RV College of Engineering®

Autonomous
Institution Affiliated
to Visvesvaraya
Technological
University, Belagavi

Approved by AICTE
New Delhi

RV College of Engineering, Bangalore

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

BOS CONTENT SHEET

RV College of Engineering®

Autonomous
institution Affiliated
to Visvesvaraya
Technological
University, Belagavi

Approved by AICTE
New Delhi

Department: Computer Science & Engineering

Programme: B.E. (Computer Science & Engineering)

The following are the new courses added in the curricula in the respective curricular revisions made in 2018, 2021 and 2022 schemes. Curricular revisions were discussed thoroughly at the respective Board of Studies meetings. The new courses added are reflected in the revised curricula with the course codes.

Sl. No.	Title of the new course added	Course code	Scheme in which the new course is added
1.	Network Programming and Security	18CS54	2018
2.	Object Oriented System Development using UML, Java and Patterns	18CS5A1	2018
3.	Social Networks	18IS5A2	2018
4.	Applied Natural Processing	18CS5A3	2018
5.	Introduction to robotics	18CS5A4	2018
6.	Functional and Conceptual Design	18CS5A6	2018
7.	Natural Language Processing	18CS5A7	2018
8.	Blockchain and its Applications	18CS5A8	2018
9.	Artificial Intelligence and Machine Learning	18CS62	2018
10.	Minor Project	18CS64	2018
11.	Quantum Computing	18CS6D2	2018
12.	Robotic Process Automation Design & Development	18CS6D5	2018
13.	Computer Graphics and Virtual Reality	18CS72	2018
14.	Internship	18CS74	2018
15.	Information Storage Management	18CS7F3	2018
16.	Design Thinking Lab	18CS47	2018
17.	Statistics and Probability for Data Science	21MA41A	2021
18.	Object Oriented Analysis And Design	21CS4A1	2021
19.	Multi-core Computer Architecture – Storage and interconnects	21CS4A2	2021
20.	Introduction To Haskell Programming	21CS4A3	2021
21.	Embedded System Design With ARM	21CS4A4	2021
22.	Distributed Systems	21CS4A5	2021
23.	Data Structures and its Applications	18CS33	2018
24.	Data Science	18MCE13	2018
25.	Data Preparation and Analysis	18MCE1A2	2018
26.	Applied Cryptography	18MCE1A3	2018
27.	Intelligent Systems	18MCE1B2	2018
28.	Wireless Network Security	18MCN1B3	2018
29.	Wireless and Mobile Networks	18MCE2C1	2018
30.	Natural Language Processing	18MCE2C2	2018
31.	Cloud Security	18MCN2C3	2018
32.	Internet of Things and Applications	18MCN2D1	2018

33.	Deep Learning	18MCE2D2	2018
34.	Security Engineering	18MCE2D3	2018
35.	Operating System Design	18MCE31	2018
36.	Software Defined Systems	18MCE3E1	2018
37.	Web Analytics and Development	18MCE3E2	2018
38.	Cyber Security	18MCE3E3	2018
39.	Advanced Data Structures and Algorithms	22MCE12TL	2022
40.	Advances in Data Base Management & Mining	22MCE13T	2022
41.	Computing & Analytics Lab	22MCE14L	2022
42.	Blockchain Technologies	22MCN1A2T	2022
43.	Mobile Application Development	22MIT1A3T	2022
44.	Computer Vision	22MCE1A4T	2022
45.	Social Network Analysis	22MCN1B1T	2022
46.	Distributed and Cloud Computing	22MCN1B2T	2022
47.	Advances in Operating System	22MCE22TL	2022
48.	Deep Learning	22MCE23T	2022
49.	Robotic Process Automation	22MSE2C1T	2022
50.	Embedded Systems	22MCE2C2T	2022
51.	Internet Of Things and Edge Computing	22MCN2C4T	2022
52.	Web Application Development Lab	22MCE24L	2022
53.	Applied Cryptography	18MCE1A3	2018
54.	Information Coding	18MCN1B2	2018
55.	Wireless Network Security	18MCN1B3	2018
56.	Wireless Communication Technologies	18MCN21	2018
57.	Advances in Network Management	18MCN22	2018
58.	Network Routing and Protocols	18MCN2C1	2018
59.	Machine Learning	18MCS2C2	2018
60.	Cloud Security	18MCN2C3	2018
61.	Internet of Things and Applications	18MCN2D1	2018
62.	Advances in Algorithms	18MCN2D2	2018
63.	Security Engineering	18MCE2D3	2018
64.	High Speed Networks	18MCN31	2018
65.	Data Storage Technology and Networks	18MCN3E2	2018
66.	Cyber Security	18MCE3E3	2018
67.	Software Defined Networks Lab	22MCN14L	2022
68.	Blockchain Technologies	22MCN1A2T	2022
69.	Mobile Application Development	22MIT1A3T	2022
70.	Social Network Analysis	22MCN1B1T	2022
71.	Distributed and Cloud Computing	22MCN1B2T	2022
72.	Network Programming	22MCN22TL	2022
73.	Advanced Wireless Technologies	22MCN23T	2022
74.	Robotic Process Automation	22MSE2C1T	2022
75.	Embedded Systems	22MCE2C2T	2022
76.	Internet Of Things and Edge Computing	22MCN2C4T	2022
77.	Open-Source Simulation Lab	22MCN24L	2022

BoS-CHAIRMAN
(Computer Science
& Engineering)

DEAN ACADEMICS

DEAN ACADEMICS
R.V. College of Engineering
Bengaluru - 560 059

PRINCIPAL
RV COLLEGE OF ENGINEERING
BENGALURU - 560 059

RV College of Engineering®

Board of Studies CSE <bos.cse@rvce.edu.in>

Invitation for Board of Studies Meeting on 06/07/2018

7 messages

Board of Studies CSE <bos.cse@rvce.edu.in>   Fri, Jun 29, 2018 at 5:18 PM
To: Anjaneyulu Pasala <anjaneyulu_pasala@infosys.com>, mangala <mangala@cdac.in>, "Anil Nileshwar (anileshw)" <anileshw@cisco.com>, swaroopk <swaroopk@gmail.com>, shobhag@rvce.edu.in, "Dr. Srinath N K" <srinathnk@rvce.edu.in>, "Dr. Rajashree Shettar" <rajashreeshettar@rvce.edu.in>, "Anala M.R." <analamr@rvce.edu.in>, "sandhya.sampangi" <sandhya.sampangi@rvce.edu.in>, sumab_rao@rvce.edu.in, Prakash Tubakad <prakash@nvidia.com>, annapurna patil <annapurnap2@yahoo.com>

Dear Sir/Madam,

The Department of Computer Science and Engineering has arranged for Board of Studies(BoS) meeting on 6th July 2018(Friday)

Agenda:
1. Discussion of "Programming in C" syllabus of 1st year B.E. proposed for 2018 scheme.
2. Result Analysis of the outgoing BE autonomous batch.
3. Any other issue.

You are requested to kindly spare your valuable time and make it possible to attend the meeting. Your valuable suggestions will definitely help the department.

Looking forward for your participation. Kindly confirm your availability for attending the meeting.

Date & Venue: 6th July 2018, HOD's Cabin, Dept. of CSE, RVCE
Time: 10:00 a.m.

Thanks and Regards,

Dr. G. Shobha,

BoS Chairperson,

Dept. of C.S.E,

R V College of Engineering (Autonomous),

Bangalore 560059

Board of Studies CSE <bos.cse@rvce.edu.in>   Fri, Jun 29, 2018 at 6:08 PM
To: "Nagaraja G.S." <nagarajags@rvce.edu.in>
Bcc: shobhag@rvce.edu.in

[Quoted text hidden]

--
[Quoted text hidden]

Srinath N.K. <srinathnk@rvce.edu.in>   Fri, Jun 29, 2018 at 8:19 PM
To: Board of Studies CSE <bos.cse@rvce.edu.in>
Cc: Anjaneyulu Pasala <anjaneyulu_pasala@infosys.com>, mangala <mangala@cdac.in>, "Anil Nileshwar (anileshw)" <anileshw@cisco.com>, swaroopk <swaroopk@gmail.com>, shobhag@rvce.edu.in, "Dr. Rajashree Shettar" <rajashreeshettar@rvce.edu.in>, "Anala M.R." <analamr@rvce.edu.in>, "sandhya.sampangi" <sandhya.sampangi@rvce.edu.in>, sumab_rao@rvce.edu.in, Prakash Tubakad <prakash@nvidia.com>, annapurna patil <annapurnap2@yahoo.com>

I will attend the meeting.
[Quoted text hidden]

RAJASHREE SHETTAR <rajashreeshettar@rvce.edu.in>   Sat, Jun 30, 2018 at 9:35 AM

1

To: srinathnk <srinathnk@rvce.edu.in>
Cc: "bos.cse" <bos.cse@rvce.edu.in>, Anjaneyulu Pasala <Anjaneyulu_Pasala@infosys.com>, mangala <mangala@cdac.in>, "Anil Nileshwar (anileshw)" <anileshw@cisco.com>, swaroopk <swaroopk@gmail.com>, shobhag@rvce.edu.in, "Anala M.R." <analamr@rvce.edu.in>, "sandhya.sampangi" <sandhya.sampangi@rvce.edu.in>, sumab_rao@rvce.edu.in, Prakash Tubakad <prakash@nvidia.com>, annapurna patil <annapurnap2@yahoo.com>

I will be attending the meeting.
[Quoted text hidden]

Anala M.R. <analamr@rvce.edu.in>   Sat, Jun 30, 2018 at 9:25 AM
To: Board of Studies CSE <bos.cse@rvce.edu.in>

I am attending the meeting.
[Quoted text hidden]

---

mangala <mangala@cdac.in>   Mon, Jul 2, 2018 at 9:59 AM
Reply-To: mangala <mangala@cdac.in>
To: Board of Studies CSE <bos.cse@rvce.edu.in>

Dear Madam,

I will attend the meeting.

Regards
Mangala

On June 29, 2018 at 5:18 PM Board of Studies CSE <bos.cse@rvce.edu.in> wrote:

> Dear Sir/Madam,
>
> The Department of Computer Science and Engineering has arranged for Board of Studies(BoS) meeting on 6th July 2018(Friday)
>
> **Agenda:**
>   1. Discussion of "Programming in C" syllabus of 1st year B.E. proposed for 2018 scheme.
>   2. Result Analysis of the outgoing BE autonomous batch.
>   3. Any other issue.
>
> You are requested to kindly spare your valuable time and make it possible to attend the meeting . Your valuable suggestions will definitely   help the department.
>
> Looking forward for your participation. Kindly confirm your availability for attending the meeting.
>
> **Date & Venue:**   6th July 2018 , HOD's Cabin, Dept. of CSE, RVCE
> **Time:** 10:00 a.m.
>
>
> **Thanks and Regards,**
>
> **Dr. G. Shobha,**
>
> **BoS Chairperson,**
>
> **Dept. of C.S.E,**
>
> **R V College of Engineering (Autonomous),**
>
> **Bangalore 560059**

[C-DAC is on Social-Media too. Kindly follow us at:
Facebook: https://www.facebook.com/CDACINDIA & Twitter: @cdacindia]

This e-mail is for the sole use of the intended recipient(s) and may
contain confidential and privileged information. If you are not the
intended recipient, please contact the sender by reply e-mail and destroy

all copies and the original message. Any unauthorized review, use,
disclosure, dissemination, forwarding, printing or copying of this email
is strictly prohibited and appropriate legal action will be taken.

---

annapurna patil <annapurnap2@yahoo.com> Tue, Jul 3, 2018 at 1:54 PM
Reply-To: annapurna patil <annapurnap2@yahoo.com>
To: Board of Studies CSE <bos.cse@rvce.edu.in>

Dear Madam,
I will attend the meeting on 6th at 10 am.

Dr. Annapurna P Patil,
  Senior Member IEEE, Member ACM, LMCSI, LMISTE
Professor
Department of Computer Science and Engineering
M S Ramaiah Institute of Technology
Bangalore-54,Karnataka, INDIA.
080 23600822/ 145
+91 9945409177
annapurnap2@yahoo.com, annapurnap2@msrit.edu

[Quoted text hidden]

R.V.COLLEGE OF ENGINEERING
(Autonomous institution affiliated to VTU)
DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING
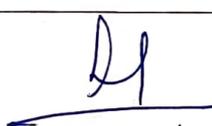
Date: 6 July 2018

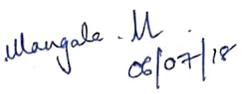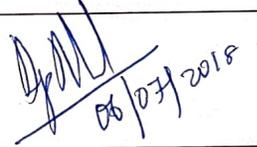## CONSOLIATED PROCEEDINGS OF 17th BoS Meeting
Held on
6th July 2018 at 10:00 am in CSE Department

Agenda:

1. Discussion and approval of "Programming in C" syllabus of 1st year B.E. proposed for 2018 scheme.
2. Discussion of result analysis of the outgoing BE autonomous batch.
3. Discussion and approval of PG CSE and CNE 2018 scheme and proposed syllabus.
4. Any other issue with the permission of the chair.

Members present:

Sl. No.	BoS Member	Signature
1.	**Dr. Shobha G,** Professor and Head, BoS Chairperson	
2.	**Dr. N.K. Srinath,** Professor & Dean Academics	
3.	**Dr.Rajashree Shettar,** Professor and Associate Dean	
4.	**Dr. Anala M R,** Associate Professor	
5.	**Prof. Sandhya S,** Assistant Professor	
6.	**Prof. Suma B,** Assistant Professor	
7.	**Dr. Anjaneyulupasala,** Principal Research Scientist, Infosys Labs,Infosys Limited	

8.	**Mr. Anil Nileshwar** Director, Global Infrastructure Services Cisco Systems(India) Private Limited	
9.	**Ms.Mangala** Joint Director C-DAC Associate Director - NSM , CDAC	Mangala .M. 06/07/18
10.	**Mr. Prakash** Director-Enterprise, Asia South & Program Coordinator – NVIDIA	IN ABSENTIA
11.	**Mr. Swaroop Karunakaran,** Software Engineer, Oracle	IN ABSENTIA
12.	**Dr. Annapurna Patil,** Professor, MSRIT	06/07/2018
13.	**Dr. Nagaraja G S,** **Professor**	
14.		—

Signature of the BoS Chairman with date

198

R.V. College of Engineering, Bangalore – 59
(An Autonomous Institution affiliated to VTU, Belgaum)
Department of Computer Science & Engineering
Date: 6 July 2018

CONSOLIATED PROCEEDINGS OF 17th BoS Meeting
Held on
6th July 2018 at 10:00 am in CSE Department

Members present:

Faculty members from R V College of Engineering:

1. Dr Shobha G (Chairman, BoS), Professor & HoD, Dept. of CSE, R V College of Engineering, Bengaluru
2. Dr. N.K. Srinath, Professor and Dean Academics, Dept. of CSE, RVCE, Bengaluru.
3. Dr Rajashree Shettar, Professor & Associate Dean, Dept. of CSE, R V College of Engineering, Bengaluru
4. Dr Anala M R, Associate Professor, Dept. of CSE, R V College of Engineering, Bengaluru
5. Mrs Sandhya S, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru, Convener Board of Studies (Sept 2015 -Aug 2017)
6. Mrs Suma B, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.

Subject Experts from outside the college nominated by Academic council:

1. Dr. A n j a n e y u l u p a s a l a, Principal Research Scientist, Infosys Labs, Infosys Limited, Bengaluru.

2. Mr. Anil Nileshwar, Director, Global Infrastructure Services, Cisco Systems(India) Private Limited.

Subject experts (VTU Nominee):

1. Mrs. Mangala, Joint Director, C-DAC, Bengaluru.

Subject experts from other colleges:
1. Dr. Annapurna P Patil, Professor, Dept. of CSE, MSRIT, Bengaluru.

Course Co-ordinators:
1. Dr. Nagaraja G S, Professor, Dept. of CSE, RVCE, Bengaluru.(PIC Co-ordinator)
2. Dr. Sharvani G S, Associate Professor, Dept. of CSE, RVCE, Bengaluru.(PG Co-ordinator)

Leave of Absence:

The following members have sought permission and leave of absence due to prior commitments and other pressing engagements:

1. Mr. Swaroop Karunakaran, Engineer Manager, NetAPP(Postgraduate meritorious alumnus nominated by the Principal)
2. Mr. Prakash, Director-Enterprise, Asia South & Program Coordinator – NVIDIA University Relations

This draft minutes of the meeting is being circulated to all the members of the BoS to invite their comments.

The Chairman, BoS welcomed all the BoS members and briefed the Agenda No.80 to 85, to the Board.

Agenda for the BoS meeting:

80. To read and record the previous meeting MoM held on 16th February 2018.
81. To approve first year 'Programming in C' syllabus of the course proposed for 2018 scheme.
82. Result Analysis of outgoing autonomous BE batch.
83. Placement Statistics of outgoing autonomous BE batch.
84. To approve the proposed Scheme and Syllabus for PG CSE and PG CNE of 2018 scheme.
85. Any other issues with the permission of the chair.

Minutes of the Meeting in BoS:

Agenda No.80: To read and record the previous meeting MoM held on 16th February 2018.

Points of discussion: The minutes of the previous meeting held on 16th February 2018 was briefed by the BoS chairperson and the related action taken was discussed with the members. Brief summary of feedback received from all stake holders including alumni, industry experts, students through exit survey and faculty members was shared in the meeting. "The changes in the 2018 curriculum were incorporated after discussion".

Agenda No. 81: To approve first year 'Programming in C' syllabus of the course proposed for 2018 scheme.

Points of discussion: The following points were suggested by the members for the course 'Programming in C',-

- Problem solving could be included as part of the first unit in the course syllabi, which could further be taken up for assessment as part of the tutorial.
- In the list of text books proposed the book by Balaguruswamy needs to be removed and has to be replaced with a better reference book.
- CS-50 series by David Malon (online courses) which provides a series of contents on various domains of computer science could be included as links in the references of the courses.
- Evaluation of tutorials could be graded as part of continuous assessment.

Resolution: The course co-ordinator has been informed regarding incorporation of problem solving in first unit and asked to modify the text and reference books.

Agenda No. 82: Result Analysis of outgoing autonomous BE batch.

Points of discussion: The result analysis for the previous three years has been discussed with the board and analysed for betterment of results.

Agenda No. 83: Placement Statistics of outgoing autonomous BE batch.

Points of discussion: The placement statistics in terms of percentage of students placed and min-max salaries in terms of packages was presented to the board.

Resolution: The board members suggested that though the projected statistics projects satisfactory figures, the department needs to focus more on moving from quantity of placements towards the quality of placements. The placement co-ordinator and Placement Dean were intimated of the above discussion regarding quality placements.

Agenda No. 84: To approve the proposed Scheme and Syllabus for PG CSE and PG CNE of 2018 scheme.

Points of discussion:

The proposed PG-CSE scheme was presented to the board, the members have suggested the following-

- A course on security could be included as core in the proposed scheme.

- The overall scheme needs to be relooked and revised with better flair of core subjects that could include all domains of computer science.

The proposed PG-CNE scheme was presented to the board, the members have suggested the following-

- Network Management can be included as two parts in the curriculum proposed for 2018 scheme. One part could discuss the core management aspects and the other to include Remote Network Management aspects.

- Network Management could be made an industry based elective by associating with industries such as Cisco Pvt. Ltd.,

- Online lectures could be incorporated as TLP approach to facilitate better learning.

Resolution: The PG-CSE and PG-CNE scheme has been asked to revise by the board and same has been taken by PG-Dean and PG co-ordinator.

Agenda No. 85: Any other issues with the permission of the chair.

Dr Shobha G
Chairman - Board of Studies
Professor &Head CSE Department

19

R.V. COLLEGE OF ENGINEERING

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Date: 17-7-2018.

Submitted:

Sub: Proceedings of 17th BoS meeting held on 6th July 2018.

With reference to the Agenda No. 83 of BoS meeting held on 6th July 2018, the board members suggested that though the projected statistics projects satisfactory figures, the department needs to focus more on moving from quantity of placements towards the quality of placement. Hence please discuss the same.
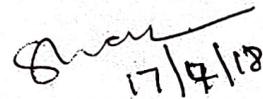
17/7/18

Professor and Head
Department of
Computer Science and Engineering
R.V. College of Engineering
Bangalore - 560 059.

Encl: BoS meeting proceedings.

RV College of Engineering®

Board of Studies CSE <bos.cse@rvce.edu.in>

Invitation for Board of Studies Meeting on 11/08/2018

2 messages

Board of Studies CSE <bos.cse@rvce.edu.in>   Thu, Aug 2, 2018 at 9:51 AM
To: Anjaneyulu Pasala <anjaneyulu_pasala@infosys.com>, mangala <mangala@cdac.in>, "Anil Nileshwar (anileshw)" <anileshw@cisco.com>, swaroopk <swaroopk@gmail.com>, shobhag@rvce.edu.in, "Dr. Srinath N K" <srinathnk@rvce.edu.in>, "Dr. Rajashree Shettar" <rajashreeshettar@rvce.edu.in>, "Anala M.R." <analamr@rvce.edu.in>, "sandhya.sampangi" <sandhya.sampangi@rvce.edu.in>, sumab_rao@rvce.edu.in, Prakash Tubakad <prakash@nvidia.com>, annapurna patil <annapurnap2@yahoo.com>

Dear Sir/Madam,

The Department of Computer Science and Engineering has arranged for Board of Studies(BoS) meeting on 11th August 2018(Saturday)

Agenda:
1. Discussion and approval of PG - CNE scheme and syllabus for 2018 scheme.
2. Discussion and approval of PG - CSE scheme and syllabus for 2018 scheme.
3. Any other issue.

You are requested to kindly spare your valuable time and make it possible to attend the meeting. Your valuable suggestions will definitely help the department.

Looking forward for your participation. Kindly confirm your availability for attending the meeting.

Date & Venue: 11th August 2018(Saturday), HOD's Cabin, Dept. of CSE, RVCE
Time: 10:00 a.m.

Thanks and Regards,

Dr. G. Shobha,

BoS Chairperson,

Dept. of C.S.E,

R V College of Engineering (Autonomous),

Bangalore 560059

Anil Nileshwar (anileshw) <anileshw@cisco.com>   Thu, Aug 2, 2018 at 10:47 AM
To: Board of Studies CSE <bos.cse@rvce.edu.in>

I can make it

[Quoted text hidden]

10

Date: 11th Aug 2018

CONSOLIDATED PROCEEDINGS OF 18th BoS Meeting
Held on
11th Aug 2018 at 10:00 A.M in Dept. of CSE

Agenda:

1. Discussion and approval of PG - CSE scheme and syllabus for 2018 scheme.
2. Discussion and approval of PG - CNE scheme and syllabus for 2018 scheme.

Members Present:

SL No.	BoS Members	Signature
1.	**Dr. Shobha G.** Professor & HoD, BoS Chairperson	
2.	**Dr. N.K. Srinath** Professor & Dean Academics	
3.	**Dr. Rajashree Shettar** Professor & Associate Dean	
4.	**Dr. Anala M.R.** Associate Professor	
5.	**Prof. Sandhya S.** Assistant Professor	
6.	**Prof. Suma B.** Assistant Professor	

213

7.	**Dr. Anjaneyulupasala,** Principal Research Scientist, Infosys Labs, Infosys Ltd.	
8.	**Mr. Anil Nileshwar** Director, Global Infrastructure Services, CISCO Systems India Pvt Ltd.	
9.	**Ms. Mangala** ~~Joint~~ Director C-DAC Associate Director CDAC	Mangala - M
10.	**Mr. Prakash** Director- Enterprise, Asia South & Program Co-ordinator – NVIDIA	— In Absentia —
11.	**Mr. Ravikumar Pareet** IT Consultant, ABB India Pvt Ltd.	
12.	**Dr. Annapurna Patil,** Professor, MSRIT Dr. Annapurna. P. Patil.	11/8/2018

Signature of the BoS Chairman with date

212

R.V. College of Engineering, Bangalore – 59
(An Autonomous Institution affiliated to VTU, Belgaum)
Department of Computer Science & Engineering

Date: 11 August 2018

CONSOLIATED PROCEEDINGS OF 18th BoS Meeting
Held on
11th August 2018 at 10:00 am in CSE Department

Members present:

Faculty members from R V College of Engineering:

1. Dr Shobha G (Chairman, BoS), Professor & HoD, Dept. of CSE, R V College of Engineering, Bengaluru
2. Dr. N.K. Srinath, Professor and Dean Academics, Dept. of CSE, RVCE, Bengaluru.
3. Dr Rajashree Shettar, Professor & Associate Dean, Dept. of CSE, R V College of Engineering, Bengaluru
4. Dr Anala M R, Associate Professor, Dept. of CSE, R V College of Engineering, Bengaluru
5. Mrs Sandhya S, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru, Convener Board of Studies
6. Mrs Suma B, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.

Subject Experts from outside the college nominated by Academic council:

1. Dr. A n j a n e y u l u p a s a l a, Principal Research Scientist, Infosys Labs, Infosys Limited, Bengaluru.

2. Mr. Anil Nileshwar, Director, Global Infrastructure Services, Cisco Systems (India) Private Limited.

Subject experts (VTU Nominee):

1. Mrs. Mangala, Joint Director, C-DAC, Bengaluru.

Subject experts from other colleges:
1. Dr. Annapurna P Patil, Professor, Dept. of CSE, MSRIT, Bengaluru.

Special Invitees-PGCNE:
1. Dr. Nagaraja G S, Professor, Dept. of CSE, RVCE, Bengaluru.
2. Dr. Sharvani G S, Associate Professor, Dept. of CSE, RVCE, Bengaluru.(PG Co-ordinator)
3. PG-Staff Members.

217

Leave of Absence:

The following members have sought permission and leave of absence due to prior commitments and other pressing engagements:

1. Mr. Swaroop Karunakaran, Engineer Manager, NetAPP (Postgraduate meritorious alumnus nominated by the Principal)
2. Mr. Prakash, Director-Enterprise, Asia South & Program Coordinator – NVIDIA University Relations

This draft minutes of the meeting is being circulated to all the members of the BoS to invite their comments.

The Chairman, BoS welcomed all the BoS members and briefed the Agenda No.86 to 88, to the Board.

Agenda for the BoS meeting:

86. To read and record the previous meeting MoM held on 6th July 2018.
87. To approve the scheme and syllabus of PG CSE and PG-CNE program.
88. Any other issues with the permission of the chair.

Minutes of the Meeting in BoS:

Agenda No.86: To read and record the previous meeting MoM held on 6th July 2018.

Points of discussion: The minutes of the previous meeting held on 6th July, 2018 was briefed by the BoS chairperson and the related action taken was discussed with the members. Brief summary of feedback received from all stake holders including alumni, industry experts, students through exit survey and faculty members was shared in the meeting. "The changes in the PG 2018 scheme curriculum were incorporated after discussion".

Agenda No. 87: To approve the proposed Scheme and Syllabus for PG-CSE and PG-CNE of 2018 scheme.

Points of discussion:

87.1 The proposed PG-CSE and PG-CNE scheme was presented to the board, the members have suggested the following:

87.1.1 Advanced Algorithms - The reference book to be updated with latest reference. Rename the course as Advances in Algorithms and Applications for both PG-CSE and PG-CNE courses

87.1.2 Data Science- Include R/Python programming for lab component. (PG-CSE)

87.1.3 Big Data Analytics- Add NoSQL content and introduce unstructured data in Unit-1 (PG-CSE)

87.1.4 **Operating Systems** - Rename the course as Operating Systems Design, change the content of Unit-1 to Unit-4 completely and include latest and advanced topics on Security, Device drivers, IPC, Linux Internals. (PG-CSE)

87.1.5 **Advanced Computer Networks-** Rename as Computer Network Technologies for PG-CSE and change the contents to include advanced topics in networking and security aspect also to be covered for both PG-CSE and PG-CNE.

87.1.6 **Cloud Computing Technology** - In Unit-V include hands on using AWS, add identity management, access management for both PG-CSE and PG-CNE syllabus on Cloud Computing. Unit-1 and Unit-2 reduce the total number of hours as content and hours here is slight mismatch. Focus on security, isolation, notification services, capability list in the syllabus.

87.1.7 **Wireless and Mobile Network:** - Include 5G, Difference between 4G and 5G, WPAN 1,2,3 for PG-CNE

87.1.8 **IoT** - Include Edge computing, FoG computing in Unit-V as latest development for both PG-CSE and PG-CNE

87.1.9 **NLP** - Include Hands-on in Unit-V for working on NLTK

87.1.10 Web search and IR to be removed and include related course for that vertical.

87.2 It was suggested by external BoS members to have Elective courses related to security in one of the verticals such that the student could be specialized either in the area of security or could specialize on Networking courses or on Data Analytics courses as listed other two verticals.

87.3 As suggested by the Dept. of CSE, BoS members have agreed to go with **Business Analytics** as Open Elective (Global Elective) and its contents was reviewed by the committee.

87.4 For the PG-CNE course on **information and network security**, it was suggested by BoS members to include topic on Block Chaining.

87.5 Faculty were advised to include latest developments and usage of appropriate tool based on the course in Unit-5 for both PG-CSE and PG-CNE.

87.6   The committee suggested to include latest edition, publisher, ISBN for books mentioned under reference section for both PG-CSE and PG-CNE

Resolution: The PG-CSE and PG-CNE scheme and syllabus for certain courses has been asked to revise by the board and the same has been taken by PG-Dean and PG-coordinator.

Agenda No. 88: Any other issues with the permission of the chair.

Dr Shobha G
Chairman - Board of Studies
Professor &Head CSE Department

RV College of Engineering®

Board of Studies CSE <bos.cse@rvce.edu.in>

Invitation for Board of Studies Meeting on 11/05/201

8 messages

Board of Studies CSE <bos.cse@rvce.edu.in>   Tue, May 7, 2019 at 9:16 PM
To: shreyassrinath94@gmail.com, Ravi Kumar Pareet <ravikumarnpareet@gmail.co>
Cc: ramakanthkp@rvce.edu.in, "Dr. Rajashree Shettar" <rajashreeshettar@rvce.edu.in>

Dear Mr.Shreyas and Mr. Ravi,

GREETINGS FROM CSE-RVCE.

As spoken to you earlier regarding BoS meeting, the Department of Computer Science and Engineering has arranged for Board of Studies(BoS) meeting on 11th May 2019(Saturday).

Agenda for the meeting is as below:

1. Discussion and approval of UG-BE CSE 2018 scheme from 3rd to 8th semester.
2. Discussion and approval of UG-BE CSE 3rd-4th semester syllabus of 2018 scheme.
3. Discussion and approval of PG - CNE 3rd-4th semester syllabus of 2018 scheme.
4. Discussion and approval of PG - CSE 3rd-4th semester syllabus of 2018 scheme.
5. Approval of new Program Outcomes(POs) for PG CNE and CSE.
6. Ratification of the new BoE members.
7. Ratification of subject exemption for the branch change student Vedika Agarwal.
8. Any other issue with the permission of the chair.

You are requested to kindly spare your valuable time and make it possible to attend the meeting. Looking forward for your participation.

Date & Venue: 11th May 2019(Saturday), HOD's Cabin, Dept. of CSE, RVCE
Time: 10:00 a.m.

Thanks and Regards,

Dr. Ramakanth Kumar P,

BoS Chairperson,

Dept. of C.S.E,

R V College of Engineering (Autonomous),

Bangalore 560059

---

shreyas s <shreyassrinath94@gmail.com>   Tue, May 7, 2019 at 10:32 PM
To: Board of Studies CSE <bos.cse@rvce.edu.in>
Cc: ramakanthkp@rvce.edu.in, "Dr. Rajashree Shettar" <rajashreeshettar@rvce.edu.in>

Thank you for the invite.
Kindly share the draft PG - CNE 3rd-4th semester syllabus of 2018 scheme if you have it.
So that i can prepare before attending the meeting.

Regards,
Shreyas S

[Quoted text hidden]

R.V. College of Engineering, Bangalore – 59
(An Autonomous Institution affiliated to VTU, Belgaum)
Department of Computer Science & Engineering

Date: 11 May 2019
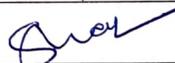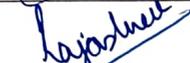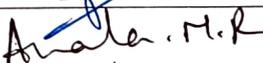
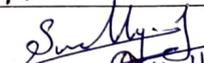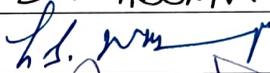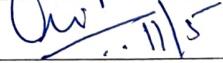## CONSOLIATED PROCEEDINGS OF 19th BoS MEETING
Held on
11th May 2019 at 10:00 am in CSE Department

Meeting Agenda for 19th BoS Meeting:

89. Read and record the minutes of previous BoS meeting held on 11/08/2018.

90. Discussion and approval of UG-BE CSE 2018 scheme from 3rd to 8th semester.

91. Discussion and approval of UG-BE CSE 3rd-4th semester syllabus of 2018 scheme.

92. Discussion and approval of PG - CNE 3rd-4th semester syllabus of 2018 scheme.

93. Discussion and approval of PG - CSE 3rd-4th semester syllabus of 2018 scheme.

94. Approval of new Program Outcomes(POs) for PG CNE and CSE.

95. Ratification of the new BoE members.

96. Ratification of subject exemption for the branch change student Vedika Agarwal.

97. Any other issue with the permission of the chair.

The 19th BoS Meeting conducted this day May 11th 2019 with above mentioned agenda was witnessed by the following members, the detailed minutes of the meeting will be shared through mail at the earliest,-

Sl. No	MEMBERS	SIGNATURE
1.	**Dr. Ramakanthkumar P,** Professor and Head, BoS Chairperson	11/5/19
2.	**Dr. Shobha G,** Professor	
3.	**Dr.RajashreeShettar,** Professor and Associate Dean	
4.	**Prof. Anala M R,** Associate Professor	
5.	**Prof. Sandhya S,** Assistant Professor	11/5/2019.
6.	**Prof. Suma B,** Assistant Professor	11/5/19.
7.	**Dr. H S Guruprasad,** Professor, Information Science and Engineering, BMS College of Engineering	11.05.2019

1

2/18

8.	**Dr. G T Raju** Dean of Engg, Professor and Head Dept. of Computer Science and Engineering RNS Institute of Technology	
9.	**Mr. Anil Nileshwar** Director, Global Infrastructure Services Cisco Systems(India) Private Limited.	
10.	**Mr. KeerthyJagadeesh,** Lead Engineer, Texas Instruments	

Special Invitees

11.	**Dr. N. K. Srinath,** Professor & Dean Academics	*N. K. Srinath*
12.	**Dr. S R Swamy,** Professor	IN ABSENTIA
13.	**Dr. G S Nagaraja,** Professor	
14.	**Dr. B Sathish Babu,** Professor	
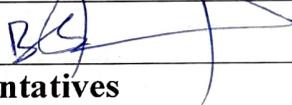
Special Invitees - Student Representatives

15.	**Mr. Ravi Kumar Pareet,** IT Consultant, ABB(PG CSE Alumnus)	
16.	**Mr. Shreyas Srinath,** Intel(PG CNE Alumnus)	
17.	**Ms. Namitha Padmanabhan** IRV15CS095 (UG Final Year Student)	*Namitha*
18.	**Mr. Shreyas A R** IRV15CS149 (UG Final Year Student)	*Shreyas*

Special Invitees - Course Coordinators

19.	**Dr. Deepamala N,** Associate Professor	IN ABSENTIA
20.	**Dr. Soumya A,** Associate Professor	
21.	**Dr. Poonam B,** Associate Professor	
22.	**Prof. Girish Rao S,** Assistant Professor	
23.	**Dr. Badrinath K,** Assistant Professor	
24.	**Prof. Jyothi Shetty,** Assistant Professor	
25.	**Dr. Sowmyarani C N,** Associate Professor	IN ABSENTIA

20 19

	Special Invitees - PG CSE & CNE	
26.	**Dr. Sharvani G S,** Associate Professor	Sharvani G.S
27.	**Dr. Shantha Rangaswamy,** Associate Professor	IN ABSENTIA.

1920

RV College of Engineering®,
(Autonomous Institution Affiliated to VTU, Belagavi)
BENGALURU – 560059
Department of Computer Science & Engineering

Date: 11 May 2019

CONSOLIATED PROCEEDINGS OF 19th BoS Meeting

Held on
11th May 2019 at 10:00 am in CSE Department

Members present:

BoS members from R V College of Engineering:

1. Dr. Ramakanthkumar P, (Chairman, BoS), Professor & HoD, Dept. of CSE, R V College of Engineering, Bengaluru

2. Dr Shobha G, Professor, Dept. of CSE, R V College of Engineering, Bengaluru

3. Dr Rajashree Shettar, Professor & Associate Dean, Dept. of CSE, R V College of Engineering, Bengaluru (BoS member)

4. Dr Anala M R, Associate Professor, Dept. of CSE, R V College of Engineering, Bengaluru

5. Mrs Sandhya S, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.

6. Mrs Suma B, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.

Subject Experts from outside the college nominated by Academic council:

1. Dr. H S Guruprasad, Dean Student Affairs, Professor, Information Science and Engineering, BMS College of Engineering, Bengaluru.

2. Dr. G T Raju, Vice Principal, Professor and Head, Dept. of Computer Science and Engineering, RNS Institute of Technology, Bengaluru.

Subject experts (VTU Nominee):

1. Waiting for the nomination from VTU.

Representative from Industry/Corporate Sector Allied Areas relating to Placement, to be nominated by Academic council:

1. Mr. Anil Nileshwar, Director, Global Infrastructure Services, Cisco Systems(India) Private Limited.

Meritorious Alumnus, to be nominated by the Principal:

1. Mr. KeerthyJagadeesh, Lead Engineer, Texas Instruments, Bengaluru.

Special invitees:

1. Dr. N.K. Srinath, Professor and Dean Academics, Dept. of CSE, RVCE, Bengaluru.
2. Dr. G S Nagaraja, Professor, Dept. of CSE, R V College of Engineering, Bengaluru.(Special Invitee)
3. Dr. B Sathish Babu, Professor, Dept. of CSE, R V College of Engineering, Bengaluru.

Special Invitees - Student Representatives

1. Ms. Namitha Padmanabhan (IRV15CS095) UG Final Year Student, CSE, RVCE.
2. Mr. Shreyas A R (IRV15CS149) UG Final Year Student, CSE, RVCE.
3. Mr. Shreyas Srinath, Intel(PG CNE Alumnus)
4. Mr. Ravi Kumar Pareet, IT Consultant, ABB(PG CSE Alumnus)

Special Invitees - Course Coordinators

1. Dr. Soumya A, Associate Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
2. Dr. Poonam B, Associate Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
3. Prof. Girish Rao S, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
4. Dr. Badrinath K, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
5. Prof. Jyothi Shetty, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.

Special Invitees PG CSE & CNE

1. Dr. Sharvani G S, Associate Professor, Dept. of CSE, R V College of Engineering, Bengaluru.

Leave of Absence:

The following members have sought permission and leave of absence due to prior commitments and other pressing engagements:

1. Dr. S R Swamy, Professor, Dept. of CSE, R V College of Engineering, Bengaluru. (Special Invitee)

2. Dr. Deepamala N, Associate Professor, Dept. of CSE, R V College of Engineering, Bengaluru. (Special Invitee - Course Coordinator)

3. Dr. Sowmyarani C N, Associate Professor, Dept. of CSE, R V College of Engineering, Bengaluru.(Special Invitee - Course Coordinator)

4. Dr. Shantha Rangaswamy, Associate Professor, Dept. of CSE, R V College of Engineering, Bengaluru.(Special Invitee PG CSE)

This draft minutes of the meeting is being circulated to all the members of the BoS to invite their comments.

The Chairman, BoS welcomed all the members of Board of Studies. He also mentioned about the inclusion of special invitee's (mentioned above) and course co-ordiantors for the meeting. BoS Chairman presented agenda No.89 to 97, to the members.

Agenda for the BoS meeting:

89. To read and record the minutes of previous BoS meeting held on 11/08/2018.

90. Discussion and approval of UG-BE CSE 2018 scheme from 3rd to 8th semester.

91. Discussion and approval of UG-BE CSE 3rd-4th semester syllabus of 2018 scheme.

92. Discussion and approval of PG - CNE 3rd-4th semester syllabus of 2018 scheme.

93. Discussion and approval of PG - CSE 3rd-4th semester syllabus of 2018 scheme.

94. Approval of new Program Outcomes(POs) for PG CNE and CSE.

95. Ratification of the new BoE members.

96. Ratification of subject exemption for the branch change student Vedika Agarwal.

97. Any other issue with the permission of the chair.

Minutes of the Meeting in BoS:

The BoS chairman acknowledged the previous board members for their effort and time dedicated to the meetings. The meeting also started by introducing the new members with mission, vision, POs and PEOs of the department and also summarized the achievements of the department.

Agenda No.89: To read and record the minutes of previous BoS meeting held on 11/08/2018.

Points of discussion: The minutes of the previous meeting held on 11th August 2018 was briefed by the BoS chairperson. The previous meeting had approved the PG CSE and PG CNE 2018 scheme along with the syllabus for the first year of the corresponding programmes.

Agenda No.90: Discussion and approval of UG-BE CSE 2018 scheme from 3rd to 8th semester.

Points of discussion: The following points with respect to 2018 scheme from 3rd to 8th semester B.E., was suggested and highlighted in the meeting,-

- It was pointed out that a total of 13 credits (Engineering Mathematics-III(5 credits), Discrete Mathematical Structures(3 credits), Engineering Mathematics-IV(5 credits)) has been allotted to courses of mathematics which puts the departmental core courses on a compromise. Therefore it was suggested to incorporate the concepts of DMS in one of the Engineering Mathematics course and utilize those credits for offering core courses of the programme.

- It was suggested to offer the course titled 'Data Structures and its Applications' for 5 credits in place of 4 credits(as proposed) as this subject needs to be dealt in depth, since this being the heart of computer science and engineering.

- The standard of course delivery to be looked into and a more practical approach of teaching / ICT approach to be employed for the course 'Object Oriented Programming using JAVA'. If sufficient labs are available teaching in lab, would help students to improve their practical skill and was hence left for discussion of feasibility to employ the same. If there is scope or provision to offer this course as only laboratory then it could be included in the scheme with only lab course for 3 credits to facilitate more practical exposure.

- The laboratory component for the course 'Operating Systems' could be retained and the lab could relate and provide exposure to Unix System Programming concepts.

- For the course 'Design Thinking lab' to be effective, it was suggested to form groups by the end of third semester and orientation towards design and product based approach needs to be employed that emphasizes the complete product life cycle to be learnt by students.

- It was presented to the board that few core courses such as 'Data Structures and its Applications', 'Object Oriented Programming using JAVA', 'Discrete Mathematical Sutructures', 'Design and Analysis of Algorithms' were offered as common subject to CSE and ISE departments

- It was suggested to raise the TLP for the delivery of the course 'IPR & Entrepreneurship' that focuses on the practical aspects of trademarks and property rights. Assessments for these needs to be relooked which should be oriented towards inferring the case studies rather than making students remembering them.

- It was also offered by the industry representative that they would supplement their personnel to deliver and aid students for orienting towards IPR and also startups could be approached for briefing on the process of setting up business and making students get awareness on entrepreneurship. Further the facilities such as webex/incubation centre of the institution could be utilized by startups to provide awareness to students about entrepreneur.

- It was suggested by the members to reduce the load of 3 tests and 3 quizzes for students rather 2 tests and 2 quizzes for internal assessments could be considered along with other alternative approach of assessments due to time constraints.

- 'Application Programming with Python' and 'Mobile Application Development' was proposed to be offered as an extra course by any faculty to facilitate learning to interested students beyond the curriculum.

- Further it was also suggested that provision could given to any faculty undergoing workshop/training/FDP etc., to disseminate the knowledge acquired to the interested students/faculty by conducting extra sessions/courses for a day or two.

- Computer Science core subjects such as Data Structures, Object Oriented Programming in C++, Operating Systems, Application Programming with Python, Web Programming etc., could be offered as open elective in 5th semester in place of 'Graph Theory and Applications'.

- Assessments for NPTEL need to be looked in, if credits are to be allotted in the scheme for an elective group. It was suggested to provide partial weightage to the NPTEL assessments and additional assessments could be incorporated to give due weightage to the courses.

- IoT could be offered as core course for 2 credits in association with industrypersonnel to provide practical exposure and meet the current trends of industry.

- Courses titled 'Computer Graphics and Virtual Reality' and 'Parallel Architecture & Distributed Programming' in seventh semester which are offered for 5 credits(L:T:P 4:0:1) seems to be heavy for the contents in the final year and was suggested for 5 credits as (L:T:P 3:1:1)

- The course 'Computer Vision' currently offered as elective in 6th semester could be pushed to 7th semester since the connecting course for this is Computer Graphics which is a core in 7th semester.

- It was suggested that the major project credits needs to be looked into to facilitate the project to begin from 7th semester. Since the internship offered by industry does not provide sufficientclarity/transparencyforevaluation due to IPissues, hence creditsof major project could be distributed partially to 7th semester to ensure an inhouseproject to start in 7th semester with 2 phases evaluations during the semester which could be continued in eight semester along with the industry internships.

- Computer Science core subjects to be offered as open elective in place of the course 'Intelligent Systems' in 7th semester.

- The course 'Grid Computing' offered as elective in 7th semester could be removed from scheme and 'Mobile Application Development' could be included in its place.

- The following new courses included in 2018 scheme BE CSE was mentioned and approved in the meeting: Data Structures and its Applications(18CS33), Network Programming and Security(18CS54), Artificial Intelligence and Machine Learning(18CS62), Quantum Computing, Robotic Process Automation Design & Development, Computer Graphics and Virtual Reality(18CS72), Information Storage Management. Minor Project(18CS64) & Internship(18CS74) introduced in the scheme newly was appreciated from student's perspective to facilitate practical exposure. Introduction of MOOC courses in the scheme was also discussed and approved.

Resolution: The suggestions regarding the course delivery and assessments in individual courses would be considered and discussed in the subsequent stages. The course coordinators

will be instructed to frame the contents from the application perspective and the suggestions provided. The open electives offered from 5th to 7th semester will be considered to be domain specific. In view of this, Data Structures and its Applications will be considered in 5th sem, Application Programming with Python will be considered in 6th sem and Web Programming will be considered for 7th semester for open electives. The overall structure of 2018 scheme from 3rd to 8th semesters was approved by the Board.

Agenda No.91: Discussion and approval of UG-BE CSE 3rd-4th semester syllabus of 2018 scheme.

Points of discussion: The following points with respect to 3rd – 4th syllabus of 2018 scheme B.E.., was suggested in the meeting,-

- The syllabus of 'Data Structures and its Applications' was approved. It was suggested to include hackerrank, codechef etc., for partial assessments in the course.

- The syllabus of 'Object Oriented Programming using JAVA' was approved. It was suggested that the components for coding standards could be included. The third reference book needs to be changed .

- The syllabus of 'Foundations of Computer Systems Design' was approved.

- The syllabus of 'Design and Analysis of Algorithms ' was approved.

- The syllabus of 'Microcontrollers and Embedded Systems' was suggested to include concepts of microcontrollers introducing ARM, Aurdino and the current controllers since 8051 (which is proposed in the curriculum) in the current day has become obsolete.

- The syllabus of 'Operating Systems ' was approved and it was suggested to include laboratory component.

- Design Thinking lab – it was suggested that PoC or product needs to be the outcome of the course and hence proper orientation is to be provided. Concepts of product/ product life cycle to be discussed in module 4. It was suggested to include fifteen areas in 2030/themes.

Resolution: The suggestions regarding the inclusion of different assessments would be considered and further discussed. The concepts in 'OOP using JAVA', 'Microcontroller & Embedded Systems', 'Operating Systems' and 'Design Thinking lab' was conveyed to the faculty members and would be considered for further action by the course coordinator. The overall syllabus 3rd and 4th semesters was approved by the Board.

AgendaNo.92: Discussion and approval of PG-CNE 3rd-4th semester syllabus of 2018 scheme.
Points of discussion: The following points with respect to 2nd year PGCNE.., was suggested in the meeting,-

- Latest text books for the course 'High Speed Networks' to be included.
- Latest research papers could be included in the curriculum of the courses offered in 3rd semester, to facilitate and motivate students to take up research.
- The following new courses included in 2018 scheme PG-CNE was mentioned and approved in the meeting: Wireless Communication Technologies(18MCN21), Advances in Network Management(18MCN22) Wireless Network Security, Information Coding, Cloud Security, Internet of Things and Applications, Wireless Network Security, Network Routing and Protocols, Machine Learning, Cloud Security, Internet of Things and Applications, Advances in Algorithms, Security Engineering, High Speed Networks(18MCN31), Data Storage Technology and Networks.

Resolution: The board suggestion to include research papers in the curriculum will be further taken up for discussion with the advisory committee for further action. The suggestion of updating reference books will be conveyed to the coordinator. The overall syllabus for PG CNE 3rd and 4th semesters was approved by the Board.

AgendaNo.93: Discussion and approval of PG-CSE 3rd-4th semester syllabus of 2018 scheme.
Points of discussion: The following points with respect to 2nd year PG CSE., was suggested in the meeting,-

- It was suggested to update text books for including the latest edition.

- Latest research papers could be included in the curriculum of the courses offered in 3rd semester, to facilitate and motivate students to take up research.

- The following new courses included in 2018 scheme PG-CSE was mentioned and approved in the meeting: Data Science (18MCE13), Operating System Design(18MCE31), Data Preparation and Analysis , Applied Cryptography, Intelligent Systems, Wireless and Mobile Networks, Natural Language Processing, Deep Learning, Security Engineering, Applied Cryptography, Software Defined Systems, Web Analytics and Development, Cyber Security.

Resolution: The board suggestion to include research papers in the curriculum will befurther taken up for discussion with the advisory committee for further action. Updating of referencebookswillbeconveyedtothecoordinator.TheoverallsyllabusforPGCSE3rd and 4th semesters was approved by the Board.

Agenda No. 94: Approval of new Program Outcomes(POs) for PG CNE and CSE.

Points of discussion: The POs of PG CNE and CSE were presented to the board.

Resolution: The POs of PG CNE and CSE was approved by the Board.

Agenda No. 95: Ratification of the new BoE members.

Points of discussion: The structure and the new members of the Board of Examiners was presented to the board.

Resolution: The new BoE members ratified.

Agenda No. 96: Ratification of subject exemption for the branch change student Vedika Agarwal.

Points of discussion: The case of branch change student Vedika Agarwal (1RV17TE063) for exemption of taking up the course Environmental Technology (16ET32) was discussed in the meeting.

Resolution: Since the student has completed Environmental Technology (16ET32) during third semester in Telecommunication Engineering, it was ratified that the student could be exempted from taking the course in fourth semester offered in 2016 scheme of computer science and engineering. The same would be intimated to CoE and Dean Academics by the equivalence committee.

Agenda No. 97: Any other issue with the permission of the chair.

Points of discussion:

97(a). The syllabus of the course 'Big Data Analytics' (16CS7F1) in 2016 scheme was modified by the course coordinator, and this was presented to the board.

97(b). It was also presented to the board that students will be eligible to get 20 credits under graduate degree with honours through MOOCs.

Resolution:

97(a) The modified syllabus for the course 'Big Data Analytics' (16CS7F1) of 2016 scheme approved. The syllabus would be kept for approval by the academic council which would be updated further for printing on approval.

97(b) It was suggested to check the suitability of the courses to be offered such that the chosen course is not taken up in the regular curriculum by the student, from where it has to be taken up or what is to be offered to be judiciously thought of for earning credits with honours.

The meeting concluded with the BoS Chairman thanking the members for their valuable inputs and suggestions.

16/5/19

Dr. Ramakanthkumar P,
Chairman - Board of Studies
Professor &Head CSE Department

Action Taken Report for 19th BoS Meeting held on 11/05/2019:

- To address the standard of course delivery, staff were informed to identify ICT approaches for effective delivery of courses.

- Since laboratory component for the course 'Operating Systems' was suggested to be retained, the faculty coordinator was informed to structure contents for the lab component. The credit for lab in this course was fitted into the scheme after discussion internally.

- The suggestion regarding the course 'Design Thinking lab' was informed to the concerned coordinators. The coordinators were informed to provide orientation to students towards design and product based approach.

- As it was suggested to offer computer science core subjects as open elective in higher semesters, hence the scheme was modified to offer Data Structures and its Applications in 5th semester, Application Programming with Python in 6th semester and Web Programming in 7th semester replacing Graph Theory and Applications, Cryptography and Cyber Security and Intelligent Systems that were identified to be offered previously.

- Course credits for courses 'Computer Graphics and Virtual Reality' and 'Parallel Architecture & Distributed Programming' in seventh semester were reworked to make the contents lighter in final year by restructuring as suggested for 5 credits as (L:T:P 3:1:1 and 3:0:1).

- The exempted from taking the course Environmental Technology for Vedika Agarwal (1RV17TE063) has been intimated to the Controller of Exam.

15/05/2019

Dr. Ramakanth Kumar. P
(HoD & BoS Chairman)
Dept. of CSE, RVCE

31

RV College
of Engineering®

Autonomous
Institution Affiliated
to Visvesvaraya
Technological
University, Belagavi

Approved by AICTE,
New Delhi, Accredited
by NAAC, Bengaluru

Department of Computer Science and Engineering
Phone: 080-67178053, 8054 : e-mail: hod.cse@rvce.edu.in

Ref: RVE/CSE/   /2019-20   Date: 13/02/2020

20th Board of Studies(BoS) Meeting Invitation

Dear Sir/Madam,

Subject: Invitation for 20th BoS Meeting.

GREETINGS FROM CSE-RVCE.

The Department of Computer Science and Engineering has arranged for Board of Studies meeting on 22nd February 2020(Saturday)

Agenda for the meeting is as below:

1. To read and record the minutes of previous BoS meeting held on 11/05/2019.
2. Discussion and approval of UG-BE CSE syllabus for 5th – 6th semesters of 2018 scheme.
3. Ratification of equivalence for 2012, 2016 and 2018 schemes.
4. Any other issue with the permission of the chair.

You are requested to kindly spare your valuable time and make it possible to attend the meeting. Your valuable suggestions will definitely help the department.

Looking forward for your participation.

Date & Venue: 22nd February 2020(Saturday), HOD's Cabin, Dept. of CSE, RVCE
Time: 9:30 a.m.

13/2/2020

Dr. Ramakanthkumar P,
Chairman - Board of Studies
Professor &Head CSE Department
Department of
Computer Science and Engineering
R.V. College of Engineering
Bangalore - 560 059.

Go, change the world

Mysore Road, RV Vidyaniketan Post,
Bengaluru - 560059, Karnataka, India

080 - 67178053
8054

hod.cse@rvce.edu.in
www.rvce.edu.in

32
82

RV College
of Engineering®

Autonomous
Institution Affiliated
to Visvesvaraya
Technological
University, Belagavi

Approved by AICTE,
New Delhi, Accredited
by NAAC, Bengaluru

Department of Computer Science and Engineering
Phone: 080-67178053, 8054: e-mail: hod.cse@rvce.edu.in

Ref: RVE/CSE/   /2019-20   Date: 22/02/2020

20th Board of Studies Meeting
Held on
22nd February at 9:30 am in CSE Department

Agenda for 20th BoS Meeting:

98. To read and record the minutes of previous BoS meeting held on 11/05/2019.

99. Discussion and approval of UG-BE CSE syllabus for 5th – 6th semesters of 2018 scheme.

100. Ratification of equivalence for 2012, 2016 and 2018 schemes.

101. Any other issue with the permission of the chair.

The 20th BoS Meeting conducted this day 22nd February 2020 with the above mentioned agenda was witnessed by the following members, the detailed minutes of the meeting will be shared through mail at the earliest.-
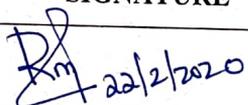
Sl. No.	MEMBERS	SIGNATURE
1	**Dr. Ramakanthkumar P,** Professor and Head, BoS Chairperson	22/2/2020
2	**Dr. Shobha G,** Professor	
3	**Dr. Rajashree Shettar,** Professor and PG Dean - Circuit Branches	
4	**Prof. Anala M R,** Associate Professor	Anala. M. R
5	**Prof. Sandhya S,** Assistant Professor	
6	**Prof. Suma B,** Assistant Professor	
7	**Dr. H S Guruprasad,** Professor, BMSCE	– IN ABSENTIA –
8	**Dr. G T Raju,** Vice-Principal, Professor and Head of CSE, RNSIT	
9	**Dr. M. Girish Chandra,** Principal Scientist, TATA Consultancy Services	– IN ABSENTIA –
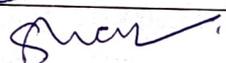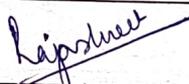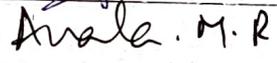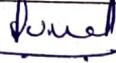
Mysore Road, RVVidyaniketan Post,
Bengaluru – 560 059, Karnataka, India

080-67178020
8161

principal@rvce.edu.in
www.rvce.edu.in

Go, change the world

88 33

RV College
of Engineering®

Autonomous
Institution Affiliated
to Visvesvaraya
Technological
University, Belagavi

Approved by AICTE,
New Delhi, Accredited
by NAAC, Bengaluru

Department of Computer Science and Engineering
Phone: 080-67178053, 8054: e-mail: hod.cse@rvce.edu.in

10	**Mr. Anil Nileshwar** Director, Global Infrastructure Services Cisco Systems(India) Private Limited	*(signature)*
11	**Mr. KeerthyJagadeesh,** Lead Engineer, Texas Instruments	*(signature)*
Special Invitees – Dean Academics	
12	**Dr. Shanmukha Nagaraj** Dean Academics, RVCE	– IN ABSENTIA –
Special Invitees – Student Representatives	
13	**PRATIK MOHAPATRA** UG Final Year Student (USN: 1RV16CS103)	Pratik
14	**RAKSHITH RAO R** UG Final Year Student (USN: 1RV16CS111)	Rakshith
15	**AISHWARYA SETH** UG Final Year Student (USN: 1RV16CS187)	Aishwarya
Special Invitees – Faculty	
16	Dr. Soumyarani C N.	*(signature)*
17	H. Pavithra	*(signature)* 22/2/20
18	Praveena - T	*(signature)* 22/02/2020
19	S. Manonmani	*(signature)* 22/2/2020
20	ANIL NILESHWAR	*(signature)*
21	Dr. GT Raju	*(signature)*
22	Dr. L.S. NALARAJA	*(signature)*
23	Dr B Sathish Babu	*(signature)*
24		
25		
26		
27		

Mysore Road, RVVidyaniketan Post,
Bengaluru – 560 059, Karnataka, India

080-67178020
8161

principal@rvce.edu.in
www.rvce.edu.in

Go, change the world

RV Educational Institutions ®
RV College of Engineering ®

Autonomous
Institution Affiliated
to Visvesvaraya
Technological
University, Belagavi

Approved by AICTE,
New Delhi, Accredited
By NAAC, Bengaluru
And NBA, New Delhi

Department of Computer Science and Engineering
Phone: 080-67178053, 8054: e-mail: hod.cse@rvce.edu.in

Date: 24/02/2020

CONSOLIATED PROCEEDINGS 20th BOARD OF STUDIES MEETING
Held on
22nd February at 9:30 am in CSE Department

Members present:

BoS members from R V College of Engineering:

1. Dr. Ramakanthkumar P, (Chairman, BoS), Professor & HoD, Dept. of CSE, R V College of Engineering, Bengaluru

2. Dr Shobha G, Professor, Dept. of CSE, R V College of Engineering, Bengaluru

3. Dr Rajashree Shettar, Professor & PG Dean - Circuit Branches, Dept. of CSE, R V College of Engineering, Bengaluru

4. Dr Anala M R, Associate Professor, Dept. of CSE, R V College of Engineering, Bengaluru

5. Mrs Sandhya S, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.

6. Mrs Suma B, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.

Representative from Industry/Corporate Sector Allied Areas relating to Placement, nominated by Academic council:

1. Mr. Anil Nileshwar, Director, Global Infrastructure Services, Cisco Systems(India) Private Limited.

Subject Experts from outside the college nominated by Academic council:

1. Dr. G T Raju, Vice Principal, Professor and Head, Dept. of Computer Science and Engineering, RNS Institute of Technology, Bengaluru.

Mysore Road, RV Vidyaniketan
Post, Bengaluru - 560059,
Karnataka, India

080 - 67178020/ 8161

principal@rvce.edu.in
rvce.edu.in

Go, change the world

35

Department of Computer Science and Engineering
Phone: 080-67178053, 8054: e-mail: hod.cse@rvce.edu.in

Meritorious Alumnus Nominated by the Principal:

1. Mr. Keerthy Jagadeesh, Lead Engineer, Texas Instruments, Bengaluru.

Special Invitees:

1. Dr. G S Nagaraja, Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
2. Dr. B Sathish Babu, Professor, Dept. of CSE, R V College of Engineering, Bengaluru.

Special Invitees - Student Representatives

1. Mr. Pratik Mohapatra(USN: 1RV16CS103), UG Final Year Student, CSE, RVCE.
2. Mr. Rakshith Rao R(USN: 1RV16CS111), UG Final Year Student, CSE, RVCE.
3. Ms. Aishwarya Seth (USN: 1RV16CS187), UG Final Year Student, CSE, RVCE.

Special Invitees - Course Coordinators

1. Dr. Sowmyarani C N, Associate Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
2. Prof. Praveena T, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
3. Prof. Pavithra H, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
4. Prof. Manonmani S, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.

Leave of Absence:

1. Dr. H S Guruprasad, Dean Student Affairs, Professor, Information Science and Engineering, BMS College of Engineering, Bengaluru.
2. Dr. M. Girish Chandra, Principal Scientist, TATA Consultancy Services.

9-36

RV Educational Institutions ®
RV College of Engineering ®

Autonomous
Institution Affiliated
to Visvesvaraya
Technological
University, Belagavi

Approved by AICTE,
New Delhi, Accredited
By NAAC, Bengaluru
And NBA, New Delhi

Department of Computer Science and Engineering
Phone: 080-67178053, 8054: e-mail: hod.cse@rvce.edu.in

This draft minutes of the meeting is being circulated to all the members of the BoS to invite their comments.

The Chairman, BoS welcomed all the members of Board of Studies and the attendees. He also mentioned about the inclusion of special invitee's (mentioned above) and course co-ordinators for the meeting. BoS Chairman presented agenda No. 98 to 101 to the members.

Agenda for the 20th BoS meeting:

98. To read and record the minutes of previous BoS meeting held on 11/05/2019.
99. Discussion and approval of UG-BE CSE syllabus for 5th – 6th semesters of 2018 scheme.
100. Ratification of equivalence for 2012, 2016 and 2018 schemes.
101. Any other issue with the permission of the chair.

Minutes of the Meeting in 20th BoS:

The BoS chairman initiated the meeting by briefing the achievements of the department and the new practices/reforms in the department. The achievements included briefing about new MoU's signed, research and consultancy projects taken up, placements statistics w.r.t to average package and percentage of students placed. In regard with the new practices/reforms, the chairman mentioned the approach employed for Design Thinking Lab, the training and initiative by faculties to mentor students, motivation towards NPTEL and MOOC courses, initiative with NGO's for facilitating students admitted to 2018 scheme to earn 100 activity points as prescribed by AICTE. The chairman also mentioned about the successful conduction of 4th IEEE International Conference organised by the department jointly with ISE and MCA.

Mysore Road, RV Vidyaniketan
Post, Bengaluru - 560059,
Karnataka, India

080 - 67178020/ 8161

principal@rvce.edu.in
rvce.edu.in

Go, change the world

9537

RV Educational Institutions ®
RV College of Engineering ®

Autonomous
Institution Affiliated
to Visvesvaraya
Technological
University, Belagavi

Approved by AICTE,
New Delhi, Accredited
By NAAC, Bengaluru
And NBA, New Delhi

Department of Computer Science and Engineering
Phone: 080-67178053, 8054: e-mail: hod.cse@rvce.edu.in

Agenda No. 98: To read and record the minutes of previous BoS meeting held on 11/05/2019.

Points of discussion: The minutes of the previous meeting held on 11th May 2019 was briefed by the BoS chairperson. The previous meeting had approved the 2018 scheme of BE-CSE from 3rd – 8th semesters, syllabus of 3rd – 4th semesters of 2018 scheme for BE-CSE, M.Tech-CSE & M.Tech-CNE programmes, and new Program Outcomes(POs) of M.Tech-CSE and M.Tech-CNE. The ratification of the new BoE members was also taken up in the previous meeting.

Agenda No. 99: Discussion and approval of BE CSE syllabus for 5th – 6th semesters of 2018 scheme.

Points of discussion: The members/attendees reviewed the courses in 5th – 6th semesters in 2018 scheme and the following were suggested,-

<u>**5th semester Courses:**</u>

- The inclusion of **one professional elective group(Group-A in 5th semester) to be offered through MOOC courses** either by Swayam or NPTEL (12 weeks course) was presented in the meeting and the same has been approved.

- In course **'Database Design'**, it was suggested to include the concept of Elastic Search if feasible. It was also suggested to revise the reference book "Elmasri and Navathe: Fundamentals of Database Systems, 6th Edition, whose 7th Edition has been released.

- The course contents of **'Network Programming and Security'**, needs revision which could include programming the network and network security. To give students better practical and programming exposure, it was suggested to refer project slate of Stanford University. It was also suggested to revise the practical content that familiarizes students in programming as packet tracer which is included looks very primitive.

- For the course **'Software Engineering'**, it was suggested that podcasts related to security which introduces students about the vulnerabilities and other aspects on

Mysore Road, RV Vidyaniketan
Post, Bengaluru - 560059,
Karnataka, India

080 - 67178020/ 8161

principal@rvce.edu.in
rvce.edu.in

Go, change the world

9 438

RV Educational Institutions ®
RV College of Engineering ®

Autonomous
Institution Affiliated
to Visvesvaraya
Technological
University, Belagavi

Approved by AICTE,
New Delhi, Accredited
By NAAC, Bengaluru
And NBA, New Delhi

Department of Computer Science and Engineering
Phone: 080-67178053, 8054: e-mail: hod.cse@rvce.edu.in

Bluetooth needs to be focused since the identified book presents older content. The lab component which accounts for one credits should not focus only on writing functional code rather student should be able to write good test cases for the conventional code that he/she has been writing. It was also mentioned that web stack and other testing tools from Apache could be incorporated as part of the lab component.

- The members questioned the inclusion of the course 'Probability, Statistics and Queuing Theory', which was justified by the chairman that 'Probability, Statistics and Queuing Theory' and 'Discrete Mathematical Structures' were courses which are to be part of Computer science programme as prescribed by the program specific criteria, IEEE and ACM. Hence was approved.

- The inclusion of the course 'Quantum Computing' was appreciated by industry personnel. It was presented in the meeting by the chairman that the course contents are been drafted by working with Physics Department faculty Dr. Trivikram. The members suggested having some collaboration in the course delivery since this domain is fresh and interesting.

- The course contents of 'Web Technology', was approved in the meeting. It was presented in the meeting that w3c.org tools and geeksforgeeks was introduced and explored in the course delivery. The assessments for this course was introduced with open book tests. Since the paper included L6 questions for open book test it was mentioned that relative grading could be employed. It was suggested that textbooks included for the course needs to be revised to include latest publication.

- The course contents of 'Artificial Neural Networks', was approved. It was suggested that textbooks included needs to be revised to include latest edition.

- The course contents of the proposed open elective 'Data Structures and its Applications' has been approved.

6th semester Courses:

- In the course, 'Artificial Intelligence and Machine Learning', the contents in the first unit until Alpha-Beta pruning looked superficial hence prerequisite content that

Mysore Road, RV Vidyaniketan
Post, Bengaluru - 560059,
Karnataka, India

080 - 67178020/ 8161

principal@rvce.edu.in
rvce.edu.in

Go, change the world

9.39

RV Educational Institutions ®
RV College of Engineering ©

Autonomous Institution Affiliated to Visvesvaraya Technological University, Belagavi

Approved by AICTE, New Delhi, Accredited By NAAC, Bengaluru And NBA, New Delhi

Department of Computer Science and Engineering
Phone: 080-67178053, 8054: e-mail: hod.cse@rvce.edu.in

includes derivations with respect to data science along with application based content could be incorporated. Efforts in each unit by working on the solution of the prescribed/identified reference book - Stuart Russel, Peter Norvig "AI – A Modern Approach" could facilitate in better delivery of the course contents. The book identified viz Russel has released the latest edition – 3rd Edition hence needs to be updated.

For the lab component, it was presented that the contents have been revised compared to the previous scheme to include open ended problems on which students would be working in groups. The student attendees mentioned the need of some hand holding to be made to guide them towards use of / getting familiar with the tools of this domain, to associate data with the projects and tools which connects the academics further towards research.

- The course contents of 'Compiler Design' was approved and the lab component revision which includes project has been appreciated.

- The course 'Blockchain' inclusion in the curriculum was appreciated by the industry personnel. It was mentioned that the faculty handling the course could refer to Course Era, Skill Velocity which focuses on teaching the latest technologies which eases the course delivery. The course content is approved by the board with suggestion to revise the list of reference books. One book in the list is identified on block chain and the remaining 3 books were on bit coin, hence revising books was suggested to include better books.

- The course contents of 'Deep Learning' has been approved by the board. The industry alumnus who is also a member extended to provide link / identify expert for this course as there are few experts in the domain in their organization.

- The course contents of 'DevOps' has been approved by the board. The faculty could employ video based learning/flipped class approach in delivering the proposed concepts but could also provide updates on the latest happenings as the string of tools consistently change w.r.t DevOps. A tie-up with industry that leverages practical exposure to students could also be thought of.

Mysore Road, RV Vidyaniketan Post, Bengaluru - 560059, Karnataka, India

080 - 67178020/ 8161

principal@rvce.edu.in
rvce.edu.in

Go, change the world

9 240

RV Educational Institutions ®
RV College of Engineering ®

Autonomous
Institution Affiliated
to Visvesvaraya
Technological
University, Belagavi

Approved by AICTE,
New Delhi, Acredited
By NAAC, Bengaluru
And NBA, New Delhi

Department of Computer Science and Engineering
Phone: 080-67178053, 8054: e-mail: hod.cse@rvce.edu.in

- The course contents of 'Natural Language Processing' has been approved by the board. It was mentioned that NLTK tool kit could be employed to provide practical exposure to students.

- For the course 'IoT and Edge Computing', it was suggested to add/include security aspects to the course contents. As IoT is tightly linked to security and proliferation of devices there is a need to address security hence this suggestion was given. The course contents includes only theoretical aspects which could be relooked to provide technological impact that aids to propose big bang solutions employing IoT, such as drone based solutions etc.,

Generic Suggestion:

- Students expressed the need of orientation to Git in first year to computer science students, and also organize workshops during the weekends for higher semesters to facilitate students to become aware of and to work on current trends like Python, Machine Learning, etc.,

- Students expressed that the complexity distribution in the lab question needs to be fair and consistent across all the questions in list.

- The members expressed that the reference books listed for all the courses need to be revised to include latest edition of reprint or year of publication. The books considered in the identified list needs to be above 2016 and not beyond.

- The members also suggested that for any course if feasible, tools could be employed in course delivery to provide practical exposure to students.

Course contents of 'Finite Automata and Formal Languages', 'Wireless Sensor Networks', 'Advanced Algorithms', 'Data Warehousing and Data Mining', 'Fuzzy Logic', 'Cloud Computing', 'Computer Vision , 'Application Delivery Controller', 'Service Oriented Architecture', 'Big Data Analytics', 'Robotic Process Automation Design & Development', and 'Application Programming with Python' were approved.

Mysore Road, RV Vidyaniketan
Post, Bengaluru - 560059,
Karnataka, India

080 - 67178020/ 8161

principal@rvce.edu.in
rvce.edu.in

Go, change the world

94/1

RV Educational Institutions ®
RV College of Engineering ®

Autonomous	Approved by AICTE,
Institution Affiliated	New Delhi, Accredited
to Visvesvaraya	By NAAC, Bengaluru
Technological	And NBA, New Delhi
University, Belagavi	

Department of Computer Science and Engineering
Phone: 080-67178053, 8054: e-mail: hod.cse@rvce.edu.in

Resolution: The suggestions regarding the course delivery and assessments in individual courses would be considered and discussed in the subsequent stages. The suggestions with respect to each course listed above would be conveyed to the faculty members and would be considered for further action by the course coordinator. The overall syllabus of 5th and 6th semesters in 2018 scheme was approved by the Board.

Agenda No. 100: Ratification of equivalence for 2012, 2016 and 2018 schemes.

Points of discussion:

- The **equivalence for the students who have moved from 2012 scheme to 2016 scheme** in 3rd semester (Apurb Rajdhan, Girish K V, Sanket V Salankimatt), 5th semester (Aditya Kumar Shetty M, Aditya Duggal, Judhjit Ganguli, Ajeeta Singh, Gautham G Naik) and 7th semester (Sidharth Rashwana, Rishab Raj) was presented in the meeting and was **ratified by the board**.

- The **subject equivalence of 3rd and 4th semester 2018 with 2016 schemes** was presented in the meeting mentioning that autonomous scheme (2016) is not equivalent to autonomous scheme (2018). Students who have backlogs in autonomous scheme (2016) can only attend classes for the courses in third and fourth semester. For the courses which are not equivalent students have to take up the courses in fast track. SEE question paper will be as per 2016 scheme only. The same **has been ratified by the board**.

Resolution: The equivalence presented in the meeting has been ratified by the board. The same would be communicated to Dean Academics, CoE, Counselor of the respective students and the respective students.

Agenda No. 101: Any other issue with the permission of the chair.

Points of discussion: -NA-

Mysore Road, RV Vidyaniketan
Post, Bengaluru - 560059,
Karnataka, India

080 - 67178020/ 8161

principal@rvce.edu.in
rvce.edu.in

Go, change the world

9142

RV Educational Institutions ®
RV College of Engineering ®

Autonomous	Approved by AICTE,
Institution Affiliated	New Delhi, Accredited
to Visvesvaraya	By NAAC, Bengaluru
Technological	And NBA, New Delhi
University, Belagavi	

Department of Computer Science and Engineering
Phone: 080-67178053, 8054: e-mail: hod.cse@rvce.edu.in

The board members appreciated the inclusion of good fundamentals in the curriculum for computer science domain. The meeting concluded with the BoS Chairman thanking the members for their valuable inputs and suggestions.

5/3/2020

Dr. Ramakanthkumar P,
Chairman - Board of Studies
Professor & Head CSE Department,
R. V. College of Engineering
Professor and Head
Department of
Computer Science and Engineering
R.V. College of Engineering
Bangalore - 560 059.

Mysore Road, RV Vidyaniketan
Post, Bengaluru - 560059,
Karnataka, India

080 - 67178020/ 8161

principal@rvce.edu.in
rvce.edu.in

Go, change the world

89

Action Taken Report for 20th BoS Meeting held on 22/02/2020:

- The suggestion given by members to revise the reference books for few courses to reflect the latest edition, etc., have been updated to faculty coordination for updation and further action.

- The suggestions w.r.t the course content modification is informed to the respective faculty coordinator for further action and feasibility to incorporate the indicated changes. The following courses were suggested corrections during the meeting:

  i. Network Programming and Security - Dr. CNS
  ii. Software Engineering - Dr. HKK
  iii. Quantum Computing - Dr. BSB
  iv. Artificail Intelligence and Machine Learning - Dr. HR
  v. IoT and Edge Computing - Dr. MM

- The suggestions indicated for the course Deep Learning will be passed on to Department of ISE as this is a common course for both the departments and the board for this is ISE.

- Generic suggestion on course content delivery and increasing practical tool exposure in lab components would be taken up by the course coordinators.

- The equivalence ratified by the board is communicated to Dean Academics and CoE.

26/02/2020

Dr.Ramakanthkumar P,

Chairman - Board of Studies

Professor & Head CSE Department,

R. V. College of Engineering

RV College
of Engineering®

Autonomous
Institution Affiliated
to Visvesvaraya
Technological
University, Belagavi

Approved by AICTE,
New Delhi, Accredited
by NAAC, Bengaluru

Department of Computer Science and Engineering
Phone: 080-67178053, 8054: e-mail: hod.cse@rvce.edu.in

Date: 24/11/2020

Ref: RVE/CSE/   /2020-21

21ˢᵗ Board of Studies(BoS) Meeting Invitation

Dear Sir/Madam,

Subject: Invitation to 21ˢᵗ BoS Meeting.

GREETINGS FROM CSE-RVCE.

The Department of Computer Science and Engineering has arranged for Board of Studies meeting on 28ᵗʰ November 2020(Saturday)

Agenda for the meeting is as below:
1. To read and record the minutes of previous BoS meeting held on 22ⁿᵈ February 2020.

2. Discussion and approval of UG scheme for the program- Artificial Intelligence and Machine Learning.

3. Ratification of students shifted to 2016 autonomous scheme from 2012 autonomous scheme who could not continue in the admitted scheme due to back logs.

4. Discussion on guidelines for the revision of the syllabus for the academic year 2021-2022 based on NEP.

5. Department Achievements and any other issue with the permission of the chair.

You are requested to kindly spare your valuable time and make it possible to attend the meeting. Your valuable suggestions will definitely help the department. The online link to join the meeting will be shared through mail.

Looking forward for your participation.

Date & Venue: 28ᵗʰ November 2020 (Saturday), Online, Dept. of CSE, RVCE

Time: 9:30 a.m.

Dr. Ramakanthkumar P,
Chairman - Board of Studies
Professor & Head CSE Department
Professor and Head
Department of
Computer Science and Engi.
R.V. College of Engineering
Bangalore - 560 059.
Go, change the world

Mysore Road, RVVidyaniketan Post,
Bengaluru – 560 059, Karnataka, India

080-67178020
8161

principal@rvce.edu.in
www.rvce.edu.in

45

**RV College
of Engineering®**

Autonomous
Institution Affiliated
to Visvesvaraya
Technological
University, Belagavi

Approved by AICTE,
New Delhi, Accredited
by NAAC, Bengaluru

Department of Computer Science and Engineering
Phone: 080-67178053, 8054: e-mail: hod.cse@rvce.edu.in

Ref: RVE/CSE/ /2019-20

Date: 28/11/2020

21ˢᵗ Board of Studies Meeting
Held on
28ᵗʰ November 2020 at 9:30 am in CSE Department

Agenda for 21st BoS Meeting:

102. To read and record the minutes of previous BoS meeting held on 22ⁿᵈ February 2020.

103. Discussion and approval of UG scheme for the program- Artificial Intelligence and Machine Learning.

104. Ratification of students shifted to 2016 autonomous scheme from 2012 autonomous scheme who could not continue in the admitted scheme due to back logs.

105. Discussion on guidelines for the revision of the syllabus for the academic year 2021-2022 based on NEP.

106. Department Achievements and any other issue with the permission of the chair.

The 21ˢᵗ BoS Meeting conducted this day 28ᵗʰ November 2020(Saturday) through online meet with the above mentioned agenda was witnessed by the following members, the detailed minutes of the meeting will be shared through mail at the earliest,-

Sl. No.	MEMBERS	SIGNATURE
1	**Dr. Ramakanthkumar P,** Professor and Head, BoS Chairperson	
2	**Dr. Shobha G,** Professor	**In Absentia**
3	**Dr. Rajashree Shettar,** Professor and PG Dean - Circuit Branches	
4	**Dr. Shanth Rangaswamy,** Associate Professor	
5	**Prof. Sandhya S,** Assistant Professor	
6	**Prof. Suma B,** Assistant Professor	
7	**Dr. H S Guruprasad,** Professor, BMSCE	**Not Applicable (Online Attendance)**
8	**Dr. G T Raju,** Vice-Principal, Professor and Head of CSE, RNSIT	**Not Applicable (Online Attendance)**

Mysore Road, RVVidyaniketan Post,
Bengaluru – 560 059, Karnataka, India

080-67178020
8161

principal@rvce.edu.in
www.rvce.edu.in

Go, change the world

46

RV College
of Engineering®

Autonomous Institution Affiliated to Visvesvaraya Technological University, Belagavi

Approved by AICTE, New Delhi, Accredited by NAAC, Bengaluru

Department of Computer Science and Engineering
Phone: 080-67178053, 8054: e-mail: hod.cse@rvce.edu.in

9	**Dr. M. Girish Chandra,** Principal Scientist, TATA Consultancy Services	In Absentia
10	**Mr. Anil Nileshwar** Philips India Private Limited	In Absentia
11	**Mr. KeerthyJagadeesh,** Lead Engineer, Texas Instruments	Not Applicable (Online Attendance)
	Special Invitees – Dean Academics	
12	**Dr. Shanmukha Nagaraj** Dean Academics, RVCE	In Absentia
13	**Ms. Deeksha Shravani** (1RV17CS042) Student 7th Sem	Not Applicable (Online Attendance)
14	**Ms. Nayana Bannur** (1RV17CS092) Student 7th Sem	Not Applicable (Online Attendance Captured)
15	**Mr. Akshar Prasad** (1RV17CS014) Student 7th Sem	Not Applicable (Online Attendance)
	Special Invitees – Faculty	
16	**Dr. B Sathish Babu** Professor, Dept. of CSE	
17	**Dr. G S Nagaraja,** Professor, Dept. of CSE	
18	**Dr. Poonam Ghuli,** Associate Professor, Dept. of CSE	
19	**Dr. Soumya A,** Associate Professor, Dept. of CSE	
20	**Dr. Hemavathy R,** Associate Professor, Dept. of CSE	
21	**Dr. Minal Moharir,** Associate Professor, Dept. of CSE	
22	**Prof. Praveena T,** Assistant Professor, Dept. of CSE	
23	**Prof. Manonmani S,** Assistant Professor, Dept. of CSE	
24	**Dr. Azra Nasreen,** Assistant Professor, Dept. of CSE	
25	**Prof. Jyothi Shetty,** Assistant Professor, Dept. of CSE	
26	**Prof. Prapulla S B,** Assistant Professor, Dept. of CSE	
27	**Prof. Anitha Sandeep,** Assistant Professor, Dept. of CSE	

Mysore Road, RVVidyaniketan Post, Bengaluru – 560 059, Karnataka, India

080-67178020
8161

principal@rvce.edu.in
www.rvce.edu.in

Go, change the world

47

RV College
of Engineering®

Autonomous
Institution Affiliated
to Visvesvaraya
Technological
University, Belagavi

Approved by AICTE,
New Delhi, Accredited
by NAAC, Bengaluru

Department of Computer Science and Engineering
Phone: 080-67178053, 8054: e-mail: hod.cse@rvce.edu.in

28	Prof. K C Ganashree, Assistant Professor, Dept. of CSE	Ganashree
29	Prof. Revathi S A, Assistant Professor, Dept. of CSE	
30	Dr. Pratiba D, Assistant Professor, Dept. of CSE	
31	Prof. Veena Gadad, Assistant Professor, Dept. of CSE	

Mysore Road, RVVidyaniketan Post,
Bengaluru – 560 059, Karnataka, India

080-67178020
8161

principal@rvce.edu.in
www.rvce.edu.in

Go, change the world

2048

Members present : 28

sandhya sampangiramaiah
AKSHAR PRASAD
Azra Nasreen
DEEKSHA SHRAVANI
Dr H S Guru Prasad
Jyothi Shetty
NAYANA BANNUR
POONAM GHULI
Praveena T
RAJASHREE SHETTAR
Ramakanth Kumar P.
Shantha Ranga Swamy
Soumya A.
Sumab Rao
Dr. B Sathish Babu
Nagaraja G.S.
Prapulla S B
Anitha Sandeep
ganashree ganashree
Hemavathy R.
Revathi S A
Pratiba D.
Veena Gadad
HOD Dept. of CS, RVCE
keerthy j
Dr. Raju G T
Minal Moharir
Manonmani S

RV College
of Engineering®

Autonomous
Institution Affiliated
to Visvesvaraya
Technological
University, Belagavi

Approved by AICTE,
New Delhi, Accredited
by NAAC, Bengaluru

Department of Computer Science and Engineering
Phone: 080-67178053, 8054: e-mail: hod.cse@rvce.edu.in

Date: 30/11/2020

CONSOLIATED PROCEEDINGS 21ˢᵗ Board of Studies Meeting
Held on
28ᵗʰ November at 9:30 am Online in CSE Department

Members present:

BoS members from R V College of Engineering:

1. Dr. Ramakanthkumar P, (Chairman, BoS), Professor & HoD, Dept. of CSE,
   R V College of Engineering, Bengaluru

2. Dr. Rajashree Shettar, Professor & PG Dean - Circuit Branches, Dept. of CSE, R V College of Engineering, Bengaluru

3. Dr. Shanta Rangaswamy, Associate Professor, Dept. of CSE, R V College of Engineering, Bengaluru

4. Mrs Sandhya S, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.

5. Mrs Suma B, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.

Subject Experts from outside the college nominated by Academic council:

1. Dr. H S Guruprasad, Professor and Dean Student Affairs, ISE, BMS College of Engineering, Bengalru.

2. Dr. G T Raju, Principal, The Oxford College of Engineering, Bengaluru.

Meritorious Alumnus nominated by the Principal:

1. Mr. Keerthy Jagadeesh, Lead Engineer, Texas Instruments, Bengaluru.

Special Invitees:

1. Dr. G S Nagaraja, Professor, Dept. of CSE, R V College of Engineering, Bengaluru.

2. Dr. B Sathish Babu, Professor, Dept. of CSE, R V College of Engineering, Bengaluru.

Special Invitees - Student Representatives

1. Mr. Akshar Prasad (USN: 1RV17CS014), UG Final Year Student, CSE, RVCE

2. Mr. Nayana Bannur (USN: 1RV17CS092), UG Final Year Student, CSE, RVCE.

3. Ms. Deeksha Shravani (USN: 1RV17CS042), UG Final Year Student, CSE, RVCE.

Mysore Road, RVVidyaniketan Post,
Bengaluru – 560 059, Karnataka, India

080-67178020
8161

principal@rvce.edu.in
www.rvce.edu.in

Go, change the world

50

RV College
of Engineering®

Autonomous Institution Affiliated to Visvesvaraya Technological University, Belagavi

Approved by AICTE, New Delhi, Accredited by NAAC, Bengaluru

Department of Computer Science and Engineering

Phone: 080-67178053, 8054: e-mail: hod.cse@rvce.edu.in

Special Invitees – CS Faculty

1. Dr. Poonam Ghuli, Associate Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
2. Dr. Soumya A, Associate Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
3. Dr. Hemavathy R, Associate Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
4. Dr. Minal Moharir, Associate Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
5. Prof. Praveena T, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
6. Prof. Manonmani S, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
7. Dr. Azra Nasreen, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
8. Prof. Jyothi Shetty, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
9. Prof. Prapulla S B, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
10. Prof. Anitha Sandeep, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
11. Prof. K C Ganashree, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
12. Prof. Revathi S A, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
13. Dr. Pratiba D, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
14. Prof. Veena Gadad, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.

Leave of Absence:

1. Dr Shobha G, Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
2. Dr. Shanmukha Nagaraj, Dean Academics, RVCE.
3. Mr. Anil Nileshwar, Philips Private Limited.
4. Dr. M. Girish Chandra, Principal Scientist, TATA Consultancy Services.

This draft minutes of the meeting is being circulated to all the members of the BoS to invite their comments.

The Chairman, BoS welcomed all the members of Board of Studies and the attendees. He also mentioned about the inclusion of special invitee's (mentioned above) and CS-faculty for the meeting, since all faculty would be involved in finalising the scheme and structuring of the syllabus. BoS Chairman presented agenda No.102 to 105, in the meeting.

Mysore Road, RVVidyaniketan Post,
Bengaluru – 560 059, Karnataka, India

080-67178020
8161

principal@rvce.edu.in
www.rvce.edu.in

Go, change the world

51

RV College
of Engineering®

Autonomous
Institution Affiliated
to Visvesvaraya
Technological
University, Belagavi

Approved by AICTE,
New Delhi, Accredited
by NAAC, Bengaluru

Department of Computer Science and Engineering
Phone: 080-67178053, 8054: e-mail: hod.cse@rvce.edu.in

Agenda for the 21st BoS meeting:

102. To read and record the minutes of previous BoS meeting held on 22nd February 2020.

103. Discussion and approval of UG scheme for the program- Artificial Intelligence and Machine Learning.

104. Ratification of students shifted to 2016 autonomous scheme from 2012 autonomous scheme who could not continue in the admitted scheme due to back logs.

105. Discussion on guidelines for the revision of the syllabus for the academic year 2021-2022 based on NEP.

106. Department Achievements and any other issue with the permission of the chair.

Minutes of the Meeting in 21st BoS:

The BoS chairman initiated the meeting by welcoming the members, student representatives and special invitees to the meeting.

Agenda No. 102: To read and record the minutes of previous BoS meeting held on 22/02/2020.

Points of discussion: The minutes of the previous meeting held on 22nd February 2020 was briefed by the BoS chairperson. The previous meeting had approved the syllabus of 2018 scheme for BE-CSE of 5th – 6th semesters. Ratification of Equivalence for 2012, 2016 and 2018 autonomous schemes of UG program was also made in the earlier meeting along with other issues with the permission of the chair.

Agenda No. 103: Discussion and approval of UG scheme for the program - Artificial Intelligence and Machine Learning(AI & ML).

Points of discussion: The members/attendees reviewed the draft scheme and the courses identified for the new proposed AI & ML program. The following points were suggested,-

a) It was suggested that both courses 'Mathematics for Machine Learning – I' in 3rd semester and 'Mathematics for Machine Learning – II' in 4th semester being offered with L:T:P = 4:1:0 for a total of 5 credits looked heavy with respect to the total contact hours of 6 per week. However the Chairman BoS mentioned that there was need to focus more on mathematical concepts to strengthen the fundamentals. Also, as this being a college level decision to offer mathematics for 5 credits due to the reason that it was also a matter of concern for students taking up higher education. The member accepted this credits proposed.

Mysore Road, RVVidyaniketan Post,
Bengaluru – 560 059, Karnataka, India

080-67178020
8161

principal@rvce.edu.in
www.rvce.edu.in

Go, change the world

52

**RV College
of Engineering®**

Autonomous
Institution Affiliated
to Visvesvaraya
Technological
University, Belagavi

Approved by AICTE,
New Delhi, Accredited
by NAAC, Bengaluru

Department of Computer Science and Engineering
Phone: 080-67178053, 8054: e-mail: hod.cse@rvce.edu.in

b) It was suggested that the course 'Microcontrollers and Embedded Systems' L:T:P = 4:0:1 could be too heavy for 3rd semester students which could be made either L:T:P = 3:0:2 or since 'Discrete Mathematical Structures' course is offered L:T:P = 3:0:0 another credit can be included to strengthen mathematical concepts by adding 1 tutorial credit and making it L:T:P = 3:1:0.

c) The course 'Computer Networks' lacked a lab component in the draft scheme presented during the meeting, the members suggested to include the lab component as it could help students in understanding the networking aspects hence could be accommodated if there is scope.

d) The members appreciated the inclusion of courses like 'Design Thinking Lab', 'Sensors and Sensor Applications' in 4th semester which aimed at providing more domain specific practical exposure to students.

e) Members raised concern over the tentatively listed MOOC courses however it was clarified by BoS chairperson that 12 weeks courses specific to the program would be offered based on what NPTEL would be then offering.

f) The title for the course 'Database Design' was suggested to be changed as 'Database Management System' and also since it has a lab components it was suggested that projects could be given to students to make students work on real world issues to provide more practical exposure.

g) The course contents of 'Machine learning algorithms and models' could overlap with course contents of MOOC course identified 'Machine Learning For Engineering And Science Applications' hence it was suggested to ensure while framing syllabus that contents do not repeat or overlap.

h) Basics of Computer Science such as 'Software Engineering', fundamentals of computer organization and distributed concepts was suggested to be included in the scheme as it was found that these were skipped in the presented draft scheme.

i) Student representatives in the meeting indicated that tensor flow, pandas and numpy libraries were missing hence inclusion of these as separate courses could help to provide practical exposure to students of the program. It was clarified that the UG program mainly intends to teach the fundamental aspects and practical concepts since not every technology can be accommodated in the scheme. These libraries mentioned above could be included as Experiential Learning(EL) while formulating the course contents. Further this can be ensured through delivery of practical sessions and EL rather than offering it as a separate course.

j) The course 'Artificial Neural Networks and Deep learning' was indicated that it could become huge with the offered credits L:T:P = 4:0:1, hence from the perspective of student's benefit it could be made

Mysore Road, RVVidyaniketan Post,
Bengaluru – 560 059, Karnataka, India

080-67178020
8161

principal@rvce.edu.in
www.rvce.edu.in

Go, change the world

53

RV College
of Engineering®

Autonomous
Institution Affiliated
to Visvesvaraya
Technological
University, Belagavi

Approved by AICTE,
New Delhi, Accredited
by NAAC, Bengaluru

Department of Computer Science and Engineering
Phone: 080-67178053, 8054: e-mail: hod.cse@rvce.edu.in

L:T:P = 3:0:2. This rearrangement could provide more practical exposure further the quality of work can be planned and delivered by identifying quality and innovative projects.

k) The professional electives in 5th, 6th and 7th semesters with L:T:P = 3:0:0 are identified such that most courses like 'Big Data Analytics Using Distributed Platforms', 'Robotic Process Automation Design & Development', 'Predictive Analytics', 'Cloud Computing' etc., would be well appreciated with lab practice. Hence it was suggested if lab component could be included for professional electives by attendees. However it was clarified that since the most higher semester have at least 3-4 credits of lab included already in scheme, exclusively adding a credit to electives for the lab component would not be feasible which would over burden the students however practical work can be incorporated through assignments and EL. Also exclusive credit inclusion would impact on lab infrastructure, Time Table to reflect lab slots and other issues rising hence project based learning could be incorporated was agreed by all members in the meeting.

l) The course 'Computer Vision and Virtual Reality' could be retitled in 'Computer Vision, Virtual Reality and Augmented Reality' in 7th semester.

m) It was suggested that 'Multi-Agent Systems' could be included either as a separate course or as a part of 'Game Theory' as most Artificial Intelligence and Machine Learning Applications would run on distributed and heterogeneous systems.

n) 'Cloud Computing' course title could be retitled to include virtualization as 'Cloud Computing and Virtualization'.

o) 'Reinforcement Learning Techniques' is offered as L:T:P = 3:1:1 looked heavy totalling 7 hours/week instead it could be offered as a 3 credit course bringing in few basic courses of computer science into the scheme or making Natural Language Processing a core subject in the scheme.

Resolution: The suggestions 'Discrete Mathematical Structures' course to offer with credits L:T:P = 3:1:0 can be looked into and taken up for further discussion. The suggestion to include lab component for the course 'Computer Networks' will be taken up during further discussions. MOOC courses identification to be offered would be reviewed to ensure that course contents do not overlap with other courses in the scheme. Projects to be identified based on real world to give practical exposure in various courses as suggested would be intimated to the concerned course coordinators. Inclusion of 'Software Engineering' would be discussed to fit in the scheme, the concepts of computer organization/logic design would be indicated to be accommodated (in few units) within the course 'Microcontrollers and Embedded Systems'. Reinforcement Learning

Mysore Road, RVVidyaniketan Post,
Bengaluru – 560 059, Karnataka, India

080-67178020
8161

principal@rvce.edu.in
www.rvce.edu.in

Go, change the world

54

**RV College
of Engineering®**

**Autonomous
Institution Affiliated
to Visvesvaraya
Technological
University, Belagavi**

**Approved by AICTE,
New Delhi, Accredited
by NAAC, Bengaluru**

Department of Computer Science and Engineering

Phone: 080-67178053, 8054: e-mail: hod.cse@rvce.edu.in

Techniques can be made elective and 'Natural Language Processing' could be offered as core subject in the scheme.

Agenda No. 104: Ratification of students shifted to 2016 autonomous scheme from 2012 autonomous scheme who could not continue in the admitted scheme due to back logs.

Points of discussion:

- The credit balancing details for each student mentioned below, who have moved from 2012 scheme to 2016 autonomous scheme due to back logs along with Course Mapping of syllabus from 2016 scheme to 2018 scheme for 5th - 6th semesters subjects was presented in the meeting and the same was ratified by the board.

  a. AJEETHA SINGH-1RV14CS009
  b. ARUN KUMAR B NADAGUDRA-1RV15CS403
  c. GAUTHAM G NAIK-1RV14CS050
  d. KAVITHA K S- 1RV16CS410
  e. MONAL GUPTA-1RV14CS085
  f. PINNAMANENI SIDDARTH SHANKER-1RV15CS107.
  g. TEJASWINI V BELLARI-1RV16CS431

- The subject equivalence presented in the meeting also mentioned that autonomous scheme (2016) is not equivalent to autonomous scheme (2018). Students who have backlogs in autonomous scheme (2016) can only attend classes for the courses however SEE question paper will be as per 2016 scheme only. For the courses which are not equivalent students have to take up the courses in fast track. The same has been ratified by the board.

Resolution: The equivalence presented in the meeting has been ratified by the board. The same would be communicated to Dean Academics, CoE, Counselor of the respective students and the respective students.

Agenda No. 105: Discussion on guidelines for the revision of the syllabus for the academic year 2021-2022 based on NEP.

Points of discussion: BoS chairperson briefed the new educational policies influence and various revisions that might be included in the next proposed scheme 2021-2022 based on the National Educational Policy(NEP) 2.0. In line with this, the scheme for CSE would be revised in 2021 to incorporate NEP also keeping in mind 21st Century skills, vision 2035 and NBA Program Outcomes.

Mysore Road, RVVidyaniketan Post,
Bengaluru – 560 059, Karnataka, India

080-67178020
8161

principal@rvce.edu.in
www.rvce.edu.in

Go, change the world

55

RV College
of Engineering®

Autonomous Institution Affiliated to Visvesvaraya Technological University, Belagavi

Approved by AICTE, New Delhi, Accredited by NAAC, Bengaluru

Department of Computer Science and Engineering

Phone: 080-67178053, 8054: e-mail: hod.cse@rvce.edu.in

Agenda No. 106: Department Achievements and any other issue with the permission of the chair.

Points of discussion: The BoS chairman presented in the meeting brief achievements of the department and the new practices/reforms in the department.

- The achievements included briefing about new MoU's signed, research and consultancy projects taken up, placements statistics w.r.t to average package and percentage of student placed. In regard with the new practices/reforms, the chairman mentioned the approach employed for Design Thinking Lab, the training and initiative by faculties to mentor students, motivation towards NPTEL, CourseEra and MOOC courses, initiative with NGO's for facilitating students admitted to 2018 scheme to earn 100 activity points as prescribed by AICTE.

The board members appreciated the identified domain specific courses offering good fundamentals in the curriculum for AI & ML. The meeting concluded with the BoS Chairman thanking the members for their valuable inputs and suggestions.

Dr. Ramakanthkumar P,
Chairman - Board of Studies
Professor & Head CSE Department,
R. V. College of Engineering

Professor and Head
Department of
Computer Science and Engineering
R.V. College of Engineering
Bangalore - 560 059.

211 56

Action Taken Report for 21st BoS Meeting held on 28/11/2020:

The suggestion made for revising the AI & ML scheme would be considered while structuring the scheme on approval from VTU for the new program.

- The suggestions on 'Discrete Mathematical Structures' course to offer with credits L:T:P = 3:1:0 can be looked into for further action while structuring the scheme.
- The suggestion to include lab component for the course 'Computer Networks' is passed on to the respective faculty coordinator to discuss with Head of Department for suitable incorporation.
- The department NPTEL SPOC will be consulted to ensure that courses do not overlap with other department offered courses while identifying MOOC courses.
- The equivalence for the identified students who have moved from 2012 scheme to 2016 autonomous scheme is ratified by the board. This is communicated to Dean Academics, CoE, Counselor of the respective students and the respective students.

03/12/20

Dr.Ramakanthkumar P,

Chairman - Board of Studies

Professor & Head CSE Department,

R. V. College of Engineering

RVCE email

Invitation: 22nd Board of Studies Meeting on 12/06/2021 @ Sat Jun 12, 2021 9:30am - 11:30am (IST) (m.gchandra@tcs.com)

1 message

bos.cse@rvce.edu.in <bos.cse@rvce.edu.in>   Fri, Jun 11, 2021 at 9:23 AM
Reply-To: bos.cse@rvce.edu.in
To: m.gchandra@tcs.com, sandhya.sampangi@rvce.edu.in, shobhag@rvce.edu.in, j-keerthy@ti.com,
shantharangaswamy@rvce.edu.in, rajashreeshettar@rvce.edu.in, Dr H S Guru Prasad <drhsguru@gmail.com>,
gtraju1990@yahoo.com, drgirichand@gmail.com, ramakanthkp@rvce.edu.in, sumab_rao@rvce.edu.in,
anilkumar.nileshwar@philips.com

You have been invited to the following event.

22nd Board of Studies Meeting on 12/06/2021

When	Sat Jun 12, 2021 9:30am – 11:30am India Standard Time - Kolkata	**more details »**
Joining info	Join with Google Meet meet.google.com/ers-hyno-pgs	
	Join by phone (US) +1 225-424-8412 (PIN: 278033888)	
Calendar	m.gchandra@tcs.com	
Who	• bos.cse@rvce.edu.in - organizer • sandhya.sampangi@rvce.edu.in • m.gchandra@tcs.com • shobhag@rvce.edu.in • j-keerthy@ti.com • shantharangaswamy@rvce.edu.in • rajashreeshettar@rvce.edu.in • Dr H S Guru Prasad • gtraju1990@yahoo.com • drgirichand@gmail.com • ramakanthkp@rvce.edu.in • sumab_rao@rvce.edu.in • anilkumar.nileshwar@philips.com	

Meeting Link for Board of Studies(BoS) meeting on 12th June 2021.

You are requested to kindly spare your valuable time and make it possible to attend the meeting. Looking forward for your participation.

Going (m.gchandra@tcs.com)? **Yes** - **Maybe** - **No**   more options »

Invitation from Google Calendar

You are receiving this courtesy email at the account m.gchandra@tcs.com because you are an attendee of this event.

To stop receiving future updates for this event, decline this event. Alternatively you can sign up for a Google account at https://calendar.google.com/calendar/ and control your notification settings for your entire calendar.

Forwarding this invitation could allow any recipient to send a response to the organizer and be added to the guest list, or invite others regardless of their own invitation status, or to modify your RSVP. Learn More.

Invitation for Board of Studies Meeting on 12/06/2021
6 messages

Board of Studies CSE <bos.cse@rvce.edu.in>   Mon, May 31, 2021 at 4:40 PM
To: "Ramakanth Kumar P." <ramakanthkp@rvce.edu.in>, "Shobha G." <shobhag@rvce.edu.in>, "Dr. Rajashree Shettar" <rajashreeshettar@rvce.edu.in>, "sandhya.sampangi" <sandhya.sampangi@rvce.edu.in>, Sumab Rao <sumab_rao@rvce.edu.in>, Dr H S Guru Prasad <drhsguru@gmail.com>, gtraju1990@yahoo.com, "Anil Nileshwar (anileshw)" <anileshw@cisco.com>, j-keerthy@ti.com, Shantha Ranga Swamy <shantharangaswamy@rvce.edu.in>, m.gchandra@tcs.com, drgirichand@gmail.com

Dear Sir/Madam,

GREETINGS FROM CSE-RVCE.

● The Department of Computer Science and Engineering is proposing to have a Board of Studies(BoS) meeting on 12th June 2021(Saturday).

Agenda for the meeting is as below:

1. Discussion and approval of UG-BE CSE 7th-8th semester syllabus of 2018 scheme.
2. Ratification of the equivalence for the offered list of MOOC subjects in 5th semester(2018 Scheme Elective-A) to those courses offered in the current NPTEL list.
3. Any other issue with the permission of the chair.

You are requested to kindly spare your valuable time and make it possible to attend the meeting. Your valuable suggestions will definitely help the department. Detailed draft
● syllabus will be shared at the earliest possible. Kindly find attached the approved scheme(credit structure) of 7th - 8th semester.

Looking forward to your participation.

Date & Venue: 12th June 2021(Saturday)
Time: 9:30 a.m.

Thanks and Regards,

Dr. Ramakanth Kumar P,

BoS Chairperson,

Dept. of C.S.E,

R V College of Engineering (Autonomous),

Bangalore 560059

59

RV College
of Engineering®

Autonomous Institution Affiliated to Visvesvaraya Technological University, Belagavi

Approved by AICTE, New Delhi, Accredited by NAAC, Bengaluru

Department of Computer Science and Engineering
Phone: 080-67178053, 8054: e-mail: hod.cse@rvce.edu.in

Ref: RVE/CSE/ /2020-21   Date: 28/06/2021

22nd Board of Studies Meeting
Online Meeting Held on
12th June 2021 at 9:30 am

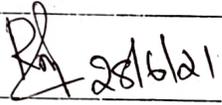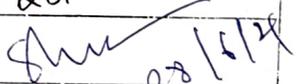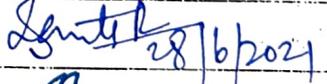**Date & Venue:** 12th June 2021(Saturday) Online Mode
Time: 9:30 a.m.
Meeting Link: meet.google.com/ers-hyno-pgs

Agenda for 22nd BoS Meeting:

106. To read and record the minutes of previous BoS meeting held on 28th November 2020.

107. Discussion and approval of UG-BE CSE 7th-8th semester syllabus of 2018 autonomous scheme.

108. Ratification of the equivalence for the offered list of MOOC subjects in 5th semester(2018 Scheme Elective-A) to those courses offered in the current NPTEL list.

109. Any other issue with the permission of the chair.

The 22nd BoS Meeting conducted this day 12th June 2021(Saturday) through online meet with the above mentioned agenda was witnessed by the following members, the detailed minutes of the meeting will be shared through mail at the earliest,-

Sl. No.	MEMBERS	SIGNATURE
1	**Dr. Ramakanthkumar P,** Professor and Head, BoS Chairperson	28/6/21
2	**Dr. Shobha G,** Professor	28/6/24
3	**Dr. Rajashree Shettar,** Professor and PG Dean - Circuit Branches	Rajashree 28/6/24
4	**Dr. Shanth Rangaswamy,** Associate Professor	28/6/2024
5	**Dr. Sandhya S,** Assistant Professor	
6	**Prof. Suma B,** Assistant Professor	28.6.
7	**Dr. H S Guruprasad,** Professor, BMSCE	Not Applicable (Online Attendance)

Mysore Road, RVVidyaniketan Post, Bengaluru -- 560 059, Karnataka, India

080-67178020
8161

principal@rvce.edu.in
www.rvce.edu.in

Go, change the world

60

RV College
of Engineering®

Autonomous
Institution Affiliated
to Visvesvaraya
Technological
University, Belagavi

Approved by AICTE,
New Delhi, Accredited
by NAAC, Bengaluru

Department of Computer Science and Engineering
Phone: 080-67178053, 8054; e-mail: hod.cse@rvce.edu.in

8	Dr. G T Raju, Principal, SJCIT, Chikbalapur	Not Applicable (Online Attendance)
9	Dr. M. Girish Chandra, Principal Scientist, TATA Consultancy Services	Not Applicable (Online Attendance)
10	Mr. Anil Nileshwar Philips India Private Limited	Not Applicable (Online Attendance)
11	Mr. KeerthyJagadeesh, Lead Engineer, Texas Instruments	Not Applicable (Online Attendance)

Special Invitees - Dean Academics

12	Dr. Shanmukha Nagaraj Dean Academics, RVCE	Not Applicable (Online Attendance)
13	Ms. Aishwarya G (1RV17CS012) Student 8th Sem	Not Applicable (Online Attendance)
14	Mr. Abhijith Trichur (1RV17CS006) Student 8th Sem	Not Applicable (Online Attendance)
15	Dr. B Sathish Babu Professor, Dept. of CSE	
16	Dr. G S Nagaraja, Professor and Associate Dean, Dept. of CSE	

Special Invitees – Faculty

17	Dr. Minal Moharir, Associate Professor, Dept. of CSE	
18	Dr. Sharvani G S, Associate Professor,	
19	Dr. Vinay Hegde, Associate Professor, Dept. of CSE,	
20	Dr. Ashok Kumar, Associate Professor, Dept. of CSE,	
21	Dr. Soumya A, Associate Professor, Dept. of CSE,	
22	Dr. H K Krishnappa, Associate Professor, Dept. of CSE	
23	Dr. Deepamala N, Associate Professor, Dept. of CSE,	
24	Dr. Sowmyarani C N, Associate Professor, Dept. of CSE	
25	Dr. Poonam Ghuli, Associate Professor, Dept. of CSE	
26	Dr. Hemavathy R, Associate Professor, Dept. of CSE	

Mysore Road, RVVidyaniketan Post,
Bengaluru – 560 059, Karnataka, India

080-67178020
8161

principal@rvce.edu.in
www.rvce.edu.in

Go, change the world 61

RV College
of Engineering®

Autonomous Institution Affiliated to Visvesvaraya Technological University, Belagavi

Approved by AICTE, New Delhi, Accredited by NAAC, Bengaluru

Department of Computer Science and Engineering
Phone: 080-67178053, 8054; e-mail: hod.cse@rvce.edu.in

28	Prof. Praveena T, Assistant Professor	
29	Prof. Manonmani S, Assistant Professor, Dept. of CSE	
30	Dr. Azra Nasreen, Assistant Professor, Dept. of CSE,	
31	Prof. Jyothi Shetty, Assistant Professor, Dept. of CSE	
32	Prof. Prapulla S B, Assistant Professor, Dept. of CSE,	
33	Prof. K C Ganashree, Assistant Professor, Dept. of CSE,	
34	Dr. Chethana Murthy, Assistant Professor, Dept. of CSE,	
35	Dr. Pratiba D, Assistant Professor, Dept. of CSE,	
36	Prof. Chaitra B H, Assistant Professor, Dept. of CSE,	
37	Dr. Vishalakshi Prabhu, Assistant Professor, Dept. of CSE,	
38	Prof. Veena Gadad, Assistant Professor, Dept. of CSE,	
39	Prof. Girish Rao Solanke, Assistant Professor, Dept. of CSE,	
40	Prof. Lalitha V P, Assistant Professor, Dept. of CSE,	
41	Dr. Mamatha T, Assistant Professor, Dept. of CSE	
42	Prof. Pavithra H, Assistant Professor, Dept. of CSE,	
43	Prof. Sneha M, Assistant Professor, Dept. of CSE	
44	Prof. Srividya M S, Assistant Professor, Dept. of CSE	
45	Prof. Manas M N, Assistant Professor, Dept. of CSE	
46	Prof. Revathi S A, Assistant Professor, Dept. of CSE,	
47	Prof. Anitha Sandeep, Assistant Professor, Dept. of CSE	

Mysore Road, RVVidyaniketan Post,
Bengaluru – 560 059, Karnataka, India

080-67178020
8161

principal@rvce.edu.in
www.rvce.edu.in

Go, change the world

Members present : 48 (Duplicates removed)

ABIJITH TRICHUR RAMACHANDRAN
AISHWARYA G
Anil N
Anitha Sandeep
Azra Nasreen
Badarinath K B
Board of Studies CSE
Chaitra B H
Chethana Murthy
Deepamala N
Dr H S Guru Prasad
Dr. Ashok Kumar A R
Dr. B Sathish Babu
Dr. G T Raju
Dr. Raju G T
Dr. Sowmyarani C N
Ganashree K C
Girish Chandra
Girish Rao Salanke N S
Hemavathy R.
Jyothi Shetty
Krishnappa H K
Lalitha V P
Mamatha T Jayaprakash
Manas M N
Manonmani S
Minal Moharir
Nagaraja G.S.
POONAM GHULI
Pavithra H
Prapulla S B
Pratiba D.
Praveena T
RAJASHREE SHETTAR
Ramakanth Kumar P.
Revathi S A
Shantha Ranga Swamy
Sharvani G.S.
Shobha G.
Sneha M
Soumya A.
Srividya M S
Sumab Rao
Veena Gadad
Vinay V.Hegde
keerthy j

sandhya sampangiramaiah
vishalakshi prabhu

**RV College
of Engineering®**

Autonomous
Institution Affiliated
to Visvesvaraya
Technological
University, Belagavi
Engineering

Approved by AICTE,
New Delhi, Accredited
by NAAC, Bengaluru

Department of Computer Science and

Phone: 080-68188199, 8200 : e-mail: hod.cse@rvce.edu.in

Date: 17/06/2021

CONSOLIATED PROCEEDINGS 22ⁿᵈ Board of Studies Meeting
Held on
12ᵗʰ June at 9:30 am Online Mode

Date & Venue: 12th June 2021(Saturday) Online Mode

Time: 9:30 a.m.

Meeting Link: meet.google.com/ers-hyno-pgs

Members present:

BoS members from R V College of Engineering:

1. Dr. Ramakanthkumar P, (Chairman, BoS), Professor & HoD, Dept. of CSE, R V College of Engineering, Bengaluru

2. Dr. Shobha G, Professor, Dept. of CSE, R V College of Engineering, Bengaluru.

3. Dr. Rajashree Shettar, Professor & PG Dean - Circuit Branches, Dept. of CSE, R V College of Engineering, Bengaluru

4. Dr. Shanta Rangaswamy, Associate Professor, Dept. of CSE, R V College of Engineering, Bengaluru

5. Dr. Sandhya S, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.

6. Prof. Suma B, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.

Subject Experts from outside the college nominated by Academic council:

1. Dr. H S Guruprasad, Professor and Dean Student Affairs, ISE, BMS College of Engineering, Bengalru.

2. Dr. G T Raju, Principal, SJCIT, Chikaballapur

Subject Experts from outside the college (VTU Nominee):

1. Dr. M. Girish Chandra, Principal Scientist, TCS Research and Innovations, TATA Consultancy Services.

Representative from Industry/Corporate Sector/ Allied Areas relating to placement, to be nominated by Academic council:

1. Mr. Anil Nileshwar, Philips Pvt. Ltd.,

Mysore Road, RVVidyaniketan Post,
Bengaluru – 560 059, Karnataka, India

080-68188110
8111

principal@rvce.edu.in
www.rvce.edu.in

Go, change the world

233   65

**RV College
of Engineering®**

Autonomous
Institution Affiliated
to Visvesvaraya
Technological
University, Belagavi
Engineering

Approved by AICTE,
New Delhi, Accredited
by NAAC, Bengaluru

Department of Computer Science and

Phone: 080-68188199, 8200 : e-mail: hod.cse@rvce.edu.in

Meritorious Alumnus nominated by the Principal:

1. Mr. Keerthy Jagadeesh, Lead Engineer, Texas Instruments, Bengaluru.

Special Invitees:

1. Dr. Shanmukha Nagaraj, Dean Academics, RVCE.
2. Dr. G S Nagaraja, Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
3. Dr. B Sathish Babu, Professor, Dept. of CSE, R V College of Engineering, Bengaluru.

Special Invitees - Student Representatives

1. Mr. Abijith Trichur Ramachandran (USN: 1RV17CS006), UG Final Year Student, CSE, RVCE.
2. Mr. Aishwarya G (USN: 1RV17CS012), UG Final Year Student, CSE, RVCE.

CS Faculty:

1. Dr. Minal Moharir, Associate Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
2. Dr. Sharvani G S, Associate Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
3. Dr. Vinay Hegde, Associate Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
4. Dr. Ashok Kumar, Associate Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
5. Dr. Soumya A, Associate Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
6. Dr. H K Krishnappa, Associate Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
7. Dr. Deepamala N, Associate Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
8. Dr. Sowmyarani C N, Associate Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
9. Dr. Poonam Ghuli, Associate Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
10. Dr. Hemavathy R, Associate Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
11. Dr. Badrinath K, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
12. Prof. Praveena T, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
13. Prof. Manonmani S, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
14. Dr. Azra Nasreen, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
15. Prof. Jyothi Shetty, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
16. Prof. Prapulla S B, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
17. Prof. Anitha Sandeep, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
18. Prof. K C Ganashree, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
19. Prof. Revathi S A, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.

Mysore Road, RVVidyaniketan Post,
Bengaluru – 560 059, Karnataka, India

080-68188110
8111

principal@rvce.edu.in
www.rvce.edu.in

Go, change the world

232 66

RV College
of Engineering®

Autonomous Institution Affiliated to Visvesvaraya Technological University, Belagavi Engineering

Approved by AICTE, New Delhi, Accredited by NAAC, Bengaluru

Department of Computer Science and

Phone: 080-68188199, 8200 : e-mail: hod.cse@rvce.edu.in

20. Dr. Pratiba D, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
21. Prof. Veena Gadad, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
22. Prof. Chaitra B H, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
23. Dr. Chethana Murthy, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
24. Dr. Vishalakshi Prabhu, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
25. Prof. Girish Rao Solanke, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
26. Prof. Lalitha V P, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
27. Dr. Mamatha T, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
28. Prof. Manas M N, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
29. Prof. Pavithra H, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
30. Prof. Sneha M, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
31. Prof. Srividya M S, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.

Leave of Absence: -NIL-

This draft minutes of the meeting is being circulated to all the members of the BoS to invite their comments.

The Chairman, BoS welcomed all the members of Board of Studies and the attendees. He also mentioned about the inclusion of special invitee's (mentioned above) and CS-faculty for the meeting, since all faculty would be involved in finalising the scheme and structuring of the syllabus. BoS Chairman presented agenda No.106 to 109, in the meeting.

Agenda for the 22nd BoS meeting:

106. To read and record the minutes of previous BoS meeting held on 28th November 2020.

107. Discussion and approval of UG-BE CSE 7th-8th semester syllabus of 2018 autonomous scheme.

108. Ratification of the equivalence for the offered list of MOOC subjects in 5th semester(2018 Scheme Elective-A) to those courses offered in the current NPTEL list.

109. Any other issue with the permission of the chair

Mysore Road, RVVidyaniketan Post, Bengaluru – 560 059, Karnataka, India

080-68188110
8111

principal@rvce.edu.in
www.rvce.edu.in

Go, change the world

231   67

RV College
of Engineering®

Autonomous Institution Affiliated to Visvesvaraya Technological University, Belagavi

Approved by AICTE, New Delhi, Accredited by NAAC, Bengaluru

Department of Computer Science and Engineering

Phone: 080-68188199, 8200 : e-mail: hod.cse@rvce.edu.in

Minutes of the Meeting in 22nd BoS:

The BoS chairman initiated the meeting by greeting and welcoming the BoS members, student representatives, CSE faculty and special invitees to the meeting. The BoS chairman presented in the meeting brief achievements of the department. The achievements included briefing about new MoU's signed, research and consultancy projects taken up, initiatives in translation of MOOC courses, external connect, student admission, introduction/approval of new BE programme under CS department and faculty awards.

Members appreciated the improvement seen in the quality of student admissions to the programme and congratulated the department for this leap. Members also were pleased to know about the introduction of the new BE programme- Artificial Intelligence and Machine Learning.

Agenda No. 106: To read and record the minutes of previous BoS meeting held on 28/11/2020.

Points of discussion: The minutes of the previous meeting held on 28th November 2020 was briefed by the BoS chairperson. The previous meeting had approved the UG scheme and draft tentative syllabus for the program - Artificial Intelligence and Machine Learning. The meeting also ratified the equivalence of students who shifted to 2016 autonomous scheme from 2012 autonomous scheme who could not continue in the admitted scheme due to back logs. The discussion of guidelines for the revision of the syllabus for the academic year 2021-2022 based on NEP and discussion of the department achievements was also made in the earlier meeting along with any other issues with the permission of the chair.

Agenda No. 107: Discussion and approval of UG-BE CSE 7th-8th semester syllabus of 2018 autonomous scheme.

Points of discussion: The members and attendees reviewed the draft syllabus for 7th – 8th semester of 2018 autonomous scheme. The following points were suggested,-

a) *Computer Graphics and Virtual Reality(18CS72)* – The discussion with respect to the lab component took place among the members. It was suggested by student representative that instead of detailed focus towards algorithmic concepts and its implementation, the focus needs to be given to actually render 3D objects which could aid student to get in pace with

Mysore Road, RVVidyaniketan Post, Bengaluru – 560 059, Karnataka, India

080-68188110
8111

principal@rvce.edu.in
www.rvce.edu.in

Go, change the world

230 68

**RV College
of Engineering®**

Autonomous
Institution Affiliated
to Visvesvaraya
Technological
University, Belagavi

Approved by AICTE,
New Delhi, Accredited
by NAAC, Bengaluru

**Department of Computer Science and
Engineering**

Phone: 080-68188199, 8200 : e-mail: hod.cse@rvce.edu.in

the most happening trends in market. It was clarified however that the fundamental concepts are more important, however to accommodate the suggested change the number of lab programs could be brought down by 4 and in place can include exercises that facilitate students to explore tools w.r.t virtual reality. Also to give exposure, the experiential learning topics could also be more innovative.

b) **Parallel Architecture and Distributed Programming(18CS73)** – the draft syllabus was reviewed, the syllabus structured was well appreciated and contents approved by the board. However the reference books need revision to include latest edition/reprint.

c) **Linux Internals(18CS7F1)** – the draft syllabus was reviewed, members appreciated the contents and inclusion of this course in BE scheme and approved the course. However the reference books need revision to include latest edition/reprint.

d) **An Introduction to Game Theory(18CS7F2)** – the draft syllabus was reviewed, however to match the contents drafted in the 5 units members suggested to change the title of this course to "Game Theory". The contents of the course was approved, however the faculty could think of introducing learning augmentation like hashpy that puts concepts to live actions for students.

e) **Information Storage Management(18CS7F3)** – the draft syllabus was reviewed, the contents appreciated and approved by the board.

f) **Software Defined Networks(18CS7F4)** – it was presented to the board that this is a common course for the departments CSE and ISE. The contents reviewed and approved by the board.

g) **Introduction to Optimization Techniques(18CS7F5)** – the contents were reviewed by the members and it was suggested that though the contents drafted looked loaded if there was scope to squeeze in convex programming, quadratic programming and include some live action by adding to the course some form of stochastic grading which would be used across domains and that could also aid for better understanding of the course Deep Learning.

h) **Cyber Security and Industry 4.0(18CS7G1)** – the draft syllabus was reviewed, syllabus structured was well appreciated and contents approved by the board. However it was suggested to the course delivery that the contents of Industry 4.0 needs to be cohesively

Mysore Road, RVVidyaniketan Post,
Bengaluru – 560 059, Karnataka, India

080-68188110
8111

principal@rvce.edu.in
www.rvce.edu.in

Go, change the world

229 69

**RV College
of Engineering**®

Autonomous
Institution Affiliated
to Visvesvaraya
Technological
University, Belagavi
Engineering

Approved by AICTE,
New Delhi, Accredited
by NAAC, Bengaluru

Department of Computer Science and

Phone: 080-68188199, 8200 : e-mail: hod.cse@rvce.edu.in

gelled well with cyber security aspects. Also aspects of Cyber physical systems – how it affects the overall system could also be delivered to bring awareness to students.

i) **Application Delivery Controller and Virtualization(18CS7G1)** – the draft syllabus was reviewed, the contents was approved by the board.

j) **Fuzzy Graphs, Fuzzy Soft Sets and Petrinets (18CS7G3)** – the draft syllabus was reviewed, members questioned about the hands-on experience catered to students for which the course coordinator justified that it would be taken up as part of experiential learning through innovative problems. The contents were approved by the board.

k) **Computer Vision (18CS7G4)** – the draft syllabus was reviewed and the contents were appreciated and approved by the board. However an external member suggested to include books by Adrian Low-'Introductory Computer Vision, Imaging Techhniques and Solutions', Vishvajit S Nalwa – 'A Guided Tour of Computer Vision' as reference books which could aid in putting the concepts in appropriate window to students.

l) **Deep Learning(18CS7G5)** – it was presented to the board that this is a common course for the departments CSE and ISE, also ISE is the board to this course. However inputs were taken by CSE board which would be passed on to the concerned course coordinator. The contents was reviewed by the board and suggested to include transfer learning, resource planning modelling(RPM) and energy based modelling which could be introduced as part of experiential learning. It was also indicated that Neural networks concepts could be overlapped/repeated in the course however it was justified that as it is common for ISE who have not gone through introductory concepts less than 10% of neural networks has been included. Members also felt that though Autoencoders are introduced in the course, one step further introducing variations of autoencoders could be taken up as precursor towards generative models.

m) **Web Programming(18G7H04)** - the draft syllabus was reviewed, syllabus structured was well appreciated and contents approved by the board.

Resolution: The course "An Introduction to Game Theory(18CS7F2)" will be retitled as 'Game Theory(18CS7F2)'as suggested in the meeting. The suggestions mentioned above would be taken up for further action by the course coordinators to incorporate the suggestions if feasible after discussion

Mysore Road, RVVidyaniketan Post,
Bengaluru – 560 059, Karnataka, India

080-68188110
8111

principal@rvce.edu.in
www.rvce.edu.in

Go, change the world

228   70

RV College
of Engineering®

Autonomous Institution Affiliated to Visvesvaraya Technological University, Belagavi

Approved by AICTE, New Delhi, Accredited by NAAC, Bengaluru

Department of Computer Science and Engineering

Phone: 080-68188199, 8200 : e-mail: hod.cse@rvce.edu.in

with the subject experts in the department. The inputs with respect to the course 'Deep Learning' would be passed on to the department faculty coordinator who inturn would share with ISE department for further incorporations.

Agenda No. 108: Ratification of the equivalence for the offered list of MOOC subjects in 5th semester(2018 Scheme Elective-A) to those courses offered in the current NPTEL list(List of mapping shared by equivalence enclosed as Appendix-I).

Points of discussion: The list of 5th semester 2018 scheme, Elective Group A subjects and their equivalence mapped with the current NPTEL ongoing courses prepared by equivalence committee was presented to the board and the same has been approved.

Resolution: The equivalence presented in the meeting has been ratified by the board. The same would be communicated to Dean Academics, CoE and the identified course mentors of the department.

Agenda No. 109: Any other issue with the permission of the chair..

Points of discussion: The BoS chairperson thanked the board members and attendees for attending the meeting .

The meeting concluded with the BoS Chairman thanking the members for their valuable inputs and suggestions.

14/07/2021

Dr. Ramakanthkumar P,
Chairman - Board of Studies
Professor & Head CSE Department,
R. V. College of Engineering
Professor and Head
Department of
Computer Science and Engineering
R.V. College of Engineering
Bangalore - 560 059.

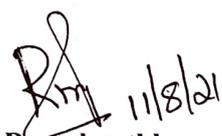Mysore Road, RVVidyaniketan Post,
Bengaluru – 560 059, Karnataka, India

080-68188110
8111

principal@rvce.edu.in
www.rvce.edu.in

Go, change the world

27 71

Action Taken Report for 22nd BoS Meeting held on 17/06/2021:

- To address the standard of course delivery, staff were informed to identify ICT approaches for effective delivery of courses as indicated for courses Computer Graphics and Virtual Reality(18CS72), An Introduction to Game Theory(18CS7F2), Cyber Security and Industry 4.0(18CS7G1), Fuzzy Graphs, Fuzzy Soft Sets and Petrinets (18CS7G3).

- As suggested the course "An Introduction to Game Theory(18CS7F2)" will be retitled to "Game Theory".

- The suggestions w.r.t the course content modification is informed to the respective faculty coordinator for further action and feasibility to incorporate the indicated changes. The following courses were suggested corrections during the meeting:
    i. Computer Graphics and Virtual Reality(18CS72) - Dr. HKK
    ii. Parallel Architecture and Distributed Programming(18CS73) - Dr. MM
    iii. Linux Internals(18CS7F1) - Dr. DN
    iv. An Introduction to Game Theory(18CS7F2) - Dr. ASP
    v. Introduction to Optimization Techniques(18CS7F5) Dr. RS & Dr.SR
    vi. Computer Vision (18CS7G4) - Dr. AS
    vii. Deep Learning(18CS7G5) - Dr. BSB

- The suggestions indicated for the course Deep Learning(18CS7G5) will be passed on to Department of ISE as this is a common course for both the departments and the board for this is ISE.

- The equivalence ratified by the board is communicated to Dean Academics, CoE and the identified course mentors of the department.

11|8|21

Dr. Ramakanthkumar P,

Chairman - Board of Studies

Professor & Head CSE Department,

R. V. College of Engineering

RVCE email

Invitation: 23rd Board of Studies Meeting on 21/08/2021(Saturday)
2 messages

Board of Studies CSE <bos.cse@rvce.edu.in>   Tue, Aug 17, 2021 at 10:17 AM
To: Dr H S Guru Prasad <drhsguru@gmail.com>, gtraju1990@yahoo.com, AnilKumar.Nileshwar@philips.com, j-keerthy@ti.com, m.gchandra@tcs.com, drgirichand@gmail.com
Cc: "Ramakanth Kumar P." <ramakanthkp@rvce.edu.in>, "Shobha G." <shobhag@rvce.edu.in>, RAJASHREE SHETTAR <rajashreeshettar@rvce.edu.in>, Shantha Ranga Swamy <shantharangaswamy@rvce.edu.in>, sandhya sampangiramaiah <sandhya.sampangi@rvce.edu.in>, Sumab Rao <sumab_rao@rvce.edu.in>

Dear Sir/Madam,

GREETINGS FROM CSE-RVCE.

With the instruction from Principal Sir, we are required to finalise the syllabus of 1st semester 'Programming in C" course in line with NEP 2020. Hence we **propose to conduct the BoS meeting to finalise the contents of one subject/course** since NEP will be implemented from the coming academic year for the first year students.

We are pleased to extend you an invitation to attend the BoS Meeting that will be held on 21st August 2021(Saturday) at 9:30 am. The agenda for 23rd BoS meeting(21/08/2021) is as below,-

Meeting Agenda for 23rd BoS Meeting:
1. To read and record the minutes of the previous BoS meeting held on 12th June 2021.
2. Discussion and approval of UG-BE 1st Semester "Programming in C" syllabus in line with NEP 2020 for the new scheme.
3. Ratification of the offered list of MOOC subjects in 5th semester(2018 Scheme Elective-A) to those courses offered in the current NPTEL list.
4. Any other issue with the permission of the chair.

You are requested to kindly spare your valuable time and make it possible to attend the meeting. Looking forward to your participation.

The detailed syllabus for discussion along with meeting link will be shared through mail at the earliest.

Date & Venue: 21st August 2021(Saturday) Online Mode
Time: 9:30 a.m.

Thanks and Regards,

Dr. Ramakanth Kumar P,

BoS Chairperson,

Dept. of C.S.E,

R V College of Engineering (Autonomous),

Bangalore 560059
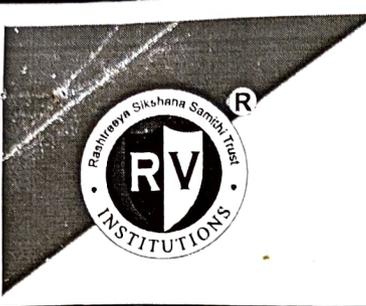
Ref: RVE/CSE/   /2020-21

Date: 21/08/2021

23ʳᵈ Board of Studies Meeting
Online Meeting Held on
21ˢᵗ August 2021 at 9:30 am

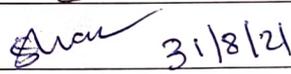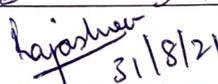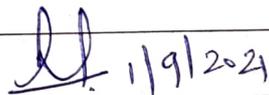**Date & Venue:** 21ˢᵗ August 2021(Saturday) Online Mode
Time: 9:30 a.m.
Meeting Link: meet.google.com/hmb-ksso-prk

Agenda for 22ⁿᵈ BoS Meeting:

110.   To read and record the minutes of the previous BoS meeting held on 12th June 2021.

111.   Discussion and approval of UG-BE 1st Semester "Programming in C" syllabus in line with NEP 2020 for the new scheme.

112.   Ratification of the offered list of MOOC subjects in 5th semester(2018 Scheme Elective-A) to those courses offered in the current NPTEL list.

113.   Any other issue with the permission of the chair.

The 23ʳᵈ BoS Meeting conducted this day 21ˢᵗ August 2021(Saturday) through online meet with the above mentioned agenda was witnessed by the following members, the detailed minutes of the meeting will be shared through mail at the earliest,-
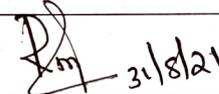
Sl. No.	MEMBERS	SIGNATURE
1	**Dr. Ramakanthkumar P,** Professor and Head, BoS Chairperson	31\8\21
2	**Dr. Shobha G,** Professor	31\8\21
3	**Dr. Rajashree Shettar,** Professor and PG Dean - Circuit Branches	31\8\21
4	**Dr. Shanth Rangaswamy,** Associate Professor	01\09\2021
5	**Dr. Sandhya S,** Assistant Professor	
6	**Prof. Suma B,** Assistant Professor	1\9\2021
7	**Dr. H S Guruprasad,** Professor, BMSCE	Not Applicable

RV College
of Engineering®

Autonomous Institution Affiliated to Visvesvaraya Technological University, Belagavi

Approved by AICTE, New Delhi, Accredited by NAAC, Bengaluru

Department of Computer Science and Engineering

Phone: 080-68188199, 8200: e-mail: hod.cse@rvce.edu.in

		(Online Attendance)
8	**Dr. G T Raju,** Principal, SJC Institute of Technology, Chikballapur.	Not Applicable (Online Attendance)
9	**Dr. M. Girish Chandra,** Principal Scientist, TATA Consultancy Services	In Absentia
10	**Mr. Anil Nileshwar** Philips India Private Limited	Not Applicable (Online Attendance)
11	**Mr. KeerthyJagadeesh,** Lead Engineer, Texas Instruments	Not Applicable (Online Attendance)
Special Invitees - Dean Academics	
12	**Dr. Shanmukha Nagaraj** Dean Academics, RVCE	In Absentia
13	**Ms. Aishwarya G** (1RV17CS012) Student 8th Sem	Not Applicable (Online Attendance)
14	**Mr. Abhijith Trichur** (1RV17CS006) Student 8th Sem	Not Applicable (Online Attendance)
15	**Dr. B Sathish Babu** Professor, Dept. of CSE	
16	**Dr. G S Nagaraja,** Professor and Associate Dean, Dept. of CSE	In Absentia
Special Invitees – Faculty	
17	**Dr. Minal Moharir,** Associate Professor, Dept. of CSE	M.
18	**Dr. Sharvani G S,** Associate Professor,	Sharvani. G-S
19	**Dr. Vinay Hegde,** Associate Professor, Dept. of CSE,	
20	**Dr. Ashok Kumar,** Associate Professor, Dept. of CSE,	
21	**Dr. Soumya A,** Associate Professor, Dept. of CSE,	
22	**Dr. Deepamala N,** Associate Professor, Dept. of CSE,	
23	**Dr. Sowmyarani C N,** Associate Professor, Dept. of CSE	
24	**Dr. Poonam Ghuli,** Associate Professor, Dept. of CSE	
25	**Dr. Hemavathy R,** Associate Professor, Dept. of CSE	

Mysore Road, RVVidyaniketan Post, Bengaluru – 560 059, Karnataka, India

080-68188110
8111

principal@rvce.edu.in
www.rvce.edu.in

Go, change the world

248 75

RV College
of Engineering®

Autonomous Institution Affiliated to Visvesvaraya Technological University, Belagavi

Approved by AICTE, New Delhi, Accredited by NAAC, Bengaluru

Department of Computer Science and Engineering

Phone: 080-68188199, 8200: e-mail: hod.cse@rvce.edu.in

26	Prof. Praveena T, Assistant Professor	
27	Prof. Manonmani S, Assistant Professor, Dept. of CSE	
28	Dr. Azra Nasreen, Assistant Professor, Dept. of CSE,	
29	Prof. Jyothi Shetty, Assistant Professor, Dept. of CSE	
30	Prof. Prapulla S B, Assistant Professor, Dept. of CSE,	
31	Prof. K C Ganashree, Assistant Professor, Dept. of CSE,	
32	Dr. Chethana Murthy, Assistant Professor, Dept. of CSE,	
33	Dr. Pratiba D, Assistant Professor, Dept. of CSE,	
34	Prof. Chaitra B H, Assistant Professor, Dept. of CSE,	
35	Dr. Vishalakshi Prabhu, Assistant Professor, Dept. of CSE,	
36	Prof. Veena Gadad, Assistant Professor, Dept. of CSE,	
37	Prof. Girish Rao Salanke, Assistant Professor, Dept. of CSE,	
38	Prof. Lalitha V P, Assistant Professor, Dept. of CSE,	
39	Prof. Pavithra H, Assistant Professor, Dept. of CSE,	
40	Prof. Sneha M, Assistant Professor, Dept. of CSE	
41	Prof. Srividya M S, Assistant Professor, Dept. of CSE	
42	Prof. Manas M N, Assistant Professor, Dept. of CSE	
43	Prof. Anitha Sandeep, Assistant Professor, Dept. of CSE	

Mysore Road, RVVidyaniketan Post,
Bengaluru – 560 059, Karnataka, India

080-68188110
8111

principal@rvce.edu.in
www.rvce.edu.in

Go, change the world

2 4776

Members present : 42 (Duplicates removed)

AISHWARYA G
AKSHAR PRASAD
ANIL KUMAR N
Anitha Sandeep
Azra Nasreen
Board of Studies CSE
Chaitra B H
Chethana Murthy
Deepamala N
Deepti Kademani
Dr H S Guru Prasad
Dr. Ashok Kumar A R
Dr. B Sathish Babu
Dr. G T Raju Principal SJCIT
Dr. Raju G T
Dr. Sowmyarani C N
Ganashree K C
Girish Rao Salanke N S
Hemavathy R.
Jyothi Shetty
Lalitha V P
Manas M N
Manonmani S
Minal Moharir
POONAM GHULI
Pavithra H
Prapulla S B
Pratiba D.
Praveena T
Ramakanth Kumar P.
Shantha Ranga Swamy
Sharvani G.S.
Shobha G.
Sneha M
Soumya A.
Srividya M S
Sumab Rao
Veena Gadad
Vinay V.Hegde
keerthy j
sandhya sampangiramaiah
vishalakshi prabhu

**RV College
of Engineering®**

Autonomous
Institution Affiliated
to Visvesvaraya
Technological
University, Belagavi
Engineering

Approved by AICTE,
New Delhi, Accredited
by NAAC, Bengaluru

Department of Computer Science and

Phone: 080-68188199, 8200: e-mail: hod.cse@rvce.edu.in

Date: 25/08/2021

CONSOLIATED PROCEEDINGS 23rd Board of Studies Meeting
Held on
21st August 2021 at 9:30 am Online Mode

Date & Venue: 21st August 2021 (Saturday) Online Mode
Time: 9:30 a.m.
Meeting Link: meet.google.com/hmb-ksso-prk

Members present:

BoS members from R V College of Engineering:

1. Dr. Ramakanthkumar P, (Chairman, BoS), Professor & HoD, Dept. of CSE, R V College of Engineering, Bengaluru

2. Dr. Shobha G, Professor, Dept. of CSE, R V College of Engineering, Bengaluru.

3. Dr. Rajashree Shettar, Professor & PG Dean - Circuit Branches, Dept. of CSE, R V College of Engineering, Bengaluru

4. Dr. Shanta Rangaswamy, Associate Professor, Dept. of CSE, R V College of Engineering, Bengaluru

5. Dr. Sandhya S, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.

6. Prof. Suma B, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.

Subject Experts from outside the college nominated by Academic council:

1. Dr. H S Guruprasad, Professor and Dean Student Affairs, ISE, BMS College of Engineering, Bengalru.

2. Dr. G T Raju, Principal, SJC Institute of Technology, Chikballapur.

Representative from Industry/Corporate Sector/ Allied Areas relating to placement, to be nominated by Academic council:

1. Mr. Anil Nileshwar, Philips Pvt. Ltd.,

Meritorious Alumnus nominated by the Principal:

Mysore Road, RVVidyaniketan Post,
Bengaluru – 560 059, Karnataka, India

080-68188110
8111

principal@rvce.edu.in
www.rvce.edu.in

Go, change the world

245 78

RV College
of Engineering®

Autonomous Institution Affiliated to Visvesvaraya Technological University, Belagavi Engineering	Approved by AICTE, New Delhi, Accredited by NAAC, Bengaluru
	Department of Computer Science and

Phone: 080-68188199, 8200: e-mail: hod.cse@rvce.edu.in

1. Mr. Keerthy Jagadeesh, Lead Engineer, Texas Instruments, Bengaluru.

Special Invitees:

1. Dr. B Sathish Babu, Professor, Dept. of CSE, R V College of Engineering, Bengaluru.

Special Invitees - Student Representatives

1. Mr. Akshar Prasad (USN: 1RV17CS014), UG Final Year Student, CSE, RVCE.
2. Mr. Aishwarya G (USN: 1RV17CS012), UG Final Year Student, CSE, RVCE.

Special Invitees – CS Faculty

1. Dr. Minal Moharir, Associate Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
2. Dr. Sharvani G S, Associate Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
3. Dr. Vinay Hegde, Associate Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
4. Dr. Ashok Kumar, Associate Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
5. Dr. Soumya A, Associate Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
6. Dr. Deepamala N, Associate Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
7. Dr. Sowmyarani C N, Associate Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
8. Dr. Poonam Ghuli, Associate Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
9. Dr. Hemavathy R, Associate Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
10. Prof. Praveena T, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
11. Prof. Manonmani S, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
12. Dr. Azra Nasreen, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
13. Prof. Jyothi Shetty, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
14. Prof. Prapulla S B, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
15. Prof. Anitha Sandeep, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
16. Prof. K C Ganashree, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
17. Dr. Pratiba D, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
18. Prof. Veena Gadad, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
19. Prof. Chaitra B H, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
20. Dr. Chethana Murthy, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
21. Dr. Vishalakshi Prabhu, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
22. Prof. Girish Rao Solanke, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
23. Prof. Lalitha V P, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.

Mysore Road, RVVidyaniketan Post,   080-68188110   principal@rvce.edu.in
Bengaluru – 560 059, Karnataka, India   8111   www.rvce.edu.in

Go, change the world

244   79

RV College
of Engineering®

Autonomous Institution Affiliated to Visvesvaraya Technological University, Belagavi Engineering | **Approved by AICTE, New Delhi, Accredited by NAAC, Bengaluru**

Department of Computer Science and

Phone: 080-68188199, 8200: e-mail: hod.cse@rvce.edu.in

~~24. Prof. Manas M N, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.~~

25. Prof. Pavithra H, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.

26. Prof. Sneha M, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.

27. Prof. Srividya M S, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.

Leave of Absence:

Subject Experts from outside the college (VTU Nominee):

1. Dr. M. Girish Chandra, Principal Scientist, TCS Research and Innovations, TATA Consultancy Services.

Special Invitees:

2. Dr. Shanmukha Nagaraj, Dean Academics, RVCE.

3. Dr. G S Nagaraja, Professor, Dept. of CSE, R V College of Engineering, Bengaluru.

This draft minutes of the meeting is being circulated to all the members of the BoS to invite their comments.

The Chairman, BoS welcomed all the members of Board of Studies and the attendees. He also mentioned about the inclusion of special invitee's (mentioned above) and CS-faculty for the meeting, since all faculty would be involved in incorporating NEP to the new autonomous scheme and structuring of the syllabus. BoS Chairman presented agenda No.110 to 113, in the meeting.

Agenda for the 22nd BoS meeting:

110. To read and record the minutes of the previous BoS meeting held on 12th June 2021.

111. Discussion and approval of UG-BE 1st Semester "Programming in C" syllabus in line with NEP 2020 for the new scheme.

112. Ratification of the offered list of MOOC subjects in 5th semester(2018 Scheme Elective-A) to those courses offered in the current NPTEL list.

113. Any other issue with the permission of the chair

Mysore Road, RVVidyaniketan Post, Bengaluru – 560 059, Karnataka, India

080-68188110
8111

principal@rvce.edu.in
www.rvce.edu.in

Go, change the world

243 80

**RV College
of Engineering®**

Autonomous
Institution Affiliated
to Visvesvaraya
Technological
University, Belagavi
Engineering

Approved by AICTE,
New Delhi, Accredited
by NAAC, Bengaluru

Department of Computer Science and

Phone: 080-68188199, 8200: e-mail: hod.cse@rvce.edu.in

Minutes of the Meeting in 23rd BoS:

The BoS chairman initiated the meeting by greeting and welcoming the BoS members, student representatives, CSE faculty and special invitees to the meeting. The chairman presented salient aspects of NEP and discussed briefly incorporation/implementation perspectives of NEP in the curriculum.

Agenda No. 110: To read and record the minutes of previous BoS meeting held on 12/06/2021.

Points of discussion: The minutes of the previous meeting held on 12th June 2021 was briefed by the BoS chairperson. The previous meeting had approved the UG-BE CSE 7th-8th semester syllabus of 2018 autonomous scheme. The meeting also ratified the equivalence for the offered list of MOOC subjects in 5th semester(2018 Scheme Elective-A) to those courses offered in the current NPTEL list.

Agenda No. 111: Discussion and approval of UG-BE 1st Semester "Programming in C" syllabus in line with NEP 2020 for the new scheme.

Points of discussion: The members and attendees reviewed the draft syllabus of "Programming in C" course of the new autonomous scheme. The following points were suggested,-

a) In order to make skill based learning, it was suggested to have a question bank of lab programs of varied complexities of around 150 to 200 questions.

b) As the syllabus presented had hardware components in the Part-B lab component, the members suggested that the delivery mode could be aided with small video's for hardware interfacing which would facilitate the students in better understanding of Arduino and other hardware components.

c) It was proposed that rather than having exclusive experiential learning component/topics of only C Language, one topic that incorporates concepts from other courses like Physics, Chemistry along with C can be identified which could be more effective and also less pressurizing on students.

d) It was indicated in meeting that the experiential topics could be made more exhaustive based on the domain like circuit and non circuit branches and so on.

Mysore Road, RVVidyaniketan Post,
Bengaluru – 560 059, Karnataka, India

080-68188110
8111

principal@rvce.edu.in
www.rvce.edu.in

Go, change the world

242   81

**RV College
of Engineering®**

Autonomous
Institution Affiliated
to Visvesvaraya
Technological
University, Belagavi

Approved by AICTE,
New Delhi, Accredited
by NAAC, Bengaluru

**Department of Computer Science and
Engineering**

Phone: 080-68188199, 8200: e-mail: hod.cse@rvce.edu.in

~~e) The industry expert highlighted to relook on the listed textbooks. Though the listed books were~~ good, rather than listing these evergreen books, books which have come with updates that discuss in detail applications of C for hardware modules and interfacing needs to be incorporated.

f) One of the industry member raised concern that the delivery mode should deliver system level understanding to the students regarding code and data sections of a program, allocation of memory and purpose of temporary variables, stack etc., that could be taken up in detail as part of lab sessions.

The members also appreciated that the syllabus structured provided a good gateway for the current industry scenario along with an effective evaluation scheme.

Resolution: The above suggestions with respect to delivery modes will be taken up by the faculty team incharge for framing syllabus under the guidance of HoD sir. The suggestions mentioned w.r.t the revision of text books would be passed to the course coordinators to incorporate as feasible.

Agenda No. 112: Ratification of the offered list of MOOC subjects in 5th semester(2018 Scheme Elective-A) to those courses offered in the current NPTEL list.

Points of discussion: The list of courses of Elective A in 5th semester 2018 scheme offered earlier and the new subjects which had to be changed/included due to the current NPTEL ongoing courses was presented to the board and the same has been approved.

Resolution: The changed list of courses identified for Elective A, would be communicated to Dean Academics, CoE and the identified course mentors of the department for further action.

Agenda No. 113: Any other issue with the permission of the chair..

Points of discussion: The common electives framed for student of non CS departments in 7th semester that are offered from the CS Department to other branches (as required) for 3 credits based on the request from those departments were presented to the board. The syllabus contents of courses 'Artificial Intelligence' and 'Data Mining Essentials' was presented to the board. The members reviewed the contents of Artificial Intelligence and it was suggested to relook into the book contents Stuart Russel, Peter Norvig "AI – A Modern Approach", as it could overload the non computer science background students. Therefore, the syllabus could be structured to begin with Introduction to AI and

Mysore Road, RVVidyaniketan Post,
Bengaluru – 560 059, Karnataka, India

080-68188110
8111

principal@rvce.edu.in
www.rvce.edu.in

Go, change the world

82

RV College
of Engineering®

Autonomous
Institution Affiliated
to Visvesvaraya
Technological
University, Belagavi
Engineering

| Approved by AICTE,
| New Delhi, Accredited
| by NAAC, Bengaluru

Department of Computer Science and

Phone: 080-68188199, 8200: e-mail: hod.cse@rvce.edu.in

~~the basic concepts of AI sufficient for a non CS student and then proceed with few units on applied~~

AI. It was also indicated the unit-3 in the current presented syllabus could be not relevant for CH and other non CS students hence applications of AI could be brought in.

It was mentioned in the meeting that teaching material from Russel can be accessed from the publication team an aided for course handling faculty. Also the text book Russel included needs to be updated to the latest edition published.

The members reviewed the contents of Data Mining Essentials and it was suggested to include one unit that discusses how data from various sources flowing can be brought into one place and building data lakes and applying data mining.

The BoS chairperson also briefly presented the achievements of the department and faculty members as concluding remarks and thanked the board members and all attendees for attending the meeting.

The meeting concluded with the BoS Chairman thanking the members for their valuable inputs and suggestions made which added new insights and would aid in the implementation of NEP in the new autonomous scheme.

02\09\2021

Dr. Ramakanthkumar P,
Chairman - Board of Studies
Professor & Head CSE Department,
R. V. College of Engineering

Professor and Head
Department of
Computer Science and Engineering
R.V. College of Engineering
Bangalore - 560 059.

Mysore Road, RVVidyaniketan Post,   080-68188110   principal@rvce.edu.in
Bengaluru – 560 059, Karnataka, India   8111   www.rvce.edu.in

Go, change the world

2 40 83

Action Taken Report for 23rd BoS Meeting held on 21/08/2021:

- Suggestion of board on course content delivery and increasing practical exposure through skill based learning would be taken up by the course coordinator by providing 150 to 200 questions for practice.
- The suggestions made for the experiential learning topics was revised under the guidance of the chairperson.
- The suggestion to revise the books is passed on to faculty coordination for updation and further action.
- The ratified updated list of courses identified for Elective A based on the new revised list published by NPTEL is communicated to Dean Academics and CoE.
- Books revision for the latest edition for the common courses is informed to the faculty incharge for further action.
- Suggestion on modifying a unit in the elective course Data Mining Essentials is informed to the faculty incharge for further incorporation based on inputs/guidance from subject expert.

30\08\2021

Dr.Ramakanthkumar P,

Chairman - Board of Studies

Professor & Head CSE Department,

R. V. College of Engineering

Invitation: Board of Studies Meeting on 12/03/2022(Saturday) @ 09:30am - 11:30am
2 messages

Board of Studies CSE <bos.cse@rvce.edu.in>   Fri, Feb 25, 2022 at 10:56 AM
To: "Ramakanth Kumar P." <ramakanthkp@rvce.edu.in>, "Shobha G." <shobhag@rvce.edu.in>, "Dr. Rajashree Shettar" <rajashreeshettar@rvce.edu.in>, Shantha Ranga Swamy <shantharangaswamy@rvce.edu.in>, sandhya sampangiramaiah <sandhya.sampangi@rvce.edu.in>, Sumab Rao <sumab_rao@rvce.edu.in>, Dr H S Guru Prasad <drhsguru@gmail.com>, gtraju1990@yahoo.com, AnilKumar.Nileshwar@philips.com, m.gchandra@tcs.com, drgirichand@gmail.com, j-keerthy@ti.com

Dear Sir/Madam,

GREETINGS FROM CSE-RVCE.

The Department of Computer Science and Engineering is proposing to have a Board of Studies(BoS) meeting on 12th March 2022(Saturday).

Agenda for the meeting is as below:

1. Discussion and approval of UG-BE CSE 3rd-4th semester scheme and syllabus of 2021 scheme.
2. Any other issue with the permission of the chair.

You are requested to kindly spare your valuable time and make it possible to attend the meeting. Your valuable suggestions will definitely help the department. Detailed draft syllabus will be shared at the earliest possible. Kindly find attached the draft scheme(credit structure) of 3rd-4th semester.

Looking forward to your participation.

Date : 12th March 2022(Saturday)
Time: 9:30 a.m.

Thanks and Regards,

Dr. Ramakanth Kumar P,

BoS Chairperson,

Dept. of C.S.E,

R V College of Engineering (Autonomous),

Bangalore 560059

Reminder & Link: Webex meeting invitation: 24th BoS Meeting of CSE, RVCE
3 messages

Board of Studies CSE <bos.cse@rvce.edu.in>   Fri, Mar 11, 2022 at 10:03 AM
To: "Ramakanth Kumar P." <ramakanthkp@rvce.edu.in>, "Shobha G." <shobhag@rvce.edu.in>, RAJASHREE SHETTAR
<rajashreeshettar@rvce.edu.in>, Shantha Ranga Swamy <shantharangaswamy@rvce.edu.in>, sandhya sampangiramaiah
<sandhya.sampangi@rvce.edu.in>, Sumab Rao <sumab_rao@rvce.edu.in>, Dr H S Guru Prasad <drhsguru@gmail.com>,
gtraju1990@yahoo.com, AnilKumar.Nileshwar@philips.com, m.gchandra@tcs.com, drgirichand@gmail.com, j-
keerthy@ti.com, prasanna@iitdh.ac.in, akshrprasad.cs17@rvce.edu.in, deeksha.shravani1@gmail.com, Dean Academics R
V College of Engineering <dean_acad@rvce.edu.in>, cs_faculty@rvce.edu.in

Dear Sir/Madam,

GREETINGS FROM CSE-RVCE.

● Find the **meeting link for the Board of Studies(BoS) meeting on 12th March
2022(Saturday).**

Agenda for the meeting is as below:

      1.To read and record the minutes of the previous BoS meeting held on 25th August
2021.

      2. Discussion and approval of UG-BE CSE 3rd-4th semester scheme and
syllabus of 2021 scheme.

      3. Any other issue with the permission of the chair.

● You are requested to kindly spare your valuable time and make it possible to attend
the meeting. Your valuable suggestions will definitely help the department.

Looking forward to your participation.

Date : 12th March 2022(Saturday)
Time: 9:30 a.m.
Meeting Link:

https://rvce.webex.com/rvce/j.php?MTID=m38939c075cc45ed3ab3e387804163209

ramakanthkp is inviting you to a scheduled Webex meeting.

Saturday, March 12, 2022

9:30 AM | (UTC+05:30) Chennai, Kolkata, Mumbai, New Delhi | 2 hrs

RV College
of Engineering®

Autonomous Institution Affiliated to Visvesvaraya Technological University, Belagavi | **Approved by AICTE, New Delhi, Accredited by NAAC, Bengaluru**

Department of Computer Science and Engineering
Phone: 080-68188199, 8200: e-mail: hod.cse@rvce.edu.in

Ref: RVE/CSE/   /2021-22   Date: 17/03/2022

24th Board of Studies Meeting
Online Meeting Held on
12th March 2022 at 9:30 am
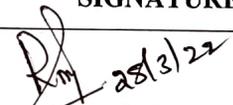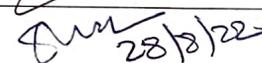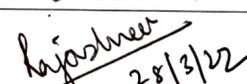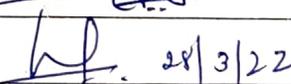
Date & Venue: 12th March 2022(Saturday) Online Mode
Time: 9:30 a.m.
Meeting Link: https://rvce.webex.com/rvce/j.php?MTID=m38939c075cc45ed3ab3e387804163209

Agenda for 24th BoS Meeting:

114.   To read and record the minutes of the previous BoS meeting held on 21st August 2021.

115.   Discussion of Draft CSE 2021 scheme 3rd to 8th semesters.

116.   Discussion and approval of UG-BE CSE 3rd-4th semester scheme and syllabus of 2021 scheme.

117.   Any other issue with the permission of the chair.

The 24th BoS Meeting conducted this day 12th March 2022(Saturday) through online meet with the above mentioned agenda was witnessed by the following members, the detailed minutes of the meeting will be shared through mail at the earliest,-

Sl. No.	MEMBERS	SIGNATURE
1	**Dr. Ramakanthkumar P,** Professor and Head, BoS Chairperson	28/3/22
2	**Dr. Shobha G,** Professor	28/8/22
3	**Dr. RajashreeShettar,** Professor and PG Dean - Circuit Branches	Rajashree 28/3/22
4	**Dr. ShanthRangaswamy,** Professor	29/3/2022
5	**Dr. Sandhya S,** Assistant Professor	
6	**Prof. Suma B,** Assistant Professor	28/3/22
7	**Dr. H S Guruprasad,** Professor, BMSCE	Not Applicable (Online Attendance)

Mysore Road, RVVidyaniketan Post,   080-68188110   principal@rvce.edu.in
Bengaluru – 560 059, Karnataka, India   8111   www.rvce.edu.in

Go, change the world

19 87

RV College
of Engineering®

Autonomous
Institution Affiliated
to Visvesvaraya
Technological
University, Belagavi

Approved by AICTE,
New Delhi, Accredited
by NAAC, Bengaluru

Department of Computer Science and Engineering
Phone: 080-68188199, 8200: e-mail: hod.cse@rvce.edu.in

8	**Dr. G T Raju,** Principal,SJC Institute of Technology, Chikballapur.	~~In Absentia~~

9	**Dr. M. Girish Chandra,** Principal Scientist,TATA Consultancy Services	**In Absentia**
10	**Mr. Anil Nileshwar** Philips India Private Limited	**Not Applicable** **(Online Attendance)**
11	**Mr. KeerthyJagadeesh,** Lead Engineer, Texas Instruments	**Not Applicable** **(Online Attendance)**
12	**Dr.S. R. MahadevaPrasanna** Professor, Dept. of Electrical Engineering Dean (Faculty Welfare, Research & Development) Indian Institute of Technology Dharwad **VTU Nominee 2022**	**Not Applicable** **(Online Attendance)**

Special Invitees - Dean Academics

	Dr.Shanmukha Nagaraj Dean Academics, RVCE	**In Absentia**
13	**Ms. Deeksha Shravani** BE CSE Alumna	**Not Applicable** **(Online Attendance)**
14	**Mr. AbhijithTrichur** BE CSE Alumnus	**Not Applicable** **(Online Attendance)**
16	**Dr. G S Nagaraja,** Professor and Associate Dean, Dept. of CSE	*L.S. Nru 2/03/22*

Special Invitees – Faculty

17	**Dr. Minal Moharir,**Professor, Dept. of CSE	
18	**Dr. Sharvani G S,**Associate Professor,	*Sharvani GS*
19	**Dr. Vinay Hegde,**Associate Professor, Dept. of CSE,	Online Attendance (Not well)
20	**Dr. Ashok Kumar,** Associate Professor, Dept. of CSE,	*29/03/22*
21	**Dr. Soumya A,**Associate Professor, Dept. of CSE,	
22	**Dr. Deepamala N,**Associate Professor, Dept. of CSE,	*29/3/22*
23	**Dr. Sowmyarani C N,**Associate Professor, Dept. of CSE	*CN 29/3/22*
24	**Dr. Poonam Ghuli,** Associate Professor, Dept. of CSE	*Ghuli*
25	**Dr. Hemavathy R,**Associate Professor, Dept. of CSE	*29/3/22*
26	**Dr.Praveena T,** Assistant Professor	*29/03/22*

Mysore Road, RVVidyaniketan Post,
Bengaluru – 560 059, Karnataka, India

080-68188110
8111

principal@rvce.edu.in
www.rvce.edu.in

Go, change the world

18   88

RV College
of Engineering®

Autonomous Institution Affiliated to Visvesvaraya Technological University, Belagavi

Approved by AICTE, New Delhi, Accredited by NAAC, Bengaluru

Department of Computer Science and Engineering

Phone: 080-68188199, 8200: e-mail: hod.cse@rvce.edu.in

27	Prof.Manonmani S, Assistant Professor, Dept. of CSE	
28	Dr. AzraNasreen,Assistant Professor, Dept. of CSE,	
29	Prof. Jyothi Shetty,Assistant Professor, Dept. of CSE	
30	Prof.Prapulla S B,Assistant Professor, Dept. of CSE,	
31	Prof. K C Ganashree,Assistant Professor, Dept. of CSE,	
32	Dr. Chethana Murthy,Assistant Professor, Dept. of CSE,	
33	Dr. Pratiba D,Assistant Professor, Dept. of CSE,	
34	Dr. VishalakshiPrabhu,Assistant Professor, Dept. of CSE,	
35	Prof.VeenaGadad, Assistant Professor, Dept. of CSE,	
36	Prof. Girish Rao Solanke,Assistant Professor, Dept. of CSE,	
37	Prof. Pavithra H,Assistant Professor, Dept. of CSE,	
38	Prof. Sneha M,Assistant Professor, Dept. of CSE	
39	Prof. Srividya M S,Assistant Professor, Dept. of CSE	
40	Prof. Manas M N,Assistant Professor, Dept. of CSE	

Mysore Road, RVVidyaniketan Post, Bengaluru – 560 059, Karnataka, India

080-68188110
8111

principal@rvce.edu.in
www.rvce.edu.in

Go, change the world

17-89

	RV College	
	of Engineering®	
	Autonomous Institution Affiliated to Visvesvaraya Technological University, Belagavi Engineering	Approved by AICTE, New Delhi, Accredited by NAAC, Bengaluru
		Department of Computer Science and

Phone: 080-68188199, 8200: e-mail: hod.cse@rvce.edu.in

Date: 25/03/2022

CONSOLIATED PROCEEDINGS 24th Board of Studies Meeting
Held on
12th March 2022 at 9:30 am Online Mode

Date & Venue: 12thMarch 2022 (Saturday) Online Mode

Time: 9:30 a.m.

Meeting Link: https://rvce.webex.com/rvce/j.php?MTID=m38939c075cc45ed3ab3e387804163209

Members present:

BoS members from R V College of Engineering:

1. Dr. Ramakanthkumar P, (Chairman, BoS), Professor & HoD, Dept. of CSE, R V College of Engineering, Bengaluru

2. Dr. Shobha G, Professor, Dept. of CSE, R V College of Engineering, Bengaluru.

3. Dr. RajashreeShettar, Professor &PG Dean - Circuit Branches, Dept. of CSE, R V College of Engineering, Bengaluru

4. Dr. Shanta Rangaswamy, Professor, Dept. of CSE, R V College of Engineering, Bengaluru

5. Dr.Sandhya S, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.

6. Prof. Suma B, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.

Subject Experts from outside the college nominated by Academic council:

1. Dr. H S Guruprasad, Professor and Dean Student Affairs, ISE, BMS College of Engineering, Bengalru.

Representative from Industry/Corporate Sector/ Allied Areas relating to placement, to be nominated by Academic council:

1. Mr. Anil Nileshwar, Philips Pvt. Ltd.,

27 90

RV College
of Engineering®

Autonomous
Institution Affiliated
to Visvesvaraya
Technological
University, Belagavi
Engineering

Approved by AICTE,
New Delhi, Accredited
by NAAC, Bengaluru

Department of Computer Science and

Phone: 080-68188199, 8200: e-mail: hod.cse@rvce.edu.in

VTU Nominee 2022:

1. Dr. S. R. Mahadeva Prasanna, Professor, Dept. of Electrical Engineering, Dean (Faculty Welfare, Research & Development)Indian Institute of Technology Dharwad.

Meritorious Alumnus nominated by the Principal:

1. Mr. Keerthy Jagadeesh, Lead Engineer, Texas Instruments, Bengaluru.

Special Invitees:

1. Dr. G S Nagaraja, Professor and Associate Dean, Dept. of CSE, R V College of Engineering, Bengaluru.

Special Invitees - Student Representatives

1. Mr. Akshar Prasad(BE CSE Alumnus), UG Student (2021 pass out), CSE, RVCE.
2. Mr.Deeksha Shravani(BE CSE Alumna), UG Student, (2021 pass out),CSE, RVCE.

Special Invitees –CS Faculty

1. Dr. MinalMoharir, Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
2. Dr. Sharvani G S, Associate Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
3. Dr. Vinay Hegde, Associate Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
4. Dr. Ashok Kumar, Associate Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
5. Dr. Soumya A, Associate Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
6. Dr. Deepamala N, Associate Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
7. Dr. Sowmyarani C N, Associate Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
8. Dr. Poonam Ghuli, Associate Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
9. Dr. Hemavathy R, Associate Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
10. Dr. Praveena T, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
11. Prof.Manonmani S, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
12. Dr. AzraNasreen, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
13. Prof. Jyothi Shetty, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
14. Prof.Prapulla S B, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
15. Prof.Anitha Sandeep, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.
16. Prof. K C Ganashree, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.

26 91

**RV College
of Engineering®**

Autonomous
Institution Affiliated
to Visvesvaraya
Technological
University, Belagavi | Approved by AICTE,
New Delhi, Accredited
by NAAC, Bengaluru

**Department of Computer Science and
Engineering**

Phone: 080-68188199, 8200: e-mail: hod.cse@rvce.edu.in

17. Dr. Pratiba D, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.

18. Prof. VeenaGadad, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.

19. Dr. Chethana Murthy, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.

20. Dr. VishalakshiPrabhu, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.

21. Prof. Girish Rao Solanke, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.

22. Prof. Manas M N, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.

23. Prof. Pavithra H, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.

24. Prof. Sneha M, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.

25. Prof. Srividya M S, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.

Leave of Absence:

Subject Experts from outside the college:
1. Dr. M. Girish Chandra, Principal Scientist, TCS Research and Innovations, TATA Consultancy Services.

2. Dr. G T Raju, Principal, SJC Institute of Technology, Chikballapur.

Special Invitees:
3. Dr. Shanmukha Nagaraj, Dean Academics, RVCE.

This draft minutes of the meeting is being circulated to all the members of the BoS to invite their comments.

The Chairman, BoS welcomed all the members of Board of Studies and the attendees. He also mentioned about the inclusion of special invitee's (mentioned above) and CS-faculty. The Chairman thanked the previous board members of the earlier term for their tenure as members from 2018 – 2021 for all the feedback and guidance provided in structuring and refining the curriculum of the department of CSE. Further He also welcomed the new VTU nominee Dr. S. R. Mahadeva Prasanna, who is identified and nominated by VTU for the new BoS structure 2021-2024. It was also mentioned that 2 BE student alumni (BE 2021 pass out) have been included since the current final

3

25 92

RV College
of Engineering®

Autonomous | **Approved by AICTE,**
Institution Affiliated | **New Delhi, Accredited**
to Visvesvaraya | **by NAAC, Bengaluru**
Technological |
University, Belagavi | **Department of Computer Science and**
Engineering

Phone: 080-68188199, 8200: e-mail: hod.cse@rvce.edu.in

year students have their ongoing SEE exams. BoS Chairman presented agenda No.114 to117, in the meeting.

Agenda for the 24thBoS meeting:

114. To read and record the minutes of the previous BoS meeting held on 21st August 2021.
115. Discussion of Draft CSE 2021 scheme 3rd to 8th semesters.
116. Discussion and approval of UG-BE CSE 3rd-4th semester scheme and syllabus of 2021 scheme.
117. Any other issue with the permission of the chair.

Minutes of the Meeting in 23rdBoS:

The BoS chairman initiated the meeting by greeting and welcoming the BoSmembers, student representatives, CSE faculty and special invitees to the meeting.The chairman presented salient aspects of NEP and discussed briefly incorporation/implementation perspectives of NEP in the curriculum.

Agenda No. 114: To read and record the minutes of the previous BoS meeting held on 25thAugust 2021.

Points of discussion: The minutes of the previous meeting held on 25thAugust 2021was briefed by the BoS chairperson. The previous meeting had approved Discussion and approval of UG-BE 1st Semester "Programming in C" syllabus. The meeting also ratified Ratification of the offered list of MOOC subjects in 5thsemester. Brief summary of feedback received from all stake holders including alumni, industry experts, students through exit survey and faculty members was shared in the meeting. "The changes in the 2021 curriculum were incorporated after discussion".

Agenda No. 115: Discussion of Draft CSE 2021 scheme 3rd to 8th semesters.

Points of discussion: The draft 2021 scheme from 3rd – 8th semester was presented in the meeting and the following is discussed,-

- Questions were raised on who would be offered Bridge course PICMathematics which is an audit course, the chairperson clarified that it would be for all lateral entry students of all the

Mysore Road, RVVidyaniketan Post,   080-68188110   principal@rvce.edu.in
Bengaluru – 560 059, Karnataka, India   8111   www.rvce.edu.in

Go, change the world 93

RV College
of Engineering®

Autonomous Institution Affiliated to Visvesvaraya Technological University, Belagavi

Approved by AICTE, New Delhi, Accredited by NAAC, Bengaluru

Department of Computer Science and Engineering

Phone: 080-68188199, 8200: e-mail: hod.cse@rvce.edu.in

branches. These two courses would be offered to bridge the gap of Diploma students to bring them on par to the regular students.

- Members also questioned whether the contents of Bridge course C programming for computer science background students would be customised / different from other branches syllabus. The chairperson clarified that to strengthen the programming skills of diploma students this course is required and hence the course and contents are the same.

- The members raised concerns on how the internships could be taken up / facilitated to all the students considering the total number of students. The chairperson clarified that students would be offered internships through the 16 Centre of Excellences(viz Cisco IoT, Quantum Computing, Smart cities, CCTV research centre etc.,) in the college, could be a part of Internshala, also through IIT's which offer 2 months Internship programs etc., It was also made clear that for slow learner this would be taken up on case by case basis that would benefit students.

The inclusion, efforts and plan of evaluation of internship was thus appreciated in the proposed scheme.

- The VTU nominee enquired about the new changes brought-in in the 2021 scheme as compared to the earlier scheme. The chairperson briefed that the total credits have been reduced to 160 as compared to the earlier scheme which was 175 credits. Since the new scheme incorporates the aspects of NEP, several courses like Ability Enhancement Course, Indian Knowledge Systems, Internships, UHV, Yoga etc., are included in the scheme which are common across branches. Also due to the reduction in total credits and incorporation of other components there are changes like lab component in few courses are removed like in Operating Systems course but however the practical exposure to students would be offered through the Experiential Learning (EL) component in such courses. Number of credits reduced for few courses like Foundations of Computer Systems Design, Discrete Mathematical Structures is reduced from 3 to 2 credits, MOOC courses have been increased in the new proposed scheme.

- Members also discussed on offering MOOC courses and their follow up procedures to ensure the completion by students. It was presented that a local mentor from the department for each identified MOOC course would monitor the key events or milestones and would update and

5

23 94

RV College
of Engineering®

Autonomous Institution Affiliated to Visvesvaraya Technological University, Belagavi Engineering

Approved by AICTE, New Delhi, Accredited by NAAC, Bengaluru

Department of Computer Science and

Phone: 080-68188199, 8200: e-mail: hod.cse@rvce.edu.in

keep track of the student's progress. If any student fails to complete the course through NPTEL then it would be offered by the department through which the students need to attend classes and complete the course through the conducted exam.

- Questions were raised on delivery of Design Thinking Lab(DTL) – regarding this the chairperson mentioned that a MoU with the FHWS from Germany is signed and 3 professors from the department were trained by German professor for handling DTL. This course is running successfully as observed from the earlier scheme and has also brought good outcome in terms of publication.

- The scheme for EL and its delivery was mentioned that video based assessment and other content delivery flexibilities would be given to faculty to bring good outcome was well appreciated by the members.

- Concerns on lab component offered for Global Electives and respective infrastructure for facilitating it was asked by members. Since the number of labs in the regular core courses is reduced, managing lab for global elective would be possible.

- Students representative suggested to include Software Engineering(SE) as mandatory course from department (also if possible SCRUM and agile) rather than MOOC course since this is important for CS background students.

  Further the student representative appreciated the efforts in structuring the scheme from 5-8 semesters and the way it is designed to cover all the fundamentals at the right time but since Object Oriented Programming(OOP) and SE concepts being rewarding to CS students, these could be included as department courses rather than MOOC course.

  The chairperson said that it would definitely be looked into since the scheme from $5^{th} - 8^{th}$ semester was only a draft and there was scope to modify the scheme to fit the suggestion if possible.

Resolution: The above suggestions with respect to delivery modes will be taken up by the faculty team incharge for framing syllabus under the guidance of HoD sir. The suggestions mentioned w.r.t the revision of draft scheme would be taken up at department level with subject experts to incorporate based on the feasibility.

6

**RV College
of Engineering**®

Autonomous
Institution Affiliated
to Visvesvaraya
Technological
University, Belagavi
Engineering

Approved by AICTE,
New Delhi, Accredited
by NAAC, Bengaluru

Department of Computer Science and

Phone: 080-68188199, 8200: e-mail: hod.cse@rvce.edu.in

Agenda No. 116: Discussion and approval of UG-BE CSE 3rd-4th semester scheme and syllabus of 2021 scheme.

Points of discussion: The subjects identified for 3rd – 4th semesters have been approved in the proposed scheme. The syllabus contents of all the courses of 3rd – 4th semesters were reviewed and following points are suggested,-

- Discrete Mathematical Structures the CO-PO mapping employs L:M:H which is to be changed to 1:2:3 to maintain uniformity. The contents presented in meeting for this course was structured to include 5 units, since the guidelines have come recently the entire contents would be restructured to 3 units as per the instructions received from Dean.

- It is observed in few courses CO-PO mapping that all CO's have been mapped to most of the PO's. This mapping needs to be looked into specifically if the CO is mapped to PO7 onwards.

  The chairperson welcomed the suggestion and told that this would be certainly revised and further the faculty in charge needs to provide justification for the CO-PO mapping.

- Operating Systems faculty in charge mentioned that 40 marks EL will be innovative such as developing miniOS for which inputs from IIT professors and CAIR scientist will be taken up. Members indicated to relook/revise the CO-PO mapping.

- Bridge course C programming contents reviewed and approved by the board.

- Design And Analysis of Algorithms contents was reviewed and approved by the board.

- Microcontrollers and Embedded Systems course contents incorporates all the suggestions made earlier and hence contents approved by the board.

- Computer Networks course contents reviewed and approved by the board.

Resolution: The suggestion to revise the CO-PO mapping would be passed to the respective faculty incharge for the needful. The DMS course restructuring would be indicated to faculty for further action.

96

RV College
of Engineering®

Autonomous Institution Affiliated to Visvesvaraya Technological University, Belagavi | **Approved by AICTE, New Delhi, Accredited by NAAC, Bengaluru**

Engineering | **Department of Computer Science and**

Phone: 080-68188199, 8200: e-mail: hod.cse@rvce.edu.in

Agenda No. 117: Any other issue with the permission of the chair..

Points of discussion: The BoS chairperson also briefly presented the achievements of the department and faculty members as concluding remarks and thanked the board members and all attendees for attending the meeting.

The meeting concluded with the BoS Chairman thanking the members for their valuable inputs.

29/03/2022

Dr.Ramakanthkumar P,
Chairman - Board of Studies
Professor &Head CSE Department,
R. V. College of Engineering

Professor and Head
Department of
Computer Science and Engineering
R.V. College of Engineering
Bangalore - 560 059.

20 97

Action Taken Report for 24th BoS Meeting held on 12/03/2022:

- Concerns put forth in the meeting regarding facilitating all the students for internship would be facilitated via the 16 Centre of Excellences in the college, via Internshala, also through IIT's which offer 2 months Internship programs etc., and for slow learner this would be taken up on case by case basis that would benefit students.

- Students representative's suggestion to include Software Engineering(SE) as mandatory course offered from department will be considered and further discussed in the department and would be facilitated to fit in the scheme.

- The suggestion to Object Oriented Programming as department course will be discussed further in department for suitable action.

- The generic suggestions with respect to delivery modes will be taken up by the faculty team incharge for framing syllabus under the guidance of HoD sir.

- The course contents of Discrete Mathematical Structures needs to be restructured as per the guidelines and is passed on to the respective faculty for revision. The faculty will be informed to restructure the contents to 3 units as per the instructions received from Dean.

  Members suggested that CO-PO mapping of most courses are to be revised, faculty in charge is informed to revise the CO-PO mapping and also to provide justification for the CO-PO mapping.

Dr.Ramakanthkumar P,

Chairman - Board of Studies

Professor & Head CSE Department,

R. V. College of Engineering

RV College of
Engineering®

Board of Studies CSE <bos.cse@rvce.edu.in>

Invitation: Online Board of Studies Meeting on 18/11/2022(Friday) @ 09:30am
1 message

Board of Studies CSE <bos.cse@rvce.edu.in>   Mon, Nov 14, 2022 at 5:02 PM
To: "Ramakanth Kumar P." <ramakanthkp@rvce.edu.in>, "Shobha G." <shobhag@rvce.edu.in>, "Nagaraja G.S."
<nagarajags@rvce.edu.in>, Minal Moharir <minalmoharir@rvce.edu.in>, sandhya sampangiramaiah
<sandhya.sampangi@rvce.edu.in>, Prapulla S B <prapullasb@rvce.edu.in>, rc@iiitb.ac.in, sudarshan@pes.edu,
prasanna@iitdh.ac.in, monabharadwaj@in.ibm.com, j-keerthy@ti.com

Dear Sir/Madam,

GREETINGS FROM CSE-RVCE.

The Department of Computer Science and Engineering is proposing to have a Board of Studies(BoS) meeting on 18th November 2022(Friday).

Agenda for the meeting is as below:

1. Discussion and approval of Clusterwise UG-BE CSE 2021 Scheme.
2. Discussion and approval of Clusterwise syllabus drafted for the courses offered by CS Department.
3. Discussion and approval of draft PG CSE and PG CNE course contents of 2021 scheme.
4. Ratification of newly identified two MOOC courses that replace the previously identified courses in Elective-A of 2018 scheme.
5. Ratification of credit balancing details for the student - ARUN KUMAR B NADAGUDRA- 1RV15CS403 who is shifted from 2012 autonomous Scheme to 2016 autonomous Scheme.
6. Any other issue with the permission of the chair.

You are requested to kindly spare your valuable time and make it possible to attend the online meeting. Your valuable suggestions will definitely help the department.

Meeting Link and Draft scheme and syllabus will be shared at the earliest possible.

Looking forward to your participation.

Date : 18th March 2022(Friday)
Time: 9:30 a.m.

Thanks and Regards,

Dr. Ramakanth Kumar P,

BoS Chairperson,

Dept. of C.S.E,

R V College of Engineering (Autonomous),

Bangalore 560059

99

Ref: RVE/CSE/ /2022-23

Date: 18/11/2022

25th Board of Studies Meeting
Held on
18th November 2022 at 9:30 am Online in CSE Department
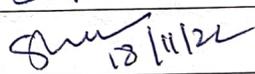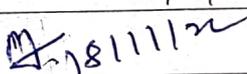
Meeting link https://rvce.webex.com/rvce/j.php?MTID=m1cba6fb85a30c50075c1f76e3c965bcd

Agenda for 25th BoS Meeting:

118. To read and record the minutes of previous BoS meeting held on 22nd February 2020.

119. Discussion and approval of Clusterwise UG-BE CSE 2022 Scheme.

120. Discussion and approval of Clusterwise syllabus drafted for the courses offered by CS Department.

121. Discussion and approval of draft PG CSE and PG CNE course contents of 2022 scheme.

122. Ratification of newly identified two MOOC courses that replace the previously identified courses in Elective-A of 2018 scheme.

123. Ratification of credit balancing details for the student - ARUN KUMAR B NADAGUDRA-1RV15CS403 who is shifted from 2012 autonomous Scheme to 2016 autonomous Scheme.

124. Any other issue with the permission of the chair.

The 25th BoS Meeting conducted this day 18th November 2022 with the above mentioned agenda was witnessed by the following members, the detailed minutes of the meeting will be shared through mail at the earliest,-
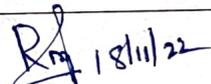
Sl. No.	MEMBERS	SIGNATURE
1	**Dr. Ramakanthkumar P,** Professor and Head, BoS Chairperson	18/11/22
2	**Dr. Shobha G,** Professor	18/11/22
3	**Dr. Nagaraja G S,** Professor and Associate Dean	18/11/22
4	**Dr. Minal Moharir,** Professor	18/11/22
5	**Dr. Sandhya S,** Assistant Professor	18/11
6	**Prof. Prapulla S B,** Assistant Professor	
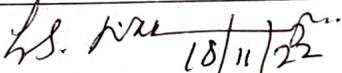
Go, change the world

RV College
of Engineering®

Autonomous Institution Affiliated to Visvesvaraya Technological University, Belagavi

Approved by AICTE, New Delhi, Accredited by NAAC, Bengaluru

Department of Computer Science and Engineering

Phone: 080-67178053, 8054 : e-mail: hod.cse@rvce.edu.in

7	**Dr. Sudarshan T.S.B,** Professor and Dean of Research, CSE, PES University	**Attended Online**
8	**Dr. Chandrashekar Ramanathan,** Professor & Dean (Academics) & Faculty-in-charge Computing, IIITB	**In Absentia**
9	**Dr. S. R. Mahadeva Prasanna,** Professor, Dept. of Electrical Engineering, Indian Institute of Technology Dharwad	**In Absentia**
10	**Mrs. Mona Bharadwaj,** Head, University Relations, IBM India Pvt. Ltd., Bengaluru	**In Absentia**
11	**Mr. Keerthy Jagadeesh,** Lead Engineer, Texas Instruments	**In Absentia**
	Special Invitees – Student Representatives	
12	**Mr. Abhay H Kashyap** UG Final Year Student, (USN: 1RV19CS002)	*Abhay*
13	**Ms. Namya L G** UG Final Year Student, (USN: 1RV19CS097)	*Namya L.G.*
	Special Invitees – CSE Faculty	
14	S. Manonmani	
15	Dr. Shanta Rangaswamy	
16	Dr. Sindhu D V	
17	Dr. Praveena T	
18	Dr. Chethana. R. Murthy	
19	Dr. K. Badari Nath	
20	Dr. Mohana	
21	Girish Rao Salanke	
22	Ashok Kumar A.R	
23	Veena Gadad	
24	Jyoti Shetty	
25	Smriti Srivastava	
26	Sneha M	
27	Dr. D. Pratiba	
28	Suma B	
29	M. S. Sinvidya	
30	Harithee	
31	Azra Nasreen	

RV College
of Engineering®

Autonomous
Institution Affiliated
to Visvesvaraya
Technological
University, Belagavi

Approved by AICTE,
New Delhi, Accredited
by NAAC, Bengaluru

Department of Computer Science and Engineering
Phone: 080-67178053, 8054: e-mail: hod.cse@rvce.edu.in

Date: 22/11/2022

Consoliated Proceedings 25th Board of Studies Meeting
Held on
18th November 2022 at 9:30 am Online in CSE Department

Meeting link https://rvce.webex.com/rvce/j.php?MTID=m1cba6fb85a30c50075c1f76e3c965bcd

Members present:

BoS members from R V College of Engineering:

1. Dr. Ramakanthkumar P, (Chairman, BoS), Professor & HoD, Dept. of CSE,
   R V College of Engineering, Bengaluru

2. Dr. Shobha G, Professor, Dept. of CSE, R V College of Engineering, Bengaluru.

3. Dr. Nagaraja G S, Professor and Associate Dean, Dept. of CSE, R V College of Engineering, Bengaluru.

4. Dr. Minal Moharir, Professor, Dept. of CSE, R V College of Engineering, Bengaluru

5. Dr. Sandhya S, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru

6. Prof. Prapulla S B, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.

Subject Experts from outside the college nominated by Academic council:

1. Dr. Sudarshan T.S.B, Professor and Dean of Research, CSE, PES University, Bengaluru.

Special Invitees - Student Representatives

1. Mr. Abhay H Kashyap(USN: 1RV19CS002), UG Final Year Student, CSE, RVCE

2. Ms. Namya L G (USN: 1RV19CS097), UG Final Year Student, CSE, RVCE.

Special Invitees – CS Faculty

   All Faculty of CSE.

Leave of Absence:

1. Dr. Chandrashekar Ramanathan, Professor & Dean (Academics) & Faculty-in-charge Computing, IIITB, Electronics City, Bengaluru.

2. Mr. Keerthy Jagadeesh, Lead Engineer, Texas Instruments, Bengaluru.

Mysore Road, RVVidyaniketan Post,
Bengaluru – 560 059, Karnataka, India

080-67178020
8161

principal@rvce.edu.in
www.rvce.edu.in

Go, change the world

102

**RVCollege
of Engineering®**

Autonomous
InstitutionAffiliated
to Visvesvaraya
Technological
University,Belagavi

ApprovedbyAICTE,
NewDelhi,Accredited
by NAAC, Bengaluru

DepartmentofComputerScienceandEngineering
Phone:080-67178053,8054:e-mail:hod.cse@rvce.edu.in

3. Dr. S.R. Mahadeva Prasanna, Professor, Dept. of Electrical Engineering, Indian Institute of Technology Dharwad.

4. Mrs. Mona Bharadwaj, Head, University Relations, IBM India Pvt. Ltd., Bengaluru.

This draft minutes of the meeting is being circulated to all the members of the BoS to invite their comments.

The Chairman, BoS welcomed all the members of Board of Studies and the attendees. He also mentioned about the inclusion of special invitee's (mentioned above) and CS-faculty for the meeting, since all faculty would be involved in finalising the scheme and structuring of the syllabus. BoS Chairman presented agenda No.118to 124, in the meeting.

Agenda for the 25th BoS meeting:

118. To read and record the minutes of previous BoS meeting held on22nd February2020.
119. Discussion and approval of Clusterwise UG-BE CSE 2022Scheme.
120. Discussion and approval of Clusterwise syllabus drafted for the courses offered by CS Department.
121. Discussion and approval of draft PGCSE and PG CNE course contents of 2022 scheme.
122. Ratification of newly identified two MOOC courses that replace the previously identified courses in Elective-A of 2018 scheme.
123. Ratification of credit balancing details for the student-ARUNKUMARBNADAGUDRA-1RV15CS403 who is shifted from 2012 autonomous Scheme to 2016 autonomous Scheme.
124. Any other issue with the permission of the chair.

Minutes of the Meeting in 25th BoS:

The BoS chairman initiated the meeting by welcoming the new board members of the term 2022-2024, student representatives and special invitees to the meeting.

AgendaNo.118: To read and record the minutes of previous BoS meeting held on 12/03/2022.

Points of discussion: The minutes of the previous meeting held on 12th March 2022 was briefed by the BoS chairperson. The previous meeting had approved the credit structure/scheme from 3rd to8th semesters of 2021 scheme for BE-CSE.The meeting also gave approval for UG-BE CSE 3rd-4th semester detailed syllabus of 2021 scheme along with other issues with the permission of the chair.

Brief summary of feedback received from all stake holders including alumni, industry experts, students through exit survey and faculty members was shared in the meeting. "The changes in the PG 2022 curriculum were incorporated after discussion".

MysoreRoad,RVVidyaniketanPost,
Bengaluru–560059,Karnataka,India

080-67178020
8161

principal@rvce.edu.in
www.rvce.edu.in

Go, change the world

103

RV College
of Engineering®

Autonomous Institution Affiliated to Visvesvaraya Technological University, Belagavi

Approved by AICTE, New Delhi, Accredited by NAAC, Bengaluru

Department of Computer Science and Engineering
Phone: 080-67178053, 8054: e-mail: hod.cse@rvce.edu.in

Agenda No. 119: Discussion and approval of Clusterwise UG-BE CSE 2022 Scheme.

Points of discussion: BoS chairperson briefed and shared the details of the VTU credit structure of the new 2022 clusterwise scheme. Further the draft credit scheme of 2022 clusterwise scheme of CSE department was presented in the meeting.

- Dr. Sudarshan T.S.B raised query in meeting whether the student could switch between Emerging Technology Course and Programming Languages Course offered with choice in the first and second semesters. The query was clarified that choice to switch between these was permitted by BoS chairperson. The draft scheme was approved by the board.

Agenda No. 120: Discussion and approval of Clusterwise syllabus drafted for the courses offered by CS Department.

Points of discussion: The draft syllabus contents of the courses "Principles of Programming Using C", "Introduction to C Programming", "Elements of Blockchain Technology", "Introduction to Cyber Security", "Introduction to Web Programming" and "Basics to Java Programming" was presented in the meeting. The following suggestion was made.

- Suggestion towards 'Principles of Programming Using C' course contents,-
    - **Dr. Shobha G** suggested that in Unit-3 under the topic Recursive functions the listed content GCD and Fibonacci being very specific needs to be modified to include generic content / problems that discuss recursive functions.
    - **Dr. Shobha G** also mentioned that EL component and titles that would be given to students needs to provide exposure to AR / VR topics as part of NEP. Hence this could be mentioned in the contents of the syllabus by listing few samples under AR/VR. In response to this **Prof. Veena Gadad** briefed the variety of topics assigned to students to mention a few viz Smart Parking System, Waste Management etc., hence the suggestion given is a welcome.
      Student representative **Mr. Abhay H K** felt that for implementation of EL one project that covers modules on all courses could be assigned to students for implementation to ease the students from the burden of individual projects for every course.
      Dr. Praveena T justified that one topic was assigned to each student that covered all courses EL component due to which students could work on multiple associated topics and also the burden of students was greatly reduced and the project also came out with quality.

Mysore Road, RVVidyaniketan Post,
Bengaluru – 560 059, Karnataka, India

080-67178020
8161

principal@rvce.edu.in
www.rvce.edu.in

Go, change the world

104

RVCollege
of Engineering®

Autonomous InstitutionAffiliated to Visvesvaraya Technological University,Belagavi

ApprovedbyAICTE, NewDelhi,Accredited by NAAC, Bengaluru

DepartmentofComputerScienceandEngineering
Phone:080-67178053,8054:e-mail:hod.cse@rvce.edu.in

Dr. Nagaraja GS presented PGCNE 2022scheme/syllabus to BoS members,-

- The Common subjects/courses shared between CSE/ISE departments have been informed before the committee and **Dr. Sudarshan T.S.B** approved for the same
- The core courses and specific electives for CNE were presented before committee and approval taken.
- Title of "Advanced Wireless Technologies" to be changed as "Advanced Wireless Networks" and BoS committee approved for the same.
- Since course "Research Methodology" is common between PGCSE and PGCNE the same applies here as well.

Resolution: The suggestions indicated above would be conveyed to the respective course coordinator for further refining the draft syllabus contents and would be looked into and taken up for further discussion and action.

The members appreciated the inclusion of new lab oriented courses and elective offered common among both PG CNE and PG CSE programs that include Software Defined Networks Lab(22MCN14L), Open-Source Simulation Lab(22MCN24L), Web Application Development Lab(22MCE24L), Computing & Analytics Lab (22MCE14L), Blockchain Technologies, Robotic Process Automation, Mobile Application Development, Social Network Analysis, Distributed and Cloud Computing, Network Programming, Advanced Wireless Technologies, Internet Of Things and Edge Computing, Computer Vision, Advanced Data Structures and Algorithms(22MCE12TL), Advances in Data Base Management & Mining(22MCE13T), Advances in Operating System(22MCE22TL), Deep Learning, Embedded Systems.

Agenda No. 122: Ratification of newly identified two MOOC courses that replace the previously identified courses in Elective-A of 2018 scheme.

Points of discussion: BoS chairperson presented that the following five NPTEL 12 week courses were identified earlier in 2019 to be offered under Elective-A(MOOC Courses).

RVCE Code	Course Title	Status of upcoming list by NPTEL
18CS5A1	Object Oriented System Development using UML, Java and Patterns	Rerun-Available in upcoming semester
18CS5A2	Social Networks	Rerun-Available in upcoming semester
18CS5A3	Applied Natural Language Processing	NOT OFFERED
18CS5A4	Introduction to robotics	NOT OFFERED
18CS5A5	The Joy of Computing using Python	Rerun-Available in upcoming semester

Out of these the following two courses has not been offered to rerun by NPTEL during this upcoming semester-

- Applied Natural Language Processing (RVCECoursecode:18CS5A3) -12weeksCourse.
- Introduction to robotics (RVCECoursecode:18CS5A4) -12weeksCourse.

Hence there was a requirement to identify similar 12 courses as per the circular from Dean Academics in place of the one's that are not offered. With the inputs and suggestions from members after reviewing the

RV College
of Engineering®

Autonomous Institution Affiliated to Visvesvaraya Technological University, Belagavi

Approved by AICTE, New Delhi, Accredited by NAAC, Bengaluru

Department of Computer Science and Engineering

Phone: 080-67178053, 8054: e-mail: hod.cse@rvce.edu.in

Student representative **Ms. Namya L G** shared that students should be made of process of—paper publication by providing orientation towards the code of ethics so that the projects implemented have better outcomes.

BoS chairperson mentioned that the suggested point would be looked into and will be taken up during the course delivery as the list included in only sample and not finalised content.

- o **Dr. Shobha G and Dr. Sudarshan T.S.B** also suggested the coordinator to relook into the 4th reference book listed which is focussed towards Turbo C. Rather to provide indepth discussion towards pointers Yashwanth Kanetwar could be included. It was also pointed out that the 5th reference book's publication being listed as 2008 could be outdated and hence needs to be modified to include for the lastest reprint/publication.

- • Suggestion towards 'Introduction to C Programming' course contents,-
  - o **Dr. Nagaraja G S** suggested that unit titles of Unit-I and Unit-II needs to be relooked at, also as mentioned earlier for 'Principles of Programming Using C' in Unit-III Recursive functions needs to be modified as suggested earlier.
  - o **Dr. Ramakanthkumar P** also suggested course coordinator to relook at the books listed so that the concepts of this course could be kept simple since this course is proposed for non CS students.

- • Suggestion towards 'Elements of Blockchain Technology' course contents,-
  - o **Dr. Sudarshan T.S.B** mentioned that since it is a fundamental course in 1st year the contents drafted gave a surface level of brushing through the concepts to takeup the concepts at a greater depth in higher semesters.
  - o Sir also mentioned to explore and include better books like Simple Blockchain Technologies, Application in Blockchain etc., which could be chosen wisely for the included content.

- • Suggestion towards 'Introduction to Cyber Security' course contents,-
  - o **Dr. Nagaraja G S** indicated that the contents included for Unit-4 and Unit-5 looked vlumnous for the allocated contact hours and hence need to be relooked at.
  - o **Dr. Sudarshan T.S.B** also suggested to relook at the listed book as it needs present the concepts at the introductory level.

- • The draft contents for the course 'Introduction to Web Programming' was approved.
- • The draft contents for the course 'Basics to Java Programming' was approved.

Resolution: The suggestions indicated above would be conveyed to the respective course coordinator for further refining the draft contents and would be looked into and taken up for further discussion and action.

Mysore Road, RVVidyaniketan Post, Bengaluru – 560 059, Karnataka, India
080-67178020 8161
principal@rvce.edu.in www.rvce.edu.in

Go, change the world

105

**RV College
of Engineering®**

Autonomous Institution Affiliated to Visvesvaraya Technological University, Belagavi	Approved by AICTE, New Delhi, Accredited by NAAC, Bengaluru
	Department of Computer Science and Engineering

Phone: 080-67178053, 8054: e-mail: hod.cse@rvce.edu.in

Agenda No. 121: Discussion and approval of draft PG CSE and PG CNE course contents of 2022 scheme.

Points of discussion: **Dr. Nagaraja G S,** Professor & Associate Dean PG presented draft PG CSE and PG CNE course contents of 2022 scheme in the meeting. The 2022 scheme and syllabus of PG CSE and CNE is for a total of 80 credits are distributed into 22credits in each of 1st and 2nd semester and 18 credits in each of 3rd and 4thsem of PG Programs. Discussions of Joint BoS meeting were conveyed for common and interdisciplinary electives of Departments of CSE and ISE.

- PG CSE 2022 Scheme and Syllabus
  - PG CSE 2022 Scheme was approved in the meeting.
  - Detailed syllabus contents draft was presented in the meeting.
    - **Advances in Database Management System & Mining:** **Dr. Sudarshan T.S.B** indicated that since data mining is dealt only as part of Unit-4, last two units could be modified to include more of data mining concepts.
    - **Computing and Analytics Lab:** **Dr. Shobha G suggested to include** software tools can be generic, other open source tools can be included in addition to MS-Excel and SQL. It was also suggested to relook into the published year of reference books that has been included.
    - **Software Defined Networks:** it was suggested to include one more reference book.
    - **Computer Network Technologies:** it was suggested to relook at the fundamental topics that would have been covered in UG programs to avoid overlapping with undergraduate content.
    - **Research Methodology:** **Dr. Sudarshan T.S.B** urged to explore more research tools viz latex, bibtes etc., that can be included as part of the syllabus/course delivery.
    - **Robotic and Process Automation:** **Dr. Sudarshan T.S.B** indicated that the course can be retitled as "Robotics and Computing Automation" as 4 credits for RPA would not be appropriate since it is still not a matured technology. Path planning algorithms for autonomous and aerial vehicles can added in 2 units as it has more market value.
    - **Embedded System:** **Dr. Sudarshan T.S.B** suggested that course title can be more specific to SoC to bring a match to the contents of the syllabus. However **Dr. Nagaraja G S** clarified that the contents were drafted by taking feedback from professionals from Intel Corp. and the idea of have partial delivery for this course and also the title need to be kept more generic rather than making to specific.
    - **High Performance Computing Architecture:** **Dr. Sudarshan T.S.B** suggested that course can be retitled as "Heterogeneous Computing and Architectures". It was also mentioned that topics of SIMD, Vector architectures in Unit-2 could be replaced with OpenMP. Also since GPU's are included GPU programming and CUDA topics could be included.
      To introduce TPU programming for AI&ML algorithms, bring in google co-labs could be included along with FPGA programming can be introduced.
- PG CNE 2022 Scheme and Syllabus

Mysore Road, RVVidyaniketan Post,
Bengaluru – 560 059, Karnataka, India

080-67178020
8161

principal@rvce.edu.in
www.rvce.edu.in

Go, change the world

106

RV College
of Engineering®

Autonomous Institution Affiliated to Visvesvaraya Technological University, Belagavi

| Approved by AICTE, New Delhi, Accredited by NAAC, Bengaluru |

Department of Computer Science and Engineering

Phone: 080-67178053, 8054: e-mail: hod.cse@rvce.edu.in

final NPTEL list the courses *"Natural Language Processing"* and *"Blockchain and its Applications"* were identified to be offered in Elective - A. Hence the newly identified two MOOC courses (Twelve weeks) and the earlier three courses which are rerun(rerun courses will be retained) was ratified in the meeting.

Resolution: Ratification of the new courses would be conveyed to Dean Academics for final approval.

Agenda No. 123: Ratification of credit balancing details for the student - ARUN KUMAR B NADAGUDRA- 1RV15CS403 who is shifted from 2012 autonomous Scheme to 2016 autonomous Scheme.

Points of discussion: The credit balancing details for the student - ARUN KUMAR B NADAGUDRA- 1RV15CS403 who is shifted from 2012 autonomous Scheme to 2016 autonomous Scheme was presented in the meeting. The student could not continue in the 2012 autonomous scheme due to back logs. Also the student was falling short of one credit hence a MOOC course is identified in consultation with Dean Academics and counsellor to earn this credit. The identified MOOC course needs to be completed by the student to earn the shortage of one credit. The same was ratified in the meeting.

Resolution: The equivalence presented in the meeting has been ratified by the board. The same would be communicated to Dean Academics, CoE, Counselor of the respective students and the respective students

Agenda No. 124: Any other issue with the permission of the chair.

The meeting concluded with the BoS Chairman and Dr. Nagaraja G S thanking the members for their valuable inputs and suggestions.
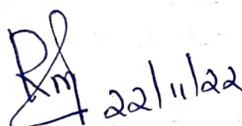
22/11/22

Dr. Ramakanthkumar P,
Chairman - Board of Studies
Professor & Head CSE Department,
R. V. College of Engineering

Mysore Road, RVVidyaniketan Post,
Bengaluru – 560 059, Karnataka, India

080-67178020
8161

principal@rvce.edu.in
www.rvce.edu.in

Go, change the world

108

Action Taken Report for 25th BoS Meeting held on 18/11/2022:

- To address the standard of course delivery, EL component and title assignment staff were informed to identify ICT approaches for effective delivery as indicated in the detailed minutes.

- As suggested for the courses "Principles of Programming Using C", "Introduction to C Programming" the revision of course content and updating the reference books would be conveyed to the faculty coordinator for further action and incorporation.

- To bring in the awareness regarding the process of paper publication, the department would look into arranging orientation sessions to students right from the first year.

- The suggestions of course content revision for the courses of PG CSE and PG CNE would be relooked at under the guidance of PG associate Dean and the respective faculty coordinator for further action and incorporation.

- The equivalence ratified by the board regarding MOOC courses and credit shortage for student shifting between schemes would be communicated to Dean Academics, counsellor, and the identified course mentors of the department.

24/11/22

Dr. Ramakanthkumar P,

Chairman - Board of Studies

Professor & Head CSE Department,

R. V. College of Engineering

Professor and Head
Department of
Computer Science and Engineering
R.V. College of Engineering
Bangalore - 560 059.

RV College of Engineering®

Board of Studies CSE <bos.cse@rvce.edu.in>

Invitation for BoS Meeting on 03/06/2023(Saturday)
3 messages

Board of Studies CSE <bos.cse@rvce.edu.in>   Wed, May 24, 2023 at 11:53 AM
To: "Ramakanth Kumar P." <ramakanthkp@rvce.edu.in>, "Shobha G." <shobhag@rvce.edu.in>, "Nagaraja G.S." <nagarajags@rvce.edu.in>, Minal Moharir <minalmoharir@rvce.edu.in>, sandhya sampangiramaiah <sandhya.sampangi@rvce.edu.in>, Prapulla S B <prapullasb@rvce.edu.in>, Chandrashekar Ramanathan <rc@iiitb.ac.in>, sudarshan@pes.edu, prasanna@iitdh.ac.in, j-keerthy@ti.com, RamKumar.Viswanathan@philips.com

Dear All,

GREETINGS FROM CSE, RVCE.

As the previously proposed date for the meeting was on weekdays few of our BoS members couldn't attend the meeting, hence we have scheduled it on saturday.The Department of Computer Science and Engineering is proposing to have a Board of Studies(BoS) meeting on 3rd June 2023(Saturday).

Agenda for the meeting is as below:

1. Discussion and approval of UG-BE CSE, CSE(Cyber Security) and CSE(Data Science) 3rd-4th semester scheme and syllabus of 2022 scheme.
2. Discussion and approval of UG-BE CSE 5th-6th semester scheme and syllabus of 2021 scheme.
3. Ratification of Elective-A(IV Semester 2021 scheme) new courses identified in place of the ones that are not offered to rerun by NPTEL.
4. Any other issue with the permission of the chair.

You are requested to kindly spare your valuable time and make it possible to attend the meeting. Your valuable suggestions will definitely help the department.

Looking forward to your participation.

Date : 3rd June 2023(Saturday)
Time: 9:30 a.m.

Venue: HoD's Cabin, CSE, RVCE

Thanks and Regards,

Dr. Ramakanth Kumar P,

BoS Chairperson,

Dept. of C.S.E,

R V College of Engineering (Autonomous),

Bangalore 560059

RV College
of Engineering®

Autonomous Institution Affiliated to Visvesvaraya Technological University, Belagavi

Approved by AICTE, Accredited by NBA

Department of Computer Science and Engineering
Phone: 080-68188199, 8200 : e-mail: hod.cse@rvce.edu.in

Ref: RVE/CSE/　　　　/2023-24　　　　　　　　　　Date: 03/06/2023
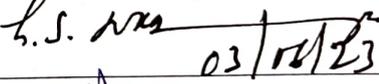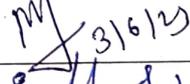
26th Board of Studies Meeting
Held on
3rd June 2023 at 9:30 am in CSE Department

Agenda for 26thBoS Meeting:

125. To read and record the minutes of the previous BoS meeting held on 18th November 2022.

126. Discussion and approval of UG-BE CSE, CSE(Cyber Security) and CSE(Data Science) 3rd - 4th semester syllabus of 2022 Scheme.

127. Discussion and approval of UG-BE CSE 5th - 6th semester syllabus of 2021 Scheme.

128. Ratification and identification of new MOOC courses to replace the previously identified courses in Elective-A of 2021 scheme.

129. PG Result Analysis and Placement Statistics.

130. Any other issue with the permission of the chair.

The 26thBoS Meeting conducted this day 03/06/2023 with the above mentioned agenda was witnessed by the following members, the detailed minutes of the meeting will be shared through mail at the earliest,-

Sl. No.	MEMBERS	SIGNATURE
1	**Dr. Ramakanthkumar P,** Professor and Head, BoS Chairperson	3/6/23
2	**Dr. Shobha G,** Professor	3/6/23
3	**Dr. Nagaraja G S,** Professor and Associate Dean	03/06/23
4	**Dr. MinalMoharir,** Professor	3/6/23
5	**Dr. Sandhya S,** Assistant Professor	3/6/2023
6	**Prof.Prapulla S B,** Assistant Professor	3/6/23

Mysore Road, RVVidyaniketan Post, Bengaluru – 560 059, Karnataka, India

080-68188199
8200

hod.cse@rvce.edu.in
www.rvce.edu.in

Go, change the world

78

RV College
of Engineering®

Autonomous Institution Affiliated to Visvesvaraya Technological University, Belagavi

Approved by AICTE, Accredited by NBA

Department of Computer Science and Engineering
Phone: 080-68188199, 8200 : e-mail: hod.cse@rvce.edu.in

7	**Dr. ChandrashekarRamanathan,** Professor & Dean (Academics) & Faculty-in-charge Computing,IIITB	IN ABSENTIA
8	**Dr. Sudarshan T.S.B,** Professor and Dean of Research, CSE, PES University	
9	**Dr. S. R. MahadevaPrasanna,** Professor, Dept. of Electrical Engineering, Indian Institute of Technology Dharwad	IN ABSENTIA
10	**Mr. Ram Vishwanathan,** Director, Philips Innovation Campus, Bangalore.	Online Attended
11	**Mr. KeerthyJagadeesh,** Lead Engineer, Texas Instruments	3rd Jun 2023
	Special Invitees – Student Representatives	
12	**Mr. Abhay H Kashyap** UG Final Year Student, (USN: 1RV19CS002)	
13	**Ms. Manali M Ranade** UG Final Year Student, (USN: 1RV19CS084)	
	Special Invitees – CSE Faculty	
14	Dr. Ashok Kumar A.R	
15	Girish Rao Salanke	
16	Dr. Mohana	
17	Dr. Krishnappa H. K.	HK-Krist
18	Ganashree. K. C	K19
19	Dr. Sharvani. G. S	Sharvani. G-S
20	Dr. Suma B	
21	H. Pavithra	3/6/23
22	Veena. Gadad.	Gadad 3/6/23
23	Manas. M. N	Mas.M.N 3/6/23
24	Dr. Azra Nasreen	3/6/23
25	Anitha Sandeep	SA 3/6/23
26	Sneha M	3/6/23
27	Smriti Srivastava	Smrs 3/6/23
28	R. Hemavally	Rhe 3/6/23
29	Dr. Rajashree Shettar	Rajashree
30	Dr. Jyoti Swetty	3/6/23
31	Dr. Chethana. R. Murthy	3/6/23

Mysore Road, RVVidyaniketan Post, Bengaluru – 560 059, Karnataka, India

080-68188199
8200

hod.cse@rvce.edu.in
www.rvce.edu.in

Go, change the world

7/2

RV College
of Engineering®

Autonomous Institution Affiliated to Visvesvaraya Technological University, Belagavi

Approved by AICTE, Accredited by NBA

Department of Computer Science and Engineering

Phone: 080-68188199, 8200 : e-mail: hod.cse@rvce.edu.in

32	Apoorva. O. Chate	Auchate
33	MANALI M RANADE	Manali
34	Abhay H Kashyap	Abhay
35	De. Soumya. A	
36		
37		

Mysore Road, RVVidyaniketan Post,
Bengaluru – 560 059, Karnataka, India

080-68188199
8200

hod.cse@rvce.edu.in
www.rvce.edu.in

Go, change the world

113

**RV College
of Engineering®**

Autonomous
Institution Affiliated
to Visvesvaraya
Technological
University, Belagavi

Approved by AICTE,
New Delhi, Accredited
by NBA

**Department of Computer Science and
Engineering**
Phone: 080-68188199, 8200 : e-mail: hod.cse@rvce.edu.in

Date: 09/06/2023

CONSOLIATED PROCEEDINGS 26th Board of Studies Meeting
Held on
3rd June 2023 at 9:30 am

Date : 3rd June 2023(Saturday)
Time: 9:30 a.m.
Venue: Department of CSE, RVCE.

Members present:

BoS members from R V College of Engineering:

1. Dr. Ramakanthkumar P, (Chairman, BoS), Professor & HoD, Dept. of CSE, R V College of Engineering, Bengaluru

2. Dr. Shobha G, Professor, Dept. of CSE, R V College of Engineering, Bengaluru.

3. Dr. Nagaraja G S, Professor & Associate Dean, Dept. of CSE, R V College of Engineering, Bengaluru

4. Dr. Minal Moharir, Professor, Dept. of CSE, R V College of Engineering, Bengaluru

5. Dr. Sandhya S, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.

6. Dr. Prapulla S B, Assistant Professor, Dept. of CSE, R V College of Engineering, Bengaluru.

Subject Experts from outside the college nominated by Academic council:

7. Dr. Sudarshan T.S.B, Professor and Dean of Research, CSE, PES University, Bengaluru.

Representative from Industry/Corporate Sector/ Allied Areas relating to placement, to be nominated by Academic council:

9. Mr. Ram Vishwanathan, Director, Philips Innovation Campus, Bengaluru.

Meritorious Alumnus nominated by the Principal:

10. Mr. Keerthy Jagadeesh, Lead Engineer, Texas Instruments, Bengaluru.

Go, change the world

114

RV College
of Engineering®

Autonomous
Institution Affiliated
to Visvesvaraya
Technological
University, Belagavi

Approved by AICTE,
New Delhi, Accredited
by NBA

Department of Computer Science and Engineering

Phone: 080-68188199, 8200 : e-mail: hod.cse@rvce.edu.in

Special Invitees:

> 11. Faculty, Department of CSE.

Special Invitees - Student Representatives

> 12. Mr. Abhay H Kashyap (USN: 1RV19CS002), UG Final Year Student, CSE, RVCE.
>
> 13. Ms. Manali M Ranade (USN: 1RV19CS084), UG Final Year Student, CSE, RVCE.

Leave of Absence:

1. Dr. Chandrashekar Ramanathan, Professor & Dean (Academics) & Faculty-in-charge Computing, IIITB, Electronics City, Bengaluru.

2. Dr. S. R. Mahadeva Prasanna, Professor, Dept. of Electrical Engineering, Indian Institute of Technology Dharwad.

This draft minutes of the meeting is being circulated to all the members of the BoS to invite their comments.

The Chairman, BoS welcomed all the members of Board of Studies and the attendees. He also mentioned about the inclusion of special invitee's (mentioned above) and CS-faculty for the meeting, since all faculty would be involved in finalising the scheme and structuring of the syllabus. BoS Chairman presented agenda No.125 to 131, in the meeting.

Agenda for the 26th BoS meeting:

125. To read and record the minutes of the previous BoS meeting held on 18th November 2022.

126. Brief report of the achievements of the department and research/consultancy activities.

127. Discussion and approval of UG-BE CSE, CSE(Cyber Security) and CSE(Data Science) 3rd - 4th semester syllabus of 2022 Scheme.

128. Discussion and approval of UG-BE CSE 5th - 6th semester syllabus of 2021 Scheme.

129. Ratification and identification of new MOOC courses to replace the previously identified courses in Elective-A of 2021 scheme.

130. PG result analysis and placement statistics.

131. Any other issue with the permission of the chair.

**RV College
of Engineering®**

Autonomous
Institution Affiliated
to Visvesvaraya
Technological
University, Belagavi

Approved by AICTE,
New Delhi, Accredited
by NBA

**Department of Computer Science and
Engineering**

Phone: 080-68188199, 8200 : e-mail: hod.cse@rvce.edu.in

Minutes of the Meeting of 26th BoS:

The BoS chairman initiated the meeting by greeting and welcoming the BoS members, student representatives and CSE faculty to the meeting.

Agenda No. 125: To read and record the minutes of the previous BoS meeting held on 18th November 2022.

Points of discussion: The minutes of the previous meeting held on 18th November 2022 was briefed by the BoS chairperson. The previous meeting had given approval for Clusterwise UG-BE CSE 2022 Scheme. It also had approved draft Clusterwise course content for the courses offered by CS Department in 1st year. The draft PG CSE and PG CNE course contents of 2022 scheme was also reviewed and approved for further implementation. The meeting had ratified newly identified two MOOC courses for replacing the previously identified courses in Elective-A of 2018 scheme and credit balancing details for the student who had shifted from 2012 autonomous Scheme to 2016 autonomous Scheme. Brief summary of feedback received from all stake holders including alumni, industry experts, students through exit survey and faculty members was shared in the meeting. "The changes in the UG 2022 curriculum of CS programs were incorporated after discussion".

Agenda No. 126: Brief report of the achievements of the department and research/consultancy activities.

Points of discussion: The BoS chairman presented in the meeting brief achievements of the department. BoS chairman informed the members that the department has been accredited for 6 year by NBA. The other achievements included briefing about new MoU's signed, research and consultancy projects taken up, initiatives in translation of MOOC courses, external connect, student admission, introduction/approval of new BE programme under CS department and faculty awards.

Agenda No. 127: Discussion and approval of UG-BE CSE, CSE(Cyber Security) and CSE(Data Science) 3rd - 4th semester syllabus of 2022 Scheme.

Points of discussion: The members and attendees reviewed the draft scheme and syllabus of UG-BE CSE, CSE(Cyber Security) and CSE(Data Science). The following points were suggested,-

    a) *The credit structures(schemes) of UG-BE CSE, CSE(Cyber Security) and CSE(Data Science) was reviewed and the following was discussed,-*

RV College
of Engineering®

Autonomous Institution Affiliated to Visvesvaraya Technological University, Belagavi

Approved by AICTE, New Delhi, Accredited by NBA

Department of Computer Science and Engineering

Phone: 080-68188199, 8200 : e-mail: hod.cse@rvce.edu.in

- ~~Dr. Sudarshan T.S.B enquired the need for 'Bridge Course' courses and the BoS chairman~~ clarified that this course is mainly offered for lateral entry students for bridging the gap and brining students on track to engineering course.

- Dr. Sudarshan T.S.B suggested that course 'IoT and Embedded Computing' could be included for Cyber Security program as well however Dr. Minal M clarified that since a course on IoT had been planned in the higher semesters it has not been takenup here in 4th sem.

- Mr. Keerthy Jagadeesh queried regarding the implementation language for lab component of "Data Structures and its Apllications', HoD clarified that since other languages provide or allow students to use libraries for a lot of functions, it may not facilitate student's fundamental learning hence 'C' would be preferred for lab component.

- Dr. Sudarshan T.S.B suggested Data Science program need to offer 'System Software & Operating Systems' in place of 'Operating Systems' course in 4th semester. Dr. Shobha G pointed out that since this course which was offered previously in CSE curriculum had been removed due to the content being outdated, hence it may not be suitable however after inputs from faculty members it was indicated that the content would be revised to add detailed topics on 'file structrures'.

2022 Schemes of UG-BE CSE, CSE(Cyber Security) and CSE(Data Science) 2nd year was approved in the meeting.

b) *Draft Course contents of UG BE CSE program,-*

- 'Data Structures and its Applications' – Course contents was briefed in the meeting by Dr. Chethana Murthy. Dr. Rajashree Shettar suggested to add 'Abstract Data Types' to the course content and also the same needs to be added for the lab part for implementation of ADTs. It was indicated that since programs 1(a) and 1(b) look similar evaluation of parenthesized expression could be included. Dr. Sudarshan T.S.B and Dr. Nagaraja G S suggested to include programs / applications on security aspects as this course is common for Cyber Security program.

- 'Applied Digital Logic Design and Computer Organisation' - Course contents was briefed in the meeting by Dr. Prapulla S B. It was suggested to add ISBN's to the reference books

RV College
of Engineering®

Autonomous Institution Affiliated to Visvesvaraya Technological University, Belagavi

Approved by AICTE, New Delhi, Accredited by NBA

Department of Computer Science and Engineering

Phone: 080-68188199, 8200 : e-mail: hod.cse@rvce.edu.in

listed. Dr. Nagaraja G S indicated that since CO part of this course starts with input, output and moves on to discuss concepts on CPU, concepts on memory which is missing needs to be included to the course contents. Dr. Sudarshan T.S.B suggested to relook at the concepts of CPU included in Unit – 4 & 5 for restructuring from the book 'Digital Design and Computer Architecture' by David Harris, Sarah Harris.

- **'Introduction to Operating Systems'** - Course contents was briefed in the meeting by Dr. Ashok kumar and mentioned that topics on 'deadlocks' has been excluded in the drafted syllabus. HoD, Dr. Nagaraja G S, Dr. Shobha G, Dr. Sudarshan T.S.B felt that as the course is common to both CSE and Cyber Security concepts of deadlocks need to included. It was also pointed out to rephrase few topics that were listed in interrogative tense in Unit-I. Mr. Keerthy Jagadeesh suggested that lab component for this course is required as all the concepts dealt in theory can be correlated in lab facilitating in better understanding of concepts. Also every concept in theory is to be dealt by correlating them to Linux / Unix.

- **Bridge Course: C Programming** course contents approved by board.

- **'Discrete Mathematical Structures and Combinatorics'** - Course contents was briefed in the meeting by Dr. H K Krishnappa. Dr. Rajashree Shettar indicated the spanning tree concepts in the course might overlap with Advanced Algorithms course contents. Dr. HKK clarified that only foundational understanding of the topic to come up with different solutions is included here unlike computing algorithms which are dealt in detail in AA.

- **'Design and Analysis of Algorithms'** – Course contents was briefed in the meeting by Dr. Chethana Murthy. Dr. Rajashree Shettar suggested to add Bellmanford algorithm along with Dijkstra's algorithm under Dynamic programming, and add 0/1 knapsack and rational knapsack under greedy approach to make the concept more appropriate. The later was takenup for further discussion however inclusion of Bellmanford algorithm might overlap with AA and hence would not be included here. Student representative Ms. Manali felt the need of pushing the concepts on Backtracking to the Units 3 or 4 rather than Unit-5 as this being an important concept, Prof. Girishrao clarified that since unit-5 dealt algorithm design techniques it was more appropriate however the suggestion would be relooked at.

RV College
of Engineering®

Autonomous Institution Affiliated to Visvesvaraya Technological University, Belagavi

Approved by AICTE, New Delhi, Accredited by NBA

Department of Computer Science and Engineering

Phone: 080-68188199, 8200 : e-mail: hod.cse@rvce.edu.in

- **'IoT and Embedded Computing'** – Course contents was briefed in the meeting by Dr. Badrinath K. Dr. Sudarshan T.S.B suggested to modify CO part in 'Applied Digital Logic Design and Computer Organisation(ADLD&CO)' orienting towards MIPS architecture so that concepts of Unit-1 are well taken care of. Also the course contents of ADLD&CO can be organised from the book 'Digital Design and Computer Architecture' by David Harris, Sarah Harris which condenses 1st Unit presented here and thereby more concepts on ARM & Embedded computing can be focussed.

- **'Computer Networks'** – Course contents was briefed in the meeting by Dr. Sowmyarani who mentioned that students are encouraged to take up course from Juniper Networks, CCNA certification, SWEEBOK. Mr. Keerthy Jagadeesh suggested to provide students with practical exposure w.r.t packet structure, traffic analysis. This suggestion was taken by the course coordinator who mentioned that it will be taken up in EL component.

c) *Draft Course contents of UG BE CSE(Data Science) program,-*

- **Introduction to Data Structures and Algorithms**– Course contents was briefed in the meeting by Dr. Chethana Murthy that this course combines concepts of data structures and algorithms. Dr. Sudarshan T.S.B queried the reason behind combining two courses as these are important for CS stream students. It was clarified that in order to facilitate program specific courses in the scheme these two courses were merged by removing advanced aspects of both subjects.

- **'Discrete Mathematical Structures'** - Course contents was briefed in the meeting by Dr. H K Krishnappa. Dr. Sudarshan T.S.B indicated that this course needs to be pushed to fourth semester and could be made common with both CSE and CY programs. This suggestion would be relooked at to fit in the credit structure.

- **'Introduction to Data Analytics and Data Visualisation'** - Course contents was briefed in the meeting by Dr. Sindhu D V. Dr. Sudarshan T.S.B pointed out the discrepancy w.r.t the total number of contact hours. Dr. Ashok kumar raised concern on the examination approach for this course which was clarified by Dr. Shobha G that since modelling and analytics part are theoretical, these would cater to examination process.

**RV College
of Engineering®**

Autonomous
Institution Affiliated
to Visvesvaraya
Technological
University, Belagavi

Approved by AICTE,
New Delhi, Accredited
by NBA

**Department of Computer Science and
Engineering**

Phone: 080-68188199, 8200 : e-mail: hod.cse@rvce.edu.in

- 'Operating Systems'- Course contents was briefed in the meeting by Dr. Ashok kumar. Since this course is offered for Data Science students topics on virtualisation, implementation of VMs needs to be dealt at a greater depth was suggested by Dr. Sudarshan T.S.B

- 'Introduction to Artificial Intelligence'- Course contents was briefed in the meeting by Dr. Soumya A. Since CO5 of this course looked too bulky Dr. Sudarshan T.S.B and Dr. Nagaraja G S suggested to rephrase this CO to make it more concise. Dr. Sudarshan T.S.B also mentioned that this course could be taught in 3rd sem by shifting DMS to 4th sem which facilitates in making DMS common to all three programs. However both student representatives felt that DMS concepts needs to be dealt earlier to this course as few concepts of AI require better understanding from topics of DMS. Hence this course would better fit in 4th semester.

d) *Draft Course contents of UG BE CSE(Cyber Security) program,-*

- 'Computer Network and Security'- Course contents was briefed in the meeting by Dr. Minal Moharir. Dr. Sudarshan T.S.B indicated that the course contents were similar to 'Computer Networks' course of CSE and hence more topics on security could be added to justify the course title. Dr. Minal Moharir though clarified that Unit-5 dealt topics on security however the suggestion would be looked at for further discussion.

- 'Secure Coding and Algorithms' – Course contents was briefed in the meeting by Dr. Chethana Murthy. Dr. Shobha G commented that secure coding and Algorithms does not map and hence needs to be checked for feasibility. Dr. Sudarshan T.S.B also suggested to relook at the title and advised to retain one solid course on algorithms by bringing in security aspects in the curriculum. Prof. Girishrao indicated that Unit-IV looks too bulky for the number of contact hours and hence needs to be trimmed to fit in the allocated hours. Ms. Manali expressed that Unit-I being trivial could be removed so that Unit-IV topics could be distributed. Coordinators mentioned that the suggestions will be looked at for revising the contents.

- 'Ethical Hacking' – Course contents was briefed in the meeting by Dr. Ashok kumar and the contents approved.

**RV College
of Engineering®**

Autonomous
Institution Affiliated
to Visvesvaraya
Technological
University, Belagavi

Approved by AICTE,
New Delhi, Accredited
by NBA

**Department of Computer Science and
Engineering**

Phone: 080-68188199, 8200 : e-mail: hod.cse@rvce.edu.in

Resolution:

The suggestions mentioned above would be taken up for further action by the course coordinators to incorporate these suggestions if feasible after discussion with their team and subject experts in the department.

Agenda No. 128: Discussion and approval of UG-BE CSE 5th - 6th semester syllabus of 2021 Scheme.

Points of discussion: The members and attendees reviewed the draft scheme and syllabus of UG-BE CSE 5th - 6th semester syllabus of 2021 Scheme. The following points were suggested,-

a) Introduction To Database Systems - Course contents was briefed in the meeting by Dr. Shobha G. Ms. Manali indicated to add ACID properties however it was clarified that it is incorporated as part of Unit-4 under the topic desirable properties of transactions. Mr. Abhay felt that SQL which is removed needs to be retained in the course content. Dr. Sudarshan also felt that without SQL the course content would be incomplete and hence could be included.

b) 'Software Engineering' - Course contents was briefed in the meeting by Prof. Pavithra. Dr. Rajashree Shettar suggested to rephrase Unit-3 title to Design, Development and Testing.

c) 'Mining of Massive Datasets' - Course contents was briefed in the meeting by Dr. Shobha G. Dr. Sudarshan queried about inclusion of distributed systems which was clarified that the course includes hadoop, HPCC to address the concern.

d) All the other courses viz 'Finite Automata Formal Languages', 'Intelligent Systems', 'Artificial Intelligence and Machine Learning', 'Network Programming and Security', 'Advanced Algorithms', 'Block Chain Technology', 'Web Programming', 'Web Technology' were approved by the board.

The chairman also presented the inclusion and introduction of the following new courses to 2021 scheme to facilitate bridging gap between industry and academia: Statistics and Probability for Data Science(21MA41A), and MOOC courses from recent list of NPTEL for meeting PO12 Life long learning which included courses Object Oriented Analysis And Design, Multi-core Computer Architecture – Storage and interconnects, Introduction To Haskell Programming, Embedded System Design With ARM, Distributed Systems.

Resolution:

The suggestions mentioned above for courses 'Introduction To Database Systems' and 'Software Engineering' would be taken up for further action by the course coordinators to incorporate these suggestions if feasible after discussion with their team and subject experts in the department.

RV College
of Engineering®

Autonomous
Institution Affiliated
to Visvesvaraya
Technological
University, Belagavi

Approved by AICTE, New Delhi, Accredited by NBA

Department of Computer Science and Engineering
Phone: 080-68188199, 8200 : e-mail: hod.cse@rvce.edu.in

Agenda No. 129: Ratification and identification of new MOOC courses to replace the previously identified courses in Elective-A of 2021 scheme.

Points of discussion:

With reference email directions from Dean Academics on May 8th 2023 regarding Elective-A courses offered through MOOC's NPTEL for IV Semester 2021 scheme BE Programs, there's a requirement to identify similar 8 weeks courses since out of the **previous offered 5 courses, three courses has not been offered to rerun** by NPTEL during this upcoming semester. The following five NPTEL 8 week courses were identified earlier to be offered under Elective-A(MOOC Courses)

GROUP A: PROFESSIONAL ELECTIVES (MOOC COURSES)			
Sl. No.	RVCE Course Code	Course Title	Status of upcoming list by NPTEL
1.	21CS4A1	Object Oriented Analysis And Design	**NOT OFFERED**
2.	21CS4A2	Multi-core Computer Architecture – Storage and interconnects	**NOT OFFERED**
3.	21CS4A3	Introduction To Haskell Programming	Rerun-Available in upcoming semester
4.	21CS4A4	Embedded System Design With ARM	**NOT OFFERED**
5.	21CS4A5	Distributed Systems	Rerun-Available in upcoming semester

With the inputs and suggestions from members, from the list of 8 weeks courses the following courses were approved to be offered in Elective - A.

- Data Science For Engineers
- Design, Technology And Innovation
- Google Cloud Computing Foundations
- Machine Learning For Earth System Sciences
- Modern Algebra

Two additional courses are identified to accommodate any change of courses further during the next semester.

Resolution: The newly identified MOOC courses (Eight weeks) and the earlier two courses which are rerun(rerun courses will be retained) is thus approved in the meeting. This would further be

RV College
of Engineering®

Autonomous
Institution Affiliated
to Visvesvaraya
Technological
University, Belagavi

Approved by AICTE,
New Delhi, Accredited
by NBA

Department of Computer Science and Engineering
Phone: 080-68188199, 8200 : e-mail: hod.cse@rvce.edu.in

communicated to Dean Academics for final approval. The same would be communicated to Dean Academics, CoE and the identified course mentors of the department.

Agenda No. 130: PG result analysis and placement statistics.

Points of discussion: PG Associate Dean presented in the meeting the result analysis and placement statistics of 2020- 2022 batch students of M.Tech CSE and M.Tech CNE programs. It was noted that results achieved is 100% for both programs, however 82.3% students of M.Tech CSE are placed and 81.25% students of M.Tech CNE have been placed.

Agenda No. 131: Any other issue with the permission of the chair..

Points of discussion: The BoS chairperson thanked the board members and attendees for attending the meeting and making the meeting interactive by providing constructive inputs to shape the curriculum.

The meeting concluded with the BoS Chairman thanking the members for their valuable inputs and suggestions.

23/6/23

Dr. Ramakanthkumar P,
Chairman - Board of Studies
Professor & Head CSE Department,
R. V. College of Engineering
Professor and Head
Department of
Computer Science and Engineering
R.V. College of Engineering
Bangalore - 560 059.

RVCE /   /CSE /   / 2023-24   Friday, 15 June 2023

26ᵗʰ BOARD OF STUDIES MEETING HELD ON 03/06/2023
ACTION TAKEN REPORT

Meeting # 26

DATE OF MEETING: 03-06-2023
TIME: 9.30 AM
VENUE: DEPARTMENT OF CSE, RVCE
MODE: OFFLINE & ONLINE

Sl. No.	Agenda	Action Taken
125.	To read and record the minutes of the previous BoS meeting held on 18th November 2022.	Read and Recorded.
126.	Brief report of the achievements of the department and research/consultancy activities.	Information provided. Members congratulated the initiatives of the department, faculty, staff and students.
127.	Discussion and approval of UG-BE CSE, CSE(Cyber Security) and CSE(Data Science) 3rd - 4th semester syllabus of 2022 Scheme.	Suggestions incorporated. Information shared with respective faculty coordinator for further steps of revision to incorporated suggestions
128.	Discussion and approval of UG-BE CSE 5th - 6th semester syllabus of 2021 Scheme.	Suggestions incorporated. Information shared with respective faculty coordinator for further steps of revision to incorporated suggestions
129.	Ratification and identification of new MOOC courses to replace the previously identified courses in Elective-A of 2021 scheme.	• Communicated to Dean Academics for final approval. • Communicated to SAP coordinator, CoE and the identified course mentors of the department.
130.	PG result analysis and placement statistics.	Information provided.
131.	Any other issue with the permission of the chair.	The meeting concluded with the BoS Chairman thanking the members

15/06/23

Dr. Ramakanthkumar P,
Chairman - Board of Studies
Professor & Head CSE Department,
R. V. College of Engineering

Go, change the world

RV College of
Engineering®

Board of Studies CSE <bos.cse@rvce.edu.in>

Invitation & Meeting Notice: 27th BoS Meeting at CSE, RVCE on 30/03/2024(Saturday)

1 message

Board of Studies CSE <bos.cse@rvce.edu.in>   Wed, Mar 20, 2024 at 4:01 PM
To: Chandrashekar Ramanathan <rc@iiitb.ac.in>, sudarshan@pes.edu, prasanna@iitdh.ac.in, j-keerthy@ti.com,
RamKumar.Viswanathan@philips.com, "Ramakanth Kumar P." <ramakanthkp@rvce.edu.in>, "Shobha G."
<shobhag@rvce.edu.in>, "Nagaraja G.S." <nagarajags@rvce.edu.in>, Minal Moharir <minalmoharir@rvce.edu.in>, sandhya
sampangiramaiah <sandhya.sampangi@rvce.edu.in>, Prapulla S B <prapullasb@rvce.edu.in>

Dear Sir,

GREETINGS FROM CSE, RVCE.

In continuation to the consent received from all our esteemed members, the 27th BoS
meeting would be conducted on 30th March 2024(Saturday).

Agenda for the 27th BoS meeting is as below:

Sl. No.	AGENDA
131	To read and record the minutes of the previous BoS meeting held on 03rd June 2023.
132	Brief overview on activities of student and faculty along with department achievements.
	Academic Matters
133	Discussion and approval of UG-BE CSE 7th - 8th semester scheme and syllabus of 2021 Scheme.
134	Discussion and approval of UG BE CSE, CSE(CY), CSE(CD) 5th - 6th semester scheme and syllabus of 2022 Scheme.
	Ratification
135	Ratification of change in NPTEL course for Mr. Sourabh Kumar(1RV21CS148)
136	Ratification of credit balancing for Mr. Arun Kumar.
	Any other subject/s
137	PG NBA process and inputs/suggestions on the new scheme to be proposed.
138	Any other issue with the permission of the chair.

You are requested to kindly spare your valuable time and make it possible to attend
the meeting. Your valuable suggestions will definitely help the department.

Looking forward to your participation.

Date : 30th March 2024(Saturday)
Time: 10:30 a.m.

125

Venue: CSE HoD's Cabin, RVCE

<u>**Enclosed:**</u> Meeting Notice

Thanks and Regards,

Dr. Ramakanth Kumar P,

BoS Chairperson,

Dept. of C.S.E,

R V College of Engineering (Autonomous),

Bangalore 560059

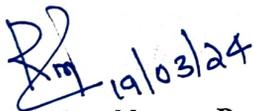
📄 **27-BoS_Meeting_Notice.pdf**
317K

Department of Computer Science and Engineering
MEETING NOTICE

27th Board of Studies Meeting

Saturday, 30th March 2024
10:30 a.m. to 12:30 p.m.

Sl. No.	AGENDA
132	To read and record the minutes of the previous BoS meeting held on 03rd June 2023.
133	Brief overview on activities of student and faculty along with department achievements.
Academic Matters	
134	Discussion and approval of UG-BE CSE 7th - 8th semester scheme and syllabus of 2021 Scheme.
135	Discussion and approval of UG BE CSE, CSE(CY), CSE(CD) 5th - 6th semester scheme and syllabus of 2022 Scheme.
Ratification	
136	Ratification of change in NPTEL course for Mr. Sourabh Kumar(1RV21CS148)
137	Ratification of credit balancing for Mr. Arun Kumar.
Any other subject/s	
138	PG NBA process and inputs/suggestions on the new scheme to be proposed.
139	Any other issue with the permission of the chair.

19/03/24

Dr. Ramakanthkumar P,
Chairman - Board of Studies
Professor & Head CSE Department,
R. V. College of Engineering

Go, change the world

127

Ref: RVE/CSE/ /2023-24

Date: 30/03/2024
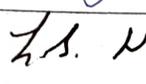
Department of Computer Science and Engineering
27th Board of Studies Meeting
Held on
30th March 2024 at 10:30 am in CSE Department

Agenda for 27th BoS Meeting:

Sl. No.	AGENDA
132	To read and record the minutes of the previous BoS meeting held on 03rd June 2023.
133	Brief overview on activities of student and faculty along with department achievements.
Academic Matters	
134	Discussion and approval of UG-BE CSE 7th - 8th semester scheme and syllabus of 2021 Scheme.
135	Discussion and approval of UG BE CSE, CSE(CY), CSE(CD) 5th - 6th semester scheme and syllabus of 2022 Scheme.
Ratification	
136	Ratification of change in NPTEL course for Mr. Sourabh Kumar(1RV21CS148)
137	Ratification of credit balancing for Mr. Arun Kumar.
Any other subject/s	
138	PG NBA process and inputs/suggestions on the new scheme to be proposed.
139	Any other issue with the permission of the chair.

The 27thBoS Meeting conducted this day 30/03/2024 with the above mentioned agenda was witnessed by the following members, the detailed minutes of the meeting will be shared through mail at the earliest,-

Sl. No.	MEMBERS	SIGNATURE
1	**Dr. Ramakanthkumar P,** Professor and Head, BoS Chairperson	30/3/24
2	**Dr. Shobha G,** Professor	30/3/24.
3	**Dr. Nagaraja G S,** Professor and Associate Dean	30/3/24

Go. change the world

128

4	**Dr. MinalMoharir,** Professor	
5	**Dr. Sandhya S,** Assistant Professor	
6	**Dr. Prapulla S B,** Assistant Professor	In Abssentia
7	**Dr. ChandrashekarRamanathan,** Professor & Dean (Academics) & Faculty-in-charge Computing,IIITB	In Absentia
8	**Dr. Sudarshan T.S.B,** Professor and Dean of Research, CSE, PES University	
9	**Dr. S. R. MahadevaPrasanna,** Professor, Dept. of Electrical Engineering, Indian Institute of Technology Dharwad	Online Attended through Webex
10	**Mr. Ram Vishwanathan,** Director, **Philips Innovation Campus,** Bangalore.	V. Ramku
11	**Mr. KeerthyJagadeesh,** Lead Engineer, Texas Instruments	

Special Invitee – Dean Academics

| 12 | **Dr. Shanmukha Nagaraj** Dean Academics, RV College of Engineering | |

Special Invitees – Student Representatives

| 13 | **Mr. Hrithik Maddirala** UG Final Year Student, (USN: 1RV20CS058) | Hrithik |
| 14 | **Ms. Pratiksha Narasimha Nayak G** UG Final Year Student, (USN: 1RV20CS123) | Pratiksha. |

Special Invitees – CSE Faculty

15	Dr. SOUMYA. A.	
16	Dr. Praveena .T	
17	Dr. Azra Nasreen	
18	Dr. Hemavathy R	
19	Dr. Vishalakshi Prabhu H	

Go. change the world

129

	Special Invitees – CSE Faculty	
20	Dr. Shanta Rangaswamy	St 30/3/2024
21	Rajatha	Raja— 30/3/24
22	Anitha Sandeep	SA
23	Dr. H Pavithra	HP 0/3/24
24	M. S. Srividya	Srividya 30/3/24
25	Dr. Soumyarani C.N.	CN 30/03/2024
26	Dr. Veena Gadad	add 30/3/2024
27	Dr. Manas. M.N	Manas. M 30/3/24
28	Dr. Vinay V Hegde	
29	Dr. Deepamala n	30/3/24
30	Girish Rao Salani	30/3/24
31	Dr Ashok kumar A.R	
32	Sindhu D.V	Sindu
33	Neethu S.	luty 30/3/2024
34	Apoorva. Udaya kumar. Chatte	Auchal 30/3/2024
35	Dr. Jyoti Shetty	30/3/24
36	Dr. mohana	MUN 30/03/24
37	Shweta Babu Prasad	RS 30/3/24
38		
39		
40		
41		
42		

Go. change the world

130

WEBEX Attendance Extract

27th BoS Meeting at CSE	RVCE on 30-03-2024"='	RVCE on 30-03-2024
27th BoS Meeting at CSE	RVCE on 30-03-2024"='	RVCE on 30-03-2024
27th BoS Meeting at CSE	RVCE on 30-03-2024"='	RVCE on 30-03-2024
27th BoS Meeting at CSE	RVCE on 30-03-2024"='	RVCE on 30-03-2024
27th BoS Meeting at CSE	RVCE on 30-03-2024"='	RVCE on 30-03-2024
27th BoS Meeting at CSE	RVCE on 30-03-2024"='	RVCE on 30-03-2024
27th BoS Meeting at CSE	RVCE on 30-03-2024"='	RVCE on 30-03-2024
27th BoS Meeting at CSE	RVCE on 30-03-2024"='	IIT DharwadN/AN/Aattendeeprasanna@iitdh.ac.in"=""202
27th BoS Meeting at CSE	RVCE on 30-03-2024"='	IIT DharwadN/AN/Aattendeeprasanna@iitdh.ac.in"=""202
27th BoS Meeting at CSE	RVCE on 30-03-2024"='	IIT DharwadN/AN/Aattendeeprasanna@iitdh.ac.in"=""202
27th BoS Meeting at CSE	RVCE on 30-03-2024"='	RVCE on 30-03-2024

Webex Snapshots Recording Online Attendance of

Dr. S. R. MahadevaPrasanna, Indian Institute of Technology Dharwad

27th BoS Meeting at CSE, RVCE on 30-03-2024-20240330 0932-1 ± ∢ ⌀

	RV College of Engineering	VII Sem: Professional Core Electives			Go. chan	Prasanna, IIT Dhar...	

GROUP-E

Sl. No.	Course Code	Course Title
1	21IS73E1	Deep Learning (Common to CS & IS)
2	21CS73E2	Cyber Security for Industry 4.0 (Common to CS & IS)
3	21CS73E3	Application Delivery Controller and Virtualization
4	21CS73E4	Information Storage Management
5	21CS73E5	Computer Graphics and Virtual Reality

Participants — Join/Leave

Dr. Ashok Kumar A R	11:01 / 13:20
J KEERTHY	11:01 / 11:58
J KEERTHY	11:59 / 12:29
J KEERTHY	12:30 / 13:19
Prasanna, IIT Dharwad	11:01 / 13:17
Dr Ramakanth	11:01 / 13:20

15:29 / 2:18:32

Chapters

When chapters are added to this recording, you'll find them here.

(Add chapters)

---

webex

- Profile
- Settings
- Calendar
- Webinars
- Recordings

Enter meeting information to set a meeting

Back to List

27th BoS Meeting at CSE, RVCE on 30-03-2024

Dr. Ashok Kumar A R   10.09 AM – 3.01 PM Saturday, March 30, 2024

Meeting content

Recording **Attendance**

Display name	First name	Last name	Role	Email address	Connection time	Duration	Connection type	Session name
DR Dr Ashok Kumar A R	ashokkumar	ashokkumar	coHost	ashokkumar@rvce.edu.in	10.16 AM – 1:52 PM	214 mins	Desktop app	27th BoS Meeting at C...
Dr Ramakanth	Dr Ramakanthkumar	P	host	ramakanthkp@rvce.edu.in	10.48 AM – 3:01 PM	254 mins	Desktop app	27th BoS Meeting at C...
Dr Ramakanthkumar P	Dr.Ramakanthkumar	P	attendee	ramakanthkp@rvce.edu.in	10.45 AM – 10:46 AM	1 min	Web app	27th BoS Meeting at C...
Dr Ramakanthkumar P	Dr Ramakanthkumar	P	attendee	ramakanthkp@rvce.edu.in	10.16 AM – 10:45 AM	27 mins	Web app	27th BoS Meeting at C...
J KEERTHY	N/A	N/A	attendee	j-keerthy@5i.com	12:30 PM – 1:19 PM	50 mins	Mobile app	27th BoS Meeting at C...
J KEERTHY	N/A	N/A	attendee	j-keerthy@5i.com	10.43 AM – 11:58 AM	76 mins	Mobile app	27th BoS Meeting at C...
J KEERTHY	N/A	N/A	attendee	j-keerthy@5i.com	11:59 AM – 12:29 PM	31 mins	Mobile app	27th BoS Meeting at C...
Prasanna, IIT Dharwad	N/A	N/A	attendee	prasanna@iitdh.ac.in	10.39 AM – 10:45 AM	6 mins	Web app	27th BoS Meeting at C...
Prasanna, IIT Dharwad	N/A	N/A	attendee	prasanna@iitdh.ac.in	10.48 AM – 1:17 PM	149 mins	Web app	27th BoS Meeting at C...

Downloads

27th BOARD OF STUDIES MINUTES OF MEETING

Meeting #27

DATE: 30-03-2024
TIME: 10.30 AM
MODE: OFFLINE & ONLINE
VENUE: ECE CONFERENCE HALL, RVCE
MEETING LINK:
https://rvce.webex.com/rvce/j.php?MTID=m75557024297514fcebafbd6d846d91ff

Agenda:

132 To read and record the minutes of the previous BoS meeting held on 03rd June 2023.
133 Brief overview on activities of student and faculty along with department achievements.
134 Discussion and approval of UG-BE CSE 7th - 8th semester scheme and syllabus of 2021 Scheme.
135 Discussion and approval of UG BE CSE, CSE(CY), CSE(CD) 5th - 6th semester scheme and syllabus of 2022 Scheme.
136 Ratification of change in NPTEL course for Mr. Sourabh Kumar(1RV21CS148)
137 Ratification of credit balancing for Mr. Arun Kumar.
138 PG NBA process and inputs/suggestions on the new scheme to be proposed.
139 Any other issue with the permission of the chair.

These draft minutes of the meeting is being circulated to all the members of the BoS to invite their comments.

Head of the department and BoS chairman Dr. Ramakanthkumar P, welcomed the external experts BoS members, all department faculties and special invitee student representatives. BoS Chairman presented agenda No.132 to 139, in the meeting. and the following points were discussed:

Subject No.	132
Agenda	To read and record the minutes of the previous BoS meeting held on 03rd June 2023.
Discussions & Resolutions	

The minutes of the previous meeting held on 3/06/2023, was briefed by the BoS chairperson. The *previous meeting had given approval for UG-BE CSE, CSE(Cyber Security) and CSE(Data Science) 3rd - 4th semester syllabus of 2022 Scheme & UG-BE CSE 5th - 6th semester syllabus of 2021 Scheme*. The meeting also had ratified newly identified MOOC courses for replacing the previously identified courses in Elective-A of 2021 scheme since they were not being rerun again. PG result analysis and placement statistics was also reviewed and discussed during the previous meeting.

Action Plan & Deadlines:
(For whom the task has been assigned and expected date of completion of the task/assignment)

The previous meeting agenda was reviewed by attendees.

Go, change the world

Subject No.	133
Agenda	Brief overview on activities of student and faculty along with department achievements.

Discussions & Resolutions

BoS Chairman presented to the board the ***newly introduced programs in CSE department*** and also introduced the new faculties who have joined the department. Sir also briefed about the ***infrastructure*** development taken up by the trust to upgrade the facilities to students and the department and gave updates on the current progress expected date of completion. The board members were also briefed about the achievements of the department viz the successful accreditation status granted by NBA for both UG and PG programs. UG program which is granted ***6 years accreditation*** was appreciated by the external experts. The ***intake for CSE program increased*** from 240 to 285 was also mentioned in the meeting. Sir also briefed the research and consultancy activities that have been taken up by the faculty of the department. It was also brought to the notice of the board that our Trust ***RSST has been kind enough in supporting the faculty*** members financially to publish quality work in IEEE, Taylor and Francis etc., The discussion also highlighted the MoU's signed with various industries, placements status and several activities carried out such as Skill labs mainly focusing hands-on, Design Thinking Labs, Hackathons in the benefit of the students.

Action Plan & Deadlines:
(For whom the task has been assigned and expected date of completion of the task/assignment)

The members well appreciated the department achievements, research activities, accreditation and the trust for extending their support to the faculty and institution.

Subject No.	134
Agenda	Discussion and approval of UG-BE CSE 7th - 8th semester scheme and syllabus of 2021 Scheme.

Discussions & Resolutions

The members and attendees reviewed the draft scheme and syllabus of UG-BE CSE 2021 scheme and the following points were suggested,-

- ***Dr. S. R. Mahadeva Prasanna enquired if "Natural Language Processing"*** has been excluded from the list of electives for which ***HoD clarified*** that it had been included as an elective in the third year for the said scheme.
- ***Dr. S. R. Mahadeva Prasanna raised concerns on coverage*** of Linear Algebra, Statistics, and Probability in the program for which ***HoD clarified*** that these are included as part of mandatory mathematics courses during the 1st and 2nd years of the program.
- ***Dr. Sudarshan T.S.B asked for the details on the course*** "Robotic Process Automation", ***HoD briefed*** that the course was in association with UIPath with whom the department has signed a MoU and students will be getting an experience of Blueprism which being used in several industries including Volvo. ***Student representative Mr. Hrithik M also briefed*** about the contents and gave feedback that the contents were helpful and required in the curriculum.
- ***Dr. Sudarshan T.S.B & Mr. Ram Vishwanathan suggested to look at Power Automate*** from Microsoft Hyperautomate which most industries are now looking at and therefore these could be looked at for incorporation.
- ***Mr. Ram Vishwanathan suggested to include "Prompt Engineering"*** since from most of the industry perspective this is a required course in the current trend specially these concepts to be explore from open source perspective. ***HoD assured that it would be incorporated*** based on the feasibility of the fitment in the curriculum w.r.t credits.

- *Dr. Sudarshan T.S.B raised concerns on allocating sufficient credits to the project work* so that quality work could be identified and Institute driven projects can be given to students which could later be converted into quality publications. *Agreeing to this point, HoD told that it will be certainly implemented in the next scheme(2022 scheme)* where Interdisciplinary project is allocated credits in the 6th semester that could be taken forward.

- The course contents of *"Parallel Architecture and Distributed Programming"* was briefed by Dr. Azra N in the meeting. *Dr. S. R. Mahadeva Prasanna suggested* including concepts from architectural perspective how these parallel models aid Deep Learning models and few case studies could also be included to gel the architectural aspects with the current trending topics of industry. *Dr. Sudarshan T.S.B adding* to the above point also suggested including a unit which deals with parallelizing an application, generalized concepts of accelerators, Tagged Procedure Calls (TPC), Tensor Processing Units (TPUs).

- The course contents of *"Computer Graphics and Virtual Reality"* was briefed by Dr. Soumya A to the board. *Mr. Ram Vishwanathan queried if Augmented Reality(AR)* would also be covered in the elective course "Computer Graphics and Virtual Reality", *HoD justified* that since this course is voluminous it not a part of the course however AR was included as part of skill labs with complete hands-on sessions. *Adding to this point Mr. Ram V suggested to include few use cases* and also teach students oriented towards practical applicability of AR & VR, which *was welcomed by Dr. Soumya who clarified* that these would be incorporated and taken up as part of Experiential learning(EL).

- The course contents of *"Intelligent Software Defined Networks"* was briefed by Dr. Ashok Kumar to the board. *Mr. Ram Vishwanathan enquired* if there is any collaboration with Cisco as a lot of work is currently engaged by the company in the domain of AI from SDN perspective. Hence he extended help to the coordinator stating that he could connect to Cisco team to handhold the content delivery in terms of expert lecture.

- The course contents of *"Robotic Process Automation"* was briefed by Dr. Vishalakshi Prabhu in the meeting and also mention that the contents are specifically drafted from UIPath's perspective. *Mr. Ram Vishwanathan suggested* that he could connect the coordinator to a group which is working on hyper automation in his organization which could guide in reorganizing the contents such that the course contents could be made generic such that 2 units could deal with UIPath and the remaining 3 units on hyper automation and Power automate. *Dr. Sudarshan T.S.B also suggested* referring the syllabus of a similar course "Advances in Robotic Process Automation" from Carnegie Mellon University that deals with more than RPA and hence could be of some guidance in reframing the contents.

- The course contents of *"Cyber Security for Industry 4.0", "Application Delivery Controller and Virtualization", "Information Storage Management" "Computer Vision", and "Linux Internals"* was approved in the board.

Action Plan & Deadlines:
(For whom the task has been assigned and expected date of completion of the task/assignment)
Suggestion given on project credits will be taken up while structuring the next scheme.
The coordinators of the above courses to which suggestions have been recorded from subject experts is intimated to take necessary action and work towards incorporating the said suggestions.

Subject No.	135
Agenda	<mark>Discussion and approval of UG BE CSE, CSE(CY), CSE(CD) 5th - 6th semester scheme and syllabus of 2022 Scheme.</mark>

Discussions & Resolutions

The members and attendees reviewed the draft scheme and syllabus of UG-BE CSE, CSE(CY), CSE(CD) 2022 scheme and the following points were suggested,-

UG-BE CSE 2022 scheme:

- *Mr. Ram Vishwanathan* enquired whether the courses offered by HSS board were common to all three programs which *was clarified affirmatively by HoD*.
- *Dr. Sudarshan T.S.B* questioned if 2nd year courses was common between programs of CY and CD for which *Dr. Minal M responded affirmatively*.
- *Dr. Sudarshan T.S.B* asked the faculty coordinator of <mark>*"Network Programming and Security"*</mark> regarding practical content and its delivery w.r.t various tool included for exploration to students, regarding this *HoD clarified that the department has procured Qualnet simulator* and apart from this students will be encouraged to work on open source simulators like packet tracer, NS2, etc.,
- *Dr. Sudarshan T.S.B enquired* if Interdisciplinary project included in 6th semester will be mandated to be taken along with other departments. *HoD mentioned that since the college vision* itself mention interdisciplinary research this component is introduced in 2022 scheme and more emphasis will be on taking up inter department projects as it is incorporated in curriculum. Also few groups could also work on Wirin project at the institutional level which is basically interdisciplinary.

UG-BE CSE(CD) 2022 scheme:

Dr. Shobha G presented the scheme of Data science to the board and the following discussion is recorded,-

- *Dr. Sudarshan T.S.B* asked if the course <mark>*"Applications of Data Science"*</mark> included any sort of practical orientation and if there was any collaboration for the course delivery. *Dr. Shobha G* mentioned that there was no collaboration at this point with any organization and also the contents does not specifically have any hands-on since this course is identified as an elective course. *Mr. Ram Vishwanathan suggested* to look at few domains and cover 3 applications for each identified domain.
- *Dr. Shobha G asked the board members* after presenting 6th semester details whether the program needs "<mark>Compiler Design</mark>" course in place of the identified "<mark>Software Engineering with Agile Technologies</mark>" core course. The *experts felt that the scheme should be proceeding with the identified Software Engineering course* as this is required irrespective of the domain which helps students during placements and their work.
- The course contents of <mark>*"Semantic Web and Social Network Analysis"*</mark> was briefed by Dr. Deepamala N, *Dr. Sudarshan T.S.B suggested* that the course need to focus more on Social Network Analysis and hence the course contents could be reorganised such the 1 unit instead of 2 units(as per draft syllabus contents) could be about Semantic web and remaining contents to be included concepts on Social Network Analysis.
- The course contents of <mark>*"Data Security and Privacy"*</mark> was briefed by Dr. Sindhu D V to the board. *Mr. Ram Vishwanathan suggested to look at Cyber laws* across the world though the contents focus more towards information security, the laws differ based on the country and hence the challenge would be how these privacy policies are tackled in the syllabus/content delivery. *Dr. Minal Moharir questioned* due to the diversified nature how could this be taken up in the course such that it is beneficial in view of students since this course is common between Data Science and Cyber Security programs, *Mr. Ram V* suggested to focus more on Indian Scenario's that could be dealt in detail in the course and provide an overview of privacy policies of different countries.

UG-BE CSE(CY) 2022 scheme:

Dr. Minal Moharir presented the scheme of Cyber Security to the board and the following discussion is recorded,-

- **Dr. Sudarshan T.S.B** enquired whether the course *"Agile and Secure Software Engineering"* is common with the other programs for which **Dr. Shanta R clarified** that books referred were different and the contents were also organised such that 3.5 units covered software engineering with Agile techniques and remaining dealt with security aspects hence this course contents were not common. After the review, sir also suggested to check with the title if it justified the contents. **Dr. Minal M and Dr. Shanta R had a discussion and mentioned that the title rechange** will be taken up for further discussion.
- The course contents of *"Data Security and Privacy"* is common between CY and CD hence the above suggestion applies here aswell.

General Discussion on 2022 Scheme of CS, CY & CD:

- **Dr. S. R. Mahadeva Prasanna** mentioned that since multiple domains are integrated, enough resources in terms of manpower and infrastructure when allocated suitable these course could be taken up with hands-on for effective delivery of these specialized programs.
- **Dr. Sudarshan T.S.B** appreciated and acknowledged the efforts of mapping the elective courses suitable to the specific specialized programs.
- **Dr. S. R. Mahadeva Prasanna** queried about the **duration of internship and projects** since internship is included in 2021 scheme and project in 2022 scheme. HoD clarified that internship duration is 3 weeks and the project is during the semester one complete semester.
- 2022 scheme of all three programs approved by the board.

Action Plan & Deadlines:
(For whom the task has been assigned and expected date of completion of the task/assignment)

The coordinators of the above courses to which suggestions have been recorded from subject experts is intimated for necessary action and would be intimated to work towards incorporating the said suggestions and also relook at title change for one of the course.

Subject No.	136
Agenda	Ratification of change in NPTEL course for Mr. Sourabh Kumar(1RV21CS148)

Discussions & Resolutions

Mr. Sourabh Kumar(1RV21CS148) was permitted to change the MOOC course who had chosen Introduction to Haskell Programming(21CS4A3 – 4th Sem) to Data Science for Engineers (21CS4A6 – 4th Sem) as a suitable alternative.

Since change of course was permitted for 2021 scheme students after verifying the credits of the course, *the same is ratified in the meeting.*

Action Plan & Deadlines:
(For whom the task has been assigned and expected date of completion of the task/assignment)

The change of elective by the student Mr. Sourabh Kumar(1RV21CS148) has been ratified by the members in the meeting. This is *intimated to equivalence committee for the needful*.

Subject No.	137
Agenda	Ratification of credit balancing for Mr. Arun Kumar.

Discussions & Resolutions

The BoS chairperson *presented the credit balancing details of Mr. Arun Kumar(1RV15CS403)* who has moved to 2016 scheme due to merging of 2012 scheme to 2016 scheme; The student had 1 credit shortage and hence the equivalence committee along with inputs from HoD, Dean and Counsellor had suggested to take up one MOOC course of four weeks to earn/make it equivalent to one credit. Therefore the student took up "Cyber Security and Privacy" (16CS7SP) for earning the 1 credit which was short.

Action Plan & Deadlines:
(For whom the task has been assigned and expected date of completion of the task/assignment)

The equivalence details were reviewed and the proposal of student suggesting to take up "Cyber Security and Privacy" (16CS7SP) for *earning the 1 credit which was short has been ratified. This is intimated to equivalence committee for the needful.*

Subject No.	138
Agenda	PG NBA process and inputs/suggestions on the new scheme to be proposed.

Discussions & Resolutions

- The *PG NBA accreditation status which is received for 3 years for both programs* PGCSE and PGCNE programs was presented to the members of the board.
- The curriculum of PG programs needs to be revised for the next revision and in view of this the feedback collected from students and other stakeholders was *briefed by Dr. Nagaraja G S* to the meeting.
- *Dr. S. R. Mahadeva Prasanna enquired* what care is taken by the respective in charge to ensure the overlapping in the course contents in courses such as "Data Structures and Applications", "Operating Systems" etc., which was clarified *by Dr. Nagaraja G S* that the faculty group assigned to frame syllabus would ensure by referring the syllabus and would ensure and avoid overlapping of course contents. Further it was suggested that in order to avoid such confusion of overlapping the course titles could be made exclusive & non overlapping with the undergraduate courses.

Action Plan & Deadlines:
(For whom the task has been assigned and expected date of completion of the task/assignment)

PG NBA accreditation status was appreciated in the meeting.
The suggestion regarding course titles and non overlapping course contents will be passed to faculty responsible for drafting course contents for PG courses.

Subject No.	139
Agenda	Any other issue with the permission of the chair.

Discussions & Resolutions

The BoS chairperson thanked the board members and attendees for attending the meeting and making the meeting interactive by providing constructive inputs to shape the curriculum.

Go, change the world

Action Plan & Deadlines:
(For whom the task has been assigned and expected date of completion of the task/assignment)

The meeting concluded with the BoS Chairman thanking the members for their valuable inputs and suggestions.

17/04/24

Dr. Ramakanthkumar P,
Chairman - Board of Studies
Professor & Head CSE Department,
R. V. College of Engineering
Professor and Head
Department of
Computer Science and Engineering
R.V. College of Engineering
Bangalore - 560 059.

RV College of Engineering®
Mysore Road, RV Vidyaniketan Post,
Bengaluru - 560059, Karnataka, India

IQAC
RVCE

27th BOARD OF STUDIES MEETING HELD ON 30/03/2024
ACTION TAKEN REPORT

Meeting # 27

DATE OF MEETING: 30-03-2024
TIME: 10.30 AM
VENUE: ECE Conference HALL, RVCE
MODE: OFFLINE & ONLINE
DATE OF RELEASE OF ACTION PLAN: 23/04/2024

Sl. No.	Agenda	Action Taken
132.	To read and record the minutes of the previous BoS meeting held on 03rd June 2023	Read and Recorded.
133.	Brief overview on activities of student and faculty along with department achievements.	Information provided. Members congratulated the accreditation status received by the department. Members appreciated research activities by faculty, staff and students.
134.	Discussion and approval of UG-BE CSE 7th - 8th semester scheme and syllabus of 2021 Scheme.	Suggestions incorporated. Information conveyed to the respective faculty coordinator to take necessary action and work towards incorporating the suggestions.
135.	Discussion and approval of UG BE CSE, CSE(CY), CSE(CD) 5th - 6th semester scheme and syllabus of 2022 Scheme.	• Suggestions incorporated. • Information shared with respective faculty coordinator for further steps to work towards incorporating the said suggestions. • Faculty coordinator intimated to relook at title change for one of the course " *Agile and Secure Software Engineering*".
136.	Ratification of change in NPTEL course for Mr. Sourabh Kumar(1RV21CS148)	• The change of elective has been ratified. • *Intimated equivalence committee for the needful.*
137.	Ratification of credit balancing for Mr. Arun Kumar.	• The equivalence details were reviewed and the proposal *has been ratified.* • *Intimated equivalence committee for the needful.*

Go, change the world

138.	PG NBA process and inputs/suggestions on the new scheme to be proposed.	• Members congratulated the PG accreditation status of M.Tech CSE & M.Tech CNE. • Suggestion regarding course titles and non overlapping of course contents will be passed to faculty for curriculum revision.
139.	Any other issue with the permission of the chair.	The meeting concluded with the BoS Chairman thanking the members

23/4/24

Dr. Ramakanthkumar P,
Chairman - Board of Studies
Professor & Head CSE Department,
R. V. College of Engineering

Professor and Head
Department of
Computer Science and Engineering
R.V. College of Engineering
Bangalore - 560 059.

141