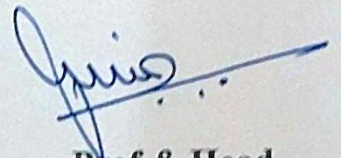Dr. Ambedkar Institute of technology, Bengaluru-56

Department of Computer Science & Engineering

The enclosed documents are verified & approved.

Prof & Head

Dr. Siddaraju

Department of Computer Science & Engineering

Professor & Head
Department of Computer Science & Engineerin
Dr. Ambedkar Institute of Technology
Bangalore-560 056.

2016-17

STRUCTURE OF BOARD STUDIES

For UG and PG

(To be constituted as per 5.3 of status of University " AUTONOMOUS COLLEGE STATUTE, 2006")

Sl. No	Category	Nomination of the Committee	Name of the person
1	**Head of the Department**	Chairman	**Dr. Siddaraju**
2.	**Advisor**		**Dr.L.M.Patnaik**
3.	**Faculty members at different levels veering different specializations**	**UG Programme**	
		Member - 1	Dr. M. Vijay Kumar
		Member - 2	Dr. Gowrishankar
		Member - 3	Prof. Asha
		Member - 4	Prof. Leena giri. G
		Member -5	Prof. Mary Cherian
		Co-ordinator	Prof. Asha Rani K.P
		PG Programme	
		Member - 1	Prof. Nithya E
		Member - 2	Prof. K R Shylaja
4.	**External Subject experts nominated by academic council**	Member-1	**Dr.Manjaiah Mangalore University**
		Member-2	**Dr. Thippeswamy VTU,Mysore**
		Member - 3	**Dr. Guruprasad BMSCE, Bangalore**
		Member - 4	**Dr. Ramakanth Kumar P. Prof & Head RVCE, Bangalore**
5.	**VTU Nominee**	Member	**Dr.T.G.Basavaraju SKSJIT, Bangalore**
6.	**Industry Representative**	Member - 1	**Mr. Subbaraya IBM, Bangalore**
		Member - 2	**Mr. Dheerendra, PThinks Ltd., Bangalore**
7.	**Alumni with PG Degree**	Member	**Mr. Karthik Rao B G, Minio Inc, Palo Alto, California**

2017-18
STRUCTURE OF BOARD STUDIES
For UG and PG
(To be constituted as per 5.3 of status of University " AUTONOMOUS COLLEGE STATUTE, 2006")

Sl. No	Category	Nomination of the Committee	Name of the person
1	**Head of the Department**	Chairman	**Dr. Siddaraju**
2.	**Advisor**		**Dr.L.M.Patnaik**
3.	**Faculty members at different levels veering different specializations**	**UG Programme**	
		Member - 1	Dr. M. Vijay Kumar
		Member - 2	Dr. Gowrishankar
		Member - 3	Prof. Asha
		Member - 4	Prof. Leena giri. G
		Member -5	Prof. Mary Cherian
		Co-ordinator	Prof. Asha Rani K.P
		PG Programme	
		Member - 1	Prof. Nithya E
		Member - 2	Prof. K R Shylaja
4.	**External Subject experts nominated by academic council**	Member-1	**Dr.Manjaiah Mangalore University**
		Member-2	**Dr. Thippeswamy VTU, Mysore**
		Member - 3	**Dr. Guruprasad BMSCE, Bangalore**
		Member - 4	**Dr. Ramakanth Kumar P. Prof & Head RVCE, Bangalore**
5.	**VTU Nominee**	Member	**Dr.T.G. Basavaraju SKSJIT, Bangalore**
6.	**Industry Representative**	Member - 1	**Mr. Subbaraya IBM, Bangalore**
		Member - 2	**Mr. Dheerendra, PThinks Ltd., Bangalore**
7.	**Alumni with PG Degree**	Member	**Mr. Arvind C S Technology Specialist, Cognitive Computing Lab, Cognizant GTO, Bangalore**

2018-19
STRUCTURE OF BOARD STUDIES
For UG and PG
(To be constituted as per 5.3 of status of University " AUTONOMOUS COLLEGE STATUTE, 2006")

Sl. No	Category	Nomination of the Committee	Name of the person
1	**Head of the Department**	Chairman	**Dr. Siddaraju**
2.	**Advisor**		**Dr.L.M.Patnaik**
3.	**Faculty members at different levels veering different specializations**	**UG Programme**	
		Member - 1	Dr. Mary Cherian
		Member - 2	Dr. Gowrishankar
		Member - 3	Dr. Smithashekar
		Member - 4	Dr. Harish G
		Member -5	Dr. Prakash
		Co-ordinator	Prof. Asha Rani K.P
		PG Programme	
		Member - 1	Dr.K.R Shylaja
		Member - 2	Prof. Shamshekar Patil
4.	**External Subject experts nominated by academic council**	Member-1	**Dr.Suresh L Principal Cambridge Institute of Technology**
		Member-2	**Dr. Ramani S MSRIT, Bangalore**
		Member - 3	**Dr. Gowrishankar. BMSCE, Bangalore**
		Member - 4	**Dr. Bindumadavi AMCE, Bangalore**
5.	**VTU Nominee**	Member	**Dr.Chandrashekar NITK, Bangalore**
6.	**Industry Representative**	Member - 1	**Dr.Rajan Senior Scientist, TCS, Bangalore**
		Member - 2	**Dr.K.C Goud, 4th Gen Paradigm,C-MMAC, Bangalore**
7.	**Alumni with PG Degree**	Member	**Preet kanwal PESU,Bangalore**

2019-20
STRUCTURE OF BOARD STUDIES
For UG and PG

(To be constituted as per 5.3 of status of University " AUTONOMOUS COLLEGE STATUTE, 2006")

Sl. No	Category	Nomination of the Committee	Name of the person
1.	**Head of the Department**	Chairman	**Dr. Siddaraju**
2.	**Advisor**		**Dr.L.M.Patnaik** **IISC, Bangalore**
3.	**Faculty members at different levels veering different specializations**	**UG Programme**	
		Member- 1	Dr. Leenagiri G
		Member- 2	Prof. Asha
		Member- 3	Dr. Mary Cherian
		Member- 4	Dr. Gowrishankar
		Member- 5	Dr. Smitha Shekar B
		Member- 6	Dr. Harish G
		Co-Ordinator	Prof. Asha Rani K.P
		PG Programme	
		Member- 1	Dr. Prabha R
		Member- 2	Dr.K.R Shylaja
4.	**External Subject experts nominated by academic council**	Member-1	**Dr. Rajendra Hegadi** **IIIT Dharwad**
		Member-2	**Dr. Suresh L** **Principal** **Cambridge Institute of Technology** **Bangalore**
		Member- 3	**Dr. Gowrishankar.** **BMSCE, Bangalore**
		Member- 4	**Dr. Bindumadavi** **AMCE, Bangalore**
5.	**VTU Nominee**	Member	**Dr. Chandrashekar** **NITK, Mangalore**
6.	**Industry Representative**	Member - 1	**Mr. G.K Patil** **Collins Aerospace** **Bangalore**
		Member - 2	**Mr. Mukund Kumar** **Senior Director** **NTT Data, Bangalore**
		Member - 3	**Mr. Iyer** **HR Manager** **Cognizant, Bangalore**
7.	**Special Invitee from Mentee Institution RML Avadh University Ayodhya**	Member	**Mr. Ashish Pandey** **HOD,CSE** **IET, Ayodhya**

8.	**Alumni with PG Degree**	Member	**Ms. Preet Kanwal** **Assistant Professor** **PESU, Bangalore**

2020-21
STRUCTURE OF BOARD STUDIES
For UG and PG

(To be constituted as per 5.3 of status of University " AUTONOMOUS COLLEGE STATUTE, 2006")

Sl. No	Category	Nomination of the Committee	Name of the person
9.	**Head of the Department**	Chairman	**Dr. Siddaraju**
10.	**Advisor**		**Dr.L.M.Patnaik** **IISC, Bangalore**
11.	**Faculty members at different levels veering different specializations**	**UG Programme**	
		Member- 1	Dr. Leenagiri G
		Member- 2	Prof. Asha
		Member- 3	Dr. Mary Cherian
		Member- 4	Dr. Gowrishankar
		Member- 5	Dr. Smitha Shekar B
		Member- 6	Dr. Harish G
		Co-Ordinator	Prof. Asha Rani K.P
		PG Programme	
		Member- 1	Dr. Prabha R
		Member- 2	Dr.K.R Shylaja
12.	**External Subject experts nominated by academic council**	Member-1	**Dr. Rajendra Hegadi** **IIIT Dharwad**
		Member-2	**Dr. Suresh L** **Principal** **Cambridge Institute of Technology** **Bangalore**
		Member- 3	**Dr. Gowrishankar.** **BMSCE, Bangalore**
		Member- 4	**Dr. Bindumadavi** **AMCE, Bangalore**
13.	**VTU Nominee**	Member	**Dr. Chandrashekar** **NITK, Mangalore**
14.	**Industry Representative**	Member - 1	**Mr. G.K Patil** **Collins Aerospace** **Bangalore**
		Member - 2	**Mr. Mukund Kumar** **Senior Director** **NTT Data, Bangalore**
		Member - 3	**Mr. Iyer** **HR Manager** **Cognizant, Bangalore**
15.	**Special Invitee from Mentee Institution RML Avadh University Ayodhya**	Member	**Mr. Ashish Pandey** **HOD,CSE** **IET, Ayodhya**

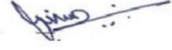| 16.	**Alumni with PG Degree**	Member	**Ms. Preet Kanwal** **Assistant Professor** **PESU, Bangalore**

2021-22
STRUCTURE OF BOARD STUDIES
For UG and PG
(To be constituted as per 5.3 of status of University ,"AUTONOMOUS COLLEGE STATUTE, 2006")

Sl. No	Category	Nomination of the Committee	Name of the person
1.	**Head of the Department**	Chairman	**Dr. Siddaraju**
2.	**Advisor**		**Dr.L.M.Patnaik** **IISC, Bangalore**
3.	**Faculty members at different levels veering different specializations**	**UG Programme**	
		Member- 1	Dr. Asha
		Member- 2	Dr. Leenagiri G
		Member- 3	Dr. Gowrishankar
		Member- 4	Dr. Smitha Shekar B
		Member- 5	Dr. Harish G
		Member- 6	Dr. Nandini N
		Co-ordinator	Prof. Asha Rani K.P
		PG Programme	
		Member- 1	Dr. Prabha R
		Member- 2	Dr.K.R Shylaja
4.	**External Subject experts nominated by academic council**	Member-1	Dr. Rajendra Hegadi IIIT Dharwad
		Member-2	Dr. Anitha Kanavalli Professor & Head MSRIT,Bangalore
		Member- 3	Dr. Guruprasad Professor & Head,BMSCE, Bangalore
		Member- 4	Dr. Thippeswamy Professor & Head,NMIT, Bangalore
5.	**VTU Nominee**	Member	Dr.Ramakanth Professor & Head,RVCE, Bangalore
6.	**Industry Representative**	Member - 1	Mr.Nandakishore VP,WIPRO Technologies Bangalore
		Member - 2	Mr.Nagendraswamy S Programme Director Sharp Software Developments, Bangalore
		Member - 3	Dr. Bishwajith Paul Director, AI Consultant, Bangalore

7.	**Special Invitee from Mentee Institution RML Avadh University Ayodhya**	Member	Mr. Ashish Pandey HOD,CSE IET, Ayodhya
8.	**Alumni with PG Degree**	Member	Dr.Anil Kumar Assistant Professor NMIT, Bangalore

Dr.Siddaraju

Chairman   BOS

Dr. Ambedkar Institute of Technology
(An Autonomous Institution affiliated to VTU, Belgaum)
Department of Computer Science & Engineering
<u>Minutes of the Meeting</u>

Members   **Present:**

1. Dr. Siddaraju
2. Dr. Mary Cherian
3. Dr. Gowri Shankar
4. Dr. Prakash
5. Dr. Nandini
6. Dr. K R Shylaja
7. Asha
8. Asha Rani K P
9. Veena Potadar
10. Srinivasa A H
11. Sham Shekhar P
12. Suresh D
13. Madhu B
14. Asha K N
15. Harish Kumar H C
16. Arathi P
17. Vinutha M S
18. Jayalakshmi K
19. Pushpaveni H P
20. Rahul M
21. Vinod Kumar K
22. Veena A
23. Lavanya S
24. Sangeetha G M
25. Shalini N
26. Mamtha
27. ShanmughaPriya
28. Tejashwini
29. Vinutha
30. Revanna Siddapa
31. Ravi

Members on Leave:

1. Sowmya C L(ML)

2. Leena Giri G
3. Dr. Smitha Shekar B
4. Dr. Harish G
5. Praveen M V
6. Uma K M

Date: April 27th, 2019
Time: 11:00am-1:30pm
Venue: Held in Smart classroom, Dept. of CSE
Facilitator: Dr. Siddaraju (HOD, CSE)

AGENDA:
1. Preliminary Internal BOS meeting for the academic year 2019-2020(3rd semester and 4th semester) to finalize the syllabus.
2. Discussion regarding syllabus scheme for higher semesters.
3. Mandatory guidelines as per AICTE.
4. Any other issues with the permission of the chair.

HOD welcomed the faculty members of CSE and as well as the few students of 6th semester and 8th semester of CSE department to the meeting and briefed about the agenda of the meeting.

The following are the student's representatives for the internal BOS:
i. Nikhil Jain S P – 6th sem
ii. Niranjan N C – 6th sem
iii. Sandeep A S – 8th sem
iv. Ravi Kumar Tiwari – 8th sem
v. Riya K – 8th sem
vi. Rashmi B – 8th sem
vii. Ranjani S N – 8th sem

1. HOD briefed to the student representatives regarding the agenda for the meeting:
i. There was a lengthy discussion about the structure of the current curriculum and its pros and cons. Students have requested for having Java and Android programming subjects together in one semester or to have Java in 5th sem and followed by Android programming in the 6th sem as it is helpful for them to understand the subject better since android programming is done using the Java programming.
ii. Students have requested for having Python Programming subject in 4th sem and Object oriented programming subject in 3rd sem since the understanding of the subject is better in this flow.
iii. Students have requested to reduce the number of subjects from 6 to 5 since they have 3 labs in every semester or to have 6 subjects and two labs per semester.

iv. Students have requested to have a practical sessions on UNIX shell and system programming.60% of the syllabus to cover theory and the remaining 40% of the syllabus to have practical portions on UNIX shell and system programming.

v. Students have requested to have 3 CIE's as it is difficult for them to prepare for the internals due to more portions or to have 2 internals with 50 marks and a makeup CIE for those who fall under some valid genuine excusable conditions.

vi. Students have requested to have IDE in 5th sem rather than having it in either in 6th or 7th sem.

> *After detailed deliberation with the faculty the chairman of BOS informed to the students regarding request made by them to be considered and place before the forth coming Academic Council Meeting, if ACM agrees the same may be considered.*

2. In respect of subject like program oriented(like OOPs, Python, Java, etc.,) the faculties are of the opinion that in every practical class one credit reserved for tutorials and the remaining two credits for practical's so that students can apply their soft skills to demonstrate or design a code. Since the suggestion seems to be good and acceptable. Hence the HOD/chairman BOS informed the same is going to place before forth coming BOS for further suggestion and comments. If it holds good the same can be implemented with immediate effect.

3. The opinion of all the faculty is the existing methods of giving 5 marks of Assignment in practical as well as theory (writing) is misused by the students by doing mass copying. As an online based assignments can be given to avoid the mass copying of the practical and as well theory based assignments. If apply the above said strategy or methodology that will lead to explore the hidden knowledge of the student and helping for outreach activities.

4. Students must compulsorily register for any one online certification courses (like MOOC, SWAYAM, NPTEL, & so on...) related to their stream and with concern of the staff as per MHRD guidelines. Only on successful completion of the online certification course as one of their elective subjects in their curriculum the respective student will be eligible for the award of the BE degree certificate.

5. Prof. ShamShekar P suggested to have 50% of MCQ's and 50% of theory type question paper pattern for CIE's.

6. The concerned mentors of the students must motivate and help the students to undergo the industry oriented internships and get the certificates mandatorily failing which the respective student will not be awarded the BE degree certificate.

As such there were no more agendas for discussion; the meeting was concluded with vote of thanks.

Dr. Siddaraju
Prof & HOD, C

Dr. AMBEDKAR INSTITUTE OF TECHNOLOGY

(An Autonomous Institution affiliated to VTU, Belgaum)

Department of Computer Science & Engineering

Minutes of BOS Meeting

Date: August 14th, 2020   **Time:** 11:00 AM-1:30 PM
Venue: Held in the Seminar Hall[C-326], CSE
Facilitator: Dr. Siddaraju (HOD, CSE)
Online Video Platform Used: ZOOM   **Meeting ID:** 83750462433

Members   Present:

Dr. Siddaraju

1. Dr. Leenagiri
2. Dr. Gowri Shankar
3. Dr. Mary Cherian
4. Dr.K R Shylaja
5. Asha
6. Asha Rani K P
7. Dr.Smitha Shekar B
8. Veena Potadar
9. Srinivasa A H
10. Sham Shekhar P
11. Suresh D
12. Praveen M V
13. Harish Kumar H C
14. Arathi P
15. Vinutha M S
16. Asha K N
17. Madhu B
18. Uma K M
19. Pushpaveni H P
20. Vinod Kumar K
21. Sowmya C L
22. Chidananda V
23. Lavanya Santhosh
24. Veena A
25. Mamatha
26. Shalini N
27. Ravikumar J
28. Vinutha H
29. Tejaswini
30. Shanmugapriya
31. Revanasidappa

Members on Leave:

1. Rashmi N
2. Sowmya C L
3. Dr.Harish G
4. Sangeetha G M

BOS Members present through Online:

Sl. No	Category	Nomination of the Committee	Name of the person
1.	**Head of the Department**	Chairman	**Dr. Siddaraju**
2.	**Advisor**		**Dr.L.M.Patnaik IISC, Bangalore**
3.	**Faculty members at different levels veering different specializations**	**UG Programme**	
		Member- 1	Dr. Leenagiri G
		Member- 2	Prof. Asha
		Member- 3	Dr. Mary Cherian
		Member- 4	Dr. Gowrishankar
		Member- 5	Dr. Smitha Shekar B
		Member- 6	Dr. Harish G[ABSENT]
		Co-Ordinator	Prof. Asha Rani K.P
		PG Programme	
		Member- 1	Dr. Prabha R
		Member- 2	Dr.K.R Shylaja
4.	**External Subject experts nominated by academic council**	Member-1	**Dr. Rajendra Hegadi IIIT Dharwad**
		Member-2	**Dr. Suresh L Principal Cambridge Institute of Technology Bangalore**
		Member- 3	**Dr. Gowrishankar. BMSCE, Bangalore**
		Member- 4	**Dr. Bindumadavi AMCE, Bangalore**
5.	**VTU Nominee**	Member	**Dr. Chandrashekar NITK, Mangalore**
6.	**Industry Representative**	Member - 1	**Mr. G.K Patil Collins Aerospace Bangalore**

		Member - 2	**Mr. Mukund Kumar Senior Director NTT Data, Bangalore**
		Member – 3 **[ABSENT]**	**Mr. Iyer HR Manager Cognizant, Bangalore**
7.	**Special Invitee from Mentee Institution RML Avadh University Ayodhya**	Member	**Mr. Ashish Pandey HOD,CSE IET, Ayodhya**
8.	**Alumni with PG Degree**	Member	**Ms. Preet Kanwal Assistant Professor PESU, Bangalore**

AGENDA

1. **Finalization of UG Scheme & syllabus from 1ˢᵗ to 6ᵗʰ semester and scheme of 7ᵗʰ and 8ᵗʰ sem.**
2. **Finalization of PG Scheme & syllabus from 1ˢᵗ to 4ᵗʰ semester.**
3. **Finalization of BE Honor's scheme.**
4. **Finalization of PAC committee.**
5. **Finalization of department Mission, Vision statement.**
6. **Any other issues related to BOS.**

HOD welcomed all the BOS members to the meeting (Online) and briefed about the agenda for the meeting.

Discussion on Syllabus is as follows:

1. Reframed syllabus for 3ʳᵈ Sem and 4ᵗʰ Sem has been approved by the externals.
2. Mr. Mukund Kumar suggested to have more case studies in software engineering. And also suggested to make student to take up realistic scenario in mini project.
3. Dr. Bindu madhavi suggested to include AI, Basics of ML with RPA.
4. Dr. Rajendra Hegadi asked to Include Deep Learning as elective.
5. Dr. G K Patil and Dr. Suresh L suggested to combine AI and ML.
6. Mr. Mukund Kumar suggested to make students to define their own experiments in ML Lab.
7. Dr. Gowrishankar Sir suggested to add Deep Learning as Elective. Also, he suggested make students to take up MOOC Course for Android Programming instead of a separate subject and conduct only lab.
8. Dr. Suresh sir asked to change the title from **Core Java to Java Programming.**
9. All the externals suggested to have atleast 2 hours of industry expert to teach for connected learning.
10. Finally, Dr. Siddaraju Explained about the shortage of Credits in the AICTE specified structure to accommodate all the subjects and hence we tried best to incorporate the recent trend subjects. Also expressed the Deep Learning Subject can be incorporated in 7ᵗʰ sem Elective.
11. Department Mission and Vision Statements, PAC committee members list has been approved by the experts.

Dr. Siddaraju
Prof. & HOD,
CSE

Minutes of the 11ᵗʰ Online BOS Meeting

The External BOS meeting of the Computer Science & Engineering department was held, on 26ᵗʰ June 2021 at 10:00 AM-12:30 PM on the Google Meet platform **(https://meet.google.com/wav-wtme-zuo).**

STRUCTURE OF BOARD STUDIES

Sl. No	Category	Nomination of the Committee	Name of the person
1.	Head of the Department	Chairman	Dr. Siddaraju
2.	Advisor		Dr.L.M.Patnaik IISC, Bangalore
3.	Faculty members at different levels veering different specializations	**UG Programme**	
		Member- 1	Dr. Asha
		Member- 2	Dr. Leenagiri G
		Member- 3	Dr. Gowrishankar
		Member- 4	Dr. Smitha Shekar B
		Member- 5	Dr. Harish G
		Member- 6	Dr. Nandini N
		Co-ordinator	Prof. Asha Rani K.P
		PG Programme	
		Member- 1	Dr. Prabha R
		Member- 2	Dr.K.R Shylaja
4.		Member -1	Dr. Rajendra Hegadi IIIT Dharwad

	External Subject experts nominated by academic council	Member -2	Dr. Suresh L Professor,RNSIT,Bangalore
		Member- 3	Dr. Gowrishankar Professor,BMSCE, Bangalore
		Member- 4	Dr. Bindumadavi Professor,SCE, Bangalore
5.	VTU Nominee	Member	Dr.Chandrashekar Professor,NITK, Mangalore
6.	Industry Representative	Member - 1	Mr.G.K Patil Collins Aerospace Bangalore
		Member - 2	Mr.Mukund Kumar K G, CEO, Securado, Muscat
		Member - 3	Mr.Iyer HR Manager Cognizant, Bangalore
7.	Special Invitee from Mentee Institution RML Avadh University Ayodhya	Member	Mr. Ashish Pandey HOD,CSE IET, Ayodhya
8.	Alumni with PG Degree	Member	Dr.Anil Kumar Assistant Professor NMIT, Bangalore

AGENDA
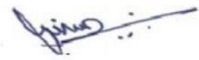
1. **Finalization of 7th and 8th semester scheme and syllabus for 175 Credits.**
2. **Any other issues related to M.Tech.**
3. **Finalization of BE Honor's scheme.**
4. **Finalization of PAC committee.**
5. **Any other issues related to BOS.**

- Ms. Asharani K P, Assistant Professor, Dept. of CSE presented the Scheme and Syllabus for the 7th and 8th semester for the AY 2021-22.
- Mr. G K Patil Sir suggested to include project planning and project management to students before they enter into 8th semester.
- Dr. Rajendra Sir asked whether Internship is compulsory for all students. If it's compulsory, it will be difficult for average level students. And suggested to make it optional to students. Dr. Suresh L sir also expressed the same and suggested for any certification course for students instead of Internship.
- Mr. Mukund Kumar K G expressed to include standard framework or best practices before the programming concepts, so that it will definitely help any individual to code in a better way as industry expects.
- Mr. G K Patil Sir agreed with the suggestion made by Mr. Mukund Kumar K G and also recommended to include that standard framework to all the programming languages.
- Ms. Bindu Madhavi Madam suggested to include Mini Project component along with the Lab component.
- Dr. Suresh L expressed his view to give option to students and suggested let students take a call whether they want Android IDE or Android IoS.
- Dr. Suresh L expressed his view on the syllabus of Cloud Computing and suggested to include Cloud security and Drivers of cloud.
- Mr. Mukund Kumar K G also suggested to include Drivers of cloud.
- Mr. G K Patil Sir suggested to include programming with data analytics.
- Dr. Rajendra Sir agreed with G K Patil sir and suggested to include Lab component for the Big data Analytics.
- Dr.Chandrashekar sir also expressed his view on the programming with data Analytics and suggested to include mini project at least instead of Lab component.
- Mr. Mukund Kumar K G suggested to include orientation to the subject (Big data Analytics), use cases on machine learning, dashboard mechanisms.
- Dr. Suresh L agreed with Mukund sir and suggested push to 5th module to 4th module and include use cases on machine learning wrt Data Analytics, dashboard mechanisms.
- Dr. Anilkumar expressed his view to include introduce Apache spark and spark SQL in Big Data Analytics.
- Mr. Mukund Kumar K G expressed his view to include use cases of Business Intelligence.
- Dr. Bindu Madhavi agreed with Mukund sir to include use cases in Business Intelligence subject.
- Mr. G K Patil Sir Simulation part to be included in Business intelligence subject.
- Mr. G K Patil Sir suggested to include security part in Cyber Forensics.
- Mr. Mukund Kumar K G suggested to include threats classification in Cyber Forensics. Also suggested to name it as Cyber breaches.
- Mr. Mukund Kumar K G suggested to call an industry person to give some introduction on Cyber forensics subject.
- Mr. Mukund Kumar K G expressed his view on Software Project Management subject and suggested to include PMI framework, Project

Governance and control, Project Stakeholders Management, Escalation Management.

- Ms. Bindu Madhavi madam expressed her views on the Computer Vision subject to use 3D photos in computer vision.
- Ratification of M.Tech subject Data Science and Machine Learning Techniques- Dr. K R Shylaja Madam modified 4th module in the subject and focused on interpretation and construction aspects.
- Dr.Siddaraju accepted all the suggestions made by the external members.

As such there were no more agendas for discussion, the meeting was concluded with vote of thanks.

Dr. Siddaraju
Prof & HOD,
CSE

	2018-22 BATCH								
Sl. No.	Course Code	Course Title	Total No. of Contact Hours					Credits	Semester
			L	T	P	S	TOTAL HOURS		
A	**Humanities and Social Science**								
1.	18HS11/12	English/Kannada	1	0	2	0	2	1	01/02
2.	18HS21/22	English/Kannada	1	0	2	0	2	1	01/02
3.	18HS33	Soft Skills	4	0	0	0	3	0	03
4.	18HS43	Employability Skills	4	0	0	0	3	0	04
5.	18HS31/32	Constitution of India Professional Ethics and Human Rights/ /Env. Studies	1	0	0	0	2	1	03
6.	18HS41/42	Constitution of India Professional Ethics and Human Rights/ /Env. Studies	1	0	0	0	2	1	04
7.	18HS51/52	M&E / IPR	3	0	0	0	3	3	05
8.	18HS61/62	M&E / IPR	3	0	0	0	3	3	06
9.	18HS71/72	CMEP/OSHA	2	0	0	0	2	2	07
10.	18XX81	CMEP/OSHA	4	0	0	0	4	2	08
		Total					**28**	**14**	
B	**Basic Sciences**								
1.	18MA11	Calculus and Linear Algebra	3	2	0	0	5	4	01
2.	18MA21	Advanced Calculus and Numerical Methods	3	2	0	0	5	4	02
3.	18CH12/22	Engineering Chemistry	3	2	0	0	5	4	01/02
4.	18CHL16/26	Engineering Chemistry Laboratory	0	0	2	0	3	1	01/02

5.	18PH12/22	Engineering Physics	3	2	0	0	5	4	01/02
6.	18PHL16/26	Engineering Physics Laboratory	0	0	2	0	3	1	01/02
7.	18MA31	Discrete Mathematical Structures	2	2	0	0	4	3	03
8.	18MA41	Probability Statistics & Queuing Theory	2	2	0	0	4	3	04
		Total					**34**	**24**	
C	**Engineering Sciences**								
1.	18CS13/23	Programming for Problem Solving	2	2	0	0	4	3	01/02
2.	18CSL17/27	Computer Programming Laboratory	0	0	2	0	3	1	01/02
3.	18MEL15/25	Computer Aided Engineering Drawing	2	0	2	0	4	3	01/02
4.	18EC14/24	Basic Electronics	2	2	0	0	4	3	01/02
5.	18CV14/24	Civil Engineering and Mechanics	2	2	0	0	4	3	01/02
6.	18ME15/25	Elements of Mechanical Engineering.	2	2	0	0	4	3	01/02
7.	18EE13/23	Basic Electrical Engineering	2	2	0	0	4	3	01/02
8.	18EEL17/27	Basic Electrical Engineering Laboratory	0	0	2	0	3	1	01/02
		Total					**30**	**20**	
D	**Professional Subjects – Core**								
1.	18CS31	Digital Logic and Computer Design	4	0	0	0	4	4	03
2.	18CS32	Data Structures and Algorithms	4	0	0	0	4	4	03
3.	18CS33	Operating System	3	0	0	0	3	3	03
4.	18CS34	Python Programming	3	0	0	0	3	3	03
5.	18CS35	Web Technology	0	0	2	0	3	1	03

6.	18CSL36	Data Structures and Algorithms Laboratory	0	0	2	0	3	1	03
7.	18CSL37	Digital Logic and Computer Design Laboratory	0	0	2	0	3	1	03
8.	18CSL38	Python Programming Laboratory	0	0	2	0	3	1	03
9.	18CS41	Algorithms Design Techniques	3	0	0	0	3	3	04
10.	18CS42	OOP Principles and Practices using C++	3	0	0	0	3	3	04
11.	18CS43	Microcontroller and Embedded System	4	0	0	0	4	4	04
12.	18CS44	Theoretical Foundation of Computer Science	4	0	0	0	4	4	04
13.	18CS45	Computer Organisation and Architecture	3	0	0	0	3	3	04
14.	18CSL46	Microcontroller and Embedded System Laboratory	0	0	2	0	3	1	04
15.	18CSL47	OOP Principles and Practices using C++ Lab	0	0	2	0	3	1	04
16.	18CSL48	Algorithm Design Techniques Laboratory	0	0	2	0	3	1	04
17.	18CS51	Software Engineering	3	0	0	0	3	3	05
18.	18CS52	Java & J2EE	4	0	0	0	4	4	05
19.	18CS53	Database Management System	3	0	0	0	3	3	05
20.	18CS54	Computer Networks & Internet Protocols	4	0	0	0	4	4	05
21.	18CSL57	Database Application Laboratory	0	0	2	0	3	1	05
22.	18CSL58	Network Programming lab using java & NS	0	0	2	0	3	1	05
23.	18CS61	Internet of Things	4	0	0	0	4	4	06
24.	18CS62	Machine Learning	4	0	0	0	4	4	06

25.	18CS63	Unix Programming	3	0	0	0	3	3	06
26.	18CSL66	Internet of Things Lab	0	0	2	0	3	1	06
27.	18CSL67	Machine Learning Laboratory	0	0	2	0	3	1	06
28.	18CS71	Android Programming	4	0	0	0	4	4	07
29.	18CS72	Cloud Computing	4	0	0	0	4	4	07
30.	18CSL76	Android Programming Laboratory	0	0	2	0	3	1	07
31.	18CSL77	Cloud Computing Laboratory	0	0	2	0	3	1	07
		Total					**101**	**77**	
E	**Professional Subjects - Elective**								
	18CS55X	**Elective-1**	3	0	0	0	3	3	05
1.	18CS551	Advanced Web Technology	3	0	0	0			
2.	18CS552	Advanced Algorithm	3	0	0	0			
3.	18CS553	Artificial Intelligence	3	0	0	0			
4.	18CS554	TCS-Elective	3	0	0	0			
		Total Credits						**3**	
	18CS64X	**Elective-2**	3	0	0	0	3	3	06
1.	18CS641	Distributed Operating System	3	0	0	0			
2.	18CS642	Digital Image Processing	3	0	0	0			
3.	18CS643	Compiler Design	3	0	0	0			
4.	18CS644	Principles of Economics	3	0	0	0			
		Total Credits						**3**	
	18CS73X	**Elective-3**					3	3	07
1.	18CS731	Business Intelligence	3	0	0	0			
2.	18CS732	Cyber Forensics	3	0	0	0			
3.	18CS733	Software Project Managemt	3	0	0	0			
4.									
		Total Credits						**3**	
	18CS74X	**Elective-4**					3	3	07
1.	18CS741	Computer Vision	3	0	0	0			

2.	18CS742	Introduction to Robotics	3	0	0	0			
3.	18CS743	Soft Computing	3	0	0	0			
		Total Credits						**3**	
		Total					**12**	**12**	
F	**Open Electives**								
								3	
	18XX56X	**Open Elective-A**	3	0	0	0	3	3	06
	18CS561	Oops With C++							
	18CS562	Python Programming							
	18CS563	Unix Shell Programming							
	18CS564	Object Oreinted Modeling And Design							
	18CS565	Software Testing							
		Total Credits						**3**	
	18XX65X	**Open Elective-B**	3	0	0	0	3	3	07
	18CS651	Wiresless Sensor Network							
	18CS652	Storage Area Network							
	18CS653	Adhoc Wireless Network							
	18CS654	Data Science							
		Total Credits						**3**	
	18XX75X	**Open Elective-C**	3	0	0	0	3	**3**	08
	18CS751	Artificial Intelligence with Prolog							
	18CS752	Machine Learning							
	18CS753	Internet of Things							
	18CS754	Software Engineering							
	18CS755	Agile Methodology							
	18CS756	Cloud Computing							
								3	
		Total					**9**	**9**	
G	**Project Work**								
1.	18CSM68	Mini Project	0	0	2	0	2	3	06

2.	18CSP78	Project Phase-1	0	0	2	0	2	2	07
3.	18CSI84	Internship	0	0	2	0	2	2	06/07/08
4.	18CSS83	Technical Seminar	0	0	2	0	1	1	08
5.	18CSP82	Project work	0	0	10	0	10	10	08
		Total					**15**	**16**	

Table B.2.1.2.1. 2018-22 BATCH

2017-21 BATCH

Sl. No.	Course Code	Course Title	Total No. of Contact Hours					Credits	Semester
			L	T	P	S	TOTAL HOURS		
A		**Humanities and Social Science**							
1.	HS01	Environmental Studies	2	0	0	0	2	02	02
2.	HS02	Constitution of India and Professional Ethics	2	0	0	0	2	02	01
3.	HS04	Intellectual Property Rights	2	0	0	0	2	02	08
4.	HS03	Management& Entrepreneurship	4	0	0	0	4	4	06
5.	EN29	English Communication Skills	2	0	0	0	2	--	01/02
6.	EN39	Soft Skills	0	2	0	0	2	--	03
7.	KA19	Kannada	2	0	0	0	2	--	01/02
8.	EN49	Employability Skills	0	2	0	0	2	--	04
9.	19HS51	Aptitude &Verbal Ability Skills	0	2	0	0	2	--	05
		Total					20	10	
B		**Basic Sciences**							
1.	MA11	Engineering Mathematics – I	3	1	0	0	4	04	01
2.	MA21	Engineering Mathematics – II	3	1	0	0	4	04	02
3.	CH22	Engineering Chemistry	4	0	0	0	4	04	02
4.	CHL27	Engineering Chemistry Lab	0	0	1.5	0	3	1.5	02
5.	PHY12	Engineering Physics	4	0	0	0	4	04	01
6.	PHL17	Engineering Physics Lab	0	0	1.5	0	3	1.5	01
7.	MA31CS	DMS& NM	4	0	0	0	4	04	03
9.	MA41CS	Probability Queuing & Reliability Theory	3	1	0	0	4	04	03
		Total					30	27	
C		**Engineering Sciences**							
1.	CS23	Computer Concepts and C programming	4	0	0	0	4	04	02
2.	CSL26	Computer Concepts and C programming Lab	0	0	1.5	0	1.5	1.5	02
3.	MEL14	Computer Aided Engineering Drawing	2	0	2	0	4	04	01
4.	EC25	Basic Electronics	3	0	0	1	4	04	02

5.	CV13	Elements of Civil Engineering & Engineering Mechanics	3	0	0	1	4	04	01
6.	ME24	Elements of Mechanical Engineering.	3	0	0	1	4	04	02
7.	EE15	Basic Electrical Engineering	3	0	0	1	4	04	01
8.	MEL16	Workshop Practice Lab	0	0	1.5	0	1.5	1.5	01
		Total					**30**	**27**	
D		**Professional Subjects - Core**							
1.	CS31	Logic Design	4	0	0	0	4	4	03
2.	CS32	Data Structures with C	4	0	0	0	4	4	03
3.	CS33	Unix & Shell Programming	3	0	0	0	3	3	03
4.	CS34	Computer Organization	3	0	0	0	3	3	03
5	CS35	Python Programming	3	0	0	0	3	3	03
6.	CSL36	Data Structures with C/C++ Lab	0	0	1	0	2	1.5	03
7.	CSL37	Logic Design Laboratory	0	0	1	0	2	1.5	03
8	CSL38	Python Programming Laboratory	0	0	1	0	2	1	03
9	CS41	Graph Theory & Combinatorics	3	0	0	0	3	3	03
9.	CS42	Algorithms Design Techniques	4	0	0	0	4	4	04
10.	CS43	Object Oriented Programming with C++	4	0	0	0	4	4	04
11	CS44	Advanced Computer Architecture and Parallel Processing	4	0	0	0	4	4	04
12	CS45	System Software	3	0	0	0	3	3	04
13	CSL46	Object Oriented Programming with C++Laboratory	0	0	1	0	3	1.5	04
14	CSL47	ADT Laboratory	0	0	1	0	3	1.5	04
15	CSL48	Unix Shell Programming and System Software Laboratory	0	0	1	0	3	1	04
16.	CS51	Software Engineering	4	0	0	0	4	4	05
17.	CS52	Java & J2EE	4	0	0	0	4	4	05
18.	CS53	Operating System	4	0	0	0	4	4	05
19.	CS54	Database Management System	3	0	0	0	3	3	05
20.	CS55	Data Communication Networks	3	0	0	0	3	3	05

21.	CS56	Theoretical Foundation of Computer Science	4	0	0	0	4	4	05
22.	CSL57	Database Application Laboratory	0	0	1	0	3	1.5	05
23.	CSL58	Networks Lab	0	0	1	0	3	1.5	05
24.	CSL59	Java & J2EE Lab	0	0	1	0	2	1	05
25.	CS61	Unix Systems Programming	0	0	3	0	3	3	06
26.	CS62	Compiler Design	4	0	0	0	4	4	06
27.	CS63	Web Technologies	0	0	3	0	3	3	06
28.	CS64	Computer Graphics and Visualization	3	0	0	0	3	3	06
29.	CSL66	Computer Graphics and Visualization Laboratory	0	0	1	0	3	1.5	06
30.	CSL67	Web Programming Laboratory	0	0	1	0	3	1.5	06
31.	CS71	Android Programming	3	0	0	0	3	3	07
32.	CS72	Cloud Computing	3	0	0	0	3	3	07
32.	CSL75	Android Programming Laboratory	0	0	1.5	0	3	1.5	07
33.	CSL76	Cloud Computing Laboratory	0	0	1.5	0	3	1.5	07
		Total					**106**	**94**	
E		**Professional Subjects - Elective**							
		Elective I (Group-A)						4	
1.	CS651	Distributed Operating System	4	0	0	0	4		06
2.	CS652	Numerical Methods & Computation	4	0	0	0	4		06
3.	CS653	Mobile Ad-hoc Networks	4	0	0	0	4		06
		Total Credits						**4**	
		Elective II (Group-B)						4	
1.	CS731	Wireless Sensor Networks	4	0	0	0	4		07
2.	CS732	Advanced Algorithms	4	0	0	0	4		07
3.	CS733	Neural Networks	4	0	0	0	4		07
		Total Credits						**4**	
		Elective III(Group-C)						3	
1.	CS741	Simulation & Modelling	3	0	0	0	3		07
2.	CS742	Digital Image Processing	3	0	0	0	3		07
3.	CS743	Software Testing	3	0	0	0	3		07
		Total Credits						**3**	
		Elective IV(Group-D)						3	
1.	CS811	Object Technology	3	0	0	0	3		08

2.	CS812	Big Data Analytics	3	0	0	0	3		08
3.	CS813	Artificial Intelligence & Machine Learning	3	0	0	0	3		08
		Total Credits						**3**	
		Elective V(Group-E)						4	
1.	CS821	Cryptography and Network Security	4	0	0	0	4		08
2.	CS822	Internet of Things	4	0	0	0	4		08
3.	CS823	Wireless Cellular Networks	4	0	0	0	4		08
		Total Credits						**4**	
		Total					**18**	**18**	
F		**Inter Departmental Electives**						8	
		Group A						4	
1.	CSE01	Wireless Sensor Networks	4	0	0	0	4		07
2.	CSE02	Storage Area Networks	4	0	0	0	4		07
3.	CSE03	Unix Shell Programming	4	0	0	0	4		07
		Total Credits						**4**	
		Group B						4	
1.	CSE04	Internet of Things	4	0	0	0	4		08
2.	CSE05	Object-Oriented Modelling and Design	4	0	0	0	4		08
		Total Credits						**4**	
		Total					**8**	**8**	
G		**Project Work**							
1.	CSP68	Mini Project	0	0	2	0	2	2	06
2.	CSP77	Project Work – Phase I	0	0	2	0	2	--	07
3.	CSS84	Seminar	0	0	2	0	2	2	08
4.	CSP83	Project work	0	0	12	0	12	12	07/08
		Total					**18**	**16**	

	2016-20 BATCH								
Sl. No.	**Course Code**	**Course Title**	**Total No. of Contact Hours**					**Credits**	**Semester**
			L	**T**	**P**	**S**	**TOTAL HOURS**		
A		**Humanities and Social Science**							
1.	HS02	Constitution of India and Prof. Ethics	2	0	0	0	2	02	01
2.	HS01	Environmental Studies	2	0	0	0	2	02	02
3.	HS04	Intellectual Property Rights	2	0	0	0	2	02	08
4.	HS03	Management and Entrepreneurship	4	0	0	0	4	04	06
5.	EN29	English	2	0	0	0	2	--	01/02
6.	EN39	Soft Skills	0	2	0	0	2	--	03
7.	KA19	Kannada	2	0	0	0	2	--	01/02
8.	EN49	Employability Skills	2	0	0	0	2	--	04
		Total					**18**	**10**	
B		**Basic Sciences**							
1.	MA11	EngineeringMathematics – I	3	1	0	0	4	04	01
2.	MA21	EngineeringMathematics – II	3	1	0	0	4	04	02
3.	CH22	Engineering Chemistry	4	0	0	0	4	04	02
4.	CHL27	Engineering Chemistry Lab	0	0	1.5	0	3	1.5	02
5.	PHY12	Engineering Physics	4	0	0	0	4	04	01
6.	PHL17	Engineering Physics Lab	0	0	1.5	0	3	1.5	01
7.	MA31CS	Engineering Mathematics -- III	4	0	0	0	4	04	03
8.	MA41CS	Probability,Queuing & Reliability Theory	3	1	0	0	4	04	04
		Total					**30**	**27**	
C		**Engineering Sciences**							
1.	CS23	Computer Concepts and C programming	4	0	0	0	4	04	02
2.	CSL26	Computer Concepts and C programming Lab	0	0	1.5	0	1.5	1.5	02
3.	MEL14	Computer Aided Engineering Drawing	2	0	2	0	4	04	01

4.	EC25	Basic Electronics	3	0	0	1	4	04	02
5.	CV13	Elements of Civil Engineering & Engineering Mechanics	3	0	0	1	4	04	01
6.	ME24	Elements of Mechanical Engineering.	3	0	0	1	4	04	02
7.	EE15	Basic Electrical Engineering	3	0	0	1	4	04	01
8.	MEL16	Workshop Practice Lab	0	0	1.5	0	1.5	1.5	01
		Total					**27**	**27**	
D		**Professional Subjects - Core**							
1.	CS31	Logic Design	4	0	0	0	4	4	03
2.	CS32	Data Structures with C	4	0	0	0	4	4	03
3.	CS33	Unix & Shell Programming	3	0	0	0	3	3	03
4.	CS34	Computer Organization	3	0	0	0	3	3	03
5.	CS35	Python Programming	3	0	0	0	3	3	03
6.	CSL36	Data Structures with C/C++ Lab	0	0	1.5	0	3	1.5	03
7.	CSL37	Logic Design Laboratory	0	0	1.5	0	3	1.5	03
8.	CSL38	Python Programming Laboratory	0	0	1	0	2	1	03
9.	CS41	Graph Theory & Combinatorics	3	0	0	0	3	3	04
10.	CS42	Algorithm Design Techniques	4	0	0	0	4	4	04
11.	CS43	Object Oriented Programming with C++	4	0	0	0	4	4	04
12.	CS44	Advanced Computer Architecture and Parallel Processing	4	0	0	0	4	4	04
13.	CS45	System Software	3	0	0	0	3	3	04
14.	CSL46	Object Oriented Programming with C++Laboratory	0	0	1.5	0	3	1.5	04
15.	CSL47	Algorithms design Laboratory	0	0	1.5	0	3	1.5	04
16.	CSL48	Unix & System Software Laboratory	0	0	1	0	2	1	04
17.	CS51	Software Engineering	4	0	0	0	4	4	05
18.	CS52	Java &J2EE	4	0	0	0	4	4	05
19.	CS53	Operating System	4	0	0	0	4	4	05

20.	CS54	Database Management System	3	0	0	0	3	3	05
21.	CS55	Data Communication Networks	3	0	0	0	3	3	05
22.	CS56	Theoretical Foundation of Computer Science	4	0	0	0	4	4	05
23.	CSL57	Database Application Laboratory	0	0	1.5	0	3	1.5	05
24.	CSL58	Networks Lab	0	0	1.5	0	3	1.5	05
25.	CSL59	Java & J2EE Laboratory	0	0	1	0	2	1	05
26.	CS61	Unix Systems Programming	0	0	3	0	3	3	06
27.	CS62	Compiler Design	4	0	0	0	4	4	06
28.	CS63	Web Technologies	3	0	0	0	3	3	06
29.	CS64	Computer Graphics and Visualization	3	0	0	0	3	3	06
30.	CSL66	Computer Graphics and Visualization Laboratory	0	0	1.5	0	3	1.5	06
31.	CSL67	Web Technologies Laboratory	0	0	1.5	0	3	1.5	06
32.	CS71	Android Programming	3	0	0	0	3	3	07
33.	CS72	Cloud Computing	3	0	0	0	3	3	07
34.	CSL75	Android Programming Laboratory	0	0	1.5	0	3	1.5	07
35.	CSL76	Cloud Computing Laboratory	0	0	1.5	0	3	1.5	07
		Total					112	94	
E		**Professional Subjects - Elective**							
		Elective I (Group-A)						4	
1.	CS651	Distributed Operating System	4	0	0	0	4		06
2.	CS652	Numerical Methods & Computation	4	0	0	0	4		06
3.	CS653	Mobile Ad-hoc Networks	4	0	0	0	4		06
		Total Credits						**4**	
		Elective II (Group-B)						4	
1.	CS731	Wireless Sensor Networks	4	0	0	0	4		07
2.	CS732	Wireless Cellular Networks	4	0	0	0	4		07
3.	CS733	Cloud Computing	4	0	0	0	4		07
		Total Credits						**4**	
		Elective III(Group-C)						3	

1.	CS741	Simulation & Modeling	3	0	0	0	3		07
2.	CS742	Digital Image Processing	3	0	0	0	3		07
3.	CS743	Software Testing	3	0	0	0	3		07
		Total Credits						**3**	
		Elective IV(Group-D)						3	
1.	CS811	Object Technology	3	0	0	0	3		08
2.	CS812	Big Data Analytics	3	0	0	0	3		08
3.	CS813	Artificial Intelligence & Machine Learning	3	0	0	0	3		08
		Total Credits						**3**	
		Elective V(Group-E)						4	
1.	CS821	Cryptography and Network Security	4	0	0	0	4		08
2.	CS822	Internet of Things	4	0	0	0	4		08
3.	CS823	Wireless Cellular Networks	4	0	0	0	4		08
		Total Credits						**4**	
		Total					**18**	**18**	
F		**Inter Departmental Electives**						8	
		Group A						4	
1.	CSE01	Wireless Sensor Networks	4	0	0	0	4		07
2.	CSE02	Storage Area Networks	4	0	0	0	4		07
3.	CSE03	Unix Shell Programming	4	0	0	0	4		07
		Total Credits						**4**	
		Group B						4	
1.	CSE04	Internet of Things	4	0	0	0	4		08
2.	CSE05	Object-Oriented Modeling and Design	4	0	0	0	4		08
		Total Credits						**4**	
		Total					**8**	**8**	
G		**Project Work**							
1.	CSP68	Mini Project	0	0	2	0	2	2	06
2.	CSP77	Project Work Phase -1	0	0	2	0	2	--	07
3.	CS84	Seminar	0	0	2	0	2	2	08
4.	CSP83	Project work Phase -2	0	0	12	0	12	12	07/08
		Total					**18**	**16**	

	2015-19 BATCH								
Sl. No.	Course Code	Course Title	Total No. of Contact Hours					Credits	Semester
			L	T	P	S	TOTAL HOURS		
A		**Humanities and Social Science**							
11.	**HS02**	Constitution of India & Professional Ethics	2	0	0	0	2	02	01
12.	**HS01**	Environmental Studies	2	0	0	0	2	02	02
13.	**HS04**	Intellectual Property Rights	2	0	0	0	2	02	08
14.	**HS03**	Management & Entrepreneurship	4	0	0	0	4	04	06
15.	**EN29**	Functional English-II	2	0	0	0	2	--	02
16.	**EN39**	English Communication Skills	2	0	0	0	2	--	03
17.	**EN49**	Employability Skills	2	0	0	0	2	--	04
18.	**KA19**	Kannada	2	0	0	0	2	--	01
		Total					**18**	**10**	
B		**Basic Sciences**							
9.	**MA11**	Engineering Mathematics – I	3	1	0	0	4	04	01
10.	**MA21**	Engineering Mathematics – II	3	1	0	0	4	04	02
11.	**CH22**	Engineering Chemistry	4	0	0	0	4	04	02
12.	**CHL27**	Engineering Chemistry Lab	0	0	1.5	0	3	1.5	02
13.	**PHY12**	Engineering Physics	4	0	0	0	4	04	01
14.	**PHL17**	Engineering Physics Lab	0	0	1.5	0	3	1.5	01
15.	**MA31 CS**	Discrete Mathematics & Numerical Methods	4	0	0	0	4	04	03
16.	**MA41 CS**	Probability, Queuing Theory & Reliability	4	0	0	0	4	04	04
17.	**CS41**	Graph Theory & Combinatorics	3	0	0	0	3	03	04
		Total					**33**	**30**	
C		**Engineering Sciences**							
1.	**CS23**	Computer Concepts and C programming	4	0	0	0	4	04	02
2.	**CSL26**	Computer Concepts and C programming Lab	0	0	1.5	0	3	1.5	02

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3.	**MEL14**	Computer Aided Engineering Drawing	2	0	2	0	4	04	01
4.	**EC25**	Basic Electronics	3	0	0	1	4	04	02
5.	**CV13**	Elements of Civil Engineering	3	0	0	1	4	04	01
6.	**ME24**	Elements of Mechanical Engineering.	3	0	0	1	4	04	02
7.	**EE15**	Basic Electrical Engineering	3	0	0	1	4	04	01
8.	**MEL16**	Workshop Practice Lab	0	0	1.5	0	3	1.5	01
		Total					**30**	**27**	
D		**Professional Subjects - Core**							
32.	**CS31**	Logic Design	4	0	0	0	4	4	03
33.	**CS32**	Data Structures with C	4	0	0	0	4	4	03
34.	**CS33**	Unix & Shell Programming	3	0	0	0	3	3	03
35.	**CS34**	Computer Organization	3	0	0	0	3	3	03
36.	**CS35**	Python Programming	3	0	0	0	3	3	03
37.	**CSL36**	Data Structures with C Laboratory	0	0	1.5	0	3	1.5	03
38.	**CSL37**	Logic Design Laboratory	0	0	1.5	0	3	1.5	03
39.	**CSL38**	Python Programming Laboratory	0	0	1	0	2	1	03
40.	**CS42**	Algorithms Design Techniques	4	0	0	0	4	4	04
41.	**CS43**	Object Oriented Programming with C++	4	0	0	0	4	4	04
42.	**CS44**	Advanced Computer Architecture and Parallel Processing	4	0	0	0	4	4	04
43.	**CS45**	System Software	3	0	0	0	3	3	04
44.	**CSL46**	Object Oriented Programming with C++ Laboratory	0	0	1.5	0	3	1.5	04
45.	**CSL47**	Algorithms Design Techniques Laboratory	0	0	1.5	0	3	1.5	04
46.	**CSL48**	USP & System Software Lab	0	0	1	0	2	1	04
47.	**CS51**	Software Engineering	4	0	0	0	4	4	05
48.	**CS52**	Java & J2EE	4	0	0	0	4	4	05

49.	**CS53**	Operating System	4	0	0	0	4	4	05
50.	**CS54**	Database Management System	3	0	0	0	3	3	05
51.	**CS55**	Data Communication Networks	3	0	0	0	3	3	05
52.	**CS56**	Theoretical Foundation of Computer Science	4	0	0	0	4	4	05
53.	**CSL57**	Database Application Laboratory	0	0	1	0	3	1.5	05
54.	**CSL58**	Networks Lab	0	0	1	0	3	1.5	05
55.	**CSL59**	Java & J2EE Lab	0	0	1	0	3	1	05
56.	**CS61**	Unix Systems Programming	0	0	3	0	3	3	06
57.	**CS62**	Compiler Design	4	0	0	0	4	4	06
58.	**CS63**	Web Technologies	3	0	0	0	3	3	06
59.	**CS64**	Computer Graphics and Visualization	3	0	0	0	3	3	06
60.	**CSL66**	Computer Graphics and Visualization Laboratory	0	0	1.5	0	3	1.5	06
61.	**CSL67**	Web Technologies Laboratory	0	0	1.5	0	3	1.5	06
62.	**CS71**	Android Programming	3	0	0	0	3	3	07
63.	**CS72**	Cloud Computing	3	0	0	0	3	3	07
64.	**CSL75**	Android Programming Laboratory	0	0	1.5	0	3	1.5	07
65.	**CSL76**	Cloud Computing Laboratory	0	0	1.5	0	3	1.5	07
		Total					**110**	**91**	
E		**Professional Subjects - Elective**							
		Elective I (Group-A)						4	
1.	**CS651**	Distributed Operating System	4	0	0	0	4		06
2.	**CS652**	Numerical Methods & Computation	4	0	0	0	4		06
3.	**CS653**	Mobile Ad-hoc Networks	4	0	0	0	4		06
		Total Credits						**4**	
		Elective II (Group-B)						4	
1.	**CS731**	Wireless Sensor Networks	4	0	0	0	4		07
2.	**CS732**	Wireless Cellular Networks	4	0	0	0	4		07
3.	**CS733**	Neural Networks	4	0	0	0	4		07
		Total Credits						**4**	

		Elective III(Group-C)						3	
1.	CS741	Simulation & Modeling	3	0	0	0	3		07
2.	CS742	Digital Image Processing	3	0	0	0	3		07
3.	CS743	Software Testing	3	0	0	0	3		07
		Total Credits						**3**	
		Elective IV(Group-D)						3	
1.	CS811	Object Technology	3	0	0	0	3		08
2.	CS812	Big Data Analytics	3	0	0	0	3		08
3.	CS813	Artificial Intelligence & Machine Learning	3	0	0	0	3		08
		Total Credits						**3**	
		Elective V(Group-E)						4	
1.	CS821	Cryptography and Network Security	4	0	0	0	4		08
2.	CS822	Internet of Things	4	0	0	0	4		08
3.	CS823	Wireless Cellular Networks	4	0	0	0	4		08
		Total Credits						**4**	
		Total					**18**	**18**	
F		**Inter Departmental Electives**						8	
		Group A						4	
1.	CSE01	Wireless Sensor Networks	4	0	0	0	4		07
2.	CSE02	Storage Area Networks	4	0	0	0	4		07
3.	CSE03	Unix Shell Programming	4	0	0	0	4		07
		Total Credits						**4**	
		Group B						4	
1.	CSE04	Internet of Things	4	0	0	0	4		08
2.	CSE05	Object-Oriented Modeling and Design	4	0	0	0	4		08
		Total Credits						**4**	
		Total					**8**	**8**	
G		**Project Work**							
1.	CSP68	Mini Project	0	0	2	0	2	2	06
2.	CS84	Seminar/Industrial Visit/Training	0	0	2	0	2	2	08
3.	CSP83	Project work	0	0	12	0	12	12	08
		Total					**16**	**16**	

Table B.2.1.2.2. 2015-19 BATCH