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 THIRD BOARD OF STUDIES MEETING HELD ON 13-11-2021 AT 11.15 AM IN ONLINE TOWARDS CONSIDERING THE CURRICULUM AND SYLLABI (V SEMESTER AND VI SEMESTER) OF R2020-UG PROGRAMME, AND PROPOSED UG PROGRAMME B.E. (Hons.) CSE WITH SPECIALIZATION IN DATA SCIENCE CURRICULUM IN THE DEPARTMENT OF COMPUTER SCIENCEAND ENGINEERING.

Platform: Microsoft Teams

Meeting Recording Link:

https://kcetvnrorg-my.sharepoint.com/:v:/g/personal/ramyacse_kamarajengg_edu_in1/EXlk8qJZ3zVMpSmfPhwyNfUBWolaUnPlhu3TfATBiXN2pw?e=Qm86id

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 the3rd 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	Assistant Professor, CSE, Karunya University, Coimbatore rlvenkei2000@karunya.edu Phone No: 98948 80563	Alumni

Internal Members of BoS – Faculty members of CSE & AI & DS		
S. No.	**Name**	**Designation**
1.	Dr.A.Meenakshi	Associate Professor and Head
2.	Dr.M.IndraDevi	Professor PG (M.E - CSE) Programme Co-ordinator
3.	Dr.R.Muthuselvi	Professor 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
8.	Mrs.S.Athilakshmi	Assistant Professor / CSE
9.	Mr.B.Muthukrishnavinayagam	Assistant Professor / CSE
10.	Mrs.K.Muthulakshmi	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.	Mrs.J.Lavanya	Assistant Professor / CSE

15.	Dr.P.Praveen Kumar	Assistant Professor / AI & DS
16.	Mrs.P.Antony Seba	Assistant Professor / AI & DS
17.	Ms.T.Rajashree	Assistant Professor / AI & DS
18.	Ms.S.Shopika	Assistant Professor / AI & DS
19.	Mrs.K.Indumathi	Assistant Professor / AI & DS

After brief introduction by Dr.A.Meenakshi, HoD (Department of Computer Science and Engineering) about the participants from industry, alumni, faculty from the Department of Computer Science and Engineering, the agenda items were taken up for discussion. The discussion starts with R2020 UG Programme curriculum and syllabi of 5th and 6th semester of B. E. Computer Science and Engineering and then continues with the suggestions and recommendations received from all BOS members

Discussions:

BOS 003.01

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

HoD / CSE gave a gist about the points discussed in the 3rd AC meeting and recommendations

BOS 003.02

Dr.R.Ramya presented the R2020 UG Curriculum, B.E (Computer Science and Engineering) for the following.

a. V and VI semester

Semester V

Sl. No	Course Code	Course Title	Category	L	T	P	Contact Periods	C
THEORY								
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
PRACTICALS								
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

Sl. No	Course Code	Course Title	Category	L	T	P	Contact Periods	C
THEORY								
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
PRATICALS								
7	HS1521	Professional Communication	EEC	0	0	2	2	1
8	CS1611	Internet of Things and Machine Learning laboratory	PC	0	0	4	4	2
9	CS1681	Mobile Application Development laboratory	PC	1	0	4	5	3
			TOTAL	**19**	**2**	**10**	**31**	**23**

b. List of Professional Elective Courses

Professional Elective Courses (Elective – I, Semester V)

S.No	COURSE CODE	COURSE NAME	CREDITS				
			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)

SL.NO	COURSE CODE	COURSE NAME	CREDITS				
			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)

SL.NO	COURSE CODE	COURSE NAME	CREDITS				
			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.	AD1502	Java Programming	2	0	2	4	3
15.	CS1633	Software Verification and Validation	3	0	0	3	3

Professional Elective Courses (Elective – IV, Semester VI)

SL.NO	COURSE CODE	COURSE NAME	CREDITS				
			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

c. List of Open Electives

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

SL NO.	COURSE CODE	COURSE NAME	CATEGORY	L	T	P	C
1	OCS151	Programming in Python	OE	3	0	0	3

d. List of Audit Courses

Audit Courses (Offered to all departments)

S. No	Course Code	Course Name	Credits			
			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

BOS 003.03

Approval of Online courses and Value added courses:

The online courses are included in curriculum at VI and VIII semester. The following suggestion and approval was given by BOS member.

Nature of courses may be from

- Core
- Management
- General learning

Online courses in phase manner: Approval was sought by Dr.M.Indra Devi 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

Assessment of End examination of online courses:

BOS members approved to fix norms for online courses and follow the University norms and guidelines. If students don't get cleared in the online courses, three member committee can conduct the special assessment and grant the credit.

Approval of Value Added courses:

- Dr.R.Muthuselvi discussed about guidelines to be followed for Value Added Courses to be offered.
- 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.

S. No.	Name of the course	Name of the Company
1.	AWS , DOCKERS,KUBERNETES, DEVOPS	SMI, Madurai
2.	Cisco Certified Network Analytics(CCNA)	CISCO
3.	Artificial Intelligence and Machine Learning (AI & ML)	Quantanics Techserv (P) Ltd
4.	Redhat Linux	Winways pvt Ltd
5.	MongoDB	Brainovision pvt Ltd

The following suggestions were given by the BOS Members

- Dr Shalini suggested to form mapping of marks obtained in online course to grade.
- Dr. Shalini inquired about the value added courses and suggested to include course like Constitution of India. Dr.A. Meenakshi replied that it is offered as audit course in the curriculum.
- Dr.Shalini suggested to provide value added course without collecting fees from students and faculty members, must get trained by industry to offer the course.
- Mr.G.S.Raman suggested to include tools in Data Engineering subject to get hands-on experience.
- Mr.G.S.Raman suggested to give importance for data crawling and data storage

technologies.

- Mr.G.S.Raman assured that he will support for value added courses in latest technologies.

BOS 003.04

Dr.P.Praveen Kumar presented and discussed the proposal of B.E. (Hons.) CSE with specialization in Data Science.

- He discussed about the eligibility for a student for taking the Honours
- He also discussed about the guidelines for offering Honours
- He discussed that the students should do additionally 5 courses and earn 20 credits.
- He also proposed that the following subjects: (Theory Cum Laboratory) may be taken for Honours.
    - Statistical Foundations for Data Science
    - Data Engineering
    - Foundations of Machine Learning
    - Full Stack Application Framework for Machine Learning
    - Applied Predictive Analytics
- He also added that the courses for honours will be offered through industry

<u>The following suggestions and recommendations were given during the discussion.</u>

- Dr.Shalini advised to follow the regulation offered by AICTE for B.E (Hons) curriculum.
- Dr.Shalini asked about the curriculum distribution and it is replied that as it is
- Dr.R.B.V.Subramaanyan suggested to include mining massive datasets and social media analytics.
- Dr. Shalini suggested to include recent subjects for 20 credits and advised to change the proposed subjects "Statistical Foundations for Data Science" and "Foundations of Machine Learning".

BOS 003.05

- Dr.G.Nirmala discussed about the bridge courses which was conducted for the lateral entry students.
- She presented the content and schedule of bridge course that was conducted and she mentioned the following courses and the syllabus of the courses which was offered as bridge courses .
    - Programming in C
    - Introduction to Python - IO Statements, Conditionals, Iteration, List, Tuples, Dictionary
    - Object Oriented Concepts
    - Engineering Mathematics

Discussions

- Dr.R.B.V.Subramaanyan inquired about the distribution of professional electives and open electives offered in V and VI semester of B.E (CSE) curriculum. Dr.R.Ramya replied about the distribution of credit for the same along with the importance of value added courses, internship and its credits.
- Dr.R.B.V.Subramaanyan suggested to shift cryptography and network security subject from VII to VI semester.
- Dr.Shalini inquired about the uniqueness of KCET R2020 B.E (CSE) Curriculum in terms of content and industry support.
- Dr. Shalini suggested to include 60% of subjects as core subjects and 40% of the subjects as elective.
- Dr. Shalini inquired about the mapping of experiments in IoT and Machine learning laboratory.
- Dr Shalini suggested to provide practical session for lateral entry students in bridge course. Dr.Meenakshi replied that it is being offered.

- Dr.R.B.V.Subramaanyan enquired that whether deep learning is offered in the curriculum. Dr.A.Meenakshi replied that it is offered as elective paper in the curriculum.
- Dr.R.B.V.Subramaanyan enquired about the importance of electronics courses in the B.E(CSE) curriculum.
- Mr.G.S.Raman suggested to include tools that are integrated with IoT such as Kafka, cloud data ware house such as snowflake etc.
- Dr.R.Venkatesan and Dr.Sabu M.Thampi accepted the curriculum framework of B.E(CSE) curriculum.

RESOLVED TO APPROVE the curriculum and detailed syllabi for V and VI Semester of B.E(CSE).

RESOLVED TO APPROVE the proposal of B.E. (Hons.) CSE with specialization in Data Science.

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

19/11/2021

BoS Chairman – CSE
HOD / CSE

19/11/21

UG-Programme Co-ordinator