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).

MINUTES OF THE MEETING OF 5th BOARD OF STUDIES MEETING HELD ON 24-09-2022 AT - 09.30 AM TOWARDS CONSIDERING THE CURRICULUM R2021-UG AND SYLLABI (VII SEMESTER TO VIII SEMESTER) OF R2020-UG PROGRAMME & SECOND YEAR CURRICULUM AND SYLLABI (III SEMESTER TO IV SEMESTER) OF R2021.

Mode of Meeting: Hybrid Mode (Both Physical and online) Venue: CSE Conference Hall – I

Recording Link: https://kcetvnrorg-my.sharepoint.com/:v:/g/personal/anandhcse_kamarajengg_edu_in/EY_SZfhaq_hCmu9ZfEliikkB1jn5RslhtwAd2pBH6MoQ3A?e=s6Yu2u

Dr. A. Meenakshi, HoD (Department of Computer Science and Engineering) welcomed all the members of the Board of Studies and Faculty members of CSE Department to the 5th BOS meeting. The following members were present:

Sl. No.	Name of the Expert	Designation	Capacity	Mode of presence
1.	Dr. P. Chitra	Professor & Head/Computer Applications and Computer Science and Business Systems,Thiagarajar College of Engineering, Madurai, pccse@tce.edu Phone No:9944976549	Anna University Nominee	Physical
2.	Dr.R.B.V.Subramaanyan	Professor and Head, Department of ComputerScience and Engineering,National Institute of Technology, Warangal E-mail ID: rbvs66@nitw.ac.inPhone No: 9491346969	Academic Councilnominated BoS Expert Member	Online

3.	Dr.Sabu M.Thampi	Professor, School of Computer Science & Engineering (SoCSE), Technocity Campus, Trivandrum-695317, Kerala State, India. E-mail ID: sabu.thampi@iiitmk.ac.in Phone No: 9447103005	Academic Councilnominated BoS Expert Member	Physical
4.	Mr.G.S.Raman	Director, Training Division, Sri Moogambikai Infotech Solutions, Madurai raman.g@mookambikainfo.com ramansriranga@gmail.com Phone No: 8870324388	Industrialist	Physical
5.	Dr.R.Venkatesan	Associate Professor, CSE, Karunya University, Coimbatore rlvenkei2000@karunya.edu Phone No: 98948 80563	Alumni	Physical

Internal Members of BoS – Faculty members of CSE & AI & DS		
S. No.	**Name**	**Designation**
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.	Mrs.S.Athilakshmi	Assistant Professor / CSE
5.	Mr.B.Muthukrishnavinayagam	Assistant Professor / CSE
6.	Mrs.K.Muthulakshmi	Assistant Professor / CSE
7.	Dr.G.Nirmala	Assistant Professor / CSE
8.	Ms.S.Janani	Assistant Professor / CSE
9.	Mrs.K.Leelarani	Assistant Professor / CSE
10.	Ms.G.Vijayalalitha	Assistant Professor / CSE
11.	Mr.M.Rajasekaran	Assistant Professor / CSE
12.	Mrs.P.Kavitha	Assistant Professor / CSE
13.	Dr.G.Mahalakshmi	Assistant Professor / CSE
14.	Dr.G.Uma Maheshwari	Assistant Professor / CSE
15.	Mr.V.Rajesh Kannan	Assistant Professor / CSE
16.	Mrs.X.Ignatius Selvarani	Assistant Professor / CSE
17.	Mrs.S.Soundariya	Assistant Professor / CSE
18.	Mrs.Sangeetha	Assistant Professor / CSE

19.	Ms.S.Hemaswathi	Assistant Professor / CSE
20.	Mrs.B.Santhi Priya	Assistant Professor / CSE
21.	Mr.D. Asir	Assistant Professor / CSE
22.	Ms.Jothi Lakshmi.S	Assistant Professor / CSE
23.	Dr P Praveen Kumar	Assistant Professor / AI & DS
24.	Mrs K Indumathi	Assistant Professor / AI & DS
25.	Ms T.Rajashree	Assistant Professor / AI & DS
26.	Mrs J Lavanya	Assistant Professor / AI & DS
27.	Ms S Shopika	Assistant Professor / AI & DS

After the brief introduction by Dr.A.Meenakshi, HoD (Department of Computer Science and Engineering) about the expert members, industrialist, alumni, faculty from the Department of Computer Science and Engineering, and the agenda items were taken up for discussion. The discussion started with R2021 UG Programme curriculum and syllabi of B. E. Computer Science and Engineering, Verticals and list of courses, Open Electives (offered to other departments), R2020 UG Programme curriculum and syllabi of IV Year (7^{th} and 8^{th} Semester) B.E. Computer Science and Engineering, updation in syllabus – M.E. Computer Science and Engineering and then continued with the suggestions and recommendations received from all BOS members.

Discussions:

BOS 005.01
HoD / CSE gave a brief presentation about overview of the Department.

BOS 005.02
Dr.A.Meenakshi presented the proposed R2021 curriculum of B.E(CSE)

S. No.	Course Title	Category	PERIODS PER WEEK			Credits
			L	T	P	
THEORY						
1	Technical English	HS	3	0	0	3
2	Matrices and Differential Calculus	BS	3	1	0	4
3	Engineering Physics	BS	3	0	0	3
4	Engineering Chemistry	BS	3	0	0	3
5	Principles of Engineering	BS	3	0	0	3
6	Coding Techniques - I	EEC	3	0	0	3
	Scientific Thoughts in Tamil	AUD	1	0	0	1*
PRACTICALS						

7	Physics Laboratory	BS	0	0	3	1
8	Mathematics Laboratory	BS	0	0	2	1
9	Coding Techniques - ILaboratory	EEC	0	0	3	1
	Total Credits		17	1	13	23

SEMESTER II

S.NO.	COURSE TITLE	CATEGORY	PERIODS PER WEEK			CREDITS
			L	T	P	
THEORY						
1	Professional English	HS	3	0	0	3
2	Vector Calculus, Complex Integration and Laplace Transforms	BS	3	1	0	4
3	Renewable Energy Sources	BS	3	0	0	3
4	Engineering Graphics	ES	2	0	3	3
5	Environmental Science and Engineering	BS	3	0	0	3
6	Coding Techniques – II	EEC	3	0	0	3
PRACTICALS						
7	Chemistry Laboratory	BS	0	0	3	1
8	Coding Techniques - II Laboratory	EEC	0	0	3	1
9	Engineering Practices Laboratory	ES	0	0	4	2
Total Credits			**17**	**1**	**13**	**23**

SEMESTER III

S.NO.	COURSE TITLE	CATEGORY	PERIODS PER WEEK			CREDITS
			L	T	P	
THEORY						
1	Linear Algebra and Boundary Value Problems	BS	3	1	0	4
2	Computer Organization and Architecture	PC	3	0	0	3
3	Data Structures using Python	PC	3	0	0	3
4	Object Oriented Programming using Java	PC	2	0	2	3
5	System Software and Operating Systems	PC	3	0	0	3
6	Digital System Design and Microprocessors	ES	3	1	0	4
7	Audit Course	AUD	3	0	0	3*
PRACTICALS						
8	Data Structures using Python Laboratory	PC	0	0	3	1
9	Digital System Design and Microprocessors Laboratory	ES	0	0	4	2
Total Credits			**19**	**2**	**9**	**23**

SEMESTER IV

S.NO.	COURSE TITLE	CATEGORY	PERIODS PER WEEK			CREDITS
			L	T	P	
THEORY						
1	Discrete Mathematics and Probability	BS	3	1	0	4
2	Database Management Systems	PC	3	0	0	3
3	Design and Analysis of Algorithms	PC	3	0	0	3
4	Artificial Intelligence	PC	3	0	0	3
5	Software Engineering with UML Design	PC	3	0	0	3
6	Design Thinking	ES	3	0	0	3
7	Scientific Thoughts in Tamil ***	AUD	1	0	0	1*
8	Aptitude	EEC	1	1	0	1
PRACTICALS						
9	Mobile Application Development Laboratory	PC	0	0	4	2
10	Database Management Systems Laboratory	PC	0	0	4	2
11	Advanced reading and writing	EEC	0	0	2	1
Total Credits			**19**	**2**	**9**	**23**

SEMESTER V

S.NO.	COURSE TITLE	CATEGORY	PERIODS PER WEEK			CREDITS
			L	T	P	
THEORY						
1	Computer Networks	PC	3	0	0	3
2	Internet Programming	PC	3	0	0	3
3	Introduction to Internet of Things	PC	3	0	0	3
4	Foundations of Data Science and Machine Learning	PC	3	0	2	4
5	Professional Elective – I	PE	-	-	-	3
6	Professional Elective – II	PE	-	-	-	3
PRACTICALS						
7	Internet of Things Laboratory	PC	0	0	4	2
8	Computer Networks Laboratory	PC	0	0	4	2
9	Internet Programming Lab	PC	0	0	4	2
10	Summer Internship /Mini project	EEC	0	0	0	1
Total Credits			12	0	12	26

SEMESTER VI

S.NO.	COURSE TITLE	CATEGORY	PERIODS PER WEEK			CREDITS
			L	T	P	
THEORY						
1	Cryptography and Network Security	PC	3	0	0	3
2	Theory of Computation and Compiler Design	PC	3	0	2	4
3	Professional Elective III	PE	-	-	-	3
4	Professional Elective IV	PE	-	-	-	3
5	Professional Elective V	PE	-	-	-	3
6	Professional Elective VI	PE	-	-	-	3
7	Open Elective I	OE	3	0	0	3
PRACTICALS						
8	Security Laboratory	PC	0	0	2	1
9	Professional Communication	EEC	0	0	2	1
Total Credits			9	0	6	24

SEMESTER VII

S.NO.	COURSE TITLE	CATEGORY	PERIODS PER WEEK			CREDITS
			L	T	P	
THEORY						
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
PRACTICALS						
6	Summer Internship / Mini project	EEC	0	0	0	1
Total Credits			14	0	0	15

SEMESTER VIII

S.NO.	COURSE TITLE	CATEGORY	PERIODS PER WEEK			CREDITS
			L	T	P	
1	Project work	EEC	0	0	20	10
Total Credits			**0**	**0**	**20**	**10**

BOS 005.03

Dr.A.Meenakshi discussed in detail about list of verticals offered for R2021 Regulation

Sl. No.	Vertical 1	Vertical 2	Vertical 3	Vertical 4
	Data Science (Option for Minor)	Application Development	Cloud Computing and Data Centre Technologies	Cyber Security
1	Data Analysis and Decision Making	Principles of programming Languages	Cloud Computing	Ethical Hacking
2	Data Warehousing and Mining	Software Testing and Automation	Virtualization	Cyber Forensics
3	Data Science using R	Web Application Development using Django	Cloud Services Management	Information Security
4	Big Data Analytics	Full Stack Development	Data Center Management	Cryptocurrency and Block Chain Technologies
5	Social Network Analysis	Multi Platform Application Development using Flutter	Devops	Intrusion Detection Systems
6	Information Retrieval Techniques	Agile Methodologies	Security and Privacy in Cloud	Modern Cryptography
7	Data visualization using Tableau	C # and .Net Fundamentals	Principles of Fog Computing	Security Governance and Risk Compliance

Highlight by yellow if the offered course is Theory based Laboratory.

NPTEL Font color by Red if the offered course is in line with NPTEL/Swayam

Sl. No.	Vertical 5	Vertical 6	Vertical 7	Vertical 8
	Creative Media	Emerging Technologies	Artificial Intelligence (Option for Minor)	Networking
1	Computer Graphics	Software Industrialization	Neural Networks	Wireless Ad hoc & Sensor Networks
2	Multimedia Data Compression and Storage	Robotic Process Automation	Deep Learning	Fundamentals of network Communication
3	UI/UX Design	2D/3D Technologies	Computer Vision	5G Communication Networks
4	Digital Marketing	Business Analytics	Natural Language Processing	Peer to Peer networks
5	Game Design and Development	Recommender systems	Human Computer Interaction	Parallel and Distributed Computing
6	Visual Effects	Augmented Reality and Virtual Reality	Reinforcement learning	Mobile and Pervasive computing
7	Multimedia and Animation	Quantum Computing	Knowledge Engineering	Wireless security

Highlight by yellow if the offered course is Theory based Laboratory.

NPTEL Font color by Red if the offered course is in line with NPTEL/Swayam

BOS 005.04

Dr.A.Meenakshi discussed in detail about honours and minor degree in R2021 Regulation

Honours Degree	Minor Degree
The student should select **6 courses Offered in same Department verticals and earn 18 credits**	The student should select **6 courses Offered from other department verticals offered for minor degree or institute level courses offered as minor degree and earn 18 credits**

Eligibility : upto 4th Semester, the CGPA >7.5 without any backlog	Eligibility : upto 4th Semester, the CGPA >7.5 without any backlog
Offered from 5th semester onwards	Offered from 5th semester onwards
The student may or may not select the course from same verticals	The student should undergo 6 courses from same verticals offered as minor either from Institute level common minor verticals or other Department minor verticals.

BOS 005.05

Open Electives (Offered to Other Department Students)
Dr.A.Meenakshi discussed in detail about open elective courses offered to other department students.

Sl. No.	Open Elective	Course Name	L	T	P	Credits
1	I & II	Data Science Fundamentals	3	0	0	3
2	III	Fundamentals of Software Engineering	3	0	0	3
3		Fundamentals of Data Structures	3	0	0	3
4	IV	Fundamentals of Computer Networks	3	0	0	3
5		Software Testing	3	0	0	3

BOS 005.06
Dr.A.Meenakshi presented R2020 IV year (7th and 8th Semester) UG Curriculum and detailed syllabus of B.E (Computer Science andEngineering).

SEMESTER VII

S. No	Course Code	Course Title	Category	L	T	P	Contact Periods	C
THEORY								
1.	CS1771	Cloud Computing	PC	3	0	0	3	3
2.	IT1671	Cryptography and Network Security	PC	3	0	0	3	3
3.	GE1671	Total Quality Management	HS	3	0	0	3	3
4.	PE5	Professional Elective V	PE	3	0	0	3	3
5.	PE6	Professional Elective VI	PE	3	0	0	3	3
6.	OE2	Open Elective – II	OE	3	0	0	3	3
PRATICALS								

7.	IT1681	Cryptography and Network Security Laboratory	PC	0	0	4	4	2
8.	CS1781	Cloud Computing laboratory	PC	0	0	4	4	2
9.	CS1721	Mini Project	EEC	0	0	4	4	2
			TOTAL	**18**	**0**	**12**	**30**	**24**

SEMESTER VIII

S. No	Course Code	Course Title	Category	L	T	P	Contact Periods	C
THEORY								
1.	OL2	Online Course – II	OL	0	2	0	2	2
PRATICALS								
2.	CS1821	Project work	EEC	0	0	16	16	8
			TOTAL	**0**	**2**	**16**	**18**	**10**

List of Professional Elective Courses

Professional Elective Courses (Elective – V, Semester VII)

S. No	Course Code	Course Name	L	T	P	Contact Periods	C
1.	IT1631	Blockchain Technologies	3	0	0	3	3
2.	AD1601	Computer Vision	3	0	0	3	3
3.	AD1602	Deep Learning	3	0	0	3	3
4.	AD1535	Human Computer interaction	3	0	0	3	3
5.	CS1731	Software Project Management	3	0	0	3	3

Professional Elective Courses (Elective – VI, Semester VII)

S. No	Course Code	Course Name	L	T	P	Contact Periods	C
1.	CS1732	2D & 3D Techniques for Graphics Modeling and Simulation	3	0	0	3	3
2.	AD1702	Natural Language Processing	3	0	0	3	3
3.	CS1733	Principles of Cyber Security	3	0	0	3	3
4.	CS1734	Risk Modeling and Assessment	3	0	0	3	3
5.	AD1633	Robotics and Intelligent Systems	3	0	0	3	3

Open Elective – II (Semester VII)

S. No	Course Code	Course Name	Category	L	T	P	C
1.	OCS171	Software Engineering Fundamentals	OE	3	0	0	3

BOS 005.07

Approval of Value Added courses:

HoD / CSE gave a brief presentation about students achievements, department facilities and technical support, number of events organized by the department, students internship details, value added courses conducted for the academic year 2021-2022 and 2022-2023 and finally students graduation and placement details.

- **Dr.A.Meenakshi discussed about the process that we followed for conducting Value Added Courses.**
- **She also discussed about the role of three member's committee and presented the list of value added courses offered for the second year and third year students forthis academic year.**

Value Added Courses Conducted 2021 - 2022

Name of the VAC course	Name of Company	Name of the Trainer(s)	No. of Students
Redhat Linux	School of Linux, Madurai	Mr.S.Suresh Kannan & K.Muthukumar	40
Machine Learning with Scikit-Learn, Keras and Tensorflow	Quantanics TechServ Pvt. Ltd., Madurai.	Mr.Farhadh Manaz and Mr.K.Vasanth Junior AI Developer, Quantanics TechServ Pvt. Ltd., Madurai.	29
Spring Boot	Silicon Software Services, Chennai	Mr.S.Rajendran Ms.Domini Neya	55
Django Framework	Lamdatech Softics, Virudhunagar	Mr.S.Balaji Ms.V.Rajeshwari	27

VALUE ADDED COURSES CONDUCTED FOR III YEAR STUDENTS

S. No	Course Name	Name of Company	No. of Students
1.	AWS cloud	School of Linux, Madurai	35
2.	Flutter	Networkz Systems, Madurai	35
3.	Fundamentals of Block Chain and Crypto currency	Incrix Techlutions LLP, Chennai	35

VALUE ADDED COURSES CONDUCTED – 2022-23

Name of the VAC course	Name of Company	Name of the Trainer(s)	No. of Students
MEAN Stack	VEI Technologies Pvt. Ltd, Chennai.	Dr.B.Ezhilavan, Managing Director Ms.Shobana, Software Developer	35
MERN Stack	Lamdatech Softics, Virudhunagar	Mr.S.Balaji, Trainer Mr.M.Prakash, Trainer	40
Data Visualization using Tableau	Brainswig Edutech Pvt., Ltd, Chennai	Dr.R.Dinesh Babu Managing Director	40
Devops	SMI Infotech Solutions. Pvt Ltd	Mr.G.S.Raman, Director, Training and upskilling Mr.Sanjay, Trainer	36

BOS 004.08

Dr.A.Meenakshi seek the approval for the updation in Syllabus R2020 - M.E - Computer Science and Engineering

MC1204 – Network Design and Technologies – Deviations

S. No.	Existing syllabus	Updated syllabus	Justification
1	Advanced multiplexing – Code Division Multiplexing, DWDM and OFDM – Shared media networks – Switched networks – End to end semantics – Connectionless, Connection oriented, Wireless Scenarios – Applications, Quality of Service – End to end level and network level solutions. LAN cabling topologies – Ethernet Switches, Routers, Firewalls and L3 switches – Remote Access Technologies and Devices – Modems and DSLs – SLIP and PPP – Core networks, and distribution networks.	Advanced multiplexing – Code Division Multiplexing, DWDM and OFDM – Shared media networks – Switched networks – End to end semantics – Connectionless, Connection oriented, Wireless Scenarios – Applications, Quality of Service – End to end level and network level solutions. Remote Access Technologies and Devices – Modems and DSLs – SLIP and PPP – Core networks, and distribution networks.	LAN cabling topologies – Ethernet Switches, Routers, Firewalls and L3 switches. The above mentioned topics are there in their UG core paper. So there is no need to study the same again and that can be removed.
2	GSM – Mobility Management and call control – GPRS –	GSM – Mobility Management and call control – GPRS –	Small Screen Web Browsing over GPRS

	Network Elements – Radio Resource Management – Mobility Management and Session Management – Small Screen Web Browsing over GPRS and EDGE – MMS over GPRS – UMTS – Channel Structure on the Air Interface – UTRAN –Core and Radio Network Mobility Management – UMTS Security.	Network Elements – Radio Resource Management – Mobility Management and Session Management ,Channel Structure on the Air Interface – UTRAN –Core and Radio Network Mobility Management – UMTS Security.	and EDGE – MMS over GPRS – UMTS. The above mentioned topics are concentrating in specific application. As the syllabus is vast, the students need to concentrate more on core concepts rather than specific application. So that topics can be removed from the syllabus
3	LTE – Network Architecture and Interfaces – FDD Air Interface and Radio Networks – Scheduling – Mobility Management and Power Optimization – LTE Security Architecture – Interconnection with UMTS and GSM – LTE Advanced (3GPPP Release 10) - 4G Networks and Composite Radio Environment – Protocol Boosters – Hybrid 4G Wireless Networks Protocols –Green Wireless Networks – Physical Layer and Multiple Access – Channel Modelling for 4G – Introduction to 5G	LTE – Network Architecture and Interfaces – FDD Air Interface and Radio Networks – Scheduling – Mobility Management and Power Optimization – LTE Security Architecture – Interconnection with UMTS and GSM –Hybrid 4G Wireless Networks Protocols –Green Wireless Networks – Physical Layer and Multiple Access – Channel Modelling for 4G – Introduction to 5G	As the syllabus is vast, the students need to concentrate more on core concepts rather than specific application. So the below mentioned topics can be removed from the syllabus. LTE Advanced (3GPPP Release 10) - 4G Networks and Composite Radio Environment – Protocol Boosters.

MC1238 – Information Retrieval Techniques- Deviations

S. No.	Existing syllabus	Updated syllabus	Justification
1	Searching the web – Structure of the web – IR and web search – Static and Dynamic Ranking – Web crawling and indexing – Link Analysis – XML Retrieval Multimedia IR : Models and Languages – Indexing and Searching Parallel and Distributed IR – Digital Libraries	Searching the web – Structure of the web – IR and web search – Static and Dynamic Ranking – Web crawling and indexing – Link Analysis – XML Retrieval Multimedia IR : Models and Languages – Indexing and Searching– Recommender System Functions – Recommendation Techniques	As Recommender System is the main topic in Information Retrieval, we can exclude the Parallel and Distributed IR and include the Recommender Functions and Techniques

The following suggestions were given by the BOS Members

1. They have suggested to give Internet Programming paper in previous semester.
2. All the BoS members have appreciated for more practical sessions assigned in 5th semester.
3. Dr. Chithra suggested to once again check the blooms taxonomy level for CO PO attainment.
4. They have suggested to provide more Industry related new technologies.
5. All the BoS members appreciated for providing more new technology related papers as Professional Electives.

RESOLVED TO APPROVE the R2020 curriculum and detailed syllabi for VII & VIII Semester of B.E(CSE), Detailed syllabus of R2021 curriculum and detailed syllabi for I to VIII Semester of B.E(CSE).

The meeting ended with the Vote of Thanks by Dr. A. Anandh, Associate Professor, Department of CSE, Kamaraj College of Engineering and Technology, Virudhunagar.

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

BoS Co-ordinator

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Department of Electronics and Communication Engineering

Date : 29-09-2022

Minutes of the 5th Board of Studies Meeting (Hybrid Mode)

ECE Department. Kamaraj College of Engineering and Technology

held on 24-09-2022 at 10.30 A.M

MS Teams Meeting Link: https://tinyurl.com/3j6bamuy

Members Present:

1. Dr.T.Prathiba, M.E.,Ph.D.,
   Assistant Professor & HoD / ECE,
   Kamaraj College of Engineering and Technology, Virudhunagar.
   Chairman of BoS - ECE

2. Dr.E.S.Gopi, Ph.D.,
   Associate Professor, ECE,
   National Institute of Technology, Tiruchirappalli - 620015.
   Member of BoS - Anna University Nominee

3. Dr.D.Sriram Kumar, Ph.D.,
   Professor, ECE,
   National Institute of Technology, Tiruchirappalli - 620015.
   Member of BoS - Academic Council Nominee

4. Dr.A.Amalin Prince, Ph.D.,
   Associate Professor, Department of EEE,
   BITS Pilani, K.K.Birla Goa Campus, Zuarinagar, Goa - 403726.
   Member of BoS - Academic Council Nominee

5. Mr.M.Chinnathambi, M.E.,
   Technical Lead,
   Viasat India, Global Infocity, Module 1 & 2, 5th Floor, Block C,
   No. 40, MGR Salai, Perungudi, Chennai - 600097.
   Member of BoS - Industrialist Nominee

6. Dr.R.Preetha, Ph.D.,
   Assistant Professor, ECE,
   SRM Institute of Science and Technology,
   Ramapuram,Chennai - 600089.
   Member of BoS - Alumni Nominee

7. Dr.R.Suresh Babu, M.E.,M.B.A.,Ph.D.,
   Dean AcademicCourses & Professor/ECE,
   Kamaraj College of Engineering and Technology, Virudhunagar.
   Member of BoS - Internal Faculty Member

8. Dr.T.Pandiselvi, M.E.,Ph.D.,
   Assistant Professor/ECE,
   Kamaraj College of Engineering and Technology, Virudhunagar.
   Member of BoS - Internal Faculty Member

9. Dr.N.M.Mary Sindhuja, M.E.,Ph.D.,
   Assistant Professor/ECE,
   Kamaraj College of Engineering and Technology, Virudhunagar.
   Member of BoS - Internal Faculty Member

10. Mrs.C.Nagavani, M.E.,(Ph.D.,)
    Assistant Professor/ECE,
    Kamaraj College of Engineering and Technology, Virudhunagar.
    Member of BoS - Internal Faculty Member

11. Mr.R.Ashok, M.E.,(Ph.D.,)
    Assistant Professor/ECE,
    Kamaraj College of Engineering and Technology, Virudhunagar.
    Member of BoS - Internal Faculty Member

12. Mrs.S.Nisha Rani, M.E.,(Ph.D.,)
    Assistant Professor/ECE,
    Kamaraj College of Engineering and Technology, Virudhunagar.
    Member of BoS - Internal Faculty Member

13. Mr.P.Aravind, M.E.,
    Assistant Professor/ECE,
    Kamaraj College of Engineering and Technology, Virudhunagar.
    Member of BoS - Internal Faculty Member

14. Mrs.P.Ramalakshmi, M.E.,(Ph.D.,)
    Assistant Professor/ECE,
    Kamaraj College of Engineering and Technology, Virudhunagar.
    Member of BoS - Internal Faculty Member

15. Mrs.M.Stella Mercy, M.E.,(Ph.D.,)
    Assistant Professor/ECE,
    Kamaraj College of Engineering and Technology, Virudhunagar.
    Member of BoS - Internal Faculty Member

16. Mr.S.Alwyn Rajiv, M.E.,(Ph.D.,)
Assistant Professor/ECE,
Kamaraj College of Engineering and Technology, Virudhunagar.
Member of BoS - Internal Faculty Member

17. Mrs.P.Muthumari, M.E.,
Assistant Professor/ECE,
Kamaraj College of Engineering and Technology, Virudhunagar.
Member of BoS - Internal Faculty Member

18. Mr.R.Raj Prabu, M.E.,(Ph.D.,)
Assistant Professor/ECE,
Kamaraj College of Engineering and Technology, Virudhunagar.
Member of BoS - Internal Faculty Member

Agenda Items, Discussions and Resolutions made:

Item No.	Agenda items	Points discussed / resolution
1.	Welcome address	The meeting started at 10.30 A.M. in hybrid mode (Microsoft Teams platform and physical). Dr.D.Sriram Kumar, Ph.D., Mr.M.Chinnathambi, M.E., and internal faculty members have attended in physical mode. Dr.E.S.Gopi, Ph.D., Dr.A.Amalin Prince, Ph.D., Dr.R.Preetha, Ph.D., have attended through online mode. Dr.R.Suresh Babu, Professor/ECE, gave a warm cordial welcome to all the members of the Board of Studies.
2.	Overview of the Vision, Mission, PEOs and PSOs of the Department	Dr.T.Prathiba, HOD/ECE, gave a brief presentation about the Vision, Mission, PEOs and PSOs, Research & Development activities, Placement & Higher studies details of previous batches and students' major achievements of ECE department.
3.	Approval of the Minutes of the Fourth BoS	Dr.T.Prathiba, HOD/ECE requested the BoS members to approve the Minutes of the Fourth BoS. The minutes of Fourth BoS is already sent to the BoS members through the mail.
4.	Action Taken for the Previous BoS	Dr.T.Prathiba, HOD/ECE explained the actions taken on the suggestions given in previous BoS. The following are the major actions taken. • As per the suggestion given by Dr.R.Preetha, Ph.D., in R2021 Signals and Systems is planned in III semester and Discrete Time Signal Processing in IV semester. • Dr.D.Sriram Kumar, Ph.D., suggested that the uniformity needs to be followed for the number of textbooks mentioned in the syllabus of all courses. It would be better if two text books are uniformly given for all the courses. With regard to Reference Books for courses, any number of books can be given. As per the suggestions given, number of text books is uniformly maintained as 2 in R2021. • He also suggested that wherever possible, connectivity of the courses without any disjoin should be ensured. Courses are sequentially assigned as per the suggestion. • He insisted to introduce Simulation based experiments in the lower semester lab courses itself especially in Circuits and Devices Lab course. Simulation experiments are included in Analog & Digital Laboratory • Dr.D.Sriram Kumar, Ph.D., and Dr.H.Umma Habiba, Ph.D., insisted that the total credits should be in the range around 165 and the total number of credits in R2021 is too high and

		needs to be reduced. As per the suggestions given, the total number of credits in R2021 is reduced to 167.
5.	Presentation of the proposed syllabi of Final Year (7th and 8th semester) for R2020 of UG Programme B.E. - Electronics and Communication Engineering	Dr.T.Prathiba, HOD/ECE presented the proposed syllabi for Final Year R2020 of UG Programme B.E. - Electronics and Communication Engineering. The following are the presentation points. • B.E. - ECE (7th and 8th semester) • Professional Electives in 7th and 8th semester • Open Electives in 7th semester
6.	Review, discussions & suggestions by Experts on Syllabi Final Year (7th and 8th semester) for R2020 of UG Programme B.E. - Electronics and Communication Engineering	a. Dr.Sriram Kumar Ph.D., gave suggestions on framing Optical Communication course syllabus. He insisted to remove Unit V- Optical Networks which is a separate course. He suggested to reduce the syllabus in Unit II. He also suggested to give more number of experiments in laboratories & project work. b. Dr.Sriram Kumar Ph.D., insisted to connect industry with guest lecture for management related courses. c. Dr.Sriram Kumar Ph.D., suggested to include software based experiments for Optical, Microwave and Wireless. d. Dr.Sriram Kumar Ph.D., implied to introduce NS3 in Advanced Communication laboratory e. Dr.Sriram Kumar Ph.D., insisted to remove Microwave Communication course which is suitable for PG course. He suggested to include one more text book in Multimedia Communication course. f. Dr.Sriram Kumar Ph.D., gave suggestion for Unit V in Wireless Networks. Since the unit titled 4G & Beyond, Introduction to future Wireless Networks topic can be included which may deal with 5G/6G networks. g. Mr. M. Chinnathambi, M.E., insisted to include MATLAB simulation in Wireless Networks in each unit. Dr.Sriram Kumar Ph.D., suggested to include test bench also. h. Dr.Sriram Kumar Ph.D., insisted that Intellectual Property Rights course may be included in management courses. i. Dr.Sriram Kumar Ph.D., insisted to recheck the content of Advanced Wireless Communication. Also, in Cryptography course, include 2 units on steganography and change the title of the course as Cryptography & Steganography. j. Mr. M. Chinnathambi, M.E., insisted to include topics RSA, EEC, open SSL algorithm in Cryptography course. k. Dr.Sriram Kumar Ph.D., suggested to include SDMA in

		Satellite Communication. He also insisted to include applications in V unit of all the courses. He implied to change the title of the course Biomedical Electronics into Biomedical Engineering. He also insisted to combine the Basics of MEMS and NEMS course and BioMEMS course as a single course. l. He insisted to remove the course Photonic Networks from open elective courses. Instead of that Electronic Packaging may be included and arrange industry people to teach Electronic Packaging course. m. Dr.E.S.Gopi, Ph.D., suggested to include prerequisites for open elective courses in Unit I if it is not mentioned. n. Dr.E.S.Gopi, Ph.D., asked for how the number of hours is fixed for Embedded & Real Time System (75 hours) – HoD/ECE explained that Embedded & Real Time System is a theory cum lab subject with 4 credit. Hence 3 lecture hours (3 credit) and 2 lab hours (1 credit) is allotted.
7.	Presentation of the proposed curriculum R2021 of UG Programme B.E. - Electronics and Communication Engineering from semester 1 to semester 8 and syllabus for 4th semester.	Dr.T.Prathiba, HOD/ECE presented the proposed curriculum for R2021 of UG Programme B.E. - Electronics and Communication Engineering from semester 1 to semester 8 and syllabus for 4th semester. The following are the presentation points. • B.E.-ECE (Curriculum for semester 1 to semester 8) • Professional Elective Courses-Verticals • Open Electives & Audit Courses • 4th Semester Syllabus
8.	Review, Discussions and Suggestions by Experts on UG Programme B.E. - Electronics and Communication Engineering R2021Curriculum for semester 1 to semester 8 and syllabus for 4th semester.	a. Dr.E.S.Gopi, Ph.D., asked how the courses are collected and arranged in Professional Elective Courses - Verticals in R2021. b. Dr.E.S.Gopi, Ph.D., insisted to include online courses in R2021.

9.	Presentation of the proposed Special Elective Courses for Ph.D Programme	Dr.T.Prathiba, HOD/ECE presented the proposed Special Elective Courses for Ph.D Programme
10.	Review, Discussions and Suggestions by Experts on Special Elective Courses for Ph.D Programme	Special Elective Courses for Ph.D Programme is approved by the BoS members.
11.	To fix the date for the NextBoS Meet (ECE Board)	It is suggested to conduct Next BoS Meeting (ECE Board) in the month of March 2022.
12.	Vote of Thanks	The meeting ended with the Vote of Thanks by Dr.T.Prathiba, Ph.D., Head, Department of ECE, Kamaraj College of Engineering and Technology, Virudhunagar.

29/9/2022
(Mrs.S.Nisha Rani)
BoS Coordinator - ECE

29/9/22
(Dr. T.Prathiba)
BoS Chairman - ECE

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DEPARTMENT OF INFORMATION TECHNOLOGY

FIFTH BOARD OF STUDIES MEETING [BLENDED MODE] – IT BOARD

MINUTES OF THE MEETING

28.09.2022

Date of the Meeting : **27.09.2022**

Time : **11:00 a.m. to 12:30 p.m.**

Online Platform : **GMeet**

Meeting Link : https://meet.google.com/zho-ofor-afa

Attendees:

S. No.	Name of the Expert with Designation	Capacity	Mode of Presence
1	Dr. P. Chitra, Professor & Head, Department of Computer Applications, Thiagarajar College of Engineering, Madurai	Anna University Nominee	Physical
2	Dr.A.Kandasamy, Professor Department of Mathematical and Computational Sciences, NITK, Suratkal	Academic Council Nominated BoS Members	Online
3	Dr.R.Rajesh, Associate Professor & Head Department of Computer Science, Central University of Kerala, Kasaragod, Kerala.		Online
4	Dr. K. Poyyamozhi, Principal Program Manager Norton E-Business Symantec Software &services Pvt Ltd. Chennai	Industry Expert	Online
5	Dr. B. Selvakumar, Assistant Professor Department of Computer Science and Engineering, MepcoSchlenk Engineering College, Sivakasi.	Alumnus	Physical

Internal BoS Members:

S. No.	Name of the Faculty Members with Designation	Capacity
1	Dr. E. Vakaimalar, Associate Professor	Chairman
2	Dr. R. Arthy, Assistant Professor	BoS Coordinator
3	Ms. P. Kaviya, Assistant Professor	BoS Co-Coordinator
4	Mrs. V. DeepaPriya, Assistant Professor	Member
5	Mr. D. Vendhan, Assistant Professor	Member
6	Mr. C. Raj Kannan, Assistant Professor	Member
7	Ms. P. Priyadharshini, Assistant Professor	Member
8	Mr. R. Raymond, Assistant Professor	Member

Minutes:

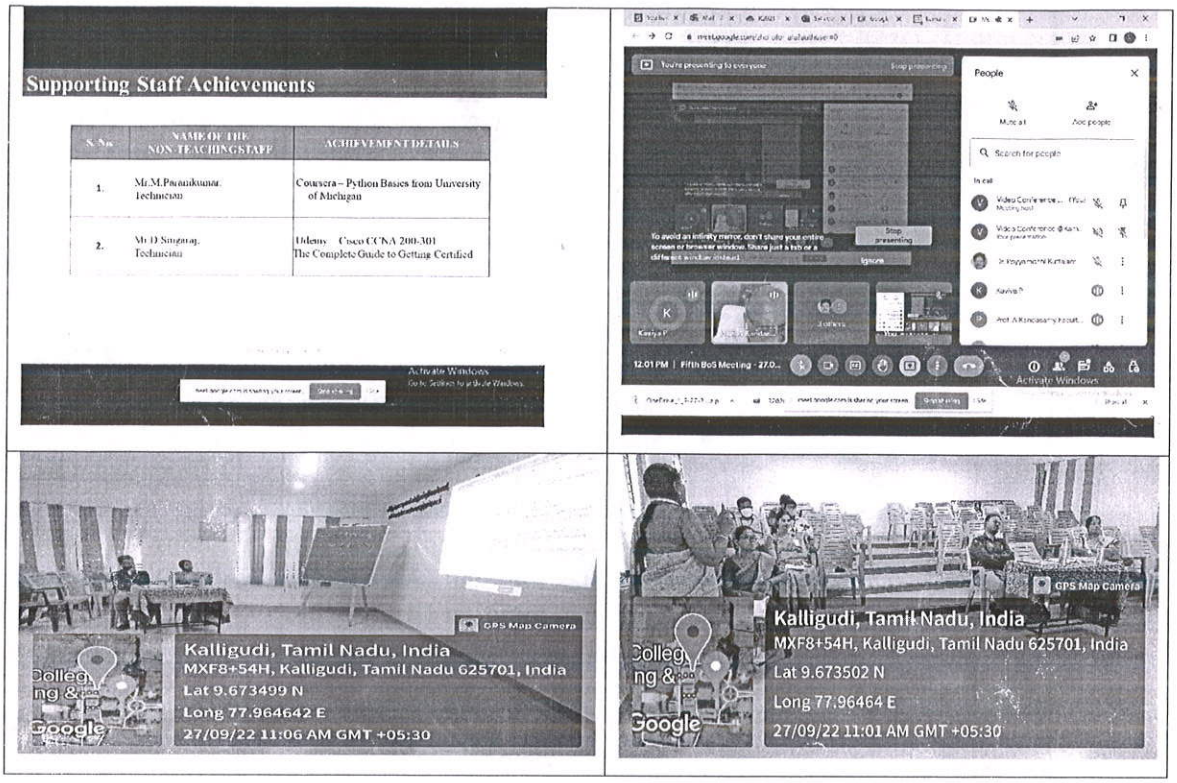
The meeting was conducted for discussing autonomous R2020 curriculum & syllabus of IV year, professional elective, open elective courses offered by the department of IT and autonomous R2021 curriculum & syllabi of 4th semester. The following points were discussed in the meeting:

- The Chairman of the board, Dr. E. Vakaimalar initiated the meeting and greeted all the members.

S. No.	Subject	Resolution
1.	Welcome Address	Dr. R. Arthy, Assistant Professor, BoS Coordinator, Department of Information Technology gave a welcome note and invited all the Board of Studies members and faculty members of the department.
2	Department Details and Activities	The chairman Dr. E. Vakaimalar presented the College and Department Profile, Faculty Members detail, Supporting Staff Members detail, Research and Extension Activities, Faculty Member's Achievements, Academic and Non Academic Activities, Internship and Placement. • Dr. P. Chitra suggested recognizing the outstanding students. The chairman explained that the college appreciates the best outstanding students and the parents of those students are appreciated in the department during parent teachers meeting. • She also insisted the importance of presenting or attending conference at IITs, NITs and IIITs. • She advised to encourage the students of II year to attend the internship and project that count for internship. The chairman explained that the students are going for internship since it was credited in the transcript as over and above credit.

3.	Curriculum and Syllabi of IV Year	The curriculum and syllabi of IV year was projected along with the professional electives and open electives (offered by the department). The approval has been already received from the BoS members in the previous meeting and Dr. P. Chitra, Anna University nominee also approved the R2020 curriculum and syllabi of IV year.
4.	Autonomous R2021 Regulation	Dr. E. Vakaimalar, explained the new regulation R2021 with various aspects like credit expected under each category, credit assignment and assessment procedures for awarding marks.
5.	R2021 Curriculum	The Chairman projected the credit distribution of R2021 curriculum and the curriculum structure. • Dr. P. Chitra advised to have Fundamentals of Electrical and Electronics Engineering course in first year and focus on core courses from second year. • She suggested combining Mathematics Laboratory in semester I with Matrices and Differential Calculus course as theory cum laboratory. • She asked to cross check the syllabus of Computer Organization and Architecture with Digital Systems course in semester III. • All the BoS members suggested reducing the number of courses in semester III. • Dr. P. Chitra and Dr. B. Selvakumar advised to reiterate the courses in all the verticals. • Dr. K. Poyyamozhi suggested rearranging the Cloud and IoT into same vertical. • All the BoS members suggested reducing the verticals from 7 to 5. • They also insisted to check the availability of the pre-requisite course for all the courses in verticals. • The course name in the verticals and open elective should not be same. • Dr. A. Kandasamy clarified the procedure for providing Honours and Minor degree.
7.	R2021 Syllabus – 4th Semester	The syllabus of 4th semester was projected. • Dr. P. Chitra advised to revise the course outcomes of the courses. • Dr. B. Selvakumar suggested including the Mini Project as an assessment tool instead of an exercise in laboratories. • He also insisted to include JSP in Web Essentials course.
8.	Vote of Thanks	The meeting ended with Vote of Thanks by Ms. P. Kaviya, AP/IT, BoS Coordinator.

Screenshots:



Approved by:

1.	Dr. E. Vakaimalar, M.E., Ph. D.,	-	Chairman of the BoS
2.	Dr. P. Chitra, M.E., Ph.D., ,	-	Anna University Nominee
3.	Dr. A. Kandasamy, M.Sc., Ph.D.,	-	AC nominated BoS Members
4.	Dr. R. Rajesh, M.E., Ph.D.,	-	AC nominated BoS Members
5.	Dr. K. Poyyamozhi, M.C.A., Ph.D.,	-	Industrial Expert
6.	Dr. B. Selvakumar. M.E., Ph.D.,	-	Alumnus

28/9/20 28/9/20

BoS Coordinators

28/9/22

HoD/IT

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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

MINUTES OF THE 5th BoS MEETING

BOARD OF STUDIES ELECTRICAL AND ELECTRONICS ENGINEERING

DATE: 24-09-2022 **TIME: 10.00 AM to 12.00 noon**

VENUE: Power System Simulation Laboratory (EEE Department)

ATTENDANCE:

S. No.	Name of the Expert	Designation	Capacity
1.	Dr. K.Selvi	Professor, Department of Electrical and Electronics Engineering, Thiagarajar College of Engineering, Madurai.	AU Nominee
2.	Dr. Sishaj P Simon	Professor, Department of Electrical and Electronics Engineering, NIT Trichy, Trichy.	Academic Council nominated BoS Members
3.	Dr. S. Jeevananthan	Professor, Department of Electrical and Electronics Engineering, Pondicherry Engineering College, Pondicherry.	
4.	Er. N. Ragupathi Muthu	Consultant, Sree Minniyal Ragu Enterprises, Sivakasi.	Industrialist
5.	Dr. P. Deepamangai	Assistant Professor, Department of Electrical and Electronics Engineering, SRM TRP Engineering College, Trichy	Alumni

S. No.	Name of the Faculty	Designation
1.	Dr. D. Prince Winston	Professor & Head / EEE Chairman, Board of Studies (EEE Board)
2.	Dr. S.Kalyani	Professor / EEE
3.	Dr. M. Sudalaimani	Associate Professor / EEE

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

4.	Dr. J. Jeslin Drusila Nesamalar	Assistant Professor / EEE
5.	Dr. B. Guru Karthik Babu	Assistant Professor / EEE
6.	Mr. D. Mariappan	Assistant Professor / EEE
7.	Mr. K. Ganesan	Assistant Professor / EEE
8.	Mr. S. Jegan	Assistant Professor / EEE
9.	Mr. R. Ganesan	Assistant Professor / EEE
10.	Mr. T. Hari Prasath	Assistant Professor / EEE

THE MINUTES:

The meeting is called for considering the Undergraduate curriculum & syllabi in R2020 and R2021.

DISCUSSIONS:

1. The meeting started at 10.00 am at Power System Simulation Laboratory (EEE Department). **Dr. D. Prince Winston**, Professor & Head / EEE gave a warm cordial welcome to all the members of the Board of Studies.
2. **Dr. D. Prince Winston**, introduced about the external expert members.
3. **Dr. D. Prince Winston**, presented the overview of the Institution and the Department.
4. **Dr. D. Prince Winston**, presented the minutes of meeting of 4th BoS Meeting held on 18th March 2022 to the experts for their approval. The expert members approved the same.
5. **Dr. D. Prince Winston**, presented the highlights of R2021 UG curriculum and also presented the complete R2021 UG curriculum for the approval.

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

S. No.	Name of the Course / Details	Comments
1.	அறிவியல் தமிழ் / Scientific Thoughts in Tamil	• Dr. Sishaj P Simon enquired about the course code for this course. Dr.D.Prince Winston said that it will be decided later. • Dr. K. Selvi enquired about the faculty members to handle this course. Dr.D.Prince Winston said that the training is given to faculty members to handle this course.
2.	Transmission and Distribution	• Dr. Sishaj P Simon asked about the course name Transmission and Distribution and suggested to have "Transmission and Distribution of Electrical Energy". Dr.D.Prince Winston said that it will be considered.
3.	Courses in Verticals	• Dr. S. Jeevanantham enquired about the different verticals. He asked whether these verticals are common for Professional electives, Honors and Minors degree. Dr.D.Prince Winston said that it is common for Professional electives, Honors and Minors degree apart from the separate institutional level vertical for minor degree. • Dr. K. Selvi asked about the credits allotted for all the courses listed in the verticals. She also enquired about the courses for Honors degree. • Dr. S. Jeevanantham suggested to include basic core courses of Electrical Engineering in the minor verticals and much care should be given as this is offered for the other programme students. Dr.D. Prince Winston said that it will be considered. • Dr. S. Jeevanantham suggested to include two more rows and include courses addressing the design aspects, so that the students opting for honors degree can be justified. Dr.D. Prince Winston said that it will be considered. • Dr. S. Jeevanantham suggested to swap the

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

S. No.	Name of the Course / Details	Comments
		courses Design of Electrical Machines and Multilevel Power Converter. Dr.D. Prince Winston said that it will be modified. • Dr. S. Jeevanantham enquired about the department target (students count) for registering in Honors and Minors degree. Dr.D. Prince Winston explained that it is >7.5 CGPA up to 4th Semester. • Dr. S. Jeevanantham suggested to lower the CGPA threshold for the minor degree and can be started from 4th semester onwards. Dr.D. Prince Winston said that it will be considered. • Dr. Sishaj P Simon and Dr. K. Selvi suggested to have separate verticals for circuit and non-circuit branches including basic core courses also and can be separately given to choose Electrical as Minor degree. Dr.D. Prince Winston said that it will be considered. • Dr. K. Selvi enquired about from which batch this curriculum is going to be adopted. Dr.D. Prince Winston said that it is adopted from 2021 batch onwards.

6. **Dr. S. Kalyani,** Professor / EEE presented the detailed syllabi for 4th semester of R2021 UG curriculum.

S. No.	Name of the Course / Details	Comments
1.	DC Machines and Transformers	• Dr. K. Selvi enquired about Unit 2 & 3 title and suggested to rework. Also she suggested to swap unit 4 & 5. Dr.S.Kalyani said that it will be considered.
2.	Linear Integrated Circuit	• Dr. Sishaj P Simon enquired about the knowledge level of the COs. Dr.S.Kalyani said that it will be updated.

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S. No.	Name of the Course / Details	Comments
3.	Digital Logic circuits	• Dr. Sishaj P Simon suggested to rework on the COS and knowledge level. Dr.S.Kalyani said that it will be updated. • Dr. K. Selvi enquired about the norms for fixing knowledge level for a particular course. Also suggested to use the recent edition in the text and reference books. Dr.S.Kalyani said that there is no hard and fast rule to decide. But based on the nature of the course it will be decided.
4.	Power System Analysis	• Dr. Sishaj P Simon, suggested to include recent edition in text and reference books. Dr.S.Kalyani said that it will be updated. • Dr. K. Selvi enquired about the activities in the syllabus. Dr.S.Kalyani explained that it is the kind of activities that the students have undergo for the particular courses.
5.	Control System	• Dr. Sishaj P Simon enquired about the textbooks and suggested to rework. Dr.S.Kalyani said that it will be updated.
6.	DC Machines and Transformers Laboratory	• Dr. K. Selvi suggested to swap load test an OC, SC test on transformers. Study experiments can be done separately. Also suggested to modify the order of experiments. Dr.S.Kalyani said that it will be updated.
7.	Linear and Digital intergrade circuits Laboratory	• Dr. Sishaj P Simon suggested to rework on the COs and Knowledge level. Dr.S.Kalyani said that it will be updated.
8.	Control and Instrumentation laboratory	• Dr. K. Selvi suggested to split the experiment in the instrumentation part. Dr.S.Kalyani said that it will be updated.
9.	Solar Photovoltaic System	• Dr. Sishaj P Simon and Dr. K. Selvi suggested to include the design concepts in the syllabus as this is going to be offered for Ph.D. students. Dr. Gurukarthik Babu said that it will

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

S. No.	Name of the Course / Details	Comments
		be updated.
10.	Power Electronics for Renewable Energy Systems	• Dr. Sishaj P Simon insisted to include higher level concepts in the syllabus. Dr. Gurukarthik Babu said that it will be updated.
11.	Research methodology	• Dr. Sishaj P Simon suggested to include journal paper writing topics in the syllabus. Dr. Gurukarthik Babu said that it will be updated. • Dr. Sishaj P Simon enquired about the faculty members to handle this course, and suggested that each unit can be handled by the different experts. Dr. D. Prince Winston said that it will be considered.

7. **Dr. B. Gurukarthik Babu,** AP/EEE presented the special elective courses offered to Ph.D. degree programme.

S. No.	Name of the Course / Details	Comments
1.	Solar Photovoltaic System	• Dr. Sishaj P Simon and Dr. K. Selvi suggested to include the design concepts in the syllabus as this is going to be offered for Ph.D. students. Dr. Gurukarthik Babu said that it will be updated.
2.	Power Electronics for Renewable Energy Systems	• Dr. Sishaj P Simon insisted to include higher level concepts in the syllabus. Dr. Gurukarthik Babu said that it will be updated.
3.	Research methodology	• Dr. Sishaj P Simon suggested to include journal paper writing topics in the syllabus. Dr. Gurukarthik Babu said that it will be updated. • Dr. Sishaj P Simon enquired about the faculty members to handle this course, and suggested that each unit can be handled by the different experts. Dr. D. Prince Winston said that it will be considered.

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

8. **Dr. B. Gurukarthik Babu,** presented the 7th and 8th semester courses in R2020 curriculum for the approval. The external BoS members accepted the same.
9. **Dr. S. Kalyani,** presented the examination reforms for R2017, R2020 and R2021 batch.
10. **Mr. K. Ganesan,** Assistant Professor / EEE proposed the vote of thanks to all the external and internal members and the meeting adjourned.

The 5th Board of Studies (EEE Board) of Kamaraj College of Engineering, Virudhunagar, was held on 24.09.2022, 10.00 AM .The minutes of the meeting is approved by the BoS members.

BoS coordinator

HoD / EEE

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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

Board of Studies Meeting (EEE Board)

Date : **24-09-2022 (Saturday)**

Time : **10.00 AM to 12.00 noon**

AGENDA

Welcome Address	:	**Dr. D. Prince Winston** Professor & Head / EEE Kamaraj College of Engineering &Technology
Approval of the minutes of the previous BoS and Action Taken Report	:	
Department Progress	:	
Presentation of the proposed R2021 UG Curriculum for approval.	:	
Presentation of the R2021 UG Syllabi of 4th semester for approval.	:	**Dr. S. Kalyani,** Professor / EEE Controller of Examination Kamaraj College of Engineering & Technology
Presentation of Examination reforms	:	
Review, discussions and suggestions by Experts on UG Programme Curriculum & Syllabi (R2020 and R2021)	:	**BoS Members**
Presentation of special electives for Ph.D. programme	:	**Dr. B. Gurukarthik Babu,** Assistant Professor / EEE Kamaraj College of Engineering & Technology
Presentation of the R2020 UG Syllabi of 7th & 8th semester for approval.	:	
To fix the tentative date for the next BoS Meeting (EEE Board)	:	**Dr. D. Prince Winston** Professor & Head / EEE Kamaraj College of Engineering &Technology
Vote of Thanks	:	**Mr. K. Ganesan,** Assistant Professor / EEE Kamaraj College of Engineering & Technology

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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

Board of Studies Meeting (EEE Board)

Date : 24-09-2022 (Saturday)

Time : 10.00 AM to 12.00 noon

Members Present

S. No.	Name & Designation	Signature
1.	Dr. K.Selvi, Professor, Department of Electrical and Electronics Engineering, Thiagarajar College of Engineering, Madurai.	online mode
2.	Dr. Sishaj P Simon, Professor, Department of Electrical and Electronics Engineering, NIT Trichy, Trichy.	SPS 24/9/2022
3.	Dr. S. Jeevananthan, Professor, Department of Electrical and Electronics Engineering, Pondicherry Engineering College, Pondicherry.	online mode
4.	Er. N. Ragupathi Muthu, Consultant, Sree Minniyal Ragu Enterprises, Sivakasi.	24/9/22
5.	Dr. P. Deepamangai, Assistant Professor, Department of Electrical and Electronics Engineering, SRM TRP Engineering College, Trichy	24/9/22
6.	Dr. D.Prince Winston, Prof & Head/EEE	24/09/2022
7.	Dr. S.Kalyani, Prof/EEE	24/9/22
8.	Dr.M.Sudalaimani, ASP/EEE	—
9.	Dr. J. Jeslin Drusila Nesamalar, AP/EEE	—
10.	Dr. B.Guru Karthik Babu, AP/EEE	24-09-2022
11.	Mr.D.Mariappan, AP/EEE	
12.	Mr. K.Ganesan, AP/EEE	
13.	Mr.S.Jegan, AP/EEE	

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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

Board of Studies Meeting (EEE Board)

Date : **24-09-2022 (Saturday)**

Time : **10.00 AM to 12.00 noon**

S. No.	Name & Designation	Signature
14.	Mr. R.Ganesan, AP/EEE.	
15.	Mr. T.Hariprasath, AP/EEE	

BoS Coordinator

HoD/EEE

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MINUTES OF THE 5th MEETING
BOARD OF STUDIES OF BIOTECHNOLOGY

DATE: 23 September 2022, Friday **Time:** 10.00 AM – 1.00 PM
PLATFORM: MS-Teams

Meeting Link:

https://teams.microsoft.com/l/meetup-join/19%3a868e3ebf1da84821b67629edf5c504c6%40thread.tacv2/1663604686681 ? context= %7b%22Tid%22%3a%222666d919-f1fc-4027-b9c5-212d4e95e68a%22%2c%22Oid%22%3a%2253e97dde-b467-45ac-80a2-df98f8017534%22%7d

IN ATTENDANCE:

BoS External members:

S. No	Name of the Expert	Designation	Capacity	Attendance
1	Dr S.Venkatesan	Professor & Head, Department Of Petrochemical Technology, Bharathidasan Institute Of Technology (Bit) Campus, Anna University, Tiruchirappalli	Anna University Nominee	In person
2	Dr. N.Ayyadurai	Senior Scientist, Biochemistry & Biotechnology, CSIR-Central Leather Research Institute, Adyar, Chennai – 600 020.	Academic Council nominated BoS Member	On-line
3	Dr. K. Rajeshwari	Founder and Managing Director, Bioklone Biotech Private Limited , Plot No.14 and 15, Golden Jubilee Biotech Park, Siruseri, Navalur, Chennai – 603 103, Tamil Nadu.	Industrialist	On-line
4	Ms.S.Sivagamasunthari	Associate Scientist, Biocon Park , SEZ, Bommasandra Jigani Link Rd, Phase-IV, Bommasandra Industrial Area, Bengaluru, Karnataka 560099.	Alumni	On-line

BoS Internal members:

S. No	Name of the Faculty	Designation	Signature
1	Dr. R. Shyam Kumar	Chairperson / HoD-BT	
2	Dr. A. Ronaldo Anuf	UG Programme coordinator	
3	Dr. K. Geetha	PG Programme coordinator	
4	Dr. S. Karthikumar	Research Programme coordinator	
5	Dr. I. Ganesh Moorthy	Associate Professor / BT	
6	Dr.R.Baskaran	Associate Professor / BT	
7	Er. S. Manibalan	Assistant Professor / BT	
8	Dr. D.Pradiba	Assistant Professor / BT	
9	Er. R. Amutha Lakshmi	Assistant Professor / BT	
10	Mrs. K. Chitradevi	Assistant Professor / BT	
11	Mr. Karl Joseph Samuel	Assistant Professor / BT	
12	Mrs. A. Ganga	Assistant Professor / BT	

THE MINUTES:

The BoS meeting was organized for discussing the curriculum framework of amendments in proposed R2021, syllabus of IV semester courses of R2021, syllabus of 4th year (VII and VIII Semesters) courses of R2020 and syllabus of special elective courses for doctoral program

Discussion:

1. Dr. R. Shyam Kumar, Head of the Department delivered the Welcome address
2. Dr. K. Geetha, Associate Professor, introduced Dr. Venkatesan, the Anna University nominee to the other members of the Board of Studies
3. Dr. K .Geetha, PG programme coordinator, presented the Vision, Mission, POs, PEOs and PSOs for the UG Programme.
4. Dr. A. Ronaldo Anuf, UG programme coordinator, presented the proposed curricular amendments in R2021 to the Board of Studies members.

Discussion on agenda:

1. The UG programme coordinator presented the R2021 with the concepts of Honours degree and Minor degree which was proposed by the Anna University, Chennai. He mentioned that the total credits have been reduced from 180 credits to 166 credits which could help the students to get a provision for add-on courses to avail Honours and Minor degree.

2. The UG programme coordinator mentioned that the General Aptitude course (1 credit course) was introduced as a new course in the fourth semester of the curriculum.
3. The UG programme coordinator mentioned about the verticals (a total of eight verticals across various domains with seven courses in each vertical) for Professional Elective (PE) courses in R2021. He also discussed about the institute level verticals for Minor degree. Six PEs and four Open Electives (OE) will be introduced in which two OE courses shall belong to emerging technologies like IoT.
4. The UG programme coordinator informed about introduction of one management course - Human Values and Professional Ethics in the VII semester as per the proposed Anna University curriculum R2021.
5. The UG programme coordinator mentioned about the concept of Summer Internship/ Mini Project in two semester (Semester IV & VI) vacations which will be evaluated in the V & VII semester respectively.
6. He mentioned that Mandatory audit courses in Tamil language (Scientific Thoughts in Tamil) will be introduced in the curriculum with over and above credit.

Discussion on proposed curriculum framework R2021:

1. The UG programme coordinator specifically mentioned that R2021 regulation have been started and the first batch of R2021 currently doing their second year (III semester- Students admitted in AY 2021-22). The proposed modifications will be implemented from their IV semester.
2. The UG programme coordinator mentioned that the mandatory online courses as proposed in the curriculum have been removed. Instead of that the completion of online course will be considered as an equivalent to PE in the verticals. All the BoS members agreed.
3. The UG programme coordinator presented the curriculum for each semester. He mentioned that there is no major modification in the first semester and one new course "Scientific Thoughts in Tamil" will be introduced from AY 2022-23 onwards.
4. The UG programme coordinator requested special permission from the Board of Studies Members to add the Mandatory audit course - Scientific thoughts in Tamil in semester IV for the first batch of R2021 students admitted in AY 2021-22.
5. The UG programme coordinator informed that there is no major modifications in the second semester curriculum. The Anna University nominee enquired about the syllabus of Coding Techniques I and II courses which was clarified by the programme coordinator.
6. The UG programme coordinator presented the curriculum of the III semester and mentioned that the audit courses will be added from the list provided.
7. The UG programme coordinator mentioned that the "General Aptitude" course was included in IV semester for facilitating the students during their placement and competitive examination preparation. In addition, the modifications were made in the "Chemical Engineering Laboratory" syllabus and the credits have been reduced to 1. The Anna University nominee suggested that instead of "General Aptitude" the "Professional Development" course may be included as a compulsory 1 credit course. The UG programme coordinator replied that the current R2021 first batch students are already undergoing it as an audit course (Developing your Personality) in the III semester.
8. The UG programme coordinator mentioned that the "Summer Internship" will be taken up by the students for a period of two weeks (1 credit) in IV semester and VI semester vacation and the same will be evaluated in the V and VII semester respectvely. The

Anna University nominee mentioned that the students can visit any industry/ institute/ other educational organization/ research centre/ entrepreneurship activity to earn credit for Summer Internship.

9. The UG programme coordinator mentioned that the "Protein Engineering" course was shifted to PE vertical list from the Professional Core. "Bioinformatics" course was shifted from VI semester to V semester. He informed that the "Immunology" course was shifted from VII semester to VI semester because semester VII has common courses like Management elective courses and OE courses. "Immunology Laboratory" was converted to 1 credit course (3 hours) from 2 credits. The Anna University nominee enquired about the credit and hours system. The UG programme coordinator explained the system to the panel members.
10. The UG programme coordinator mentioned that three PE is offered in V Semester. In semester VI three PE and one OE will be offered. The OE (OE-I) will be offered from the list of courses in Emerging technologies.
11. In semester VII, 3 OE (OE-II, III and IV) will be offered, in which OE-II will be in emerging technologies domain and OE-III & IV will be from courses offered by other departments
12. The UG programme coordinator informed that the "Computational Biology Laboratory" was introduced in VII semester and "Project Work" was in VIII semester. The Anna University nominee suggested that the project work may include Industry oriented Project/ Internship and the rubrics need to be framed for evaluating the same.

Discussion on PE Verticals framework R2021:

1. The UG programme coordinator mentioned that 8 verticals have been planned in different domains, each containing seven courses. He listed all the verticals with the subjects in which the highlighted courses had equivalent NPTEL course (12 weeks). The students may drop a PE course by completing the equivalent NPTEL course. Anna University nominee insisted to provide the list of equivalent NPTEL courses for the subjects in the verticals. He also suggested that the students can take-up courses in other platforms like Coursera, edX & MOOC platform. The UG programme coordinator replied that the "Three-member committee" will guide students with the selection of NPTEL courses.
2. Dr S. Venkatesan, Anna University nominee enquired about the flexibility of handling the vertical courses by the faculty members. He insisted not to compromise on the fundamental core courses. The UG programme coordinator replied that only one course (Protein Engineering) has been shifted from Professional Core to PE verticals. All other courses has been retained.
3. The UG programme coordinator mentioned that the Anna University R2021 syllabus has provided 7 verticals, whereas in our (KCET R2021) proposed vertical list the "Diversified vertical" has been included to accommodate basic and advanced courses like Immunotechnology, Biosensors, Bio-nanotechnology, Bio-conjugate Technology & Algal technology.
4. Dr. N. Ayyadurai, Academic council nominee, appreciated that lot of choices have been provided for the students to select the PE course based on their interest. He enquired about the number of students required for offering the course. The UG programme coordinator replied that minimum 15 students are required for offering a particular course.
5. The UG programme coordinator presented the list of OE offered to other Department students by Biotechnology Department. Dr. N. Ayyadurai, Academic council nominee

enquired about the student response to the OE courses. The UG programme coordinator clarified that although learning the fundamentals would be difficult, subject becomes interesting once they learn the concepts.

6. Dr. K. Rajeshwari, the industry nominee, enquired about the course "Testing of Biological Materials". The UG programme coordinator explained about the syllabus of the particular course to the members. She suggested to change the course title, if required. Dr. N. Ayyadurai, Academic council nominee clarified that the course deals with biomaterials and therefore the same course title may be retained.
7. Dr. K. Rajeshwari, the industry nominee, enquired about the course "Plant Biotechnology". The UG programme coordinator replied that the course has been included in the vertical titled "Food & Agro-Sciences".
8. Dr. K. Rajeshwari, the industry nominee, enquired whether any of the theory courses in the verticals have practical classes/ site visit. The UG programme coordinator replied that all the courses are theory based with a provision to include activities like field visit/ proposal writing / project presentation.
9. Dr. K. Rajeshwari, the industry nominee, enquired about the content of "Bio-entrepreneurship" syllabus. The UG programme coordinator informed that the course contains topics supporting real time applications like project presentation. In addition to that Dr. S. Karthikumar, Subject expert, explained about the syllabus and real time activities such as business model preparation, market survey and start-up schemes related the course. All the Board members accepted the same.

Discussion on syllabus for fourth semester R2021:

1. The UG programme coordinator presented the syllabus for all the theory and laboratory courses for IV semester under R2021.
2. The Anna University nominee insisted that department faculty shall handle "Probability and Biostatistics" course with program specific examples. The UG programme coordinator replied that the course will be conducted by mathematics faculty with real time applications in the field of biotechnology. In addition, he mentioned that the syllabus was framed by mathematics department with inputs from Biotechnology faculty.
3. Dr. I. Ganesh Moorthy, NBA coordinator mentioned that the applications of the mathematical course are conducted as a "Value Added Program" under the topic - Design of experiments & MATLAB for the students. The basic fundamental concepts of mathematics such as ANOVA table, F Test will be refreshed during the conduct of VAP. The Anna University nominee accepted the same.
4. Dr S. Venkatesan, Anna University nominee suggested that the syllabus of "Fluid Mechanics and Heat transfer operations" is too heavy for a biotechnology student and few parts in the syllabus may be removed. Dr. I. Ganesh Moorthy, the Subject expert mentioned that the course is designed in view of GATE preparation, as most of the topics are reflected in GATE. He informed the BoS members that Unit 5 - Radiation may be removed and replaced by Evaporators concepts. All the Bos Members accepted the same.
5. Dr. N. Ayyadurai, Academic council nominee enquired about the "Molecular Biology" course syllabus represents only DNA concepts. Dr. S. Karthikumar, Subject expert replied that the particular subject act as a fundamental prerequisite course for "Genetic Engineering" course. Dr. R. Shyam Kumar, Head of the Department mentioned that the syllabus for course was framed by referring Anna University and other universities. In addition to that, Dr. K. Geetha, the PG programme coordinator added the point that,

majority of the institution follows the same syllabus. Dr. K. Rajeshwari, the industry nominee also explained that the particular course covers the basics and the advanced techniques like Recombinant DNA Technology will be covered in the Genetic Engineering course. And the Bos members accepted the same.

6. The UG programme coordinator presented the syllabus for "General Aptitude" course which is a common course at intuitional level. The Anna University nominee asked to compare it with GATE syllabus.

Discussion on syllabus for IV-year (VII & VIII Sem) R2020:

1. The UG programme coordinator presented the syllabus of all theory and laboratory courses of VII and VII semester under R2020.
2. The UG programme coordinator presented the syllabus of "Immunology Laboratory" course. Dr. K. Rajeshwari, the industry nominee, suggested to form the Animal ethical committee for animal studies. The UG programme coordinator replied that the work has been already started and it will be completed by this semester. Dr. K. Geetha, Subject Expert informed that the experiments related to handling of animal are only theory based.
3. The UG programme coordinator presented that the syllabus for all the professional elective courses of R2020. In this, he mentioned that the "Bio-conjugate Technology" course syllabus was framed by the guidance given by industry nominee in the previous BoS meeting.
4. The UG programme coordinator presented the syllabus of all the OE courses of R2020 which will be offered to other departments by the Department of Biotechnology.
5. Dr. N. Ayyadurai, Academic council nominee suggested to provide the students training regarding analytical data interpretation. The UG programme coordinator replied that the intensive training can be given for the students before starting of their project work.
6. Dr. K. Rajeshwari, the industry nominee enquired about the time duration for the "Summer Internship" and "Project Work". The UG programme coordinator replied that the time duration for Summer Internship was 2 weeks and 3 months for Project Work. Dr. N. Ayyadurai, Academic council nominee suggested that a minimum of 6 months duration will be most appropriate. The UG programme coordinator mentioned that the placement drive will start in the VII semester. Hence 6 months duration will not be feasible for the Project Work. It was informed that students are encouraged to continue their research/ project work after completion of the academic session. Dr. K. Rajeshwari, the industry nominee also mentioned that, the time extension for Industrial Project will become tedious due to cost expenses.

- The UG programme coordinator presented the syllabus for the special elective papers to be offered for the doctoral program. All the BoS members accepted the same
- Dr. I. Ganesh Moorthy, NBA coordinator of the department proposed the Vote of thanks to all the members.

Signature of the BoS Coordinator

Signature of the BoS Chairman

Dr. R.Shyam Kumar

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).

MINUTES OF THE MEETING OF FIFTH BOARD OF STUDIES MEETING HELD ON 17.09.2022 AT 10.00 AM IN HYBRID MODE TOWARDS CONSIDERING THE PROPOSED R2020 UG PROGRAMME, B.E. – MECH CURRICULUM & SYLLABI (VII SEMESTER & VIII SEMESTER), R2021 UG PROGRAMME, B.E. – MECH CURRICULUM & SYLLABI (IV SEMESTER), & B.E. – MECH CURRICULUM (V SEMESTER, VI SEMESTER, VII SEMESTER & VIII SEMESTER)

Platform: MS Teams
Meeting Link: https://teams.microsoft.com/l/meetup-join/19%3ameeting_YzFjYjQ3MjMtNWQ1ZS00ZWJjLWEzMWItMWMyNjIxNDA1Mzhi%40thread.v2/0?context=%7b%22Tid%22%3a%222666d919-f1fc-4027-b9c5-212d4e95e68a%22%2c%22Oid%22%3a%229e69172c-74cd-4bfe-a6a8-b68a6d86a288%22%7d

Dr.S.S.Saravanakumar, HOD (Department of Mechanical Engineering) welcomed all the members of the Board of studies and Faculty members of Department of Mechanical Engineering to the 5th BOS meeting. The following members were present.

S.No	Name of the Expert	Designation	Capacity
1.	Dr. S.Supriya, M.E.(Engg. Design),MISTE,Ph.D.	Professor (CAS) & Head of the Department, Mechanical Engineering Department, Government College of Engineering, Tirunelveli	Anna University Nominee
2.	Dr. S.C. Vettivel, Ph.D.,	Associate Professor/Mechanical Engineering, Chandigarh College of Engineering and Technology, Chandigarh	Academic Council Nominee
3.	Dr. V. Anandakrishnan, Ph.D.,	Associate Professor/Production Engineering National Institute of Technology, Tiruchirappalli – 620015.	Academic Council Nominee
4.	Er. K. Rajarathinam B.E.,	Proprietor Essar Engineers, Coimbatore	Industrialist Nominee
5.	Er.K.Vijayabharathi B.E.,	Technical lead Infosys, Chennai	Alumni Nominee

Internal Members of BoS – Mechanical Engineering Department

S.No	Name of the Faculty	Designation
1.	Dr. S. S. Saravanakumar	Head / Mech Chairman of BoS
2.	Dr. S. Senthil	Professor/ Principal In-charge
3.	Dr. P. Narayanasamy	Associate Professor / MECH
4.	Dr. S. Thanga Kasi Rajan	Assistant Professor / MECH Associate Dean Academics, UG Programme Coordinator
5.	Dr. B. Prabhu	Assistant Professor / MECH
6.	Dr. M. Prithiviraj	Assistant Professor / MECH
7.	Dr. B. Balavairavan	Assistant Professor / MECH BoS coordinator
8.	Mr. D. Palani Kumar	Assistant Professor / MECH
9.	Mr. N. R. Madhan	Assistant Professor / MECH
10.	Mr. R. Sakthivel Murugan	Assistant Professor / MECH PG Programme Coordinator
11.	Mr. B. K. Parrthipan	Assistant Professor / MECH
12.	Mr. S. Devaraj	Assistant Professor / MECH
13.	Mr. T. Suresh	Assistant Professor / MECH
14.	Mr. A.Sankara Narayana Murthy	Assistant Professor / MECH
15.	Mr. K. Murugananthan	Assistant Professor / MECH
16.	Mr.P.Senthamaraikannan	Assistant Professor / MECH
17.	Mr. S. Muthu Natarajan	Assistant Professor / MECH

MINUTS OF MEETING

THE MEETING IS CALLED FOR CONSIDERING THE R2020 UG PROGRAMME, B.E. – MECH CURRICULUM & SYLLABI (VII SEMESTER & VIII SEMESTER), R2021 UG PROGRAMME, B.E. – MECH CURRICULUM & SYLLABI (IV SEMESTER) & R2021 UG PROGRAMME, B.E. – MECH PROPOSED CURRICULUM (V SEMESTER, VI SEMESTER, VII SEMESTER & VIII SEMESTER)

DISCUSSIONS:

BOS 005.01

HOD/Mech recorded his appreciation to the external experts for their suggestions and valuable inputs in framing the curriculum and syllabi. He expressed his special thanks to Dr. A. Valan Arasu, Anna University Nominee for his unanimous support in framing the Mechanical Engineering curriculum and syllabi of KCET. His tenure was completed now. He also welcomed the new Anna university nominee Dr. S. Supriya, Prof & Head, Government college of Engineering, Tirunelveli. He welcomed all the BoS members for the 5th Board of Studies meeting

BOS 005.02

Hod/Mech introduced the new BoS members Dr,S. Supriya (Anna University Nominee) and Er. K. Vijaya Bharathi (Representing Alumni) to the 5th BoS members.

BOS 005.03

Dr. S. Thanga Kasi Rajan presented the highlights of the proposed new Regulation R2021:

- The highlights of the new proposed Regulation KCET R2021 is presented to the BoS members.
- The student can earn credits through value added courses / Internship under Employability Enhancement Course (EM) category however the total credits earned are marked as Over and Above credits.
- Similar to the new amendment of AU R 2017, In R2021, the students are given to carry forward their secured internal mark for one arrear attempt only. From second arrear attempt onwards, their internal marks are nullified and the student should get pass by securing 50 % from the end semester examination.
- The internal marks of the students will be calculated as per the continuous assessment pattern policy framed by the institute.
- Relative grading system will be followed in regulation R2021.
- Discussed the introduction of dual degree "Minor" degree and "Honours" degree.
- Informed that professional electives are offered as verticals

- Discussed about the First year common courses, second year fundamental courses, third year comprise of professional elective and open electives and final year consist of open electives and project work

- The student can do online course optionally. On successful completion, he/she can skip one professional elective courses

- Informed that two week industry internship is mandatory for students.

BOS 005.04

Dr. S. Thanga Kasi Rajan gave a brief presentation for the approval of 4th BOS minutes held on March 19, 2022 and action taken report

- Dr.S.Thanga Kasi Rajan gave a brief presentation about the action taken on the 4th BoS meeting.

- **As per the BoS members suggestions, Modifications are proposed in Regulation 2021.**

  Total Credits: 165 to 170, Professional Electives are offered as Verticals.
  Honours and Minor degree are introduced in the Regulation R2021.
  Mandatory Summer Internship is introduced. Relative grading System is followed.

- As per the Expert Suggestion, Courses in Professional Elective I & II are grouped into Design, Manufacturing and Thermal stream.

- In Metrology and Measurement Techniques subject, modified the experiment name as Measurement of surface roughness using Surface roughness tester instead of that Measurement of surface roughness using talysurf instrument. In Computer Integrated Manufacturing subject Robots and automation topic included in Unit V. For open elective the subject renamed as Thermal Engineering instead of that Refrigeration and Power generation in Mechanical Engineering. For Non-Destructive Testing subject the action verb for course outcome was modified. Theory of Bonded joints, Crank shaft and connecting rod topics are not removed in Design of Machine Elements. In Design of Transmission Systems subject, the unit V title changed as Design of Electrical motors, instead of that Selection of Electrical Motors. In Dynamics of Machines subject, types and characteristics of governors topic included. In Computer Aided Design subject the introduction to cloud based CAD topic modified. In Refrigeration and Air Conditioning subject the action verb for course outcome 2&4 modified.

PROFESSIONAL ELECTIVE

SEMESTER VII, ELECTIVE III

SL.NO.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
1	ME 1731	New Product Development	PE	3	3	0	0	3
2	ME1732	Concepts of Engineering Design	PE	3	3	0	0	3
3	ME1733	Solar Energy Technology	PE	3	3	0	0	3
4	ME1734	Mechatronics and IoT	PE	3	3	0	0	3
5	ME1735	Waste management and energy recovery	PE	3	3	0	0	3

SEMESTER VII, ELECTIVE IV

SL.NO.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
1	ME1736	Supply Chain Management	PE	3	3	0	0	3
2	ME1737	Composite Materials	PE	3	3	0	0	3
3	ME1738	Power Plant Engineering	PE	3	3	0	0	3
4	ME1739	Process Planning and Cost Estimation	PE	3	3	0	0	3
5	ME1740	Precision Manufacturing	PE	3	3	0	0	3

SEMESTER VII, ELECTIVE V

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
1	ME1741	Entrepreneurship Development	PE	3	3	0	0	3
2	ME1742	Lean Manufacturing	PE	3	3	0	0	3
3	ME1743	Maintenance Engineering	PE	3	3	0	0	3
4	ME1744	Introduction to Industry 4.0	PE	3	3	0	0	3
5	GE1773	Total Quality Management	PE	3	3	0	0	3

- All Other corrections suggested by the members are carried out in the curriculum and syllabus of R2020.
- All the suggestions are meticulously worked out
- The members of the BoS resolved and approved the same.

BOS 005.05

Dr. S. Thanga Kasi Rajan presented the proposed R2020 UG IV year Curriculum & Syllabi of B.E – Mechanical Engineering programme.

SEMESTER VII

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
THEORY								
1	ME 1701	Principles of Industrial Engineering	PC	3	3	0	0	3
2	ME 1702	Robotics	PC	3	3	0	0	3
3		Open Elective – II	OE	3	3	0	0	3
4		Professional Elective – III	PE	3	3	0	0	3
5		Professional Elective – IV	PE	3	3	0	0	3
6		Professional Elective – V	PE	3	3	0	0	3
7		Online Course – 2**	OL	0	0	0	0	3*
PRACTICAL								
8	ME 1721	Automation & IOT Laboratory	PC	4	0	0	4	2
9	ME 1711	Technical Seminar	EEC	2	0	0	2	1
TOTAL				**24**	**18**	**0**	**6**	**24***

****The students shall complete the online course in this semester and credits would be added in consolidated mark sheet.**

SEMESTER VIII

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
PRACTICAL								
1	ME1821	Project Work	EEC	20	0	0	20	10
2		Online course – 2**						
TOTAL				**20**	**0**	**0**	**20**	**10**

****The students shall complete the online course in this semester and credits would be added in consolidated mark sheet.**

Discussion and approval of

i. Common courses in Final year if any (R2020)

ii. Open Elective papers (to be offered to other departments) R2020

Common Courses offered

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
1	ME1737	Composite Materials	PE	3	3	0	0	3
2	ME1743	Maintenance Engineering	PE	3	3	0	0	3
3	GE1773	Total Quality Management	PE	3	3	0	0	3

Open Elective – II

SL. NO.	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
1	OME761	3-D Printing and Design	OE	3	3	0	0	3
2	OME762	Selection of Materials	OE	3	3	0	0	3
3	OME763	Testing of Materials	OE	3	3	0	0	3
4	OME764	Industrial Safety	OE	3	3	0	0	3

Dr.S.Thanga Kasi Rajan/ Domain Expert of Manufacturing Stream presented the following subjects:

- Lean Manufacturing
- Composite Materials
- Process Planning and Cost Estimation
- Precision Manufacturing
- Maintenance Engineering

Suggestions given by BoS expert members for Manufacturing stream subjects:

- Dr.V.Anandakrishnan suggested to give the equal weightage for all units in terms of hour allocation and also CO4 to be modified for the subject Lean Manufacturing.

- Dr.V.Anandakrishnan insisted to change the Unit IV title as Testing of Composite Materials instead of that Testing of Polymer Composite Materials for the subject Composite Materials.
- Dr. S.C. Vettivel insisted to add the microwave assisted topic in Unit II for the subject Composite Materials.
- Dr.A.Anandakrishnan suggested to remove the word selection from Unit I for the subject Process planning and Cost estimation.
- Dr. S.C. Vettivel insisted to change the Unit I title as Process planning methods instead of that Process planning methods and its activities for the subject Process planning and Cost estimation.
- Er.K.Vijayabharathi insisted to add the process modelling in lab exercises.

Dr.B.Balavairavan / Domain Expert of Design Stream presented the following subjects:

- Automation and IoT lab
- Robotics
- Concepts of Engineering design
- Mechatronics and IoT
- Product design and value Engineering

Suggestions given by BoS expert members for Design stream subjects:

- Dr.A.Anandakrishnan suggested to rearrange the lab exercises and also one of the lab exercise name to be modified as Energy meter monitoring instead of that Energy meter monitoring for theft detection for the subject Automation and IoT lab.
- Er.K.Vijayabharathi insisted to include the SCADA study exercise in Automation and IoT lab.
- Dr.A.Anandakrishnan suggested that Machine vision for robots topic to be included in Unit IV for the subject Robotics.
- Dr.A.Anandakrishnan insisted to follow the new edition textbook for the subject Concepts of Engineering Design.
- Dr.A.Anandakrishnan insisted to modify the Unit V title as Development of IoT Solutions instead of that Introduction to IoT and Development with Arduino, Raspberry PI for the subject Mechatronics and IoT.
- Dr.A.Anandakrishnan suggested to reframe the contents of Unit V for the subject Mechatronics and IoT.

Dr.B.Prabhu / Domain Expert of Thermal Stream presented the following subjects:

- Solar energy technology
- Waste Management and Energy Recovery
- Powerplant Engineering
- Technical Seminar

Suggestions given by BoS expert members for Thermal stream subjects:

- Er.K.Vijayabharathi insisted to include the ISO standard topics in Waste Management and Energy Recovery subject.
- Er.K.Vijayabharathi suggested that, CO2 to be modified for the subject Power Plant Engineering.
- Dr.A.Anandakrishnan suggested that, in CO1 the word interpret to be modified as Demonstrate for the subject Technical Seminar.

Dr.S.Thanga Kasi Rajan/ Domain Expert of Manufacturing Stream presented the following Industrial Engineering subjects:

- Entrepreneurship Development
- Total Quality Management
- Supply Chain Management
- Testing of Materials

Mr.R.Sakthivel Murugan/AP/Mech presented the following Industrial Engineering subjects

- Introduction to Industry 4.O
- 3D Printing and Design

Mr.D.Palanikumar/AP/Mech presented the following Industrial Engineering subject

- Industrial Safety

Suggestions given by BoS expert members for Industrial Engineering subjects:

- Dr.A.Anandakrishnan and Er.Vijayabharathi suggested that, the topic startup to be in included in Unit V for the subject Entrepreneurship Development.
- All BoS experts are suggested that, objectives should be written in bulletin format for the subjects Entrepreneurship Development.
- Dr.A.Anandakrishnan suggested to modify the topic as Performance measures for various organizations instead of that performance measures Washington accord and Blooms taxonomy for the subject Total Quality Management.
- Er.K.Vijayabharathi insisted to modify the word as authorities instead of that agencies for the subject Total Quality Management.
- Er.K.Vijayabharathi suggested to modify the topics as Supply chain models and Stakeholder Management in Unit V instead of that Customer Relationship Management for the subject Supply Chain Management.
- Dr.A.Anandakrishnan suggested to modify the Unit V title as Case Studies instead of that Advances in Robotics in the Era of Industry 4.O for the subject Introduction to Industry 4.O
- Dr.A.Anandakrishnan insisted that, CO4 and Objective 3 to be modified for the subject 3D Printing and Design.
- Dr.A.Anandakrishnan suggested to give the equal weightage for all units in terms of hour allocation and also to split the Unit II as Two separate units for the subject 3D Printing and Design.
- Dr.A.Anandakrishnan insisted that, Unit V contents to be rearranged for the subject 3D Printing and Design.

BOS 005.06

Dr. S. Thanga Kasi Rajan explained the Introduction in about the R2021 Honours and Minor degree in R2021

Honours Degree	Minor Degree
The student should select 6 courses Offered in Parent department verticals and earn 18 credits	The student should select 6 courses Offered from other department verticals offered for minor degree or institute level courses offered as minor degree and earn 18 credits

Eligibility: upto 4th Semester, the CGPA >7.5 with out any backlog	Eligibility: upto 4th Semester, the CGPA >7.5 with out any backlog
Offered from 5th semester onwards	Offered from 5th semester onwards
The student may or may not select the course from same verticals	The student should undergo 6 courses from same verticals offered as minor either from institute level common minor verticals or other department minor verticals.

BOS 005.07

Dr. S. Thanga Kasi Rajan presented the R2021 UG II year (IV Semester Curriculum & Syllabi), III year (V Semester & VI Semester Curriculum) & IV year (VII Semester & VIII Semester Curriculum) of B.E – Mechanical Engineering programme.

SEMESTER IV

Sl. No.	AU R2021						Proposed KCET R2021						
	Course Name	L	T	P	C	hr	Course Name	Stream	L	T	P	C	Hr
1	Theory of Machines	3	0	0	3	3	Theory of Machines	Design	3	1	0	4	4
2	Thermal Engineering	4	0	0	4	4	Thermal Engineering	Thermal	3	0	0	3	3
3	Hydraulics and Pneumatics	3	0	0	3	3	Strength of Materials	Design	3	0	0	3	3
4	Manufacturing Technology	3	0	0	3	3	Manufacturing Technology – II	Mfg.Engg	3	0	0	3	3
5	Strength of Materials	3	0	0	3	3	Engineering Materials and Metallurgy	Mfg.Engg	3	0	0	3	3
6	Environmental Sciences and Sustainability	2	0	0	2	2	Probability Statistics and Numerical methods	-	3	1	0	4	4
7	NCC Credit Course Level 2	3	0	0	3	3	Scientific Thoughts in Tamil *	-	1	0	0	0	1*
							Aptitude	-	1	0	0	1	1
Practical													

1	Strength of Materials and Fluid Machinery Laboratory	0	0	4	2	4	Manufacturing Technology Laboratory	Mfg. Engg	0	0	3	1	3
2	Thermal Engineering Laboratory	0	0	4	2	4	Fluid Mechanics and Strength of Materials Laboratory	Thermal	0	0	3	1	3
3							Theory of Machines Laboratory	Design	0	0	3	1	3
	Total	**18**	**0**	**8**	**22**	**26**			**20**	**1**	**9**	**24**	**31**

*Scientific Thoughts in Tamil included 4th semester only for students those who admitted in 2021.

SEMESTER V

Sl. No.	AU R2021						Proposed KCET R2021						
	Course Name	**L**	**T**	**P**	**C**	**hr**	**Course Name**	**Stream**	**L**	**T**	**P**	**C**	**Hr**
1	Design of Machine Elements	4	0	0	4	4	Design of Machine Elements	Design	3	1	0	4	4
2	Metrology and Measurement	3	0	0	3	3	Metrology and Measurement	Mfg. Engg	3	0	0	3	3
3	Professional Elective I	-	-	-	3	-	Professional Elective I	-	3	0	0	3	3
4	Professional Elective II	-	-	-	3	-	Professional Elective II	-	3	0	0	3	3
5	Professional Elective III	-	-	-	3	-	Professional Elective III	-	3	0	0	3	3
6	Mandatory Course-I	3	0	0	0	3	Mandatory Course-II*	-	3	0	0	0	3*
Practical													
1	Summer Internship*	0	0	0	1	0	Summer Internship	-	0	0	0	1	-
2	Metrology and Dynamics Laboratory	0	0	4	2	4	Metrology Laboratory	Mfg. Engg	0	0	3	1	3
							IC Engine and Steam Laboratory	Thermal	0	0	3	1	3
							CAD Laboratory	Design	0	0	3	1	3
	Total				**19**				**18**	**1**	**9**	**20**	**28***

SEMESTER VI

Sl. No.	AU R2021						Proposed KCET R2021						
	Course Name	L	T	P	C	hr	Course Name	Stream	L	T	P	C	hr
1	Heat and Mass Transfer	3	1	0	4	4	Heat and Mass Transfer	Thermal	3	1	0	4	4
2	Professional Elective IV				3		Professional Elective IV	-	3	0	0	3	3
3	Professional Elective V				3		Professional Elective V	-	3	0	0	3	3
4	Professional Elective VI				3		Professional Elective VI	-	3	0	0	3	3
5	Professional Elective VII				3		Professional Elective VII	-	3	0	0	3	3
6	Open Elective – I*	3	0	0	3	3	Open Elective -1	-	3	0	0	3	3
7	Mandatory Course-II	3	0	0	0	3							
	NCC Credit Couse Level 3	3	0	0	3	3							
Practical													
1	CAD/CAM Laboratory	0	0	4	2	4	3D Printing and CAD Laboratory	Design	0	0	3	1	3
2	Heat Transfer Laboratory	0	0	4	2	4	Heat Transfer Laboratory	Thermal	0	0	3	1	3
							Fluid power Laboratory	Mfg. Engg	0	0	3	1	3
							Advanced Reading and writing		0	0	2	1	2
	Total				**23**		**Total**		**18**	**1**	**11**	**23**	**30**

SEMESTER VII

Sl. No.	AU R2021						Proposed KCET R2021					
	Course Name	L	T	P	C	hr	Course Name	L	T	P	C	Hr
1	Mechatronics and IoT	3	0	0	3	3	Mechatronics and IoT	3	0	0	3	3
2	Computer Integrated Manufacturing	3	0	0	3	3	Computer Integrated Manufacturing	3	0	0	3	3
3	Human Values and Ethics	2	0	0	2	2	Management Studies *	3	0	0	3	3
4	Industrial Management	3	0	0	3	3	Human values and professional ethics	2	0	0	2	2
5	Open Elective – II**	3	0	0	3	3	Open Elective 2	3	0	0	3	3
6	Open Elective – III***	3	0	0	3	3	Open Elective – 3	3	0	0	3	3
7	Open Elective – IV***	3	0	0	3	3	Open Elective - 4	3	0	0	3	3
Practical												
1	Mechatronics and IoT Laboratory	0	0	4	2	4	Summer internship/Mini project	0	0	0	1	3*
2	Summer Internship#	0	0	0	1	0	Mechatronics and IoT Laboratory	0	0	4	2	4
	Total	**20**	**0**	**4**	**23**	**24**		**20**	**0**	**4**	**23**	**24**

***Management studies course common paper for all department offered by Institution. The students can do mini project instead of summer internship and special permission must be obtained.**

SEMESTER VIII

Sl. No.	AU R2021						Proposed KCET R2021					
	Course Name	L	T	P	C	hr	Course Name	L	T	P	C	Hr
1	Project work / Internship	0	0	20	10	20	Project work/ Internship	0	0	20	10	20

BOS 005.08

Dr. S. Thanga Kasi Rajan explained about the Vertical of R2021

Sl. No.	AU R2021	PROPOSED KCET R2021
	Verticals name given	**Verticals name proposed**
1	Modern mobility systems	Modern mobility with green energy
2	Product and process development	Product and process development
3	Robotics and automation	Robotics and automation
4	Digital and green manufacturing	Digital and green manufacturing
5	Process equipment and piping design	Materials and manufacturing
6	Clean and green energy technologies	Quality control and supply chain management
7	Computational Engineering	Computer applications in mechanical Engg
8	Logistics and supply chain management	Diversified courses -1
9	Diversified courses group 1	
10	Diversified courses group 2	
11	Diversified courses group 3	

	Vertical 1	
Sl. No.	**AU R2021**	**Proposed KCET R2021**
	MODERN MOBILITY SYSTEMS	**MODERN MOBILITY WITH GREEN ENERGY**
1	Automotive Materials, Components, Design & Testing	Automotive materials, components, Design and testing
2	Conventional and Futuristic Vehicle Technology	Conventional and Electric vehicles
3	Renewable Powered Off Highway Vehicles and Emission Control Technology	Renewable Energy Technologies
4	Vehicle Health Monitoring, Maintenance and Safety	Vehicle Health Monitoring, Maintenance and Safety
5	CAE and CFD Approach in Future Mobility	Energy Conservation in Industries

6	Hybrid and Electric Technology	Energy storage Devices
7	Thermal Management of Batteries and Fuel Cells	Waste management and conversion technologies

	Vertical 2 (Minor)	
Sl. No.	AU R2021	Proposed KCET R2021
	PRODUCT AND PROCESS DEVELOPMENT	PRODUCT AND PROCESS DEVELOPMENT
1	Value Engineering	Value Engineering
2	Additive Manufacturing	Process Planning
3	CAD/CAM	Computer Aided Design
4	Design For X	Design For X
5	Ergonomics in Design	Ergonomics in Workplace Analysis
6	New Product Development	New Product Development
7	Product Life Cycle Management	Product Life Cycle Management

	Vertical 3	
Sl. No.	AU R2021	Proposed KCET R2021
	ROBOTICS AND AUTOMATION	ROBOTICS AND AUTOMATION
1	Sensors and Instrumentation	Design of Fluid Power Circuits
2	Electrical Drives and Actuators	Mechanical Drives and Actuators
3	Embedded Systems and Programming	Mechanics and control of Robotic manipulators
4	Robotics	Industrial Automation and control
5	Smart Mobility and Intelligent Vehicle	Applied Robotics and operating systems
6	Haptics and Immersive Technologies	Computer Aided Inspection and testing
7	Drone Technologies	Robotics in Smart Manufacturing

Sl. No.	Vertical 3* (Common vertical for MTR and Mech)	
	Proposed KCET R2021	**Proposed KCET R2021**
	ROBOTICS	**AUTOMATION**
1	Robotics in Smart Manufacturing	Computer Aided Inspection and Testing
2	Welding Robotics	Design of Fluid power circuits for automation.
3	Micro Robotics	Digital Twin and Industry 5.0
4	Agricultural and medical Robotics	Virtual Instrumentation
5	Collaborative Robotics	Industrial Automation and Control
6	Robot operating Systems	Total Integrated Automation
7	Drone Technologies	Industry 4.0

Sl. No.	Vertical 4	
	AU R2021	**Proposed KCET R2021**
	DIGITAL ANDGREENMANUFACTURING	**DIGITAL AND GREEN MANUFACTURING**
1	Digital Manufacturing and IoT	Digital Manufacturing and IoT
2	Lean Manufacturing	Lean Manufacturing
3	Modern Robotics	CNC Machine tool and Programming
4	Green Manufacturing Design and Practices	Green Manufacturing Design and Practices
5	Environment Sustainability and Impact Assessment	Sustainable Manufacturing and Technologies
6	Energy Saving Machinery and Components	Rapid Prototyping and tooling
7	Green Supply Chain Management	Micro Manufacturing

Sl. No.	Vertical 5 (Minor)	
	AU R2021	Proposed KCET R2021
	PROCESS EQUIPMENT AND PIPING DESIGN	MATERIALS AND MANUFACTURING
1	Design of Pressure Vessels	Advanced Manufacturing Processes
2	Failure Analysis and NDT Technique	Processing of Composite Materials
3	Material Handling and solid processing Equipment	Nondestructive Testing and Evaluation
4	Rotating Machinery Design	Selection of Materials
5	Thermal and Fired Equipment design	Materials Testing and characterization
6	Industrial Layout Design and Safety	Materials Management
7	Design Codes and Standards	Nanotechnology for Mechanical Engineers

Sl. No.	Vertical 6 (Minor)	
	AU R2021	Proposed KCET R2021
	LOGISTICS AND SUPPLY CHAIN MANAGEMENT	QUALITY CONTROL AND SUPPLY CHAIN MANAGMENT
1	Automation in Manufacturing	Statistical Quality Control
2	Warehousing Automation	Warehousing Automation
3	Material Handling Equipment, Repair and Maintenance	Six Sigma
4	Robotics	Reliability Engineering
5	Container Logistics	Precision Technology
6	Logistics in Manufacturing, Supply Chain and Distribution	Logistics in Manufacturing, Supply Chain and Distribution
7	Data Science	Innovation by Design

	Vertical 7	
Sl. No.	AU R2021	Proposed KCET R2021
	COMPUTATIONAL ENGINEERING	COMPUTATIONAL ENGINEERING
1	Computational Solid Mechanic	Artificial Intelligence for manufacturing
2	Computational Fluid Dynamics and Heat transfer	Computational Solid Mechanics
3	Theory on Computation and Visualization	Theory on Computation and Visualization
4	Computational Bio-Mechanics	Computer Aided Engineering
5	Advanced Statistics and Data Analytic	Advanced Statistics and Data Analytics
6	CAD and CAE	IoT and Industry 4.0
7	Machine Learning for Intelligent Systems	Machine Learning for Intelligent Systems

	Vertical 8 (Diversified courses -1)
Sl. No.	Proposed KCET R2021
	Diversified
1	Automobile Engineering
2	Powerplant Engineering
3	Non-traditional Machining Processes
4	Design of Transmission System
5	Refrigeration and Air Conditioning
6	Maintenance Engineering
7	Welding Technology
8	Finite Element Analysis

Finally, Dr.A.Anandakrishnan suggested to frame list of subjects, then we can fix the title for the verticals. Special Appreciation to all the faculty members for their good initiatives.

OPEN ELECTIVE I AND II (EMERGING TECHNOLOGIES)
offered for our Mechanical Students

SL. NO.	COURSE CODE	COURSE TITLE	CATE GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
1	OCS351	Artificial Intelligence and Machine Learning Fundamentals	OEC	2	0	2	4	3
2	OCS352	IoT Concepts and Applications	OEC	2	0	2	4	3
3	OCS353	Data Science Fundamentals	OEC	2	0	2	4	3
4	OCS354	Augmented and Virtual Reality	OEC	2	0	2	4	3

OPEN ELECTIVES – III&IV

SL. NO.	COURSE CODE	COURSE TITLE	CATE GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
1.		New Product Development	OEC	3	0	0	3	3
2.		Thermal Engineering	OEC	3	0	0	3	3
3.		World Class Manufacturing	OEC	3	0	0	3	3

OPEN ELECTIVES – III & IV

SL. NO.	COURSE CODE	COURSE TITLE	CATE GORY	PERIODS PER WEEK			TOTAL CONTACT PERIODS	CREDITS
				L	T	P		
1.		3-D Printing and Design	OEC	3	0	0	3	3
2.		Selection of Materials	OEC	3	0	0	3	3
3.		Testing of Materials	OEC	3	0	0	3	3
4.		Additive Manufacturing	OEC	3	0	0	3	3

BOS 005.09

Dr. B.Balavairavan informed that, Mr.K.Vijayabharathi, Technical lead, Infosys one of the Program Assessment Committee member (external stake holder) representing the KCET Alumni, suggested to include IoT, Industry 4.0, Current technologies used in industry, Artificial Intelligence and emerging technologies. Dr. B.Balavairavan resolved to implement the same in R2021 curriculum.

BOS 005.010

The meeting ended with the Vote of Thanks by Dr. P.Narayanasamy, Associate Professor, Department of Mechanical Engineering, Kamaraj College of Engineering and Technology, Virudhunagar.

BoS coordinator

(Dr.B.Balavairavan)

UG coordinator

(Dr.S.Thanga Kasi Rajan)

(Dr.S.S.Saravanakumar)

BoS Chairman

HOD/MECH

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).

DEPARTMENT OF MECHATRONICS ENGINEERING

Minutes of Meeting – BoS–17th September, 2022

DATE: 17th September, 2022, Saturday **Time:** 2:00PM to 4:00 PM

PLATFORM: Hybrid Mode (Physical /Microsoft Teams)

Meeting Link:

https://teams.microsoft.com/l/meetup-join/19%3ameeting_NDI4ZGYyYzUtYjMyZi00ZGViLWI2NzQtYjY5OTg3MDZjMDI0%40thread.v2/0?context=%7b%22Tid%22%3a%222666d919-f1fc-4027-b9c5-212d4e95e68a%22%2c%22Oid%22%3a%22b241d041-89f6-428e-aedc-2492bcdaee29%22%7d

IN ATTENDANCE:

S.No	Name of the Expert	Designation	Capacity	Mode Of Attending
1.	Dr.S.Supriya,	Professor& Head, Department of Mechanical Engineering, Government College of Engineering, Tirunelveli. supriya@gcetly.ac.in Ph.No:9366766668	AU Nominee	Offline
2.	Dr. T. Asokan	Professor & Head, Department of Engineering Design, Indian Institute of Technology Madras, Chennai – 600036 asok@iitm.ac.in Ph: 22574707	Academic Council nominated BoS Members	Online

3.	Dr. N. Selvaraj	Professor, Department of Mechanical Engineering, National Institute of Technology Warangal, Telangana-506004 selva@nitw.ac.in Ph:9989231847		Online
4.	Dr. D. Kannadassan	Associate Professor, Center for Nanotechnology Research, Vellore Institute of Technology, Vellore-600 014 dkannadasan@vit.ac.in Ph:91-9944055243	Alumni Member	Offline
5.	Dr. N. Manivannan	Managing Director, Techland Automation, 196 Dindigul main road, Tiruchirappalli – 620001. info@techland.in Ph:9994304608	Industrialist	Offline

FACULTY OF MECHATRONICS ENGINEERING	MEMBERS

S.No	Name of the Faculty	Designation
1	Dr. K. Kannan	Professor
2	Dr.S.Rajeshbabu	Assistant Professor
3	Dr. G. Sakthivel	Assistant Professor
4	Mr. A. Arul Kumar	Assistant Professor
5	Mr. P. Balasundar	Assistant Professor
6	Mr. S.DavidBlessley	Assistant Professor
7	Mr. S.Wesley Moses Samdoss	Assistant Professor
8	Mr. A. Ganesan	Assistant Professor

1. Meeting was organized in Hybrid mode – (Offline & Microsoft Teams platform) at 2.00pm.
2. Dr.K.Kannan, Professor & HoD/MTRE gave welcome address to all the members of the Board of Studies.

Discussions:

BOS 005.01

Dr. K. Kannan disseminated the Vision, Mission, and PEOs& PSOs of the Department.

Vision of the Department	Mission of the Department
To make the Department of Mechatronics Engineering the unique of its kind in the field of Research and Development towards Industrial Automation & Robotics.	To impart highly innovative and technical knowledge in Mechatronics Engineering to the urban and unreachable rural student folks through "Total Quality Education"

Program Educational Objectives (PEOs)

PEO1: Graduates will be able to apply their multi-disciplinary knowledge to formulate, design, develop and analyse Mechatronics Systems.

PEO2: Graduates will be able to come up with solution for any real time problems in the field of Mechatronics Engineering and allied areas demanded by the Industry and Society.

PEO3: Graduates will be able to get familiarized with economical issues in Mechatronics Engineering and work in multi-disciplinary teams with ethical code of conduct.

Program Specific Objectives (PSOs)

PSO1: Graduates will be able to apply their knowledge in sensors, drives, actuators, controls, mechanical design and modern software & hardware tools to design and develop cost effective Mechatronics systems.

PSO2: Graduates will be able to become Technocrats and Entrepreneurs, build the attitude of developing new concepts on emerging fields and pursuing higher studies.

BOS 005.02

Dr. K. Kannan gave a brief presentation for the Approval of the Minutes of the IV BoS held at 19th March 2022.

All the members jointly approved the Minutes of the Fourth Board of Studies meeting.

BOS 005.03

Dr. K. Kannan presented the R2020 - IV Year curriculum and syllabus for discussion and approval.

The following suggestions were given by the BOS Members:

- Dr.N.Selvaraj, gave suggestions in the Subject Computer Aided Design and Manufacturing Unit-IV the Computer Aided Part Programming need to be changed as Computer Aided Part Programming Language. In Unit V Cellular Manufacturing and Flexible Manufacturing Systems syllabus is huge. So he asked to highlight only fundamentals. Group Technology (Computer Aided Process Planning) topic can be removed from the syllabus.
- Dr. T. Asokan & Dr.N.Selvaraj suggested to use the Software Packages which are most commonly used in industries such as CATIA which is useful to the students.
- Dr. T. Asokan discussed about the syllabus of Robotics and Machine Vision System Lab. He suggested Position of Links experiment is inappropriate so it can be renamed. Also he clarified about the availability of robotics trainer kit.
- In Project work all the BoS members clarified about the mandate to publish their work in conferences.
- In the subject Mobile and Autonomous Robots members Dr.T.Asokan & Dr.N.Manivannan suggested to add little bit topics which are covering the Autonomous Robots.
- In Professional Elective-IV the member Dr.N.Selvaraj suggested the recent reference and text books for the subject Synthesis and Characterization of Nano Materials. Members Suggested to the contact hours for Unit –II and III may change based on the weightage.
- Dr.N.Selvaraj suggested the recent reference and text books for the subject principles of management.
- Dr.N.Selvaraj suggested the "Value Education for Engineers" book may include as reference book for the subject Professional Ethics and Human Values.

- Dr.N.Manivannan suggested to include ESP8266 USB Drivers in the subject Internet of Things for Mechatronics Engineering.
- Dr.N.Selvaraj suggested to introduce the Industrial Internet of Things in Unit-I.

BOS 005.04

Dr. K. Kannan presented the details of Value Added Course Conducted for III Year Mechatronics Engineering students.

The members advised the three members committee to choose the Value added courses as per current trends and skills requirement for core industries.

BOS 005.05

Dr. K. Kannan presented the NPTEL Courses for Odd & Even Semester and seeking recommendation from BoS members and the progress of Odd Semester Course undergone.

Dr.T.Asokan clarified about the faculty mentors for NPTEL Courses.

BOS 005.06

Dr. K. Kannan presented the modified Curriculum Framework R2021 as per AU revised R2021 Curriculum and incorporated the National Education Policy to members and seeking their approval.

Audit Courses:

All the BoS Members jointly approved the Audit Course Scientific Thoughts in tamil offered in R2021 Curriculum. However all the members suggested to offer this course during the IV Semester for the students those who are admitted in 2021-2025 Batch.

All the BoS Members discussed about the credits to the Audit Course.

Dr.S.Supriya, Anna University Nominee clarified Audit Course Credits will not calculated in CGPA Calculation.

Dr. K. Kannan highlighted the modification in Curriculum Framework R2021. All the BoS Members discussed in detail about the Multiple Entry Multiple Exit Scheme, Honours Degree, Minors Degree.

All the Members discussed in detail about the Internship / MiniProjects.

Dr.K.Kannan clarified about the evaluation procedures for the Internship/Mini Projects.

Dr.T.Asokan asked about the in-house or industrial projects.

Dr.K.Kannan clarified as Mini Projects are in house project, Project Work is in industries.

All the BoS members discussed in detail about the interchange of Courses during their VII & VIII Semester.

All the BoS Members suggested if all the students opt to interchange the courses may interchange, and then only it is technically feasible to interchange.

Professional Elective Courses Verticals

- **Dr. K. Kannan** presented the List of Professional Elective Courses to be offered to the students.
- **Dr.T.Asokan asked** our faculty members to take more concentration in framing the syllabus to Professional Elective Course Verticals.
- Dr.N.Selvaraj suggested to look in previous curriculum and if any important courses missed out means asked to include in that in R2021.
- All the BoS Members discussed in detail about the different verticals and the role of verticals in awarding the honours degree/minor degree.
- All the BoS Members suggested relooking at the verticals framed and looking at the different possibilities of students entering in to this minor degree program.
- All the BoS Members asked our Faculty Members to look in to the what are the essential skills (including fundamentals) required to give minor degree and frame the syllabus accordingly. All the Members suggested it's our responsibility to implement government policies in Education system.
- Dr.T.Asokan ensured the subjects Mechanics, Computer Aided Design in the Curriculum since it is essential to mechatronics students.
- In Semester –IV, Dr.T.Asokan clarified about the Engineering Aptitude or Quantitative Aptitude, he recommended to include that in curriculum.
- Dr.N.Selvaraj enquired about the CAD/CAM Theory Core Course, So all the BoS members suggested to include that subject in theory.
- Dr.T.Asokan enquired about the limitation or any other constraints on number of lab courses in each semester. Since in sixth semester four lab courses included in the curriculum.

Open Electives:

- **Dr. K. Kannan** presented the List of Open Elective Courses to be offered to our students.
- **Dr. K. Kannan** presented the List of Open Elective Courses to be offered by our department to other students.

Dr.T.Asokan Suggested renaming the subject Digital Electronics and Microprocessor as Digital Electronics and Microprocessors for clarity.

All the BoS Members jointly approved the proposed R2021 Curriculum & framed IVth Semester Syllabus.

BOS 005.07

The BoS Coordinator Mr.A.Arulkumar AP/MTRE Proposed the vote of thanks.

BoS Coordinator

UG Coordinator

(Dr.K.Kannan)
BoS Chairman
HoD/MTRE

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DEPARTMENT OF CIVIL ENGINEERING

MINUTES OF THE MEETING OF FOURTH BOARD OF STUDIES MEETING HELD ON 24-09-2022 AT 11:00 AM IN PHYSICAL AND ONLINE MODE TOWARDS CONSIDERING THE PROPOSED R2021 UG PROGRAMME, B.E. - CIVIL ENGINEERING CURRICULUM & SYLLABI (R 2020 VII SEMESTER AND VIII SEMESTER), PG RELATED AMENDMENTS AND DISCUSSIONS IN THE DEPARTMENT OF CIVIL ENGINEERING.

Platform: Microsoft Teams

Meeting Link: https://tinyurl.com/2ajaedwh

Dr. R. Lakshmi / Head of the Department - (Department of Civil Engineering) welcomed all the members of the Board of Studies and Faculty members of Civil Engineering department to the fifth BOS meeting.

The following members were present:

S.No	Name of the Expert	Designation	Capacity
1	Dr. S.Arulmary	Professor Department of Civil Engineering Thiagarajar College of Engineering Madurai	Anna University Nominee
2	Dr.S.Jayalekshmi	Professor Department of Civil Engineering NIT Trichy	Expert member Nominated by Academic council

3	Dr.G.Janarthanan	Associate Professor Center for Environmental Management NITTTR CSIR Road Chennai	Expert member Nominated by Academic council
4	Er.L.Balaji	International Professional Engineer & Registered Valuer	Industrialist Nominee
5	Er.J.Jeyapraveen	JPJ Constructions, Madurai	Alumni Nominee

Internal Members of BoS – CIVIL Department		
S.No	**Name**	**Designation**
1.	Dr.R.Lakshmi	Professor and Head / CIVIL, Chairman of BoS – CIVIL
2.	Dr. S.P.Murali Kannan	Assistant Professor / CIVIL Department BOS Co ordinator
3	Dr N.Jegan Durai	Assistant Professor / CIVIL Co ordinator – UG Courses
4.	Dr.P.Ganesh Prabhu	Assistant Professor / CIVIL
5.	Mr.P.Ponkarthikeyan (Ph.D.,)	Assistant Professor / CIVIL
6.	Mr.D.Velumani (Ph.D.,)	Assistant Professor / CIVIL
7.	Mr.M.Subahar (Ph.D.,)	Assistant Professor / CIVIL
8.	Ms.S.Brintha	Assistant Professor / CIVIL
9.	Mr.K.Hariharan	Assistant Professor / CIVIL
10.	Ms.B.S.Nivethitha	Assistant Professor / CIVIL

Dr.R.Lakshmi (Head of the Department) Department of Civil Engineering welcomed the gathering and gave a brief introduction about the Expert members, alumni and faculty members from the Department of Civil Engineering, and the programme agenda. Dr.S.P.Murali Kannan (Department BOS Co-ordinator) presented about the R2020 UG Programme curriculum and syllabi of 7th and 8th semester of Civil Engineering and Mr.N.Jegan Durai (Co-ordinator UG Courses) presented the R 2021 Curriculum

Discussions and Recommendations:

- HOD/CIVIL gave a brief presentation about the department and review of the Minutes of the Fourth BoS meeting. Recommendations of the committee and relevant implications were presented to the committee. Fourth BoS recommendations were reviewed and accepted by the committee.

- Based on the feedback on curriculum from various stake holders, the adoption of specialized professional elective courses such as Building Information Modelling in Construction and Application of Data Science - AI/ML in Civil Engineering was discussed. Committee members emphasized about the fundamental training essential to take up these courses. The basic course on Artificial Intelligence as open elective during the sixth semester and Training on BIM Modelling as value added course was explained to the committee.

- R2020 UG Programme curriculum and syllabi of 7th and 8th semester of Civil Engineering was presented by Dr S P Muralikannan.

- Dr.N.Jegan Durai presented the R2021 UG Curriculum, B.E. - Civil Engineering for B.E. - CIVIL (4th to 8th semester) and syllabus of fourth semester B.E.Civil Engineering course.

Minutes of Meeting of Fifth BoS Meeting:

5th BOS minutes

Name	Comments
Dr. S. Arul Mary	• ArcGIS, QTO should be considered for Value Added courses to improve the employability in the present scenario. • Professional Elective courses shall include courses from Naan Mudhalvan scheme. Existing professional elective courses were discussed. Design and Construction of Steel Structures, Tall Structures should be added in the relevant verticals. • Renaming of the course Earth quake resistant structure as "Structural Dynamics and Seismic Resistant Structure". • Syllabus of the Structural Design and Detailing was discussed. Staad Pro software training and application in design project was explained. Recommended to include software like Abaqus (UG & PG courses) Ansys, Nastran , Simian (Software for Stability of Structures) for PG course • Students should be encouraged to participate in INSTAG project competition • Prefabricated structures to be included in the Structural Systems and Design verticals instead of Steel concrete composites.
Dr. S.Jayalekshmi Professor, Department of Civil Engineering NIT Trichy	• Soil dynamics to be included in the subject Soil Structure Interaction- in syllabus framing • Minor corrections in R2020 7th Semester syllabus was pointed out.
Er. J. Jeya Praveen JPJ Constructions Madurai	• Urban planning and Development & Smart cities – Courses and syllabus should be taken care about the similarities. • Emphasized that introduction about Main project during seventh semester was a good practice and gives scope for detailed experimental/analytical part of the project work.
Dr. G. Janardhanan Associate Professor, Center for	• Arc GIS, Q GIS software Training programme to be introduced in the corresponding professional elective

Environmental Management, NITTTR, CSIR Road, Chennai	• Arrangement of verticals in Environmental and Water Resources domain were compared.
Er. L. Balaji International Professional Engineer & Registered Valuer , Balaji &Associates, Madurai	• Recommended that Carbon rating to be included in Green building syllabus • Field visits to ELCOT IT parks regarding Urban planning and Development to be planned for final year Civil Engineering students. He also highlighted the Urban Planning in Gandhinagar, Gujarat. • Consultancy opportunities in the field of Advanced Surveying practices such As Total Station Surveying, DGPS Surveying and Resource person to conduct these trainings was discussed.

Date of next Meeting:

The tentative date for the Next BoS Meeting (CIVIL Board) is proposed during May 2023.

The meeting ended with the Vote of Thanks by Dr.R.Lakshmi, Head of the Department.

(Dr. R.Lakshmi)

BoS Chairman – HOD / CIVIL

Dr. S.P. Murali Kannna

BoS Co-ordinator

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).

MINUTES OF THE MEETING OF 5th BOARD OF STUDIES MEETING HELD ON 24-09-2022 AT - 11.00 AM TOWARDS CONSIDERING THE CURRICULUM R2021-UG AND SYLLABI (VII SEMESTER TO VIII SEMESTER) OF R2020-UG PROGRAMME & SECOND YEAR CURRICULUM AND SYLLABI (III SEMESTER TO IV SEMESTER) OF R2021.

Mode of Meeting: Hybrid Mode (both physical and online)

Venue: CSE Conference Hall – I

Recording Link:

https://kcetvnrorg-my.sharepoint.com/:v:/g/personal/anandhcse_kamarajengg_edu_in/EY_SZfhaq_hCmu9ZfEliikkB1jn5RslhtwAd2pBH6MoQ3A?e=8zorJ2

Dr. A. Meenakshi, HoD (Department of Computer Science and Engineering) welcomed all the members of the Board of Studies and Faculty members of CSE department to the 5th BOS meeting. The following members were present:

S. No.	Name of the Expert	Designation	Capacity
1.	Dr. P. Chitra	Professor & Head/Computer Applications and Computer Science and Business Systems,Thiagarajar College of Engineering, Madurai, pccse@tce.edu Phone No:9944976549	Anna University Nominee
2.	Dr.R.B.V.Subramaanyan	Professor and Head, Department of Computer Science and Engineering National Institute of Technology, Warangal E-mail ID: rbvs66@nitw.ac.in Phone No: 9491346969	Academic Council nominated BoS Expert Member
3.	Dr.Sabu M.Thambi	Professor, School of Computer Science & Engineering (SoCSE), Technocity Campus, Trivandrum-695317, Kerala	Academic Council

		State, India. E-mail ID: sabu.thampi@iiitmk.ac.in Phone No: 9447103005	Nominee
4.	Mr.G.S.Raman	Director, Training Division, Sri Moogambikai Infotech Solutions, Madurai raman.g@mookambikainfo.com ramansriranga@gmail.com Phone No: 8870324388	Industrialist
5.	Dr.R.Venkatesan	Assistant Professor, CSE, Karunya University, Coimbatore rlvenkei2000@karunya.edu Phone No: 98948 80563	Alumni

Internal Members of BoS – Faculty members of CSE and AI & DS		
S. No.	**Name**	**Designation**
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.Umamaheshwari	Assistant Professor / CSE
7.	Mrs.S.Athilakshmi	Assistant Professor / CSE
8.	Mr.B.Muthukrishnavinayagam	Assistant Professor / CSE
9.	Mrs.K.Muthulakshmi	Assistant Professor / CSE
10.	Ms.S.Janani	Assistant Professor / CSE
11.	Mrs.K.Leelarani	Assistant Professor / CSE
12.	Mr.M.Rajasekaran	Assistant Professor / CSE
13.	Ms.G.Vijayalalitha	Assistant Professor / CSE
14.	Mr.V.Rajesh Kannan	Assistant Professor / CSE
15.	Mrs.P.Kavitha	Assistant Professor / CSE
16.	Mrs.X.Ignatius Selvarani	Assistant Professor / CSE
17.	Mrs.V.Sangeetha	Assistant Professor / CSE

18.	Mrs.S.Hemaswathi	Assistant Professor / CSE
19.	Mrs.B.SanthiPriya	Assistant Professor / CSE
20.	Ms.S.Jothilakshmi	Assistant Professor / CSE
21.	Mr.S.Asir	Assistant Professor / CSE
22.	Mrs.S.Soundariya	Assistant Professor / CSE
23.	Dr.P.Praveen Kumar	Assistant Professor / AI & DS
24.	Ms.T.Rajashree	Assistant Professor / AI & DS
25.	Mrs.K.Indumathi	Assistant Professor / AI & DS
26.	Mrs.J.Lavanya	Assistant Professor / AI & DS
27.	Ms.S.Shopika	Assistant Professor / AI & DS

After the brief introduction by Dr.A.Meenakshi, HoD (Department of Computer Science and Engineering) about the expert members, industrialist, alumni, faculty from the Department of Computer Science and Engineering, and the agenda items were taken up for discussion. The discussion started with R2021 UG Programme curriculum and syllabi of B.Tech. (Artificial Intelligence and Data Science), verticals and list of courses, Open electives (offered to other Departments), R2020 UG Programme curriculum and syllabi of IV year (7^{th} to 8^{th} semester) B.Tech. (Artificial Intelligence and Data Science) and then continued with the suggestions and recommendations received from all BOS members.

Discussions:

BOS 005.01
HoD / CSE gave a brief presentation about overview of the Department.

BOS 005.02
Dr.A.Meenakshi presented the proposed R2021 UG Curriculum of B. Tech. (Artificial Intelligence and Data Science).

SEMESTER I

Sl. No	Course Code	Course Name	Category	Credits				
				L	T	P	Contact Periods	C
THEORY								
1		Technical English	HS	3	0	0	3	3

2		Matrices and Differential Calculus	BS	3	1	0	4	4
3		Engineering Physics	BS	3	0	0	3	3
4		Engineering Chemistry	BS	3	0	0	3	3
5		Coding Techniques - I	EEC	3	0	0	3	3
6		Principles of Engineering	BS	0	0	0	0	3
7		Scientific Thoughts in Tamil	AUD	1	0	0	2	1
PRATICALS								
7		Physics Laboratory	BS	0	0	3	3	1
8		Mathematics Laboratory	BS	0	0	2	2	1
9		Coding Techniques - I Laboratory	EEC	0	0	3	3	1
TOTAL				**20**	**1**	**8**	**29**	**22**

SEMESTER II

Sl. No	Course Code	Course Name	Category	Credits				
				L	T	P	Contact Periods	C
THEORY								
1		Professional English	HS	3	0	0	3	3
2		Vector Calculus, Complex Integration and Laplace Transforms	BS	3	1	0	4	4
3		Physics of Non-Conventional Energy Sources	BS	3	0	0	3	3
4		Environmental Science and Engineering	BS	3	0	0	3	3
5		Engineering Graphics	ES	2	0	3	5	3
6		Coding Techniques – II	EEC	3	0	0	3	3
7		Professional English	HS	3	0	0	3	3
PRATICALS								
7		Engineering Practices Laboratory	ES	0	0	4	4	2
8		Coding Techniques - II Laboratory	EEC	0	0	3	3	1
9		Chemistry Laboratory	BS	0	0	3	3	1
TOTAL				**17**	**1**	**13**	**31**	**23**

SEMESTER III

Sl. No	Course Code	Course Name	Category	Credits				
				L	T	P	Contact Periods	C
THEORY								
1		Linear Algebra and Boundary Value Problems	BS	3	1	0	4	4
2		Digital System Design and Microprocessors	ES	3	1	0	4	4
3		System Software and Operating Systems	PC	3	0	0	3	3
4		Data Structures and Algorithms	PC	3	0	0	3	3
5		Object Oriented Programming using Java	PC	2	0	2	4	3
6		Artificial Intelligence	PC	3	0	0	3	3
7		Audit Course	AUD	3*	0	0	4	4
PRATICALS								
7		Data Structures and Algorithms Laboratory	PC	0	0	4	4	2
8		Digital System Design and Microprocessors Laboratory	PC	0	0	4	4	2
TOTAL				**19**	**2**	**10**	**24**	**31**

SEMESTER IV

Sl. No	Course Code	Course Name	Category	Credits				
				L	T	P	Contact Periods	C
THEORY								
1		Probability and Statistics	BS	3	1	0	4	4
2		Database Management Systems	PC	3	0	0	3	3
3		Foundations of Data Science and Machine Learning	PC	3	0	2	5	4
4		Introduction to Internet of Things	PC	3	0	0	3	3
5		Design Thinking	ES	3	0	0	3	3
6		Scientific Thoughts in Tamil ****	AUD	2	0	0	2	2
PRATICALS								
7		Database Management Systems Laboratory	PC	0	0	4	4	2

8		Internet of Things Laboratory	PC	0	0	4	4	2
9		Mobile Application Development Laboratory	PC	0	0	4	4	2
10		Aptitude	EEC	1	1	0	2	1
TOTAL				**16**	**2**	**14**	**32**	**24**

SEMESTER V

Sl. No	Course Code	Course Name	Category	Credits				
				L	T	P	Contact Periods	C
THEORY								
1		Fundamentals of Deep Learning	PC	3	0	0	3	3
2		Computer Networks and Security	PC	3	0	2	5	4
3		Internet Programming	PC	3	0	0	3	3
4		Big Data Analytics	PC	3	0	2	5	4
5		Professional Elective I	PE	0	0	0	0	3
6		Professional Elective II	PE	0	0	0	0	3
PRATICALS								
7		Deep Learning Laboratory	PC	0	0	4	4	2
8		Internet Programming Laboratory	PC	0	0	4	4	2
9		Internship/Mini Project	EEC	0	0	0	0	1
10		Interpersonal skills – Listening and Speaking	EEC	0	0	2	2	1
TOTAL				-	**0**	-	**32/34**	**26**

SEMESTER VI

Sl. No	Course Code	Course Name	Category	Credits				
				L	T	P	Contact Periods	C
THEORY								
1		Data Visualization	PC	3	0	0	3	3
2		Fundamentals of Natural Language Processing	PC	3	0	0	3	3
3		Open Elective – I	OE	3	0	0	3	3

4		Professional Elective III	PE	-	0	-	-	3
5		Professional Elective IV	PE	-	0	-	-	3
6		Professional Elective V	PE	-	0	-	-	3
7		Professional Elective VI	PE	-	0	-	-	3
PRATICALS								
7		Data Visualization Laboratory	PC	0	0	3	3	1
8		Natural Language Processing Laboratory	PC	0	0	3	3	1
9		Professional Communication	EEC	0	0	2	2	1
TOTAL				-	**0**	-	**31/33**	**24**

SEMESTER VII

Sl. No	Course Code	Course Name	Category	Credits				
				L	T	P	Contact Periods	C
THEORY								
1		Human Values and Professional Ethics	HS	2	0	0	2	2
2		Management Elective	HS	3	0	0	3	3
3		Open Elective – II	OE	3	0	0	3	3
4		Open Elective – III	OE	3	0	0	3	3
5		Open Elective – IV	OE	3	0	0	3	3
PRATICALS								
6		Summer internship/Mini Project	EEC	0	0	0	0	1
TOTAL				**14**	**0**	**0**	**14**	**15**

SEMESTER VIII

Sl. No	Course Code	Course Name	Category	Credits				
				L	T	P	Contact Periods	C
1		Project Work	EEC	0	0	20	20	10
TOTAL				**0**	**0**	**20**	**20**	**10**

BOS 005.03

Dr.A.Meenakshi discussed in detail about list of verticals offered for R2021 Regulation

Verticals and List of courses

Sl. No.	Vertical 1 Data Analytics (optional for Minor)	Vertical 2 Software Engineering and Application Development (optional for Minor)	Vertical 3 Cloud Computing and Data Centre Technologies
1	**Data Analysis and Decision Making**	Software Engineering with UML Design	**Cloud Computing**
2	Recommender Systems	Software Testing Automation	Virtualization
3	Image and Video Analytics	Web Application Development using Django	Cloud Services Management
4	Soft Computing	Full Stack Development	Data Center Management
5	Social Network Analysis	Multi Platform Application Development using Flutter	Devops
6	Information Retrieval Techniques	Agile Methodologies	Security and Privacy in Cloud
7	Knowledge Engineering	C # and . Net Fundamentals	Principles of Fog Computing

Theory integrated Laboratory course **Course is in line with NPTEL/Swayam**

Sl. No.	Vertical 4 Cyber Security and Data Privacy	Vertical 5 Creative Media	Vertical 6 Emerging Technologies	Vertical 7 Cognitive Science
1	**Ethical Hacking**	Computer Graphics	Mobile and Pervasive Computing	Socio - Cognitive and Affective Computing
2	Cyber Forensics	Multimedia Data Compression and Storage	Parallel and Distributed Computing	**Computer Vision**
3	Information Security	UI/UX Design	Computational Statistics	Robotic Process Automation
4	Cryptocurrency and Block Chain Technologies	**Digital Marketing**	Business Analytics	Sentiment analysis
5	Intrusion Detection Systems	Game Design and Development	High Performance Computing for Big Data	Human Computer Interaction
6	Modern Cryptography	Visual Effects	Augmented Reality and Virtual Reality	Fundamentals of Cognitive Science
7	Security Governance and Risk Compliance	**Multimedia and Animation**	Quantum Computing	**Bio Informatics**

Theory integrated Laboratory course **Course is in line with NPTEL/Swayam**

BOS 005.04

HONOURS AND MINOR DEGREE

Dr.A.Meenakshi discussed in detail about honours and minor degree - R2021 Regulation

Honours Degree	Minor Degree
The student should select **6 courses Offered in same Department verticals and earn 18 credits**	The student should select **6 courses Offered from other department verticals offered for minor degree or institute level courses offered as minor degree and earn 18 credits**
Eligibility : upto 4th Semester, the CGPA >7.5 with out any backlog	Eligibility : upto 4th Semester, the CGPA >7.5 with out any backlog
Offered from 5th semester onwards	Offered from 5th semester onwards
The student may or may not select the course from same verticals	The student should undergo 6 courses from same verticals offered as minor either from Institute level common minor verticals or other Department minor verticals.

BOS 005.05

Dr.A.Meenakshi presented the list of open elective courses offered to other department students in the curriculum R2021.

Open Electives – Offered to other departments

S. No	Course Code	Course Name	Credits			
			L	T	P	C
1.	I & II	Artificial Intelligence and Machine learning	3	0	0	3
2.	III	Graphics Programming	3	0	0	3
3.	IV	Game programming	3	0	0	3

BOS 005.06

Approval of Value Added courses:

- **Dr.A.Meenakshi discussed about the process that we followed for conducting Value Added Courses.**
- **She also discussed about the role of three member's committee and presented the list of value added courses offered for the second year and third year students for this academic year.**

Value Added Courses Conducted – II Year students

Name of the VAC course	Name of Company	Name of the Trainer(s)	No. of Students
Redhat Linux	School of Linux, Madurai	Mr.S.Suresh Kannan & K.Muthukumar	40
Machine Learning with Scikit-Learn, Keras and Tensorflow	Quantanics TechServ Pvt. Ltd., Madurai.	Mr.Farhadh Manaz and Mr.K.Vasanth Junior AI Developer	29
Spring Boot	Silicon Software Services, Chennai	Mr.S.Rajendran, Ms.Domini Neya	55
Django Framework	Lamdatech Softics, Virudhunagar	Mr.S.Balaji Ms.V.Rajeshwari	25

Value Added Courses Conducted – III Year students

Name of the VAC course	Name of Company	Name of the Trainer(s)	No. of Students
MEAN Stack	VEI Technologies Pvt. Ltd, Chennai.	Dr.B.Ezhilavan, Managing Director, Ms.Shobana, Software Developer,	35
MERN Stack	Lamdatech Softics, Virudhunagar	Mr.S.Balaji, Trainer Mr.M.Prakash, Trainer	40
Data Visualization using Tableau	Brainswig Edutech Pvt., Ltd, Chennai	Dr.R.Dinesh Babu Managing Director	40
Devops	SMI Infotech Sol. Pvt Ltd Mr.Sanjay, Trainer, SMI Infotech Sol. Pvt. Ltd	Mr.G.S.Raman, Training and upskilling Trainer,	36

BOS 005.07

Dr.A.Meenakshi presented R2020 IV year (7th and 8th Semester) UG Curriculum, B.Tech (Artificial Intelligence and Data Science) detailed syllabus.

R2020 Syllabus for B.Tech AI & DS (VII Sem to VIII Sem)

SEMESTER VII

Sl. No	Course Code	Course Name	Category	Credits				
				L	T	P	Contact Periods	C
THEORY								
1		Data Visualization	pc	3	0	0	3	3
2		Natural Language Processing	PC	3	0	0	3	3
3		Full Stack Development	PC	2	0	2	4	3
4		Professional Elective – V	PE	3	0	0	3	3
5		Professional Elective – VI	PE	3	0	0	3	3
6		Open Elective – II	OE	3	0	0	3	3
PRATICALS								
7		Data Visualization Laboratory	PC	0	0	4	4	2
8		Natural Language Processing Laboratory	PC	0	0	4	4	2
9		Mini project	EEC	0	0	4	4	2
TOTAL				**17**	**0**	**14**	**31**	**24**

SEMESTER VIII

Sl. No	Course Code	Course Name	Category	Credits				
				L	T	P	Contact Periods	C
THEORY								
1		Online course II	OL	0	2	0	2	2
PRACTICALS								
		Project work	EEC	0	0	16	16	8
TOTAL				0	2	16	18	10

Professional Elective Courses (Elective – V) – Semester VII

Sl. No.	Course Code	Course Name	Credits				
			L	T	P	Contact Periods	C
1.	CS1634	Augmented Reality and Virtual Reality	3	0	0	3	3
2.	AD1731	Business Intelligence	3	0	0	3	3
3.	CS1632	Game Design and Development	2	0	2	4	3
4.	CS1733	Principles of Cyber Security	3	0	0	3	3
5.	CS1731	Software Project Management	3	0	0	3	3

(Elective – VI) – Semester VII

Sl. No.	Course Code	Course Name	Credits				
			L	T	P	Contact Periods	C
6.	CS1732	2D & 3D Techniques for Graphics Modeling and Simulation	3	0	0	3	3
7.	AD1732	Statistical Tools for Data Science Engineers	2	0	2	4	3
8.	AD1733	Application of Robotics	3	0	0	3	3
9.	AD1734	Enterprise Application Development	2	0	2	4	3
10.	CS1734	Risk Modeling and Assessment	3	0	0	3	3
11.	AD1735	Virtualization and Cloud Computing	2	0	2	4	3

OPEN ELECTIVE II

S. No	Course Code	Course Name	Credits			
			L	T	P	C
1.		Artificial Intelligence and Machine learning	3	0	0	3

The following suggestions were given by the BOS Members

- Dr. R. B. V. Subramaanyan suggested to include as Cognitive computing rather than cognitive science.
- Dr. Sabu M. Thampi suggested to include Github projects, Linkedin account, Hackathon from first year onwards.
- Dr. Sabu M. Thampi suggested to reduce the syllabus content for the vast subject.

- Dr.R.Venkatesan suggested to give the course outcome in a short manner, no need to elaborate the contents.
- Dr.Sabu M.Thampi suggested to give Feature Engineering as a separate subject.
- Dr.P.Chitra suggested to revisit all the CO's in the syllabus.

RESOLVED TO APPROVE the R2020 curriculum and detailed syllabi for VII & VIII Semester of B.Tech (AI & DS), Detailed syllabus of R2021 curriculum and detailed syllabi for I to VIII Semester of B.Tech (AI & DS).

The meeting ended with the vote of thanks by Dr. A. Anandh, Associate Professor, Department of CSE, Kamaraj College of Engineering and Technology, Virudhunagar.

BoS - Coordinator.

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