc22-cs96	Introduction to Internet of Things	IIT, Kharagpur	25	25	20	5	80

#### Action Plan

- 6 students (1 course completed) + 4 (No Courses Completed) who failed in the registered subjects have to compensate with the subjects Softskills / IoT for this semester in NPTEL.
- Mentors are asked to monitor the assignment submissions of students.

#### 007.04.03 : Curriculum feedback and action taken if any

- Collected the curriculum feedback from the students and action plan is being carried out.
- Dr. E. S. Gopi, Ph.D., insisted not to collect curriculum feedback from students, instead other stake holders feedback must be collected.

#### 007.04.04 : Value Added Courses offered – ratification

The following are the value added courses conducted for the III year students in the academic year 2023-2024.

S. No.	Course Name	Resource Person	Participants	Date
1.	Value Added Course on Deep Learning	Mr.R.Ramachandran, Pantech eLearning Pvt Ltd.,	III ECE – 20 students	31 <sup>st</sup> July 2023 to 05 <sup>th</sup> August 2023
2.	Value Added Course on IoT Application Design using Raspberry Pi and Python	Mr.R.Jegadeswaran, Enthu Technology Solutions India Pvt Ltd.	III ECE – 20 students	31 <sup>st</sup> July 2023 to 05 <sup>th</sup> August 2023
3.	Value Added Course on The Internet of Things using LoRaWAN Technology	Dr. Subramaniam Enthu Technology Solutions India Pvt Ltd.	III ECE – 20 students	31 <sup>st</sup> July 2023 to 05 <sup>th</sup> August 2023

➤ BoS members approved the Value added courses conducted.

#### 007.05.00: Information about the (Points Discussed in the following)

Item No.	Description	Suggestions / Comments from the BoS Members
007.05.01	Number of students doing Honours/ Honours with Specialization Minors and its respective courses	The HOD Presented the number of students doing Honours/ Honours with specialization/ Minors and its respective courses .... 1. Honors with Specialization degree-Semiconductor Chip Design and Testing-10 2. Honors with Specialization degree-Sensor Technologies and IoT-2 3. Honors degree – 9 4. Minor degree- Computing Technology-13
007.05.02	Student Internship Completion details	The HOD shared the statistical data of the student internship/ Inplant training details for R2020 & R2021 - All the 61 students of IV ECE (R2020) have completed. - All the 60 Students of III ECE (R2021) have completed.
007.05.03	Pass Percentage of students	The HOD Presented the Pass percentage yearwise and course wise for the academic year 2022-2023 (Even). II Year- Pass percentage -76.67% III Year- Pass percentage – 88.53% IV Year- Pass percentage – 100%

007.05.04	Value Added Courses offered/ Planned for the academic year : 2023 – 2024	The HOD Presented the Value added course planned for II year students for the academic year 2023-2024 1. Integrated Full stack web development with IoT Networks 2. IoT Applications using Node MCU and Raspberry Pi 3. Machine Learning using Python
007.05.05	NBA eSAR / status /compliance preparation and its information	The HOD happily shared the NBA eSAR / Status On 09.04.2023 – NBA Compliance audit was held. Received NBA reaccreditation extended for three years (July 2023- July 2026)
007.05.06	Department achievements between 6 <sup>th</sup> and 7 <sup>th</sup> BoS	HoD happily shared the department, student and faculty achievements with the BoS members.

**007.06.00 : Any other Item**

- Next BoS Meeting is tentatively scheduled on March 2024.

**007.07.00 : Vote of Thanks**

- The meeting ended with the Vote of Thanks by Dr.S.Nisha Rani, Assistant Professor, Department of Electronics and Communication Engineering, Kamaraj College of Engineering and Technology, Virudhunagar.

*Sure*  
6/10/2023  
BoS Coordinator

Dr.S.Nisha Rani, AP/ECE

*R.S - BoS  
6/10/23*

BoS Chairman

Dr.R.Suresh Babu

HoD / ECE

**Department of Information Technology**

**Seventh BoS Meeting Minutes**

Date : 30.09.2023  
 Time : 10:30 a.m.  
 Venue : Apple Laboratory  
 Link (hybrid mode) : <https://meet.google.com/kpd-newh-hud>

The following members were present:

S.No.	Name of the Expert	Designation	Capacity
1	Dr. P. Chithra	Professor & Head, Department of Computer Applications, Thiagarajar College of Engineering, Madurai	Anna University Nominee
2	Dr. Rajeswari Sridhar	Associate Professor Department of Computer Science and Engineering, National Institute of Technology, Tiruchirappalli - 620015	Academic Council Nominee
3	Dr. S. Sankari	Professor Department of Information Technology Sri Sai Ram Engineering College, West Tambaram, Chennai.	Academic Council Nominee
4	Mr. E. Hari Prasad	Sr. Technical Trainer Acronotics, Bangalore.	Industrial Expert
5	Mr. P. Venkatesh	Managing Director Cloudb Software Solutions Private Limited, Virudhunagar.	Alumni

**Internal Faculty Members of BoS**

S.No.	Name of the Faculty	Designation	Signature
1.	Dr. E. Vakaimalar	Associate Professor & Head	
2.	Dr. R. Aghila	Professor	

3.	Dr. R. Arthy	Assistant Professor	<i>[Signature]</i> 30/9/23
4.	Ms. V. Deepa Priya	Assistant Professor	<i>[Signature]</i> 30/9/23
5.	Mr. D. Vendhan	Assistant Professor	<i>[Signature]</i> 30/9/23
6.	Mr. C. Rajkannan	Assistant Professor	<i>[Signature]</i> 30/9/23
7.	Ms. P. Kaviya	Assistant Professor	<i>[Signature]</i> 30/9/2023
8.	Mr. S. Arun Prasad	Assistant Professor	<i>[Signature]</i> 04/10/23
9.	Ms. P. Mahalakshmi	Assistant Professor	<i>[Signature]</i> 30/9/23
10.	Ms. S. Gayathri	Assistant Professor	<i>[Signature]</i> 30/9/23
11.	Ms. V. Gayathri	Assistant Professor	<i>[Signature]</i> 30/9/2023
12.	Ms. R. Saranya Priyadharshini	Assistant Professor	<i>[Signature]</i> 4/10/23

#### 007.01.00 : Welcome address by HoD

- Dr. E. Vakaimalar, Associate Professor and Head welcomed the Board of Studies members.

#### 007.02.00 : Approval of 6<sup>th</sup> BoS Meeting Minutes & Action taken

Item No.	Suggestions of BoS Members in 6 <sup>th</sup> BoS Meeting	Action Taken
1	Course title for “Computational Intelligence” can be “Artificial Intelligence”.	Course title has been changed as “Artificial Intelligent Systems”.
2	Deployment of web application can be an exercise in Full Stack Web Development laboratory.	One exercise is included in the course to deploy the web application.
3	Android Application Development Laboratory can be done with Kotlin.	Kotlin is also included in the software specification.
4	Include Jira software in Agile Methodologies course.	Jira software is included.
5	Include User Interface Design in “User Experience Design” course.	User Interface concepts are included in the course.
6	Suggested to list the laboratory exercises in detail.	Laboratory exercises are listed.
7	Syllabus organization of “Intelligent Optimization Techniques” course to be	Intelligent Optimization Techniques course is replaced with

	considered.	Data Science for Engineers and approval for the same is received.
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- The head of the department presented the approval of 6<sup>th</sup> BoS meeting.
- She reported that the syllabus of R2021 for semester V and VI was approved by the members.

**007.03.00 : Discussion and approval of**

- Dr.R.Arthy, Department BoS Coordinator presented the curriculum and syllabi of R2021 and listed the subjects and syllabus of VII and VIII semester courses including the open elective courses offered by Department of Information Technology.

**007.03.01 : Proposed Curriculum and Syllabi for VII and VIII Semester**

**VII Semester**

Name of the Course	Suggestions from BoS members
Human Values And Professional Ethics	Approved
Summer Internship / Project Development	Approved

**VIII Semester**

Name of the Course	Suggestions from BoS members
Project Work	Approved

**007.03.02 : Management Courses – TQM & PoM (MECH & MTRE)**

Name of the Course	Common to	Suggestions from BoS members
Total Quality Management	ALL	The course was framed by the Department of Mechanical Engineering and presented in their board for approval. The BoS Members approved it.
Principles of Management	ALL	The course was framed by the Department of Mechatronics Engineering and presented in their board for approval. The BoS Members approved it.

**007.03.03 : List of Open Elective 1,2,3 & 4 courses offered**

Name of the Course	Offered to	Suggestions from BoS members
Augmented Reality and Virtual Reality	EEE, BT, Mech, MTR, Civil	Approved. Dr. S. Sankari advised to reframe the Unit I title as "Introduction to Augmented Reality". Dr. Rajeswari Sridhar and Dr. S. Sankari suggested to give the latest edition of the textbook. The Head of the Department mentioned that there is no recent edition for the mentioned text book.
Principles of Database Management System	ECE, EEE, BT, Mech, MTR, Civil	Approved. Dr. Rajeswari Sridhar suggested to include NoSQL.
Problem Solving Techniques	ECE, EEE, BT, Mech, MTR, Civil	Dr. Rajeswari Sridhar suggested to reframe the syllabus such that it covers the problem solving techniques.
Principles of Programming Language	ECE, EEE, BT, Mech, MTR, Civil	Dr. P. Chitra advised to emphasize on Object Oriented Programming concepts and bring the Functional Programming to the introduction. She also reminded to include the year of publication for the text books and reference books. Dr. Rajeswari Sridhar advised to include the programming paradigm in the unit I and cover the concepts of some software/tools/language like Autocad, Matlab, R programming that are required for the non-circuit branch students. Dr. S. Sankari and Mr. P. Venkatesh also suggested the same.
Web Design Basics	ECE, EEE, BT, Mech, MTR, Civil	Approved. Dr. Rajeswari Sridhar, Mr. E. Hari Prasad and Mr. P. Venkatesh suggested to include Angular JS concepts along with JS.

**007.03.04 : List of NPTEL Courses (equivalence) offered for the students those who are opting for Honours / Minor degree / alternative to professional elective courses**

NPTEL COURSE	Equivalent Professional elective course
Introduction to Internet of Things Prof. Sudip Misra   IIT Kharagpur   12 Weeks	Internet of Things: Principles and Paradigm
Block chain and its Application Prof. Sandip Chakraborty, Prof. Shamik Sural   IIT Kharagpur   12 Weeks	Block chain Technologies and its Applications
Computer Vision Prof. Jayanta Mukhopadhyay   IIT Kharagpur   12 Weeks	Computer Vision and Image Processing

Natural Language Processing Prof. Pawan Goyal   IIT Kharagpur   12 Weeks	Natural Language Processing
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- Dr. R. Arthy presented the NPTEL courses and its equivalent professional elective courses.
- Dr. Rajeswari Sridhar advised to check the relevance of the courses

#### 007.03.05 : Human Values and Ethics Courses

- Dr. S. Sankari confirmed that the syllabus is in par with UHV.
- The course was approved by all the BoS members.

#### 007.04.00 : ITEMS FOR RATIFICATION

##### 007.04.01 : Changes or Corrections in the existing Curriculum of R2020 and R2021

Existing	Corrections required and specify the reasons
Machine Learning and Deep Learning Techniques	Dr. Rajeswari Sridhar suggested to split the course into two different courses or focus on the content that can be covered in 30 hours.

##### 007.04.02 : NPTEL Examination results (students performance) and action taken for the students who did not receive the certificates

- The NPTEL exam results of the academic year 2022-2023 EVEN were discussed.
- The BoS coordinator presented that result of the “Principles of Management” course as 50% and “The Joy of Computing using Python” as 81.25%.
- She also recorded that the students are supposed to complete 2 courses of 12 weeks to earn 6 credits.
- She also explained that 28 students have completed both the courses, 19 students have completed 1 course and 1 student yet to complete both the courses.
- She registered that the students who have not passed the course will appear for the NPTEL exam in this semester (2023 – 2024 ODD).
  - If the students have not passed till the semester VII, he/she will take up the exam conducted by the CoE.

- Dr. S. Sankari inquired whether the fail in NPTEL will be taken as arrear or not. The BoS coordinator explained that this will not be considered as arrear and will not affect the placement.
- The BoS members approved the action plan.

**007.04.03 : Curriculum feedback and action taken if any**

- HoD explained the feedback process on curriculum received from students and faculty members.
- BoS members approved it.

**007.04.04 : Value Added Courses offered – ratification if any**

- The BoS coordinator Dr. R. Arthy reported that 35 students of III IT had undergone the value added course on “Data Science with Tableau” and 30 students of III IT had undergone the course on “Deep Learning using Python” from 31.07.2023 to 05.08.2023.
- The BoS members approved the same.

**007.05.00: Information about the (Points Discussed in the following)**

Item No.	Description	Suggestions / Comments from the BoS Members
007.05.01	Number of students doing Honours / Honours with Specialization / Minors and its respective courses	The BoS coordinator presented the number of students doing Honours/ Honours with specialization/ Minors and its respective courses. BoS members approved the same.
007.05.02	Student Internship Completion details	The BoS coordinator shared the statistical data of the student internship / Inplant training details for R2020 & R2021. <ul style="list-style-type: none"> <li>➤ 64 students of III year IT attended the internship during the academic year 2022-2023 EVEN.</li> <li>➤ 48 students of IV IT completed the internship during the academic year 2022 – 2023 ODD and EVEN.</li> </ul> BoS members approved the same
007.05.03	Pass Percentage of students	The HoD presented the Pass percentage year wise and course wise. BoS members appreciated the progress of the student.
007.05.04	Value Added Courses offered/	The BoS coordinator presented the Value

	Planned for the academic year : 2023 – 2024	added course offered during the academic year 2023 – 2024 ODD. The value added course for the next academic year will be mailed and will get the consent from the BoS members through mail.
007.05.05	NBA eSAR / status /compliance preparation and its information	The HoD shared that the compliance for the NBA accreditation will be filed during the month of December 2023.
007.05.06	Student Internship details (between 6 <sup>th</sup> and 7 <sup>th</sup> meeting)	The BoS coordinator shared the statistics of the student internship / Inplant training details for R2021. ➤ 64 students of III year IT attended the internship during the academic year 2022-2023 EVEN.

**007.06.00 : Any other Item**

- Dr. S. Sankari advised naming the theory cum laboratory course as laboratory. For example, Cryptography with Laboratory.

**007.07.00 : Vote of Thanks**

- The meeting ended with the Vote of Thanks by Ms. P. Kaviya, Assistant Professor, Department of Information Technology, Kamaraj College of Engineering and Technology, Virudhunagar.

  
 BoS Coordinators  
 (Dr. R. Arthy, AP/IT and Ms. P. Kaviya, AP/IT)

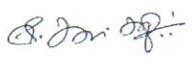
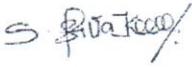
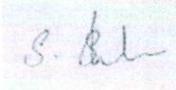
  
 BoS Chairman  
 (Dr. E. Vakaimalar)  
 HoD / IT

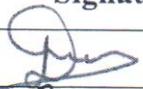
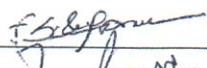
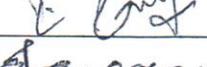
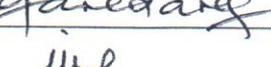
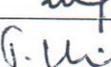
## Department of Electrical and Electronics Engineering

### Seventh BoS Meeting Minutes

Date : 30.09.2023  
Time : 10.00 am to 01.00 pm  
Venue : PSS Lab  
Link (hybrid mode) : [https://teams.microsoft.com/l/meetup-join/19%3ameeting\\_ZDcxY2JmNTAtYzNiMy00NjgzLTkwMjUtNDI0ODM1MTB1ODg4%40thread.v2/0?context=%7b%22Tid%22%3a%222666d919-f1fc-4027-b9c5-212d4e95e68a%22%2c%22Oid%22%3a%22d76d67b0-f407-471e-b62e-32dc1d1f4303%22%7d](https://teams.microsoft.com/l/meetup-join/19%3ameeting_ZDcxY2JmNTAtYzNiMy00NjgzLTkwMjUtNDI0ODM1MTB1ODg4%40thread.v2/0?context=%7b%22Tid%22%3a%222666d919-f1fc-4027-b9c5-212d4e95e68a%22%2c%22Oid%22%3a%22d76d67b0-f407-471e-b62e-32dc1d1f4303%22%7d)

The following members were present:

S. No.	Name of the Expert	Designation	Capacity	Signature
1	Dr.K.Selvi	Professor, EEE Thiagarajar College of Engineering, Madurai.	Anna University Nominee	
2	Dr.S.Senthil Kumar	Associate Professor, EEE National Institute of Technology, Tiruchirappalli.	Academic Council Nominee	
3	Dr.S.Albert Alexander	Associate Professor, School of Electrical Engineering, Department of Energy and Power Electronics, VIT, Vellore.	Academic Council Nominee	
4	Mr.S.Sivakumar	Project Manager, M/S Green Solar Technology, Madurai.	Industrial Expert	
5	Ms.S.Swathika	Associate Engineer, Randstad Technology, Caterpillar India Private Limited, Chennai	Alumni	

Internal Faculty Members of BoS			
S. No.	Name of the Faculty	Designation	Signature
1.	Dr.D.Prince Winston	Professor and Head EEE	
2.	Dr.B.Gurukarthik Babu	Assistant Professor/EEE	
3.	Dr.G.Sakthivel	Assistant Professor/EEE	
4.	Mr.R.Ganesan	Assistant Professor/EEE	
5.	Mr.K.Ganesan	Assistant Professor/EEE	
6.	Mr.S.Jegan	Assistant Professor/EEE	
7.	Mr.T.Hari Prasath	Assistant Professor/EEE	

**007.01.00 : Welcome address by HoD**

- Dr.D.Prince Winston, Professor and Head, department of Electrical and Electronics Engineering welcomes the BoS Members.

**007.02.00 : Approval of 6<sup>th</sup> BoS Meeting Minutes & Action taken**

Item No.	Suggestions of BoS Members in 6 <sup>th</sup> BoS Meeting	Action Taken
	<p><b>AC Machines:</b> Dr. K.Selvi suggested that, Minimum K3 level for CO statements to be used. The contents are too many in all the units. Need to be redefined. Dr. S. Senthil Kumar Suggested that, the text book has to be changed. Need to consider text book by PC Sen, Stephan Chappman and fitzgerald</p>	The modifications were done and the syllabus was updated
	<p><b>Protection and Switchgear:</b> Dr. S. Albert Alexander suggested that, CO statement has to be changed according to the knowledge level. Dr. K.Selvi suggested that, three stepped protection has to be changed as Three stepped 'distance' protection. Unit 5: ELCB need to be included Dr. S. Senthil Kumar Suggested that, SS Rao and B Ram can be swapped between text and reference books.</p>	The modifications were done and the syllabus was updated

	NIT Trichy syllabus can be referred for updations.	
	<p><b><u>Microprocessors and Microcontrollers:</u></b>  Dr. K.Selvi suggested that, CO4 should be at K3 level  CO5 need to redefined based on the knowledge level.  Suggested to have atleast one or two CO statements at K3 level for all the courses.  Dr. S. Senthil Kumar Suggested that, text book 1 should be checked for latest edition</p>	The modifications were done and the syllabus was updated
	<p><b><u>Microprocessors and Microcontrollers Lab:</u></b> Dr. K.Selvi suggested that, Enquired about the availability of Arduino boards in the laboratory.</p>	Arduino boards are available in the lab
	<p><b><u>AC Machines Laboratory:</u></b> Dr. S. Senthil Kumar Suggested that, ASA method need to be removed in Regulation of Alternator.</p>	The modifications were done and the syllabus was updated
	<p><b><u>Power Electronics:</u></b> Dr. S. Albert Alexander suggested that, preamble need to be maximum of two lines for all the courses.  Remove Power or mention Power Diode Power Electronic Devices should be mentioned in proper order  Dr. S. Albert Alexander and Dr. S. Senthil Kumar suggested that, It should be specified only as Applications wherever relevant. Specific topics in application can be avoided.  Dr. S. Albert Alexander suggested that, Unit 2: Firing scheme need to be removed as it is already there in Unit 1.  Unit 3: The contents are too many. Need to be refined.  Unit 4: Space vector modulation need to be removed.  Dr. S. Senthil Kumar suggested that, Ned Mohan should be added in Text book, PS Bhimbra should be moved to reference book.  For all courses NPTEL/Swayam course link can be added as reference</p>	The modifications were done and the syllabus was updated

	<p><b><u>Power System Operation and Control:</u></b>  Dr.K.Selvi and Dr. S. Senthil Kumar suggested that, Unit 4: The contents are too many. Need to be minimized.  Dr. S. Senthil Kumar suggested that, Text book 2: can be moved to reference book.  In text and reference books, recent editions need to be included</p>	<p>The modifications were done and the syllabus was updated</p>
	<p><b><u>Power Electronics Laboratory:</u></b>  Dr.K.Selvi suggested that, Any one device can be mentioned in Ex: 2, 3.  Ex: 4, 10, 12 can be combined as one experiment</p>	<p>The modifications were done and the syllabus was updated</p>
	<p><b><u>Power System Simulation Laboratory:</u></b>  Dr.K.Selvi suggested that, Ex: 10 can be removed</p>	<p>The modifications were done and the syllabus was updated</p>
	<p><b><u>Power Plant Engineering:</u></b> Dr. S. Senthil Kumar suggested that, the content repetition can be checked with the 2nd semester physics for non-conventional sources  Dr. S. Albert Alexander suggested that, Unit 4: RES need to be rearranged in a sequence.  Mr.S.Sivakumar suggested that, Tariff can be given based on the consumers.</p>	<p>The courses in the vertical 1 have been revised and suggested modifications was done and updated in the syllabus</p>
	<p><b><u>High Voltage Engineering:</u></b> Dr. S. Albert Alexander suggested that, the course can be removed from this vertical and moved to appropriate vertical.</p>	
	<p><b><u>Utilization and Conservation of Electrical Energy:</u></b> Dr. K.Selvi suggested that, knowledge level need to be checked for all Cos.  Unit 5: Cable sizing can be included.  Ms.S.Swathika suggested that, Lighting arresters can be included.</p>	
	<p><b><u>Power Electronics for Renewable Energy Systems:</u></b> Dr. S. Albert Alexander suggested that, the syllabus has to be modified focusing on converter types and design for various RES. Such as  Unit 2: PE for solar  Unit 3: PE for Wind</p>	

	<p>Dr. K.Selvi suggested that, MPPT can be included as a separate unit.</p> <p>Mr.S.Sivakumar suggested that, solar tracking system can to be included.</p>	
	<p><b><u>Solar and Energy Storage Technology:</u></b>  Dr. S. Senthil Kumar suggested that, the syllabus need to be redefined  Topic should not be repeated with the other courses</p>	
	<p><b><u>Design and Modelling of Renewable Energy Systems:</u></b> Dr. S. Albert Alexander suggested that, syllabus should be modified as Design, Installation and commissioning of Renewable Energy Systems.</p>	
	<p><b><u>Multilevel Power Converter:</u></b> Dr. S. Albert Alexander and Dr.S.Senthil Kumar suggested that, the course can be removed as it is a higher level course for UG students.</p>	
	<p><b><u>Solid State Drives:</u></b> Dr.S.Senthil Kumar suggested that,Unit 3 slip power recovery drives can be changed as Slip power recovery schemes,  Unit 4: Applications need to be mentioned specifically.</p>	
	<p><b><u>SMPS and UPS:</u></b> Dr. S. Albert Alexander and Dr.S.Senthil Kumar suggested that, the course can be removed</p>	
	<p><b><u>Modern Power Converters:</u></b> Dr. S. Albert Alexander suggested that,Suggested to change this course as ‘PWM techniques’</p>	<p>The courses in the vertical 2 have been revised and suggested modifications was done and updated in the syllabus</p>
	<p><b><u>Digital Signal Processing:</u></b> Dr.K.Selvi and Dr.S.Senthil Kumar suggested that, No need to mention the classification type of all the signals and systems.  The contents are too many. Need to be refined.  Standard text book has to be included.</p>	
	<p><b><u>Analysis of Electrical Machines:</u></b> Dr. S. Albert Alexander and Dr.S.Senthil Kumar suggested that, contents of this syllabus is of PG level. The course DEM can be included instead of this course.</p>	

	<b><u>Hybrid Electric Vehicle:</u></b> Dr. S. Albert Alexander and Dr.S.Senthil Kumar suggested that, this course can be moved to Vertical-2	The courses in the vertical 3 have been revised and suggested modifications was done and updated in the syllabus
	<b><u>Electric Vehicles and Energy Management:</u></b> Dr. S. Albert Alexander and Dr.S.Senthil Kumar suggested that, this course can be moved to Vertical-2	
	<b><u>Design of Electrical Vehicle Charging System:</u></b> Dr. S. Albert Alexander and Dr.S.Senthil Kumar suggested that, this course can be moved to Vertical-2 The contents are theory only. The parameters of design concepts have to be included. Dr. S. Sivakumar suggested that, calculation related to battery charging and discharging can be included	
	<b><u>Sensors and Instrumentation:</u></b> Dr.K.Selvi suggested that, the syllabus has to be reworked or minimized	The content in the syllabus are minimized

- The BoS Members approved the Minutes of 6<sup>th</sup> BoS meeting held on 11.03.2023 and the action taken thereof.

**007.03.00 : Discussion and approval of**

**007.03.01 : Proposed Curriculum and Syllabi for VII and VIII Semester**

**VII Semester**

<b>Name of the Course</b>	<b>Suggestions from BoS members</b>
<b>Renewable Energy Systems</b>	Dr.S.Albert Alexander enquired about the CO level and suggested to check the K-level based on the syllabus. Unit 1 can be given as introduction of Power Electronics. Solar PV and Thermal can be separated as two units. Dr.K.Selvi enquired about the CO4 and the topics related to hydro thermal. Also suggested to keep the K-level up to K3. The book written by Kilbert Masters can be added in the text book. Unit 4 can be kept in K2 level Dr.S.Senthilkumar suggested to check the text and reference books that cover all the topics. He also insisted to reduce the contents of the syllabus. Er.S.Sivakumar suggested to include case studies such as on grid/off grid solar PV, solar pump, solar street light, solar fencing. Industry standards can also be included.

<b>Renewable Energy System Laboratory</b>	<p>Dr.S.Albert Alexander suggested that Ex4 title has to be checked/changed as standalone and/or grid connected. He suggested that no need to mention the simulation or experiment in the Title and only title alone is enough. Ex 11: Safety procedure has to be followed. Dr.K.Selvi enquired the infrastructure facilities to conduct the experiments. Dr. D. Prince explained about the facilities. Er.S.Swathika suggested to include the experiments related to fault analysis in the solar PV system using MATLAB.</p>
<b>Mini project</b>	<p>Dr.S.Albert Alexander enquired that will it be industrial project/in house project? Dr. D. Prince explained that it depends on the students' choice. Dr.K.Selvi enquired about the phases of projects. Whether is it extended to main project? Dr. D. Prince explained that it depends on the students' choice and nature of the project. Dr.S.Senthilkumar suggested to increase K-Level.</p>

### VIII Semester

Name of the Course	Suggestions from BoS members
Project Work	Dr.S.Senthilkumar suggested to increase K-Level.

### Special Elective courses for Ph.D. Course work

Name of the Course	Suggestions from BoS members
Advanced Power Converters	Dr.S.Albert Alexander suggested that the syllabus is simple need to be revised. He suggested to connect the research works of the scholar and the courses accordingly.
Sustainable Energy Conversion Systems	Dr.S.Albert Alexander suggested to include courses like Smartgrid, Microgrid PE application in EV, PS, PWM techniques and Applications, MATLAB based simulation, ML for PE.
Digital Controllers of Power Electronics	Dr.S.Albert Alexander suggested that the topics in the syllabus has to in an aligned manner. Programming has to be included, Theory cum Lab can be given for this course. Focus should be given to converters, IoT can be included in Unit 5.
Wind Electric Conversion System	Dr.S.Albert Alexander suggested that course title and the content has to be verified.
Research Methodology	Dr.S.Albert Alexander enquired that whether this course is common for all. Dr. D. Prince explained that it is common for all. The syllabus has been approved
Composite Technology	Dr.S.Albert Alexander enquired that is it ok to get approval in EEE Board?

<b>Principles of Electrical Safety and Management</b>	Dr.S.Albert Alexander enquired about the necessity of this course in Ph.D. level
<b>Additive manufacturing Technologies</b>	Dr.S.Albert Alexander enquired that is it ok to get approval in Electrical Board? Dr.S.Senthilkumar suggested that the content for interdisciplinary can be included.

### 007.03.03: List of Open Elective 1, 2, 3 & 4 courses offered

Name of the Course	Offered to	Suggestions from BoS members
<b>Renewable Energy Sources</b>	CSE/AIDS/ IT/ECE	The syllabus has been approved.
<b>Disaster Management</b>	CSE/AIDS/ IT/ECE	Dr.S.Albert Alexander suggested that OE should focus on employability of the students. Courses like Embedded system Design of controllers, Digital system design Electrical machine design can be added. Survey can be conducted among other dept. students and passed out students for the courses.
<b>Battery and Energy Storage Technologies</b>	All dept. except EEE	Dr.S.Alber Alexander suggested that the Fuels on Fuel cell can be removed. Advantages and applications can be moved to last. Unit 4 PV system, can be removed Unit 5 can be moved to Unit 4 and it can be Energy storage system for EV
<b>Energy Conservation and Management</b>	All dept. except EEE	Dr.S.Albert Alexander suggested that the specific types need to be specified in Unit 1. BEE content can be included. Dr.K.Selvi suggested to add up energy saving opportunities. Er.S.Sivakumar suggested to include Energy Audit Instruments and its operation.

### 007.03.05: Human Values and Ethics Courses

Name of the Course	Suggestions from BoS members
<b>Universal Human Values and Ethics</b>	Dr.S.Albert Alexander enquired about the K-level of CO2 and CO3, it should be limited up to K2 level. In the syllabus the upper case letter and lower case letters in the sentences to be checked. Reference book 4 publisher need to include. It should be of standard format. Asked about the types of assessment whether it contains end semester exam or only internal continuous assessment. Dr.S.Senthilkumar enquired about the activities.

	Suggested to maintain the text and reference book format.
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#### 007.04.00 : ITEMS FOR RATIFICATION

#### 007.04.01 : Changes or Corrections in the existing Curriculum of R2020 and R2021

Existing	Corrections required and specify the reasons
Semester 5 of R2021 curriculum: EM 2301 Internship is not included.	EM 2301 Internship with L T P C - 0 0 0 1 is included in semester 5. <b>Total credit of semester: 24</b>
Semester 6 of R2021 curriculum: Mini project is not included	Semester 6 of R2021 curriculum: Mini project with L T P C - 0 0 3 1 is included. <b>Total credit of semester: 23</b>

#### 007.04.02 : NPTEL Examination results (students' performance) and action taken for the students who did not receive the certificates

S. No.	Course Id & Title	No. of Students Registered	No. of Students attended	No. of Students passed	No. of Students failed	Pass Percentage
1	noc23-ce14/Air Pollution and Control	19	19	9	10	47.36%
2	noc23-ge04/Non-conventional energy Resources	26	25	2	23	8%

**Action Taken:** Students those who did not clear the NPTEL courses during the academic year 2022-23 even semester will register and successfully complete the NPTEL courses during the academic year 2023-24 odd semester. If the students have not completed the NPTEL courses in the 7<sup>th</sup> Semester, he/she has to attend the end semester examination conducted by CoE/KCET during 8<sup>th</sup> Semester for the same course.

- The expert suggested that the NPTEL courses should not be made mandatory.
- The courses like AI and ML should be chosen.

**007.05.00: Information about the (Points Discussed in the following)**

Item No.	Description	Suggestions / Comments from the BoS Members
007.05.01	Number of students doing Honours / Honours with Specialization / Minors and its respective courses	<p>The HoD presented the number of students doing Honours/ Honours with specialization/ Minors and its respective courses</p> <p><b>Honours: (2 Students)</b>                      Wind Energy Conversion System                      High Voltage Engineering</p> <p><b>Minors: (13 Students)</b>                      Fundamentals of Data Structures                      Database Essentials</p> <p><b>Minors: (1 Student)</b>                      Embedded System Design for Robotics                      Arduino and Raspberrypi Programming</p> <p>The members appreciated the system.</p>
007.05.02	Student Internship Completion details	<p>The HOD shared the statistical data of the student internship/ Inplant training details for R2020 &amp; R2021.</p> <p>During 2021-22 (Even) the total number of internships are 52.</p>
007.05.03	Pass Percentage of students	<p>The HOD Presented the Pass percentage year wise and course wise.</p> <p>During 2022-23 (Even) the pass percentage of the EEE Department year wise is as follows</p> <p>II year: 77%                      III year: 94%                      IV year: 100%</p>
007.05.04	Value Added Courses offered/ Planned for the academic year : 2023 – 2024	<p>The HoD presented the Value added course planned for the academic year 2023-24 (Even):</p> <p>For the II year students it is planned to given VAC on IoT and Machine Learning through the industry Quantanics Techserv Private Limited, Madurai.</p>
007.05.05	NBA eSAR / status /compliance preparation and its information	<p>The HoD happily shared that the NBA team had visited on 15-09-2023 to 17-09-2023 and successfully completed the NBA visit.</p>
007.05.06	Student Internship details (between 6 <sup>th</sup> and 7 <sup>th</sup> meeting)	<p>The HoD shared the statistical data of the student internship/ Inplant training details for R2020 &amp; R2021</p> <p>During 2022-23 (Even) the total number of internships are 63.</p>

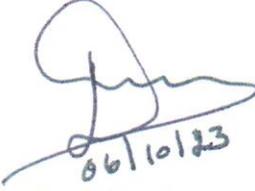
**007.06.00 : Any other Item**

Item No.	Description	Suggestions / Comments from the BoS Members
007.06.01	Dissemination of Vision, Mission, PSOs and PEOs of the department.	The HoD presented the Vision, Mission, PSOs and PEOs of the department for the approval of BoS members. All the members approved the same.

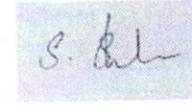
**007.07.00 : Vote of Thanks**

- The meeting ended with the Vote of Thanks by K.Ganesan, Assistant Professor, Department of Electrical and Electronics Engineering, Kamaraj College of Engineering and Technology, Virudhunagar.

  
BoS Coordinator  
(K.GAESAN)  
06/10/23

  
BoS Chairman  
(Dr.D.PRINCE WINSTON)  
HoD / EEE  
06/10/23

**Approval of Minutes:**

S. No.	Name of the Expert	Designation	Capacity	Signature
1	Dr.K.Selvi	Professor, EEE Thiagarajar College of Engineering, Madurai.	Anna University Nominee	
2	Dr.S.Senthil Kumar	Associate Professor, EEE National Institute of Technology, Tiruchirappalli.	Academic Council Nominee	
3	Dr.S.Albert Alexander	Associate Professor, School of Electrical Engineering, Department of Energy and Power Electronics, VIT, Vellore.	Academic Council Nominee	
4	Mr.S.Sivakumar	Project Manager, M/S Green Solar Technology, Madurai.	Industrial Expert	
5	Ms.S.Swathika	Associate Engineer, Randstad Technology, Caterpillar India Private Limited, Chennai	Alumni	



(An Autonomous Institution - AFFILIATED TO ANNA UNIVERSITY, CHENNAI)

S.P.G.Chidambara Nadar - C.Nagammal Campus  
S.P.G.C. Nagar, K.Vellakulam - 625 701 (Near VIRUDHUNAGAR).

## Department of Biotechnology Seventh BoS Meeting Minutes

Date : 30-09-2023

Time : 10.00 AM

Venue : CSE Conference Hall - I

Link (hybrid mode) : <https://teams.microsoft.com/l/meetup-join/19%3a868e3ebf1da84821b67629edf5c504c6%40thread.tacv2/1695969183207?context=%7b%22Tid%22%3a%222666d919-f1fc-4027-b9c5-212d4e95e68a%22%2c%22Oid%22%3a%2253e97dde-b467-45ac-80a2-df98f8017534%22%7d>

The following members were present:

S.No.	Name of the Expert	Designation	Capacity
1	Dr. S. Venkatesan	Professor & Head, Department of Petrochemical Technology, Bharathidasan Institute Of Technology (BIT) Campus, Tiruchirappalli- 620 024	Anna University Nominee
2	Dr. P. Suresh Kumar	Professor & Head, Department Of Biotechnology, University College Of Engineering, Bharathidasan Institute Of Technology Campus, Tiruchirappalli	Academic Council Nominee
3	Dr. R. Balakrishnaraja	Associate Professor and Head, Department Of Biotechnology, Bannari Amman Institute of Technology, Sathyamangalam	Academic Council Nominee
4	Mr. S. Seshan	Management Representative, The Peninsular Exports Company, Virudhunagar	Industrial Expert

5	Dr. Ilanila IP	Assistant Professor National Institute of Technology Calicut, NIT Campus – Calicut	Alumni
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Internal Faculty Members of BoS			
S.No.	Name of the Faculty	Designation	Signature
1	Dr. R. Shyam Kumar	Professor and Head	<i>R. Shyam Kumar</i> 3/10/23
2	Dr. R. Baskaran	Associate Professor	<i>R. Baskaran</i> 3/10/23
3	Dr. K. Geetha	Associate Professor	<i>K. Geetha</i> 3/10/23
4	Dr. S. Karthikumar	Associate Professor	<i>S. Karthikumar</i> 3/10/23
5	Dr. A. Ronaldo Anuf	Assistant Professor	<i>A. Ronaldo Anuf</i> 3/10/23
6	Dr. D. Pradiba	Assistant Professor	<i>D. Pradiba</i> 3/10/23
7	Er. R. Amutha Lakshmi	Assistant Professor	<i>R. Amutha Lakshmi</i> 3/10/23
8	Er. K. Chitradevi	Assistant Professor	<i>K. Chitradevi</i> 3/10/23
9	Er. Karl Joseph Samuel	Assistant Professor	<i>K. Joseph Samuel</i> 3/10/23
10.	Er. A.Ganga	Assistant Professor	<i>A. Ganga</i> 3/10/23

#### 007.01.00 : Welcome address by HoD

- Welcome address
- Dissemination of Vision and Mission statements of the Institution and the Department.
- Dissemination of PEO & PSO statements of the Program.

#### 007.02.00 : Approval of 6<sup>th</sup> BoS Meeting Minutes & Action taken

Item No.	Suggestions of BoS Members in 6 <sup>th</sup> BoS Meeting	Action Taken
006.04.01	Dr. P. Suresh Kumar, Academic Council Nominee suggested to include recent book editions in text and reference books. Dr. S. Venkatesan, Anna University Nominee suggested latest version of	The suggestions provided by the experts were taken and changes were made in the appropriate syllabus

	Separation process principles by Seader and Henly for this course	
006.04.01	Dr. P. Suresh Kumar, Academic Council Nominee suggested to include updated text, reference books and e – book links in the syllabus	Appropriate text book reference and e-book links were introduced
006.04.01	Dr. Balakrishnaraja, Academic Council Nominee suggested to include the topic “Media design and optimization simulation using MATLAB” in the syllabus. He also insisted to reframe the title of second unit	The changes were done in the modified syllabus
006.04.01	Members enquired the availability of animal handling facility in the department	Visit to near by Animal handling facility was added as an activity in the Laboratory
006.04.01	Dr. Balakrishnaraja, Academic Council , Simulation studies using MATLAB in the course.	The MATLAB based exercises are included in the Theory course
006.04.01	Dr. S. Venkatesan, Anna University Nominee asked to remove Unit Operations paper and instead include Intellectual Property Rights course.	The Paper was introduced
006.04.01	Mr. S. Seshan, Industrial Expert suggested to include International Regulatory affairs, regulations such as USFDA in the Food Safety Laws and Regulation syllabus.	The topic was introduced in the syllabus
006.05.03	Mr. S. Seshan enquired about the Management related value added courses (GLP, GMP) offered by the department and he also suggested to include the such courses as it would improve the job opportunities	Efforts were taken to provide such courses for final year students

- All the BoS members approved the minutes of the 6<sup>th</sup> BoS meeting

007.03.00 : Discussion and approval of

007.03.01 : Proposed Curriculum and Syllabi for VII and VIII Semester

### VII Semester

Name of the Course	Suggestions from BoS members
Downstream Processing	<ul style="list-style-type: none"><li>➤ Dr. R. Balakrishnaraja, suggested that Case study-based assignments can be assigned as activity. The course in charge justified that Out of the three assignments, one assignment is given as case study.</li><li>➤ Dr. Ilanila IP enquired whether in Unit-V there is Scope for including Downstream purification of Pharmaceutical product in syllabus</li><li>➤ The HoD informed that the same has been included in biopharmaceutical syllabus</li><li>➤ Dr. R. Balakrishnaraja, suggested to include text book by Seader and tatum</li></ul>
Downstream Processing Laboratory	<ul style="list-style-type: none"><li>➤ References needs to be updated with reprints</li></ul>
Computational Biology Laboratory	<ul style="list-style-type: none"><li>➤ Dr.R.Balakrishnaraja, Appreciated for including R – Programming. He also insisted to teach Theory content of R programming as one credit course. Alumni help may be sought in this regard.</li></ul>
Mini Project Work	<ul style="list-style-type: none"><li>➤ Dr.R.Balakrishnaraja, – enquired about the process of problem identification for mini project work. He suggested to identify problems from nearby industries. HOD explained that the same procedure is followed by the department. Three-member committee is constituted to monitor the progress of the same.</li><li>➤ Dr.Ilanila IP enquired the duration of the project in the syllabus.</li><li>➤ Dr.R.Balakrishnaraja, suggested that the students have to work after regular working hours to arrive at better results.</li><li>➤ Dr.Suresh Kumar enquired about the total credits for the R2021.</li></ul>

### VIII Semester

Name of the Course	Suggestions from BoS members
Project Work	<ul style="list-style-type: none"><li>➤ Dr.Balakrishnaraja, enquired about the total number of credits and the total hours allocated for the project work</li><li>➤ Dr.Suresh Kumar, enquired whether the project would be Inhouse projects or industry projects. He also enquired about the Review system.</li><li>➤ The HoD and BoS Coordinator informed that the preference for project will be based on student</li></ul>

	interest. HoD also informed that the review will be done periodically by a three-member committee constituted by the HoD
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**007.03.02 : Management Courses – TQM & PoM (MECH & MTRE)**

**007.03.03 : List of Open Elective 1,2,3 & 4 courses offered**

Name of the Course	Offered to	Suggestions from BoS members
<b>BASICS OF BIOINFORMATICS</b>	<b>CSE, ADS, ECE, IT</b>	➤ Dr.Ilanila IP, suggested that Unit I and II can be reframed to add more details related to central dogma concepts and other basic concepts related to biotechnology.
<b>INTRODUCTION TO FOOD MANUFACTURING</b>	<b>CSE, ADS, ECE, IT</b>	➤ Dr.Balakrishnaraja and Dr.Ilanila IP, suggested that the syllabus is too complex. It will be difficult for the students from other branches. ➤ Question paper has to be framed carefully taking into consideration the course is studied by students from other branches.
<b>BASICS OF NANOBIO TECHNOLOGY</b>	<b>All Branches</b>	➤ The Board of Studies experts proposed that the syllabus, being an open elective, may be reduced to accommodate students from various branches. ➤ Dr. Balakrishnaraja Suggested that Unit - 5 title can be reframed as Nanobiotechnology in Medicine.
<b>BIOLOGY FOR ENGINEERS</b>	<b>All Branches</b>	All the members appreciated the syllabus and approved it.
<b>TESTING OF BIOLOGICAL MATERIALS</b>	<b>All Branches</b>	➤ Dr.Ilanila, enquired whether Unit II will be taught by person from Mechanical Engineering background. ➤ HoD informed that for such topics guest lectures may be arranged.
<b>PRINCIPLES OF FOOD PROCESSING</b>	<b>All Branches</b>	➤ All the members appreciated the syllabus and approved it

**007.03.04 : List of NPTEL Courses (equivalence) offered for the students those who are opting for Honours / Minor degree / alternative to professional elective courses**

NPTEL COURSE	Equivalent Professional elective course
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Novel Technologies for Food Processing and Shelf Life Extension	Principles of Food Preservation
Post Harvest Operations and Processing of Fruits, Vegetables, Spices and Plantation Crop Products	Post Harvest Technology
Environmental Biotechnology	Environmental Biotechnology

- The members accepted the courses requested for equivalence.

#### 007.03.05 : Human Values and Ethics Courses

- The members appreciated the contents in the syllabus. They commented that the syllabus was in line with the initiative from AICTE.
- Dr.Bala also enquired about the number of faculty members who have completed the UHV modules.
- HoD informed that 50% of the faculty members in the department have completed the course. The members appreciated the efforts.

#### 007.04.00 : ITEMS FOR RATIFICATION

##### 007.04.01 : Changes or Corrections in the existing Curriculum of R2020 and R2021

NIL

##### 007.04.02 : NPTEL Examination results (students performance) and action taken for the students who did not receive the certificates

- IV Year B. Tech Biotechnology (2020-2024 Batch, R2020) has a mandatory 2 Online Courses for 6 Credits.
- 25 students of the total 48 students (52.03%) have completed the required two courses for six credits.

Subject Code	Subject Name	Month & Year	No of Students Enrolled	No. of students Passed	Pass %
noc22-ag13	Post Harvest Operations and Processing of Fruits, Vegetables, Spices and Plantation Crop Products	Oct 2022	15	11	73.33
noc22-ag14	Soil Fertility And Fertilizers	Oct 2022	5	5	100
noc22-bt57	Environmental Biotechnology	Oct 2022	28	28	100

noc23-ag02	Novel Technologies For Food Processing And Shelf Life Extension	Apr 2023	38	20	52.63
noc23-ce12	Water and waste water treatment	Apr 2023	7	6	85.71
noc23-ce10	Applied Environmental Microbiology	Apr 2023	3	2	66.67

- The following students have achieved Topper in their respective subjects

S. No	Roll Number	Student Name	Subject Code	Subject Name	Month & Year	Topper %
1.	20UBT023	VARSHINIRAJI.P	noc22-bt57	Environmental Biotechnology	Oct 2022	1
2.	20UBT041	MINUSHA.S	noc22-bt57	Environmental Biotechnology	Oct 2022	5
3.	20UBT027	SUBHIKSHA.S	noc23-ce10	Applied Environmental Microbiology	Apr 2023	5

- 22 students of the total 48 students (45.83%) have completed one course and earned 3 credits and 1 student (2.08%) have not completed any courses.
- The students who are short of required credits have been recommended to register from the following courses this semester.

S. No	Course ID	Name of the Course
1.	noc23_ag13	Soil Fertility And Fertilizers
2.	noc23-ag11	Advanced Aquaculture Technology
3.	noc23-ag18	Dairy And Food Process And Products Technology
4.	noc23-bt37	Drug Delivery: Principles And Engineering

- The Controller of Examination will conduct the examination for students who fail this semester.

#### 007.04.03 : Curriculum feedback and action taken if any

- The feedback received from Students, Faculty and Alumni were shared with the BOS members. The action taken were appreciated by the members.

#### 007.04.04 : Value Added Courses offered – ratification if any

- HOD presented the details about the Industry Value added course offered for III Year students on the topic Comprehensive trail in revolutionary drug

- design: Pre-clinical research methodology (30 hours) during the current semester and requested for ratification.
- Dr. Bala enquired about the total credits offered for the program.
- HoD Informed that the program was offered 2 credits.

**007.05.00: Information about the (Points Discussed in the following)**

Item No.	Description	Suggestions / Comments from the BoS Members
007.05.01	Number of students doing Honours / Honours with Specialization / Minors and its respective courses	<ul style="list-style-type: none"> <li>➤ The HOD Presented the number of students doing Honours/ Honours with specialization/ Minors and its respective courses</li> <li>➤ Dr.Balakrishnaraja enquired about the poor turnouts in enrolment for Minor degree courses.</li> <li>➤ HoD informed that most of the students are interested in core placements and research avenues.</li> </ul>
007.05.02	Student Internship Completion details	<p>The HOD shared the statistical data of the student internship/ Inplant training details for R2020 &amp; R2021</p> <ul style="list-style-type: none"> <li>➤ 100 % of the students of R2020 have completed the student internship/ Inplant training</li> <li>➤ 98% of the students from R2021 completed the Internship of 15 days duration during the Academic Year 2022-2023.</li> </ul>
007.05.03	Pass Percentage of students	<ul style="list-style-type: none"> <li>➤ The HOD Presented the Pass percentage year wise and course wise.</li> <li>➤ The BOS members appreciated the results of the students.</li> </ul>
007.05.04	Value Added Courses offered/ Planned for the academic year : 2023 – 2024	<p>The HOD Presented the Value added course planned for the academic year : 2023-2024</p> <p>The following courses were planned for Current Second year Students</p> <ul style="list-style-type: none"> <li>➤ <i>Value Added Course on Biofertilizer and Biopesticide Production</i></li> <li>➤ <i>Value Added Course on Algae for Health and Wealth</i></li> <li>➤ <i>Value Added Course on Food Safety Management System</i></li> </ul>

		<ul style="list-style-type: none"> <li>➤ Members suggested that course related to Food Value addition and Quality policy can be conducted to the students at Second year.</li> </ul> <p>The Value added courses Coordinators shared that for final years “One-week hands on training related to laboratory techniques” (Finishing School Concept) will be conducted.</p> <ul style="list-style-type: none"> <li>➤ The experts suggested that, if feasible certification course related to ISO Internal Audit (Food safety management) can be handled for Final year students.</li> </ul>
007.05.05	NBA eSAR / status /compliance preparation and its information	<ul style="list-style-type: none"> <li>➤ The HOD shared the details regarding the Visit by NBA expert committee.</li> <li>➤ The strength and Weakness pointed out by the NBA committee was shared with the BoS Members</li> </ul>
007.05.06	Student Internship details (between 6 <sup>th</sup> and 7 <sup>th</sup> meeting)	<p>The HoD shared the statistical data of the student internship/ Inplant training details for R2020 &amp; R2021.</p> <ul style="list-style-type: none"> <li>➤ 100 % of the students of R2020 have completed the student internship/ Inplant training</li> <li>➤ 98% of the students from R2021 completed the Internship of 15 days duration during the Academic Year 2022-2023.</li> </ul>

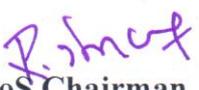
#### 007.06.00 : Any other Item

- Request for ratification of Mission statements as per NBA Criterion I. The members suggested to reframe the mission statement in to two or three individual statements in alignment with the existing mission statements.

#### 007.07.00 : Vote of Thanks

- The meeting ended with the Vote of Thanks by Dr. K. Geetha, Associate Professor, Department of Biotechnology, Kamaraj College of Engineering and Technology, Virudhunagar.

  
BoS Coordinator  
(Dr.A.Ronaldo Anuf)

  
BoS Chairman  
(Dr.R.Shyam Kumr)  
HoD /BT  
HOD

DEPT. OF BIOTECHNOLOGY  
Kamaraj College of Engineering & Technology  
VIRUDHUNAGAR.

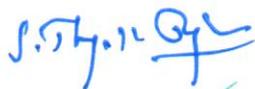
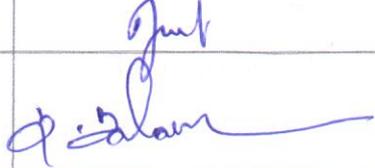
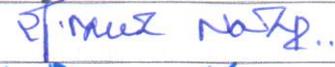
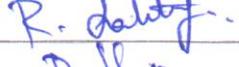
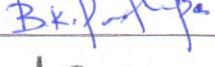
**Department of Mechanical Engineering**

**Seventh BoS Meeting Minutes**

Date : 30.09.2023  
Time : 11.30 am to 01.30 pm  
Venue : Mechanical CAD Lab  
Link (hybrid mode) : <https://tinyurl.com/5n78mtz9>

The following members were present:

S.No	Name of the Expert	Designation	Capacity	Signature
1	Dr. S.Supriya, M.E.Ph.D.	Professor (CAS) & Head of the Department, Government College of Engineering Tirunelveli – Tamilnadu	Anna University Nominee	<i>S.S. - 30/9/23</i>
2	Dr.S.Denis Ashok, M.E., Ph.D.	Professor Higher Academic Grade, Design & Automation Department, School of Mechanical Engineering, Vellore Institute of Technology, Vellore – 632014.	Academic Council Nominee	<i>D. Denis Ashok 30/09/2023</i>
3	Dr. V.Anandkrishnan, M.E., Ph.D.	Professor/Production Engineering, National Institute of Technology, Tiruchirapalli	Academic Council Nominee	<i>V. Anandkrishnan 30/9/23</i>
4	Mr.N.Vijayakumar, M.E.,	Deputy General Manager, Mahindra General Manager, Mahindra Research Valley, Mahindra & Mahindra, Chennai	Industrial Expert	<i>N. Vijayakumar</i>
5	Mr.P.Maniraj, M.E.,	Software Engineer, Altair Engineering India Pvt Ltd., Chennai	Alumni	<i>P. Maniraj 30/09/2023</i>

Internal faculty Members of BoS			
S. No	Name of the Faculty	Designation	Signature
1.	Dr.S.Thangakasirajan	Associate Professor & Head / MECH – Convener	
2.	Dr.S.Senthil	Professor & Principal / MECH	
3.	Dr.P.Narayanasamy	Associate Professor // MECH	
4.	Dr. M. Prithiviraj	Assistant Professor / MECH	
5.	Dr. B. Balavairavan	Assistant Professor / MECH BoS Coordinator	
6.	Dr. K. Muruganathan	Assistant Professor / MECH	
7.	Dr. P. Senthamarai Kannan	Assistant Professor / MECH	
8.	Dr. S. Muthu Natarajan	Assistant Professor / MECH	
9.	Mr. D. Palani Kumar	Assistant Professor / MECH	
10.	Mr. N. R. Madhan	Assistant Professor / MECH	
11.	Mr.R.Sakthivelmurugan	Assistant Professor / MECH	
12.	Mr. B. K. Parrthipan	Assistant Professor / MECH	
13.	Mr. A. Sankara Narayana Murthy	Assistant Professor / MECH	

**007.01.00 : Welcome address by HoD**

- Dr.S.Thangakasirajan, HOD (Department of Mechanical Engineering) welcomed all the expert members of the Board of studies and Faculty members of the Department of the Mechanical Engineering to the 7<sup>th</sup> BOS meeting.

**007.02.00 : Introduction of BoS members and new Academic Council Nominee**

- HOD/Mech recorded his appreciation to all the expert members of BoS for their suggestions and valuable inputs in framing the curriculum and syllabi. He welcomed Anna University Nominee ,Dr. S.Supriya, M.E. Professor (CAS) & Head of the Department, Government College of Engineering Tirunelveli – Tamilnadu, the Academic council nominee Dr.S.Denis Ashok, M.E., Ph.D. Professor Higher Academic Grade, Design & Automation Department, Vellore Institute of Technology, Vellore and Dr.V.Anandkrishnan, M.E., Ph.D.

Professor/Production Engineering, National Institute of Technology, Tiruchirappalli. He also welcomed the Industrial expert Mr.N.Vijayakumar, Deputy GM, Mahindra & Mahindra, Chennai and alumni Mr.P.Maniraj, Software Engineer, Altair Engg. India Pvt Ltd, Chennai to the 7<sup>th</sup> BoS meeting.

**007.03.00 : Approval of 5<sup>th</sup> BoS Meeting Minutes & Action taken**

- HoD /Mech has given brief presentation of minutes of the 6<sup>th</sup> BoS meeting held on March 11, 2023 submitted for approval and action taken report of the 6<sup>th</sup> BoS meeting . The action taken report is given below.

<b>Item No.</b>	<b>Suggestions of BoS Members in 6<sup>th</sup> BoS Meeting</b>	<b>Action Taken</b>
BOS 006.04.01	Dr. S.Supriya suggested that reduce the number of contact periods form 4 to 3 per week for the subject ME2301 - Design of Machine Elements	As per the suggestion, the Corrections were incorporated in the course ME2301 - Design of Machine Elements
BOS 006.04.01	Dr.S.DenisAshok insisted to add the Introduction to PLC programming topic in Unit IV for the subject ME2302 - Fluid Power Automation.	As per the suggestion, the Corrections were incorporated in the course ME2302 - Fluid Power Automation
BOS 006.04.01	Mr.P.Maniraj insisted to include the Introduction of theory portions in CAD as the first exercise and Dr.S.Denis Ashok insisted to change the CAD portion in CO1 for the subject CAD and 3D Printing Laboratory	As per the suggestion, the Corrections were incorporated in the course ME2304 - CAD and 3D Printing Laboratory
BOS 006.04.01	Mr.P.Maniraj insisted that, the topic Heat transfer techniques in electronic circuits to be included for the subject Heat and Mass Transfer.	As per the suggestion, the Corrections were incorporated in the course ME2351 - Heat and Mass Transfer.

BOS 006.04.01	Dr.V.Anandkrishnan insisted to modify the laboratory title as Heat transfer, Refrigeration and Air Conditioning Laboratory instead of that Heat, Transfer and R&AC Laboratory.	As per the suggestion, the Corrections were incorporated in the course ME2353 - Heat Transfer and Refrigeration and Air Conditioning Laboratory.
BOS 006.04.01	Dr.S.Denis Ashok insisted to rearrange the contents of Unit II for the subject VME312 - Reverse Engineering.	As per the suggestion, the Corrections were incorporated in the course VME312 - Reverse Engineering.
BOS 006.04.01	Dr.S.Denis Ashok insisted that, the topics localization and Track optimizations to be included and also suggested that, to expand the Unit -V contents for the subject VME314 - Drone Technology.	As per the suggestion, the Corrections were incorporated in the course VME314 - Drone Technology.
BOS 006.04.01	Dr.S.Denis Ashok insisted to change the word quality as explicitly and Mr.P.Maniraj suggested to include the students presentation in activities for the subject VME315 - Design For X Mr.N.Vijayakumar insisted to modify the course title as Introduction to Design for X.	As per the suggestion, the Corrections were incorporated in the course VME315 - Design For X
BOS 006.04.01	Mr.P.Maniraj suggested to add the topic vectors in moving body in Unit I for the subject VME316 - CAD/CAE.	As per the suggestion, the Corrections were incorporated in the course VME316 - CAD/CAE.
BOS 006.04.01	Dr.S.Denis Ashok Insisted to modify the unit II title as PLM/PDM Functions and Attributes Instead Of PLM/PDM Functions and Features for the subject VME317 - Product life Cycle Management.	As per the suggestion, the Corrections were incorporated in the course VME317 - Product life Cycle Management.
BOS 006.04.01	Dr.V.Anandkrishnan insisted that, the topics plant simulation, process simulation and product simulation to be included in	As per the suggestion, the Corrections were incorporated in the course VME325 - Digital

	either in Unit I or Unit V for the subject VME325 - Digital Manufacturing and IoT.	Manufacturing and IoT.
BOS 006.04.01	Mr.N.Vijayakumar insisted that, the topic sustainable manufacturing to be included for the subject VME327 - Processing and characterization of Composite Materials.	As per the suggestion, the Corrections were incorporated in the course VME327 - Processing and characterization of Composite Materials.
BOS 006.04.01	Dr.V.Anandkrishnan insisted to modify the topic as Battery Technology instead of that Advanced Batteries for the subject VME333 - Battery management system for Electric vehicles.	As per the suggestion, the Corrections were incorporated in the course VME333 - Battery management system for Electric vehicles.
BOS 006.04.01	Mr.N.Vijayakumar suggested that, the topic Standards of auditing to be included in the subject VME337- Energy audit and Management.	As per the suggestion, the Corrections were incorporated in the course VME337 - Energy audit and Management.
BOS 006.04.01	Dr. S.Supriya and Dr.S.Denis Ashok strongly expressed that prerequisite is missing in lower semester courses for Data structures and Algorithms subject, so remove this paper and Include the IoT and Industry 4.0 concepts.  Dr.V.Anandkrishnan is insisted that, The software R to be included.	As per the suggestion, the subject was modified as VME341 - Fundamentals of Industry 4.0.
BOS 006.04.01	Dr.S.Denis Ashok suggested that, the course title (MATLAB for Mechanical Engineers#) to be modified. He also insisted not to give the name of the software tools as subject name.  Mr.P.Maniraj insisted to include the one exercise with respect to Newton Raphson Method.	As per the suggestion, the Corrections were incorporated in the course VME343 - Artificial Intelligence in Mechanical Engineering.
BOS 006.04.01	Dr.S.Denis Ashok insisted to go through the Gazebo software for the subject	As per the suggestion, the Corrections were incorporated in

	Programming for Robotics and CNC machines.	the course VME345 - Programming for Robotics and CNC Machines.
BOS 006.04.01	Dr.S.Denis Ashok suggested to change the course title as 3D Printing and Design instead of 3D Printing Technology.	As per the suggestion, the Corrections were incorporated in the course MME102- 3D Printing and Design.
BOS 006.04.01	Dr.S.Denis Ashok insisted to change the contents of Unit II for the subject Reverse Engineering.	As per the suggestion, the Corrections were incorporated in the course MME104 - Reverse Engineering.
BOS 006.04.01	Dr.S.Denis Ashok suggested to change the course title as standards and Quality attributes of 3D-Printing instead of Standards, quality control and Inspection Mr.P.Maniraj insisted that, the topic data format to be elaborated.	As per the suggestion, the Corrections were incorporated in the course MME106 - Standards and Quality attributes of 3D-Printing.
BOS 006.04.01	Mr.P.Maniraj suggested to add the topics Block chain and Digital assets for the subject Financial Markets and Services.	As per the suggestion, the Corrections were incorporated in the course MEN006 - Financial Markets and Services.
BOS 006.04.02	Dr.S.Denis Ashok insisted that, the topics localization and Track optimizations to be included and also suggested that, to expand the CO5 contents for the common subject Drone Technologies.	As per the suggestion, the Corrections were incorporated in the course VME314 - Drone Technology.

- All the corrections suggested by the members are carried out in the curriculum and syllabus of R2021 (third year courses) .
- The members of the BoS resolved and approved the minutes of 6<sup>th</sup> BoS meeting.

#### 007.04.00 : ITEMS FOR DISCUSSION AND APPROVAL

- The BoS coordinator presented the IV year UG Mechanical Engineering curriculum and syllabi of R2021 and listed the subjects of VII and VIII semester courses including the open electives offered by Department of Mechanical Engineering.

#### 007.04.01 : Proposed Curriculum and Syllabi for VII

VII Semester	
Name of the Course / Name of the Faculty presented	Suggestions from BoS members
Mechatronics and IoT (Dr.M.Murugananthan AP/Mech)	Dr.V.Anandakrishnan, suggested to add specific application in unit – 4 and insisted to add data transfer interfaces in unit -5
Computer Integrated Manufacturing (Mr.D.Palanikumar AP/Mech)	Dr. S.Supriya suggested to swap the unit – 2 to unit – 5 Dr.S.Denis Ashok insisted to change the Unit – 5 title as Automated material handling system. Mr.P.Maniraj suggested to add introduction to inventory - pull -push system – inventory control system. Dr.V.Anandakrishnan suggested to include types of inventory.
Total Quality Management (Mr.B.K.Parrthipan AP/Mech)	Dr.V.Anandakrishnan suggested to change the Quality vs reliability as Quality – reliability.
Human values and professional ethics (Dr.S.Thangakasirajan ASP&HoD/Mech)	All the BoS members approved the syllabus contents.
Mechatronics and IoT Laboratory (Dr.M.Murugananthan AP/Mech)	All the BoS members approved the syllabus contents.
Simulation and Analysis Laboratory (Dr.S.Muthunatarajan AP/Mech)	Mr.P.Maniraj and Dr. S.Supriya suggested to incorporate numerical experiments based on DOE . Dr.V.Anandakrishnan opinioned to include magnet simulation and Study of multi physics analysis for

	electromagnetic systems in this laboratory course.
Computer Integrated Manufacturing Laboratory (Dr.S.Muthunatarajan AP/Mech)	Dr.V.Anandakrishnan suggested to include NX CAD ,computer aided welding Dr.S.Denis Ashok suggested to incorporate Inspection using Machine Vision System (using python coding) Dr. S.Supriya suggested to include exercise on simulation (using open source softwares)

As per the suggestions from BoS members, HoD/Mech resolved to incorporate simulation based experiments related to manufacturing and rework the list of experiments.

#### 007.04.02 : List of Open Elective -II courses offered

Name of the Course / Name of the Faculty presented	Offered to	Suggestions from BoS members
3D Printing and Design (Mr.S.Muthunatarajan AP/Mech)	CSE, ECE,IT and AI&DS	Dr.V.Anandakrishnan insisted to modify the subject name as “ Additive Manufacturing ” instead of 3D printing and design. Mr.P.Maniraj suggested to modify “neutral CAD Data formats” instead of CAD Data formats.
Creative Thinking (Dr.M.Prithiviraj AP/Mech)	CSE, ECE,IT and AI&DS	All the BoS members approved the syllabus contents.

#### 007.04.03 : List of Open Elective -III courses offered

Name of the Course / Name of the Faculty presented	Offered to	Suggestions from BoS members
Cost Management of Engineering Projects (Mr.B.K.Parrthipan AP/Mech)	CSE, ECE, BT, CIVIL, IT, EEE, AI&DS	Dr.S.Denis Ashok suggested to remove “why to manage” topic from unit – 2. He also suggested to include topics names and remove unnecessary words or statement in all the units.

Electric and Hybrid vehicles (Dr.M.Prithiviraj AP/Mech)	CSE, ECE, BT, CIVIL, IT, EEE, AI&DS	Dr.S.Denis Ashok suggested to move series , parallel hybrid vehicles to unit - 1 Mr.N.Vijayakumar suggested to include sensors in unit - 2 and interfaces in unit -3. Mr.P.Maniraj insisted to include battery cooling system.
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**007.04.04 : List of Open Elective -IV courses offered**

Name of the Course/ Name of the Faculty presented	Offered to	Suggestions from BoS members
Fundamentals of Reverse Engineering. (Mr.S.Muthunatarajan AP/Mech)	CSE, ECE, BT, CIVIL, IT, EEE, AI&DS	Dr.V.Anandkrishnan suggested to modify Unit – 3 as Reverse Engineering for 3D Printing. Dr. S.Supriya suggested to modify Unit - 5 as Application of Reverse Engineering.
Lean Concepts, Tools and Practices. (Dr.P.Senthamarai kannan AP/Mech)	CSE, ECE, BT, CIVIL, IT, EEE, AI&DS	Dr.V.Anandkrishnan insisted to reframe the syllabus in view of Automotive and Aerospace. He also suggested that the need for this course as it covers most of civil engineering concepts and applications related to lean.

**007.04.05 : List of NPTEL Courses (equivalence) offered for the students those who are opting for Honours / Minor degree / alternative to professional elective courses**

NPTEL COURSE	Equivalent Professional elective course
Robotics: Basics and Selected Advanced Concepts	Modern Robotics
Programming In Java	Java for Engineers
Introduction to Industry 4.0 And Industrial Internet of Things	Industry 4.0
An Introduction to Artificial Intelligence	Artificial Intelligence for Mechanical Engineers

MATLAB Programming for Numerical Computation	MATLAB for Mechanical Engineers#
Introduction to Machine Learning	Machine Learning for Engineers
Data structures	Data structures and Algorithms

- The BoS members suggested to check the difficulty level of courses on students perspective and approved the course equivalence.

➤ BoS members approved the proposed IV year R2021 Curriculum.

#### 007.05.00 : ITEMS FOR RATIFICATION

HoD/Mech discussed about the list of items needed ratification from the BoS members.

#### 007.05.01: Changes or corrections in the existing curriculum of R2020 and R2021

Existing	Corrections required	Reason
<b>R2021</b>		
The total credit for R2021 Mechanical Engineering curriculum	<b>168</b>	The total credits for R2021 modified to 167 due to credit adjustment for the course Human Values and Professional Ethics changed to 2 instead of 3.
VME324 / Additive Manufacturing	Post Processing Requirement and Techniques removed from unit – II	Typographical error Because already available in unit -5
	Inspection and Testing of polymer-based AM removed from unit – II	Typographical error Because already available in unit -3
ME2352 / Computer Aided Analysis and CNC Laboratory	This lab splitted in to two labs and will be offered to sixth and Seventh semester ME2352 Simulation and Analysis Laboratory - VI Semester	As per NBA experts members suggestions separate laboratory allocated for CNC machines to enhance

	Computer Integrated Manufacturing (CIM) Laboratory - VII Semester.	students knowledge in CNC programming and machining operation.
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- The BoS members ratified all the points discussed and approved the same.

**007.05.02: NPTEL Examination results (students' performance) and action taken for the students who did not receive the certificates**

**List of Courses enrolled and pass % by Students – V semester**

HoD/Mech presented the student participation in NPTEL and completion details of R2020.

Sl.No	Name of the NPTEL course	No of students enrolled	No of students passed	Pass %
1.	Computer Integrated Manufacturing	26	23	88.4

Number of final year Students Secured 6 credits (Both Pass) from NPTEL courses (As per R2020 )	14
No. of Students secured only 3 credits (Either one pass) from NPTEL courses	25
No. of Final year students yet to secure credits (Both fail) As per R2020	9

**List of Courses enrolled by Students – VII semester**

Sl.No	Name of the NPTEL course	No of students enrolled
1.	Introduction To Robotics	17
2.	Solar Energy Engineering and Technology	21

**007.05.03 Action taken for the students who did not receive certificate:**

HoD/Mech presented the student participation in NPTEL and completion details of R2020. The BoS members appreciated the efforts taken by the Department and congratulated the students those who have completed. They also ensured the allocation of NPTEL mentors for the students to guide in clearing the NPTEL course.

**007.05.04 : Curriculum Feedback and action taken**

Dr.S.Thangakasirajan shared the R2021 Curriculum Feedback by students and action taken by Department to the BoS members.

<b>Observations from Students Feedback on R2021 Curriculum &amp; Syllabus</b>	<b>Action taken</b>
<ul style="list-style-type: none"> <li>➤ The distribution of courses given in R2021 Mech curriculum is adequate.</li> <li>➤ The laboratory and infrastructure facilities provided is moderate.</li> <li>➤ The EM courses in available in R2021 curriculum is more adequate.</li> <li>➤ The experimental learning in available course of R2021 curriculum adequate.</li> <li>➤ Good scope in analytical and problem solving skills.</li> <li>➤ Industrial / placement related scope is moderate.</li> <li>➤ Learning resources for R2021 Need to be improved.</li> </ul>	<ul style="list-style-type: none"> <li>➤ The Theory based laboratory courses included in second year curriculum.</li> <li>➤ The students must complete Inplant training /internship and also Motivated the students to do online certification courses.</li> <li>➤ Purchase of Text book for new regulation R2021 is initiated. Students are motivated to utilize institution library facilities effectively.</li> <li>➤ Guest lectures by eminent industrial expert conducted to bridge the gap between industry and institute. More alumni interaction planned.</li> <li>➤ Motivated the students to apply for smart India Hackathon and file their project as patents.</li> </ul>

The BoS members appreciated the efforts taken by the department.

The BoS members also suggested to collect the student and faculty feedback about curriculum and implement the changes in curriculum periodically.

**007.05.05 : Value Added Courses offered if any**

Specify the Value added courses conducted in the department.

Dr.S.Thangakasirajan informed to BoS members that the following value added courses offered for Mechanical Engineering students and the ratification needed to include the credits earned by students from value added courses as over and above credits.

Sl.No.	Name of the Course	Year	Offered by	Date	No of Students	No of hours
1	NX-CAD for Beginners	III/Mech	CoE- Manufacturing, NITT	23.08.2022 to 28.08.2022	48	46
2	CNC Coding with live Demo	II/Mech	CIPET, Madurai	04.01.2023 to 07.01.2023	20	23
3	IoT	II/Mech	Quantanics Techserv (P) Ltd, Madurai	04.01.2023 to 09.01.2023	23	20

All the BoS members ratified and approved the same.

**007.06.00: Information about the (Points Discussed in the following)****007.06.01 : Professional Electives (From Verticals) opted by III Year Students in V semester (R2021)**

Dr.S.Thangakasirajan, HoD/Mech Presented the professional electives opted by students from verticals.

Sl.No	Name of the professional Elective Vertical	Subject code& Name	No.of students
1	Advanced Product Design	VME311 - New Product Development	43
2	Digital Manufacturing	VME324 - Additive Manufacturing	43

3	Advanced Product Design	VME317 - Product life Cycle Management	43
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BoS members appreciated the implementation of PE course from verticals.

**007.06.02 : Number of Students doing Honours / Honours with Specialization / its respective courses**

Dr.S.Thangakasirajan, HoD/Mech Presented the Honours / Honours with Specialization degree and its respective courses opted by students to the BoS Members.

Sl.No	Honours with Specialization	Unique code	Subject code& Name	No.of students
1	Honours with Specialization in Advanced Product Design	Hs 1 - 1	VME313 - Piping Design	4
		Hs 1 - 2	VME316 - CAD/CAE	4
2	Honours with Specialization in Digital Manufacturing	Hs 2 - 1	VME326 - Advanced Manufacturing Systems	4
		Hs 2 - 2	VME323 - Robots and Systems in smart Manufacturing	4
3	Honours with Specialization in E-Vehicles and Energy Systems	Hs 3 - 1	VME331 - Conventional and Electric vehicles	3
		Hs 3 - 2	VME332 - Electric vehicle design	3

The BoS members appreciated and congratulated the students.

**007.06.03 : Number of Students doing Minors and its respective courses**

Dr.S.Thangakasirajan, HoD/Mech Presented the Minors and its respective courses opted by students to the BoS Members.

Sl.No	Honours with Specialization	Unique code	Subject code& Name	No.of students
1	Minors in Business Data Analytics	M 1 - 1	MBD001 - Management Information System	2
		M 1 - 2	MBD002 - Introduction to Business Analytics	2
2	Minors in Embedded Systems and Robotics	M 2 - 1	MMT101 - Embedded Systems Design for Robotics	1
		M 2 - 2	MMT102 - Arduino and Raspberry pi Programming	1
3	Minors in Computing Technology	M 3 - 1	MCS101 - Fundamentals of Data Structures#	2
		M 3 - 2	MCS102 - Database Essentials#	2
4	Minors in Fintech and Block chain	M 4 - 1	MFB001 - Fundamental of Block chain	1
		M 4 - 2	MFB002 - Engineering Economics and Finance Management	1

BoS members appreciated the efforts taken by Institution and Department for offering honours and Minor degree courses to the students.

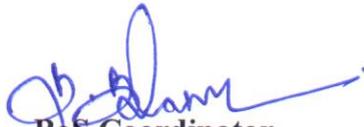
Item No.	Description	Suggestions / Comments from the BoS Members
007.06.04	Pass Percentage of students.	<p>Dr.B.Balavairavan, AP/Mech Presented the students performance in End semester examinations held on April/May 2023 year wise and course wise.</p> <p>Bos members appreciated the same.</p>
007.06.05	Value Added Courses offered/ Planned for the academic year: 2023 – 2024 (II Year students).	<p>Dr.S.Thangakasirajan, HoD/Mech Presented the Value added course planned for the academic year 2023 – 2024.</p> <p>BoS members suggested some value added courses for next academic year: Labview, Computational fluid dynamics, Image processing and coding, Deep learning in Metallurgy, NX CAD, CATIA and Solidworks.</p>
007.06.06	NBA Audit / status/ compliance preparation and information.	<p>Dr.S.Thangakasirajan, HoD/Mech shared that the NBA expert committee visit held on 15.09.2023 to 17.09.2023. He also presented the comments of NBA expert committee members about the Department to the BoS members.</p>
007.06.07	Student Internship details (between 5 <sup>th</sup> and 6 <sup>th</sup> meeting)	<p>Dr.S.Thangakasirajan, HoD/Mech shared the statistical data of the student internship/ Inplant training details for R2020 &amp; R2021.</p> <p>The BoS members appreciated the same and suggested to involve industry in partial delivery of lectures and create excellence centre in the department.</p>

**007.07.00 : Any other Item**

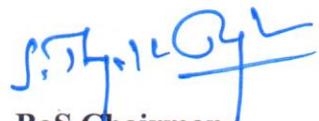
Nil

**007.08.00 : Vote of Thanks**

- The meeting ended with the Vote of Thanks by Dr.B.Balavairavan, Assistant Professor, Department of Mechanical Engineering, Kamaraj College of Engineering and Technology, Virudhunagar.



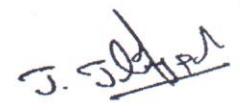
**BoS Coordinator**  
**(Dr.B.Balavairavan)**  
**AP / MECH**



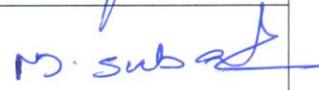
**BoS Chairman**  
**(Dr. S. Thanga Kasi Rajan)**  
**ASP & HoD / MECH.**

**Department of Civil Engineering**  
**Seventh BoS Meeting Minutes**

Date : 27.09.2023  
 Time : 11.30 am to 12.30 pm  
 Venue : CAD Lab  
 Link (hybrid mode) : <https://shorturl.at/jmCDG>  
 The following members were present:

S.No.	Name of the Expert	Designation	Capacity	Signature
1	Dr. S. Arul Mary	Professor, Department of Civil Engineering, Thiagarajar College of Engineering, Madurai	Anna University Nominee	
2	Dr.K.Muthukumaran	Professor, Department of Civil Engineering National Institute of Technology, Tiruchirappali	Academic Council Nominee	
3	Dr.C.Sivanesan	Professor, Department of Civil Engineering Government College of Engineering, Srirangam, Trichy.	Academic Council Nominee	
4	Er.S.Viswanathan	Structural and Project Management Consultant, Viswanathan Associates, Madurai	Industrial Expert	
5	Er.J.Jeyapraveen	Proprietor, JPJ Construction, Madurai	Alumni	

The following members were present:

<b>Internal Faculty Members of BoS</b>			
<b>S.No.</b>	<b>Name of the Faculty</b>	<b>Designation</b>	<b>Signature</b>
1	Dr.N.Jegan Durai	Assistant Professor & HOD/Civil Chairman of BoS – CIVIL	
2	Dr.M.Subahar	Assistant Professor/Civil Department BoS Coordinator	
3	Dr.P.Ganesh Prabhu	Assistant Professor/Civil	
4	Mr.P.Ponkarthikeyan (Ph.D.,)	Assistant Professor/Civil	
5	Mr.D.Velumani (Ph.D.,)	Assistant Professor/Civil	
6	Mrs.S.Brintha	Assistant Professor/Civil	
7	Mr.K.Hariharan	Assistant Professor/Civil	

**07.01.0 Welcome address by HoD**

- Dr.N.Jegan Durai (Head of the Department) Department of Civil Engineering welcomed the gathering.

**007.02.00 : Approval of 6<sup>th</sup> BoS Meeting Minutes & Action taken**

<b>Item No.</b>	<b>Suggestions of BoS Members in 6<sup>th</sup> BoS Meeting</b>	<b>Action Taken</b>
1.	<ul style="list-style-type: none"> <li>• Include Seismic Design in Vertical 1 replacing BIM.</li> <li>• Expert suggested to include Eigenvalues analysis to estimate natural frequency, mode shape, in Dynamics syllabus.</li> </ul>	<ul style="list-style-type: none"> <li>• Structural Dynamics and Earthquake Engineering was included in vertical – 1.</li> <li>• The topics were included in unit – II Multiple Degree of Freedom System</li> </ul>
2.	<ul style="list-style-type: none"> <li>• Include Introduction to ITS in 5th unit in Traffic Engineering.</li> <li>• In the reference include Highway traffic analysis book SALTER &amp; HOUNSEL.</li> </ul>	<ul style="list-style-type: none"> <li>• Highway traffic analysis book by SALTER &amp; HOUNSEL was included in reference section..</li> <li>• Introduction to ITS was included in 5th unit.</li> </ul>
3.	<ul style="list-style-type: none"> <li>• Committee suggested that topics on design of Firefighting, fire safety &amp; MEP to be included in the</li> </ul>	<ul style="list-style-type: none"> <li>• Firefighting, fire safety included in Unit – IV.</li> <li>• Topics related to MEP was included</li> </ul>

syllabus.	in Unit – V.
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- HOD/CIVIL gave a brief presentation about the review of the Minutes of the 6<sup>th</sup> BoS meeting. Recommendations of the committee and relevant implications were presented to the committee. 6<sup>th</sup> BoS recommendations were reviewed and accepted by the committee.

**007.03.00 : ITEMS FOR DISCUSSION AND APPROVAL**

- The BoS Coordinator Dr.M.Subahar, Presented the final year curriculum and syllabi of R2021 and including the Open Elective courses offered by department of Civil Engineering.

**007.03.01 : Proposed Curriculum and Syllabi for VII and VIII Semester**

**VII Semester**

Name of the Course	Suggestions from BoS members
Irrigation Engineering	Detailing/Drawing can be given as activity
Estimation Costing and Quantity surveying Lab	Verify the CO statement it is mentioned as residential building give a generalized word (other building need to be discussed), Bar bending schedule can be included; preparation of Excel sheet for estimation can be given as activity.
Structural Design and Detailing Laboratory	Counterfort retaining wall can be included, Exercise listed was not specific and Ensure the topics were studied earlier is given, so Water tank resting on ground and Flat slabs can be removed. New version of code has to be mentioned in reference.

**VIII Semester**

Name of the Course	Suggestions from BoS members
Project Work	Approved by BoS members

**007.03.02 : List of Open Elective 1,2,3 & 4 courses offered****Open Elective - 1**

<b>Name of the Course</b>	<b>Offered to</b>	<b>Suggestions from BoS members</b>
Biomass Conservation And Biorefinery	AI&DS, CSE, ECE, IT	Approved by BoS members.
Sustainable Construction	AI&DS, CSE, ECE, IT	Approved by BoS members.
Wastewater Treatment	AI&DS, CSE, ECE, IT	Instead of Wastewater Treatment subject, courses based on the following topics can be included Fire Safety, Glass.

**Open Elective – 2**

<b>Name of the Course</b>	<b>Offered to</b>	<b>Suggestions from BoS members</b>
Environmental and Social Impact Assessment	AI&DS, CSE, ECE, IT	Approved by BoS members.
Geographic Information System	AI&DS, CSE, ECE, IT	Remote sensing topics can be included and Arc GIS software based activity can be given.
Urban Agriculture	AI&DS, CSE, ECE, IT	Approved by BoS members.

**Open Elective - 3**

<b>Name of the Course</b>	<b>Offered to</b>	<b>Suggestions from BoS members</b>
Air Pollution and Control Engineering	AI&DS, CSE, ECE, EEE, IT, MECH, MTR	Air pollution standards, By laws to be included in the Syllabus.
Green Building Design	AI&DS, CSE, ECE, EEE, IT, MECH, MTR	Subject name can be changed from Green Building Design to Green Building Concepts.
Road safety and Practice	AI&DS, CSE, ECE, EEE, IT,	Subject name can be changed from Road Safety and Practice to Road Safety and Management.

	MECH, MTR	
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**Open Elective - 4**

Name of the Course	Offered to	Suggestions from BoS members
Climate Change and its Impact	AI&DS, CSE, ECE, EEE, IT, MECH, MTR	Approved by BoS members.
Environment and Agriculture	AI&DS, CSE, ECE, EEE, IT, MECH, MTR	Verify the topics under Environmental and Social impact Assessment subject.
Drinking Water Supply and Treatment	AI&DS, CSE, ECE, EEE, IT, MECH, MTR	Subject name can be changed from Drinking Water Supply and Treatment to Drinking Water Supply, Treatment and Distribution.

**007.03.03 : List of NPTEL Courses (equivalence) offered for the students those who are opting for Honours / Minor degree / alternative to professional elective courses**

List out the NPTEL Course Name corresponding to its equivalent Professional elective course

NPTEL COURSE	Equivalent Professional elective course
Development and Application of Special Concrete	Special Concrete Development and Application
Air Pollution and Control	Air Pollution and Control Engineering
Municipal Solid Waste Management	Municipal Solid Waste Management

- BOS Members accepted the list of NPTEL Courses (equivalence) offered for the students as alternative to professional elective/ Honours/Minor degree.

**007.03.04 : Human Values and Ethics Courses**

- Approved by BoS Members

**007.04.00 : ITEMS FOR RATIFICATION**

**007.04.01 : Changes or Corrections in the existing Curriculum of R2020 and R2021**

Existing	Corrections required and specify the reasons
CE2201 - CONSTRUCTION MATERIALS – R2021	<p><b>Corrections Required</b></p> <ul style="list-style-type: none"> <li>• Unit I- Quartz group, Feldspar group Gypsum and Clay minerals.</li> <li>• Unit II - Dolerite, Basalt, Sandstone, Laterite, Shale, Quartzite, Slate, Gneiss, Schist. attitude of beds, study of structures, Geophysical methods – Seismic and electrical methods for subsurface investigations.</li> <li>• Unit V – Steel, Glass, Composite materials – Types – Applications of laminar composites</li> </ul> <p><b>Reason</b></p> <ul style="list-style-type: none"> <li>• Unit V topics already studied in Principles of Engineering so removed.</li> </ul> <p>In Units I and II of the Engineering Geology syllabus, two units are combined into a single unit &amp; given as a single unit in construction materials subject, but the number of hours allocated is only 9 hours. Due to more topics, the syllabus can't be completed with these 9 hours. So, removed.</p>
CE2204 - SURVEYING – R2021	<p><b>Corrections</b></p> <p>Basic concepts of Astronomical terms and definitions Celestial coordinate systems – different time systems Field observations and determination of azimuth by altitude and hour angle method (Theory only)</p> <p><b>Reason</b></p> <p>Theoretical concepts only are retained, instead of working out problems, as the entire topics in UNIT V cannot be completed within 9 hours.</p>
CE2206 - SURVEYING LABORATORY – R2021	<p><b>Corrections</b></p> <p>Plane Table Surveying has been removed.</p> <p><b>Reason</b></p> <p>With reference to Anna university R2021 and</p>

	GATE syllabus the plane table surveying is removed.
CE2253 - ENVIRONMENTAL ENGINEERING – R2021	<p><b>Corrections</b></p> <p>Unit- II water treatment  <b>Removed:</b> demineralization - Water softening - Desalination - Membrane Systems.  Unit – V Sewage Treatment and Disposal  <b>Added:</b> Onsite sanitation - Septic tank, Primary treatment – Principles, functions and design of sewage treatment units - screens - grit chamber- primary sedimentation tanks</p> <p><b>Reason</b></p> <ul style="list-style-type: none"> <li>• Water treatment process was already studied in Engineering Chemistry so removed.</li> <li>• With reference to GATE syllabus few topics were included and removed.</li> </ul>

- If content is removed, some content has to be included to compensate the credit.
- CE2206 - SURVEYING LABORATORY, Electronic surveying related experiments can be included.
- Only GATE syllabus is referred, IES syllabus also has to be referred to include some topics.

**007.04.02 : NPTEL Examination results (student's performance) and action taken for the students who did not receive the certificates**

Name of the Course	No. of Students Attended	No. of Students Passed
Basic Construction Materials	25	17 10 – Elite 7 – Successfully completed
Air Pollution and Control	13	3 2 – Elite 1 - Successfully completed
Maintenance and Repair of	2	2 – Elite

Concrete Structures		
<p>Action taken for Failed Students – They were given with one more attempt during the 7<sup>th</sup> semester, if the student fails in 7<sup>th</sup> semester he will be writing the end semester exam in our college during 8<sup>th</sup> semester.</p> <p>The students failed in the NPTEL exam, have registered for Natural Resources Management, Pavement Materials (Under Pavement Engineering), Urban Utilities Planning: Water Supply Sanitation and Drainage courses and will appear for the exam during 7<sup>th</sup> semester.</p>		

- Approved by BoS Members

#### 007.04.03 : Curriculum feedback and action taken if any

- The following feedback on curriculum and action taken report was presented by the BoS coordinator.

Feedback	Action taken
Faculty represented few corrections/modification in the existing R2021 II year syllabus for few courses.	Modified syllabus of the courses was presented in the 7 <sup>th</sup> BoS meeting for approval.

#### 007.04.04 : Value Added Courses offered – ratification if any

- The following Value added course planned for the academic year 2023-2024 was presented in 6<sup>th</sup> BoS meeting on 11.03.2023.
  - ArcGIS
  - TEKLA Structure
- But based on the industrial requirement the following course was conducted, kindly ratify and approve the same.
  - Building estimation, costing and simulation Using Navisworks

#### 007.05.00: Information about the (Points Discussed in the following)

Item No.	Description	Suggestions / Comments from the BoS Members
007.05.01	Number of students doing Honours / Honours with Specialization / Minors and its respective courses	The HOD Presented the number of students doing Honours with specialization and its respective courses.

007.05.02	Student Internship Completion details	The HOD shared the statistical data of the student internship details for R2020 & R2021.
007.05.03	Pass Percentage of students	The HOD Presented the Pass percentage year wise and course wise.
007.05.04	Value Added Courses offered/Planned for the academic year : 2023 – 2024	The HOD Presented the Value added course completed between 6 <sup>th</sup> and 7 <sup>th</sup> meeting and planned for II year in the academic year 2023 – 2024 : <b>Ms- Project.</b> ➤ Members suggested the value added course on advanced surveying technology or drone technology can be planned.
007.05.05	NBA eSAR / status /compliance preparation and its information	-
007.05.06	Student Internship details (between 6 <sup>th</sup> and 7 <sup>th</sup> meeting)	The HOD shared the statistical data of the student internship details for R2020 & R2021.

**007.06.00 : Any other Item**

- HOD presented the training activities completed and planned apart from curriculum.
- Hindi language training
- Inhouse site training
- Sensor based training is planned

**007.07.00 : Vote of Thanks**

- The meeting ended with the Vote of Thanks by Dr.N.Jegan Durai, Assistant Professor and Head, Department of Civil Engineering, Kamaraj College of Engineering and Technology, Virudhunagar.



**BoS Coordinator**

**(Dr.M.Subahar)**



**BoS Chairman**

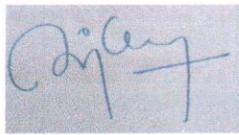
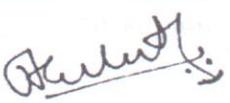
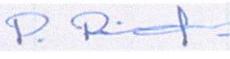
**(Dr.N.Jegan Durai)**

**HoD / Civil.**

**Department of Mechatronics Engineering**

**Seventh BoS Meeting Minutes**

Date : 30-09-2023  
Time : 2.00 P.M – 4.00P.M  
Venue : SMC Lab  
Link (hybrid mode) : <https://tinyurl.com/MTRE-Bos-meeting>

S.No	Name of the Expert	Designation	Capacity	Signature
1	Dr. S. Supriya	Professor & Head, Department of Mechanical Engineering, Government College of Engineering College, Tirunelveli - 627007.	Anna University Nominee	
2	Dr. N. Sivakumaran	Professor, Department of Instrumentation and Control Engineering, National Institute of Technology, Tiruchirappalli - 620015.	Academic Council Nominee	
3	Dr. M. Suresh	Associate Professor, Department of Robotics and Automation Engineering, PSG College of Technology, Coimbatore - 641004.	Academic Council Nominee	
4	Dr. R. Kesavamoorthy	Director, Meta Heuristic Corporate India Pvt. Ltd., ISRO Layout, Bangalore - 560078.	Industrial Expert	
5	Mr. P. Rilwan Fayas	Senior Engineer & Team Lead Automotive Domain, TATA ELXSI, Tiruvanathapuram - 695581	Alumni	

The following members were present:

<b>Internal faculty Members of BoS</b>			
<b>S.No</b>	<b>Name of the Faculty</b>	<b>Designation</b>	<b>Signature</b>
1.	Dr. K. Kannan, M.E., Ph.D.,	Professor & Head	
2.	Dr. M.Sudalaimani, M.E., Ph.D.,	Associate Professor	
3.	Dr. S.Rajesh Babu M.E., Ph.D.,	Assistant Professor	
4.	Dr. P. Bala Sundar, M.E, Ph.D.,	Assistant Professor	
5.	Mr. A. Arul Kumar, M.E, (Ph.D.,)	Assistant Professor	
6.	Mr. S. Wesley Moses Samdoss, M.E.,(Ph.D.,)	Assistant Professor	
7.	Mr. A. Ganesan, M.E.,	Assistant Professor	

**007.01.00 : Welcome address by HoD**

- Welcome address
- Dr. K. Kannan, Professor & HoD/MTRE gave welcome address to all the members of the Board of Studies.

**007.02.00 : Approval of 6<sup>th</sup> BoS Meeting Minutes & Action taken**

<b>Item No.</b>	<b>Suggestions of BoS Members in 6<sup>th</sup> BoS Meeting</b>	<b>Action Taken</b>
<b>006.04.01</b>	BoS Members gave valuable suggestions in the Proposed R2021 Curriculum – V and VI Semester and Syllabi for Verticals and Minor.	The Suggestions given by BoS Members were incorporated in the R2021 – Curriculum – V and VI Semester syllabus for Verticals and minor as per their recommendations.
<b>006.05.02</b>	Members suggested that the students who have failed should be given another chance to repeat the same NPTEL course again.	As per the members suggestions NPTEL NPTEL-failed students were given another chance to repeat the same NPTEL course again.
<b>006.05.03</b>	BoS members advised the three-member committee to choose the value-added courses as per current trends and skills	As per the members suggestions Value added course on Advanced Industrial Automation was offered

	requirement for core industries.	to the students to meet the core industries requirement.
<b>006.06.05</b>	Members enquired about the evaluation process of student internship/ Inplant training.	Dr. K. Kannan briefed the evaluation process of the Internship and credit transfer to the members.

- All the members appreciated our efforts taken towards implementing the suggestions given by the members.
- All the members jointly approved the Minutes of the Sixth Board of Studies meeting.

**007.03.00 : Discussion and approval of**

**007.03.01 : Proposed Curriculum and Syllabi for VII and VIII Semester**

#### VII Semester

Name of the Course	Suggestions from BoS members
<b>DESIGN OF MECHATRONICS SYSTEM</b>	<ul style="list-style-type: none"> <li>➤ Mr. P. Rilwan Fayas, ALUMNI Nominee suggested including concepts such as industrial standard protocols like Modbus/Ethernet in Unit-IV Real-time interfacing.</li> <li>➤ Dr. M. Suresh, Academic Council Nominee suggested including the topic bond graph technique in Unit-I.</li> <li>➤ The subject expert accepted it and assured will included in the syllabus.</li> </ul>
<b>COMPUTER-AIDED DESIGN AND MANUFACTURING LABORATORY</b>	<ul style="list-style-type: none"> <li>➤ All the members of the board accepted the syllabus without any modification.</li> </ul>

#### VIII Semester

Name of the Course	Suggestions from BoS members
<b>PROJECT WORK/INTERNSHIP</b>	<ul style="list-style-type: none"> <li>➤ All the members of the board accepted the syllabus without any modification and appreciated publishing their main project in national/international level conferences.</li> </ul>

007.03.02 : Management Courses – TQM & PoM (MECH & MTRE)

Name of the Course	Common to	Suggestions from BoS members
<b>PRINCIPLES OF MANAGEMENT</b>	All Branches	➤ All the members of the board accepted the syllabus without any modification but suggested including recent edition of textbooks and reference books.
<b>TOTAL QUALITY MANAGEMENT</b>	All branches	➤ All the members of the board accepted the syllabus without any modification. Dr. R. Kesavamoorthy, an Industrial Expert suggested teaching unit V ISO standards by industrial experts by arranging special guest lectures for better effectiveness.

007.03.03 : List of Open Elective 1,2,3 & 4 courses offered

Name of the Course	Offered to	Suggestions from BoS members
<b>FOUNDATION OF ROBOTICS</b>	CSE,ECE,IT & ADS	➤ Dr. M. Suresh, Academic Council Nominee appreciated the activities planned and suggested including 2 -DOF in Unit-I.
<b>INTRODUCTION TO PLC PROGRAMMING</b>	EEE,BT, MECH, CIVIL & CSE	➤ Mr. P. Rilwan Fayas, ALUMNI Nominee suggested choosing the industry standard PLC like Siemens PLC for Case studies.
<b>LOW COST AUTOMATION</b>	CSE,ECE, IT,EEE, BT,MECH, CIVIL & ADS	<p>➤ Mr. P. Rilwan Fayas, ALUMNI Nominee suggested removing programming of PLC and asked to include the ARM Processor or Arduino controller for further competencies to the students.</p> <p>➤ Dr. M. Suresh, Academic Council Nominee suggested removing the topics mapping methods – step counter method - compound circuit design -combination circuit design from Unit II. Asked to reframe Unit I and Unit V by considering the contact hours. The subject expert accepted it.</p>
<b>SENSORS AND ACTUATORS</b>	CSE, ECE, IT,EEE, BT,MECH, CIVIL,ADS	➤ Members suggested removing thyristors from in Unit-IV due to redundancy.

**007.03.04 : List of NPTEL Courses (equivalence) offered for the students those who are opting for Honours / Minor degree/alternative to professional elective courses**

- Dr.K.Kannan, Listed the NPTEL Course Name corresponding to its equivalent Professional elective course.

<b>NPTEL COURSE</b>	<b>Equivalent Professional elective course</b>
Wheeled Mobile Robots	Autonomous Mobile Robots
Embedded Systems Design	Embedded System Design

- The members appreciated the efforts taken by the NPTEL local chapter Coordinator and department NPTEL Coordinator.

**007.03.05 : Human Values and Ethics Courses**

- Dr. M. Suresh, Academic Council Nominee suggested this course's entire syllabus is as per the student induction programme. Since we are offering this in the SIP program,he suggested to offer Engineering Ethics Semester VII.

**007.04.00 : ITEMS FOR RATIFICATION**

**007.04.01 : Changes or Corrections in the existing Curriculum of R2020 and R2021**

<b>Existing</b>	<b>Corrections required and specify the reasons</b>
Computer Aided Design and Manufacturing Laboratory and R2021	This course is moved from the VI semester to the VII Semester since the course mini project is moved from the VII to VI semester.
Mini project and R2021	This course needs to be offered in advance i.e. in the VI Semester for giving project exposure to the students before the placement drives.
Credit Adjustment	Nil

**007.04.02 : NPTEL Examination results (students performance) and action taken for the students who did not receive the certificates**

- Dr. K. Kannan presented the NPTEL Courses enrolled by the students. Out of 16 students NPTEL course on E-Business 15 were passed and one student get failed this course. Members suggested that the students who have failed should be given another chance to repeat the same NPTEL course again.

#### 007.04.03 : Curriculum feedback and action taken if any

- Dr. K. Kannan presented the curriculum feedback summary collected from various stakeholders which was accepted by all the BoS members.

#### 007.04.04 : Value Added Courses offered – ratification if any

- In BoS 06.05.03 the BoS members advised the three members committee to choose the value-added courses as per current trends and skills requirements for core industries. As per that the three-member committee chose and offered VAC on Advanced Industrial Automation for third-year students. The BoS members accepted it without any concern.
- The members discussed about Value Added Course to be offered in the future. The members suggested the three-member committee to offer value-added courses in the recent trends of mechatronics domains such as drones or the automotive domain, as this could fetch them job opportunities.

#### 007.05.00: Information about the (Points Discussed in the following)

Item No.	Description	Suggestions / Comments from the BoS Members
007.05.01	Number of students doing Honours / Honours with Specialization / Minors and its respective courses	<ul style="list-style-type: none"><li>➤ The HOD Presented the number of students doing Honours/ Honours with specialization/ Minors and their respective courses.</li><li>➤ Members appreciated and suggested utilizing the NPTEL video lectures for honours and minors since it encourages the students to do self-paced courses and enhances self-learning.</li></ul>
007.05.02	Student Internship Completion details	<ul style="list-style-type: none"><li>➤ The HOD shared the statistical data of the student internship/ Inplant training details for R2020 &amp; R2021. Members appreciated it.</li></ul>
007.05.03	Pass Percentage of students	<ul style="list-style-type: none"><li>➤ The HOD Presented the Pass percentage year-wise and course-wise. The members appreciated the IV Year and III Year Results. The members suggested concentrating on II Year Results, especially III and IV Semester Results by providing coaching classes to the slow learners. The members appreciated the Graduation Percentage of 2019-2023 Passed out batch.</li></ul>
007.05.04	Value Added Courses offered/	<ul style="list-style-type: none"><li>➤ The HOD Presented the Value-added</li></ul>

	Planned for the academic year : 2023 – 2024	course offered/ planned for the academic year and the members suggestions were noted in 007.04.04.
007.05.05	NBA eSAR / status /compliance preparation and its information	➤ The HOD Happily shared the NBA Accreditation status of the department for three years from AY 2021-2022 to AY 2023-2024. Also, he stated that we are in the process of the compliance report preparation. The members appreciated the efforts taken by the faculty members for the successful preparation of the compliance report.
007.05.06	Student Internship details (between 6 <sup>th</sup> and 7 <sup>th</sup> meeting)	➤ The HOD shared the statistical data of the student internship/ Inplant training details for R2020 & R2021 and all the BoS Members appreciated the III cell activities of the department.

#### 007.06.00 : Any other Item

- The HoD presented the Department's achievements in placement, extracurricular, and co-curricular activities of students. The BoS members appreciated the department's achievements and encouraged offers with higher salary packages and more participation in the future.
- Members discussed the student admissions in I year and the Lateral Entry scheme.

#### 007.07.00 : Vote of Thanks

- The meeting ended with the Vote of Thanks by A.Arulkumar, Assistant Professor, Department of Mechatronics Engineering, Kamaraj College of Engineering and Technology, Virudhunagar.

  
**BoS Coordinators**  
**A.Arulkumar, AP/MTRE**

  
**S.Wesley Moses Samdoss, AP/MTRE**

  
**BoS Chairman**  
**Dr.K.Kannan**  
**HoD / MTRE**



(An Autonomous Institution - AFFILIATED TO ANNA UNIVERSITY, CHENNAI)  
S.P.G.Chidambara Nadar - C.Nagammal Campus  
S.P.G.C. Nagar, K.Vellakulam - 625 701 (Near VIRUDHUNAGAR).

**Department of Computer Science and Engineering**  
**B. Tech. (Artificial Intelligence and Data Science)**  
**Seventh BoS Meeting Minutes**

**Date** : 27.09.2023  
**Time** : 2.30 pm to 03.30 pm  
**Venue** : CSE Conference Hall-I

The following members were present:

S. No.	Name of the Expert	Designation	Capacity	Signature
1.	Dr. P. Chitra	Professor & Head, Department of Computer Applications, Thiagarajar College of Engineering, Madurai, Email : pccse@tce.edu Mobile : 9842982776	Anna University Nominee	
2.	Dr. N. Radha,	Associate Professor Department of Information Technology, SSN College of Engineering, Chennai Email : radhan@ssn.edu.in Mobile : 99443 95452	Academic Council Nominee	
3.	Mr. U. Shunmugam,	Vice President-Products, Chainsys, Madurai - 625009. Email: shunmugam.udhayakumar@chainsys. com Mobile : 98411 63959	Industrial Expert	

Internal faculty Members of BoS			
S. No.	Name of the Faculty	Designation	Signature
1.	Dr.A.Meenakshi	Professor and Head	
2.	Dr.R.Ramya	Associate Professor / CSE UG (B. E. CSE) Programme Co-ordinator	
3.	Dr.A.Anandh	Associate Professor / CSE UG (B. Tech. AI &DS) Programme Co-ordinator	
4.	Dr.G.Nirmala	Assistant Professor / CSE	
5.	Dr.G.Mahalakshmi	Assistant Professor / CSE	
6.	Dr.G.Uma Maheshwari	Assistant Professor / CSE	
7.	Mr.V.Rajesh Kannan	Assistant Professor / CSE	
8.	Mrs.S.Athilakshmi	Assistant Professor / CSE	
9.	Mr.B.Muthukrishnavinayagam	Assistant Professor / CSE	
10.	Mrs.K.Muthulakshmi	Assistant Professor / CSE	
11.	Mr.J.John Livingston	Assistant Professor / CSE	
12.	Mrs.S.Hemaswathi	Assistant Professor / CSE	
13.	Mrs.X.Ignatius Selvarani	Assistant Professor / CSE	
14.	Ms.S.Janani	Assistant Professor / CSE	
15.	Mrs.K.Leelarani	Assistant Professor / CSE	
16.	Mr.M.Rajasekaran	Assistant Professor / CSE	
17.	Mrs.B.Santhi Priya	Assistant Professor / CSE	
18.	Mrs.R.HariPriya	Assistant Professor / CSE	
19.	Mr.G.Praveen Kumar	Assistant Professor / CSE	
20.	Mrs.E.Vijayalakshmi	Assistant Professor / CSE	
21.	Mr.D.Asir	Assistant Professor / CSE	
22.	Mr.D.Raj	Assistant Professor / CSE	
23.	Mr.R.Kumaravel	Assistant Professor / CSE	
24.	Ms.D.Pradhibha	Assistant Professor / CSE	
25.	Dr.R.Muthuselvi	Professor/ AI & DS	
26.	Dr P Praveen Kumar	Associate Professor / AI & DS	
27.	Dr.U.Kumaran	Associate Professor / AI & DS	

28.	Mrs.S.Nithya	Assistant Professor / AI & DS	
29.	Mrs.R.Indhuja	Assistant Professor / AI & DS	
30.	Mrs.K.Indumathi	Assistant Professor / AI & DS	
31.	Mrs.J.Lavanya	Assistant Professor / AI & DS	
32.	Mrs.Sangeetha	Assistant Professor / AI & DS	

#### 007.01.00: Welcome address by HoD

Dr.A.Meenakshi, Professor & Head, Department of Computer Science and Engineering, welcomed all the members of the Board of Studies and Faculty members of CSE Department to the 7<sup>th</sup> BOS meeting. After that Dr.A.Meenakshi presented the department history and highlights of CSE department.

#### 007.02.00: Department Level Significant Achievements 2023-2024

Dr.A.Meenakshi presented the significant achievement of CSE department during the period 2023-2024.

#### 007.02.01: Approval of 6<sup>th</sup> BoS Meeting Minutes & Action taken

S. No	Suggestions given	Action Taken
1	BoS Member Suggested to frame last course outcome as K4 level.	Suggestion will be implemented.
2	BoS Member Suggested to include recent version of text books.	Suggestions are incorporated.
3	BoS Member Suggested to give more hours for doing mini project for the lab courses.	Suggestions are incorporated and in each laboratory subjects, students are given more hours for carrying out mini project.
4	BoS Member Suggested to frame lab experiments based on scenario.	Suggestions are incorporated.
5	Mr. U. Shunmugam suggested that industry person may give partial delivery of industry related papers	Suggestions are incorporated.
6	Dr. S.R. Balasundaram suggested to add pre-requisite for each course mentors have to give proper guidance to the students for choosing Professional Elective courses.	Proper guidance was given to the students through chair person, mentors and minor/honor in-charges for choosing Professional Elective courses.

➤ BoS members approved 6<sup>th</sup> BoS Meeting Minutes.

### 07.03.00: Items for Discussion and Approval

HoD presented the curriculum and the syllabi of R2021 and listed the subjects of VII and VIII semester courses including the open elective courses offered by Department of Computer Science and Engineering.

### 07.03.01: Proposed Curriculum and Syllabi for VII and VIII semester - R2021

#### Semester VII

S.NO.	COURSE TITLE	CATEGORY	PERIODS PER WEEK			CREDITS
			L	T	P	
<b>THEORY</b>						
1	Human Values and Professional Ethics	HS	2	0	0	2
2	Management Elective	HS	3	0	0	3
3	Open Elective – II	OE	3	0	0	3
4	Open Elective – III	OE	3	0	0	3
5	Open Elective – IV	OE	3	0	0	3
<b>PRACTICALS</b>						
6	Mini project	EM	0	0	3	1
<b>Total Credits</b>			<b>14</b>	<b>0</b>	<b>3</b>	<b>15</b>

#### Semester VIII

S.NO.	COURSE TITLE	CATEGORY	PERIODS PER WEEK			CREDITS
			L	T	P	
1	Project work	EM	0	0	20	10
<b>Total Credits</b>			<b>0</b>	<b>0</b>	<b>20</b>	<b>10</b>

➤ BOS members provided the consent for the syllabus

### 07.03.02: Approval of Open Elective courses

The following courses are offered to other departments as an open elective course.

Sl. No.	Open Elective	Course Name	Offered to	Contact Periods	L	T	P	Credits
1	II	Fundamentals of Big Data	EEE, Mech, BT, Civil	3	3	0	0	3
2	III	Information Retrieval Basics	ECE, EEE, Mech, BT, Civil	3	3	0	0	3
3	IV	Introduction to Operating Systems	ECE, EEE, Mech, BT, Civil	3	3	0	0	3

➤ BOS members provided the consent for the syllabus

**07.03.03: List of NPTEL Courses (equivalence) offered for the students those who are opting for Honours / Minor degree / alternative to professional elective courses**

<b>NPTEL COURSE</b>	<b>Equivalent Professional elective course</b>
Deep Learning	Deep Learning
Computer Vision and Image Processing - Fundamentals and Applications	Image Analytics and Computer Vision
Natural Language Processing	Natural Language Processing Essentials
Software Testing	Software Testing and Quality Assurance
Block Chain and its Applications	Block Chain Technologies
Cloud Computing	Virtualization and Cloud Computing
Introduction to Marketing Essentials	Digital Marketing Essentials

➤ BOS members approved the courses.

**007.03.04: Human Values and Ethics Courses**

➤ BOS members provided the consent for the syllabus.

**007.04.00: Items for Ratification**

**007.04.01: Changes or corrections in the existing curriculum of R2021**

<b>Sl.No</b>	<b>Course Code</b>	<b>Course Name</b>	<b>Category</b>	<b>Suggestions received</b>
1.	CS2203	System Software and Operating System	PE	Syllabus is to be fine tuned.
2.	AI2251	Foundations of Data Science and Machine Learning	PC	Some of the contents are to be trimmed and fine tuned
3.	AI2301	Big Data Tools & Techniques	PE	Mini Projects may be included.
4.	VCS313	Image Analytics and Computer Vision	PE	In unit 4, YOLO algorithm to be included since it gives more accuracy in object detection
5.	VCS321	Agile Project Development with scrum	PE	For better understanding of the concept minimize the content in Unit 1 & Unit 4
6.	VCS334	Block Chain Technologies	PE	Implementation Language may be generalized.

7.	VCS336	Multicore Architecture	PE	Syllabus is very vast. There is a need to reduce the syllabus to a moderate level.
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**007.04.02: NPTEL Examination results (Students performance) and action taken for the students who did not receive the certificates**

Semester ADS	2022-2023 ODD	2022-2023 EVEN
Total No. of Students	45	
No of Students Passed	37	15
Elite + Gold + Topper	-	-
Elite + Silver+ Topper	4	-
Elite + Silver	4	-
Elite	26	12
Successfully completed	3	3
No. of Students with no certificate (Failed)	8	30
No. of Students Cleared 2 courses	13	
No. of Students Cleared 1 courses	27	
No. of Students yet to clear 2 courses	5	

**Action taken for the students who did not receive the certificates**

- NPTEL mentors is assigned to monitor the progress of the assignment submission
- Encouraged the students to attend the courses with extra effort
- Recommended the courses which produced high pass percentage
- Practice the assignment questions that were done through 12 week course

**007.04.03: Curriculum Feedback and Action Taken**

Subject	Feedback Received
CS2203 - System Software and Operating System	Syllabus is to be fine tuned.
AI2251 - Foundations of Data Science and Machine Learning	Some of the contents are to be trimmed and fine tuned.
AI2301 - Big Data Tools & Techniques	Mini Projects may be included.
VCS313 - Image Analytics and Computer Vision	In unit 4, YOLO algorithm to be included since it gives more accuracy in object detection.
VCS321 - Agile Project Development with scrum	For better understanding of the concept minimize the content in Unit 1 & Unit 4.
VCS334 - Block Chain Technologies	Implementation Language may be generalized.
VCS336 - Multicore Architecture	Syllabus is very vast. There is a need to reduce the syllabus to a moderate level.

- The syllabus for the above subjects discussed in **007.04.01** was revised based on the feedback and BOS members provided the consent for the syllabus.

**007.04.04: Value Added Courses offered ratification required if any**

The courses that were conducted in 2022-2023

- MEAN Stack - VEI Technologies Pvt. Ltd, Chennai.
- Devops - SMI Infotech Solutions. Pvt Ltd
- MERN Stack - Lamdatech Softics, Virudhunagar
- Data Visualization using Tableau - Brainswig Edutech Pvt., Ltd, Chennai
- AWS cloud - School of Linux, Madurai
- Advanced Java Programming - VEI Technologies Pvt. Ltd, Chennai.
- Microsoft Azure Fundamentals - SMI Infotech Solutions. Pvt Ltd
- Data Analytics using R - Brainswig EduTech Pvt. Ltd. Chennai
- Django Frameworks - Lamdatech Softics, Virudhunagar.

The courses that were conducted in 2023-2024

- Figma - KEVELL CORP, Madurai
- React JS - KEVELL CORP, Madurai
- Angular JS - VEI technologies Pvt Ltd
- Data Analytics and Visualization using Power BI - Brainswig Edutech Pvt. Ltd., Chennai
- Flask - Phoenix Softech, Madurai

The courses that are planned to be conducted for II year students in 2023-2024

- Figma - KEVELL CORP, Madurai
- Data Analytics and Visualization using Power BI - Brainswig Edutech Pvt. Ltd., Chennai
- Flask - Phoenix Softech, Madurai
- AWS cloud - School of Linux, Madurai
- Advanced Java Programming - VEI Technologies Pvt. Ltd, Chennai.
- Microsoft Azure Fundamentals - SMI Infotech Solutions. Pvt Ltd
- Data Analytics using R - Brainswig EduTech Pvt. Ltd. Chennai
- Django Frameworks - Lamdatech Softics, Virudhunagar.
- Data Visualization using Tableau - Brainswig Edutech Pvt., Ltd, Chennai

- BOS members approved the above courses planned and they also suggest to offer angular.js.

**007.05.00: Information about the (Points Discussed in the following)**

Item No.	Description	Remarks
007.05.01	Number of students doing Honours / Honours with Specialization / Minors and its respective courses	The HOD presented the number of students doing Honours / Honours with specialization / Minors and its respective courses.
007.05.02	Student Internship Completion details	The HOD shared the statistical data of the student internship/ Inplant training details for R2020 & R2021.
007.05.03	Pass Percentage of students	The HOD presented the pass percentage year wise and course wise.
007.05.04	Value Added Courses offered/ Planned for the academic year 2023 – 2024	The HOD presented the Value added course planned for the academic year 2023 -2024 II Year.

**007.06.00: Any Other Items**

**General suggestions**

1. BoS members suggested to offer fundamental courses as a value added courses for second year students
2. BoS members suggested to have very lighter content for open electives and minor courses.
3. BoS members requested to give clarification about minor/honour students' distinction norms if they get fail in the exams BoS members asked about the difficulties in conducting or managing the minor/honor courses.
4. Mr.U.Shunmugam suggested to offer value added courses from IV semester onwards. He is also ready to suggest us the value added courses for the future.

**007.07.00: Vote of Thanks**

The meeting ended with the Vote of Thanks by HoD Dr.A.Meenakshi Professor, Department of Computer Science and Engineering, Kamaraj College of Engineering and Technology, Virudhunagar.

  
BoS Coordinator  
(Dr.A.Anandh)

  
BoS Chairman  
(Dr.A.Meenakshi)  
HoD - CSE