

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

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

MINUTES OF THE MEETING OF FOURTH BOARD OF STUDIES MEETING HELD ON 09-03-2022 AT 2.00 PM IN ONLINE TOWARDS CONSIDERING THE CURRICULUM AND SYLLABI (V SEMESTER TO VI SEMESTER) OF R2020-UG PROGRAMME, COMMON FIRST YEAR CURRICULUM R2021, SECOND YEAR CURRICULUM OF R2021.

Platform: Microsoft Teams

Meeting Recording Link:

https://kcetvnrorg-

my.sharepoint.com/:v:/g/personal/ramyacse kamarajengg edu in1/EVQWblH xZlLrF ULVdTxciEBLoZx6WVfH2MY3HDBMCaSdw?e=dqMGYl

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 4th BOS meeting. The following members were present:

S. No.	Name of the Expert	Designation	Capacity
1.	Dr.S.Mercy Shalinie	Professor & Head– CSE, Thiagarajar College of Engineering, Madurai, shalinie@tce.edu Phone No: 9344120708	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.Thampi	Professor, Indian Institute of Information Technology, Management-Kerala, Trivandram. E-mail ID: sabu.thampi@iiitmk.ac.in Phone No: 9447103005	Academic Council nominated BoS Expert Member
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	Associate Professor, CSE, Karunya University, Coimbatore rlvenkei2000@karunya.edu Phone No: 98948 80563	Alumni
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S. No.	Name	Designation
1.	Dr.A.Meenakshi	Associate Professor and Head
2.	Dr.M.IndraDevi	Professor and PG (M.E - CSE) Programme Co-ordinator
3.	Dr.R.Muthuselvi	Professor and NBA Coordinator
4.	Dr.R.Ramya	Assistant Professor / CSE UG (B. E. CSE) Programme Co-ordinator
5.	Dr.A.Anandh	Associate Professor / CSE UG (B. Tech. AI &DS) Programme Co-ordinator
6.	Dr.G.Nirmala	Assistant Professor / CSE
7.	Mr.G.Srinivasan	Assistant Professor / CSE Gunni
8.	Mrs.S.Athilakshmi	Assistant Professor / CSE
9.	Mr.B.Muthukrishnavinayagam	Assistant Professor / CSE
10.	Mrs.K.Muthulakshmi	Assistant Professor / CSE K. Muli
11.	Mrs.K.Leelarani	Assistant Professor / CSE
12.	Mr.M.Rajasekaran	Assistant Professor / CSE
13.	Ms.G.Vijayalalitha	Assistant Professor / CSE
14.	Mrs.J.Lavanya	Assistant Professor / CSE
15.	Dr.G.Mahalakshmi	Assistant Professor / CSE G. No.
16.	Mrs.P.Kavitha	Assistant Professor / CSE Promite
17.	Mrs.K.Arunasakthi	Assistant Professor / CSE
18.	Ms.M.Balameenakshi	Assistant Professor / CSE M. W
19.	Mrs.R.Indhuja	Assistant Professor / CSE
20.	Dr.P.Praveen Kumar	Assistant Professor / AI & DS
21.	Ms.T.Rajashree	Assistant Professor / AI & DS
22.	Ms.S.Shopika	Assistant Professor / AI & DS 2
23.	Mrs.K.Indumathi	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, the agenda items were taken up for discussion. The discussion started with R2020 UG Programme curriculum and syllabi of 5th to 8th semester of B. E. Computer Science and Engineering as well as R2021 UG Programme curriculum and syllabi of 2nd to 4th semester of B. E. Computer Science and Engineering and then continued with the suggestions and recommendations received from all BOS members.

Discussions:

BOS 004.01

HoD / CSE gave a brief presentation for the Approval of the Minutes of the Third BoS and pointed out the Actions Taken for the previous BoS.

BOS 004.02

Dr.A.Meenakshi presented the R2020 UG Curriculum, B.E (Computer Science and Engineering) and Dr.R.Ramya presented the detailed syllabus.

a. V semester to VIII semester

SEMESTER V

S. No	Course Code	Course Title	Category	L	T	P	Contact Periods	C
		THE	ORY					***
1.	IT1571	Computer Networks	PC	3	0	0	3	3
2.	CS1501	Internet Programming	PC	3	0	0	3	3
3.	CS1502	Theory of Computation and Compiler Design	PC	3	0	2	5	4
4.	PE1	Professional Elective I	PE	3	0	0	3	3
5.	PE2	Professional Elective II	PE	3	0	0	3	3
6.	OE1	Open Elective – I	OE	3	0	0	3	3
		PRATI	CALS					
7.	CS1511	Internet Programming Lab	PC	0	0	4	4	2
8.	IT1581	Computer Networks Laboratory	PC	0	0	4	4	2
			TOTAL	18	0	10	28	23

SEMESTER VI

S. No	Course Code	Course Title	Category	L	T	P	Contact Periods	C
		TI	HEORY					
1.	AD1471	Machine learning	PC	3	0	0	3	3
2.	CS1601	Distributed Systems	PC	3	0	0	3	3
3.	CS1602	Internet of Things	PC	3	0	0	3	3

4.	PE3	Professional Elective III	PE	3	0	0	3	3
5.	PE4	Professional Elective IV	PE	3	0	0	3	3
6.	OL1	Online Course – I	OL	0	2	0	2	2
		PRAT	ICALS					
7.	HS1521	Professional Communication	EEC	0	0	2	2	1
8.	CS1611	Internet of Things	PC	0	0	4	4	2
9.		Machine Learning laboratory	PC	0	0	4	4	2
10.	CS1681	Mobile Application Development laboratory	PC	0.	0	4	4	2
			TOTAL	19	2	10	28	23

SEMESTER VII

S. No	Course Code	Course Title	Category	L	T	P	Contact Periods	C
		THE	ORY					
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
111		PRATI	CALS					
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	Т	P	Contact Periods	C
		THE	ORY					
1.	OL2	Online Course – II	OL	0	2	0	2	2
		PRAT	ICALS					
2.	CS1821	Project work	EEC	0	0	16	16	8
			TOTAL	0	2	16	18	10

b. List of Professional Elective Courses

Professional Elective Courses (Elective – I, Semester V)

S. No	Course Code	Course Name	L	T	P	Contact Periods	C
1.	CS1531	Computer Graphics	3	0	0	3	3
2.	CS1532	Data Warehousing and Data Mining	3	0	0	3	3
3.	CS1533	Linux Programming and Shell Scripting	2	0	2	4	3
4.	CS1534	Real time systems	3	0	0	3	3
5.	CS1535	Software Testing and Quality Assurance	3	0	0	3	3

Professional Elective Courses (Elective – II, Semester V)

S. No	Course Code	Course Name	L	T	P	Contact Periods	C
6.	CS1536	Agile Development	3	0	0	3	3
7.	CS1537	C# and .NET Fundamentals	2	0	2	4	3
8.	CS1538	Data Science using R	2	0	2	4	3
9.	CS1539	Multicore Architecture	3	0	0	3	3
10.	CS1540	Multimedia Systems	3	0	0	3	3

Professional Elective Courses (Elective - III, Semester VI)

S. No	Course Code	Course Name	L	T	P	Contact Periods	C
11.	CS1631	Big Data Analytics – Tools and Techniques	2	0	2	4	3
12.	AD1534	Ethical Hacking	3	0	0	3	3
13.	CS1632	Game Design and Development	2	0	2	4	3
14.	AD1503	Object Oriented Programming using Java	2	0	2	4	3
15.	CS1633	Software Verification and Validation	3	0	0	3	3

Professional Elective Courses (Elective – IV, Semester VI)

S. No	Course Code	Course Name	L	T	P	Contact Periods	C
16.	CS1634	Augmented Reality and Virtual Reality	3	0	0	3	3
17.	CS1635	Full Stack Development	2	0	2	4	3
18.	CS1636	Mobile Adhoc Networks	3	0	0	3	3
19.	CS1637	Social Media Analytics	3	0	0	3	3
20.	CS1638	Software Design	3	0	0	3	3

Professional Elective Courses (Elective - V. Semester VII)

S. No	Course Code	Course Name	L	T	P	Contact Periods	C
21.	IT1631	Blockchain Technologies	3	0	0	3	3
22.	AD1601	Computer Vision	3	0	0	3	3
23.	AD1602	Deep Learning	3	0	0	3	3
24.	AD1535	Human Computer interaction	3	0	0	3	3
25.	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
26.	CS1732	2D & 3D Techniques for Graphics Modeling and Simulation	3	0	0	3	3
27.	AD1702	Natural Language Processing	3	0	0	3	3
28.	CS1733	Principles of Cyber Security	3	0	0	3	3
29.	CS1734	Risk Modeling and Assessment	3	0	0	3	3
30.	AD1633	Robotics and Intelligent Systems	3	0	0	3	3

c. List of Open Electives

Open Elective I (Semester V) - Offered to other departments

S. No	Course Code	Course Name	Category	L	T	P	C
1.	OCS151	Programming in Python	OE	3	0	0	3

Open Elective – II (Semester VII)

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

BOS 004.03

Dr.A.Meenakshi presented the list of Audit courses available in the curriculum and the audit courses completed in semester III and registered in semester IV during the academic year 2021 - 2022.

List of Audit Courses

Audit Courses - Offered

S. No	Course	Course Name		Cre	dits	
	Code	Course Name	L	T	P	C
1.	AUD101	Constitution of India	3	0	0	0
2.	AUD102	Value Education	3	0	0 .	0
3.	AUD103	Pedagogy Studies	3	0	0	0

4.	AUD104	Stress Management by Yoga	3	0	0	0
5.	AUD105	Personality Development and Soft Skills	3	0	0	0
6.	AUD106	Essence of Indian Knowledge Tradition	3	0	0	0
7.	AUD107	Sanga Tamil Literature Appreciation	3	0	0	0
8.	AUD108	Design Thinking	3	0	0	0

Audit courses completed and registered - R2020

S. No	Class	No of students Registered	Name & Code of the course	Semester
1.	II CSE A	53	Constitution of India &	III
2.	II CSE B	54	AUD101	III

S. No	Class	No of students Registered	Name & Code of the course	Semester
1.	II CSE A	53	Design Thinking &	IV
2.	II CSE B	54	AUD108	IV

BOS 004.04

Dr.A.Meenakshi presented about the list of integrated courses and assessment of B. E. Computer Science and Engineering.

Procedures of Conduct of Integrated Courses

S. No	Degree	Regulation	Category of Course	Continuous Assessment	End Semester Examination
1.	UG	R2020 & R2021	Theory Integrated with Laboratory Courses	Assessment through theory – 20% (Two assessments) Assessment through Practical – 20% (Continuous evaluation) (Total – 40%)	Theory Examination – 60%
2.	PG	R2020 & R2021	Laboratory Integrated with Theory courses	Assessment through – 15 % (One assessment) Assessment through Practical – 35 % (continuous evaluation) (Total – 50 %)	Practical Examination – 50%

BOS 004.05

Approval of Online courses

The online courses are included in curriculum at VI and VIII semester. The following were discussed and presented for approval.

Online courses in phase manner: Approval was sought by Dr.A.Meenakshi to do the course in the phase manner and decision - vested to the three member committee.

For UG

- VI sem Doing the course phase wise Minimum 8 Weeks
 - Phase-1 in V / VI SEM:
 - 12 weeks course (or)
 - 8 weeks course (or)
 - 4+ 4 weeks AND/OR
 - Phase-2:
 - 4 weeks (in V SEM) + 12 weeks (in VI SEM) and vice versa (or)
 - 4 weeks (in V SEM) + 8 weeks (in VI SEM) and vice versa (or)
 - 4 weeks (in V SEM) + 4 weeks (in VI SEM) and vice versa
- VIII sem Doing the course phase wise Minimum 8 Weeks
 - Phase-1 in VII / VIII SEM:
 - 12 weeks course (or)
 - 8 weeks course (or)
 - 4+ 4 weeks AND/OR
 - Phase-2:
 - 4 weeks (in VII SEM) + 12 weeks (in VIII SEM) and vice versa (or)
 - 4 weeks (in VII SEM) + 8 weeks (in VIII SEM) and vice versa (or)
 - 4 weeks (in VII SEM) + 4 weeks (in VIII SEM) and vice versa

Courses identified from NPTEL SWAYAM and Mentors

Dr.A.Meenakshi presented about the list of courses that were identified from NPTEL Swayam to be offered for students along with faculty mentors.

S. No	Course Name	Duration	Mentor
1.	Data Mining	8 Weeks	Dr.M.Indra Devi, Mrs.P.Kavitha,
			Ms.Bala Meenakshi.

2.	Cloud computing and Distributed Systems	8 Weeks	Dr.R.Muthuselvi
3.	Cloud computing	8 Weeks	Dr.Anandh, Mr.M.Rajasekaran, Mrs.J.Lavanya, Mrs.K.Arunasakthi, Dr.P.Praveen Kumar.
			Dr.R.Ramya, Mrs.S.Athilakshmi
4.	Data Science for Engineers	8 Weeks	Mr.B.MuthuKrishna Vinayagam
			Mrs.K.Muthulakshmi Mrs.K.Leelarani.
			Dr.Anandh, Mr.G.Srinivasan,
5.	Introduction to Internet of Things	12 weeks	Ms.G.Vijayalalitha, Ms.S.Shopika,
			Dr.G.Mahalakshmi, Ms.T.Rajashree.
6.	Software Testing	12 weeks	Dr.G.Nirmala, Mrs.K.Indumathi
			Mrs.R.Indhuja

Dr.A.Meenakshi presented about the grading system that is going to be followed for online courses and re-exam score evaluation procedure.

R2021 Grading System - Absolute Grading System

Range of Total Marks in Absolute Grading	Range of Total Marks in NPTEL Examination	Letter Grade	Grade Point
$91 \le to \le 100$	$88 \le to \le 100$	O	10
$81 \le \text{to} \le 90$	$76 \le \text{to} \le 87$	A+	9
$71 \le \text{to} \le 80$	$64 \le \text{to} \le 75$	A	8
$^{\circ}$ 61 ≤ to ≤ 70	$52 \le \text{to} \le 63$	B+	7
$50 \le \text{to} \le 60$	40 ≤ to ≤ 51	В	6

R2020 Grading System – Hybrid Relative Grading System

Range of Total Marks in Absolute Grading			Grade Point
$91 \le to \le 100$	$88 \le \text{to} \le 100$	O	10
$61 \le \text{to} \le 90$	52 ≤ to ≤ 87	A+	9
Intermediate Grade will be	nediate Grade will be Intermediate Grade will be		8
fixed based on Mean Marks between 61 and 90	fixed based on Mean Marks between 52 and 87	B+	7

$50 \le \text{to} \le 60$ $40 \le \text{to} \le 51$ B	$50 \le \text{to} \le 60$	40 ≤ to ≤ 51	В	6
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Re-Examinations for online courses

25% NPTEL SCORE + 75% REEXAM SCORE

BOS 004.06

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 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 for II Year students

Name of the VAC course	Name of Company	Name of the Trainer(s)	Name of the Coordinator	No. of Students (including II AI & DS)
Redhat Linux	School of Linux, Madurai	Kannan X		40
Machine Learning with Scikit-Learn, Keras and Tensorflow	Quantanics TechServ Pvt. Ltd., Madurai.	Mr.Farhadh Manaz and Mr.K.Vasanth Junior AI Developer	Dr.P.Praveen Kumar Dr.R.Ramya	29
Spring Boot	Silicon Software Services, Chennai	Mr.S.Rajendran Ms.Domini Neya	Mr.B.Muthukrishna vinayagam Ms.P.Kavitha	55
Django Framework	Lamdatech Softics, Virudhunagar	Mr.S.Balaji Ms.V.Rajeshwari	Mrs.K.Leela Rani, Dr.MahaLakshmi	25

Value Added Courses Planned for III Year students

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

BOS 004.07

Dr.A.Meenakshi presented First year common curriculum for all Departments which will be followed from the current academic year 2021-2022. It will come under

new Regulations 2021.

R2021 Curriculum for B.E. Computer Science and Engineering (I sem. to II Sem.) SEMESTER I

S. No	Course Code	Course Title	Category	L	Т	P	C
· ·		THEORY					
1.	SH2101	Technical English	HS	3	0	0	3
2.	MA2101	Matrices and Differential Calculus	BS	3	1	0	4
3.	PH2101	Engineering Physics	BS	3	0	0	3
4.	CY2101	Engineering Chemistry	BS	3	0	0	3
5.	GE2101	Principles of Engineering	BS	3	0	0	3
6.	EM2101	Coding Techniques – I	EEC	3	0	0	3
		PRATICALS					
7.	PH2102	Physics Laboratory	BS	0	0	3	1
8.	MA2102	Mathematics Laboratory	BS	0	0	2	1
9.	EM2102	Coding Techniques - I Laboratory	EEC	0	0	3	1

SEMESTER II

S. No	Course Code	Course Title	Category	L	T	P	C
		THEORY					
1.		Technical Communication Skill Development	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.		Environmental Science and Engineering	BS	3	0	0	3
5.		Engineering Graphics	ES	2	0	3	3

6.		Coding Techniques - II	EEC	3	0	0	3
		PRATICALS					
7.		Engineering Practices Laboratory	ES	0	0	4	2
8.	18 M	Chemistry Laboratory	BS	0	0	3	1
9.		Coding Techniques – II Laboratory	EEC	0	0	3	1

Proposed R2021 Curriculum for B.E. Computer Science and Engineering (III sem. to IV Sem.)

SEMESTER III

S.No	Sub Code	Subject Name	Category	L	Т	P	C
1		Linear Algebra and Boundary Value Problems	BS	3	1	0	4
2		Computer Organization and Architecture	PC	3	0	0	3
3	8	Data Structures using Python	PC	3	0	0	3
4		Object Oriented Programming using Java	PC	2	0	3	3
5		System Software and Operating Systems	PC	3	0	0	3
6		Digital System Design and Microprocessors	ES	3	1	0	4
7		Data Structures Laboratory using Python	PC	0	0	3	1
8		Digital System Design and Microprocessors Laboratory	ES	0	0	4	2
9		Audit Course	AUC	3	0	0	0

SEMESTER IV

CN	Sub					D.	-
S.No	Code	Subject Name	Category	L	T	P	C
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	2	4
4		Introduction to 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

		Total	21	1	13	25
11	Audit Course	AUC	3	0	0	0
10	Value Added Course / Internship	EEC	0	0	4	2
9	Database Management Systems Laboratory	PC	0	0	4	2
7	CASE Tools Laboratory	PC	0	0	3	1

The Detailed syllabus of coding techniques – II (Theory and Laboratory) is also presented for approval.

BOS 004.08

Addition and Exemption of courses for Transfer Candidate

Dr.A. Meenakshi explained that there is no exemption of course and also no need for additional courses to be studied by the candidate. BoS members accepted and approved the same for the transfer student Ms.A.Subhiksha.

The following suggestions were given by the BOS Members

- Dr.R.B.V.Subramaanyan suggested that Randomized Algorithms can be included in Professional Elective
- Dr.R.B.V.Subramaanyan suggested that Parallel Algorithms can be included in Professional Elective
- Dr.R.B.V.Subramaanyan suggested that Machine Learning syllabus may be reframed as it is very heavy
- Dr.S.Mercy Shalinie inquired about how the internship grades are going to be awarded. Dr.A. Meenakshi replied about the process of awarding the grades for internship students.
- Dr.S.Mercy Shalinie inquired about the infrastructure for Augmented Reality and Virtual Reality. Dr.A. Meenakshi replied that it is yet to be established.
- Dr.S.Mercy Shalinie inquired about the special interest group for faculty. Dr. A.
 Meenakshi replied that the special group was formed in 8 domains as follows

S. No	Domain
1.	Algorithms, data Structures & Programming
2.	Database and Analytics
3.	Networking and Security

4.	Software Engineering
5.	System Software and Architecture
6.	Graphics and Animation
7.	Application Development
8.	Cognitive Science

- Dr.S.Mercy Shalinie suggested mentioning the pre requisite for all the Professional Elective courses.
- Dr.S.Mercy Shalinie suggested giving the latest edition books as the text books.
- Dr.S.Mercy Shalinie suggested that the title of the course name may be changed as Design and Analysis of Algorithm instead of Analysis of Algorithms.
- Dr.S.Mercy Shalinie suggested getting the feedback from the stake holders like Industry, parents and Employers in addition to the students and faculty members.
- Dr.S.Mercy Shalinie inquired about the E-Book subscription in department level.
 Dr. A. Meenakshi replied that the E-Book subscription is in the college library.
- Dr.S.Mercy Shalinie suggested providing value added course from the authorized centers where the certificates are provided by the standard well reputed companies like CISCO and also added that providing International certificates may be more valuable.
- Dr.S.Mercy Shalinie suggested that Program Specific subjects may be given in the
 first year instead of Engineering Graphics. Dr.A.Meenakshi replied that common
 syllabus is followed for the first year across the departments as per the NEP.

RESOLVED TO APPROVE the R2020 curriculum and detailed syllabi for V to VIII Semester of B.E(CSE), Detailed syllabus of coding techniques – II (Theory and Laboratory) and R2021 curriculum and detailed syllabi for III to IV Semester of B.E(CSE).

The meeting ended with the Vote of Thanks by Dr. R. Ramya, Assistant Professor, Department of CSE, Kamaraj College of Engineering and Technology, Virudhunagar.

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

R. RAMYA