

RV College of Engineering, Bangalore

DEPARTMENT OF CHEMICAL ENGINEERING

BOS CONTENT SHEET

Sl.No.	Details	Date	Page No.
1.	UG 2018 Scheme - 22 nd BoS Meeting	03.05.2019	1-12
2.	UG 2018 Scheme - 23 rd BoS Meeting	14.12.2019	13-19
3.	UG 2018 Scheme - 24th BoS Meeting	05.03.2020	20-24
4.	UG 2021 Scheme - 25th BoS Meeting	18.03.2022	25-32
5.	UG 2021 Scheme - 26th BoS Meeting	02.12.2022	33-38
6.	UG 2021 & 2022 Scheme - 27th BoS Meeting	23.06.2023	39-46



RV Educational Institutions ® RV College of Engineering

Autonomous Institution Affiliated to Visvesvaraya Technological University, Belagavi Approved by AICTE, New Delhi

DEPARTMENT OF CHEMICAL ENGINEERING

Dr. Vinod Kallur Associate Professor & HoD

Phone: 080-68188223; e-mail: hod.ch@rvce.edu.in

Department: Chemical Engineering

Programme: B.E. (Chemical 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 .	Technical Chemistry	18CH33	2018
2	Design Thinking lab	18CH47	2018
3	Minor Project	18CH64	2018
4	Internet of Things	18CH6C1	2018
5	Energy conversion systems	18CH7F4	2018
6	Machine Learning	18CS6D1	2018
7	Professional Elective in Group A MOOC Courses	18CH5A1	. 2018
8	Internship	18CH74	2018
9	Industrial Chemistry	21CH36	2021
10	Technologies For Clean and Renewable Energy Production	21CH4A1	2021
11	Colloids and Surfaces	21CH4A2	2021
12	Natural Gas Engineering	21CH4A3	2021
13	Application of Spectroscopic Methods in Molecular Structure Determination	21CH4A4	2021
14	Introduction to Polymer Science	21CH4A5	2021
15	Summer Internship- I	· 21CH310	2021

Alle

BoS-CHAIRMAN (Chemical Engineering) Chairman

Bos in Chemical Engineering

R V College of Engineering

Mysole Read, Bengaluru-59

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

PRINCIPAL

PRINCIPAL RV COLLEGE OF ENGINEERING BENGALURU - 560 059



Email: hod.ch@rvce.edu.in vinodkallur@rvce.edu.in

Office: +91 67178047 Mobile: +91 991643794

26th April, 2019

Dr Chetan Raghuveer Co-founder, Enfros Technologies Pvt. Ltd.

Benaglauru

Dear Dr Chetan.

I am happy to inform you that you have been identified as a Special Invitee to BoS in Chemcal Engineering, XVCE. You are invited to participate in the proceedings of meeting of BoS in Chemical Engineering scheduled to be held on 3rd May 2019 at 9.30 AM at the department seminar hall. The agenda is as follows:

- 19.1 Department Academic and other achievements
- 19.2 Approval of UG 2018 scheme of teaching and examination
- 19.3 Approval of 3rd and 4th semester syllabus of UG 2018 Scheme
- 19.4 Approval of Equivalence of courses of PG 2016 and courses of PG 2018.
- 19.5 Swayam and NPTEL courses as professional electives
- 19.6 Any other subject with the permission of the chair.

I have sent the soft copy by mail UG 2018 Scheme approved by the department curriculum committee for your verusal.

You will be paid TA and DA as per RVCE (Autonomous) norms.

Your contribution to drafting and finalizing the scheme and syllabus will help us in strengthening the VTU Autonomy.

With regards,

The

Or. Vinod Kallur Charman, BoS in Chemical Engineering Chairman

BoS in Chemical Engineering R.V. College of Engineering Mysore Road, Bengaluru-59



Email: hod.ch@rvce.edu.in vinodkallur@rvce.edu.in

Office: +91 67178047 Mobile: +91 991643794

26th April, 2019

Dr Umesh Deshannavar Professor & Head Chemical Engineering KLE Dr Sheshagiri College of Engg. & Tech Belagavi

Dear Sir.

I am happy to inform you that you have been identified as a Special invitee to BoS in Chemical Engineering, CVCE. You are invited to participate in the proceedings of meeting of BoS in Chemical Engineering scheduled to be held on 3rd May 2019 at 9.30 AM at the department seminar hall. The agenda is as follows:

- 19.1 Department Academic and other achievements
- 19.2 Approval of UG 2018 scheme of teaching and examination
- 19.3 Approval of 3rd and 4th semester syllabus of UG 2018 Scheme
- 19.4 Approval of Equivalence of courses of PG 2016 and courses of PG 2018.
- 19.5 Swayam and NPTEL courses as professional electives
- 19.6 Any other subject with the permission of the chair.

I have sent by mail the draft copy the UG 2018 Scheme approved by the department curriculum committee for your perusal.

You will be paid TA and DA as per RVCE (Autonomous) norms.

Your contribution to drafting and finalizing the scheme and syllabus will help us in strengthening the VTU Autonomy.

With regards,

Dr. Vinod Kallur



Email: hod.ch@rvce.edu.in vinodkallur@rvce.edu.in

Office: +91 67178047 Mobile: +91 991643794

26th April, 2019

Dr B R Veena Associate Professor Chemical Engineering Department DSCE, Bengaluru - 78

Dear Madam,

I am happy to inform you that you have been identified as a Special Invitee to BoS in Chemcal Engineering, RVCE. You are invited to participate in the proceedings of meeting of BoS in Chemical Engineering scheduled to be held on 3rd May 2019 at 9.30 AM at the department seminar hall. The agenda is as follows:

- 19.1 Department Academic and other achievements
- 19.2 Approval of UG 2018 scheme of teaching and examination
- 19.3 Approval of 3rd and 4th semester syllabus of UG 2018 Scheme
- 19.4 Approval of Equivalence of courses of PG 2016 and courses of PG 2018.
- 19.5 Swayam and NPTEL courses as professional electives
- 19.6 Any other subject with the permission of the chair.

I have sent by mail the draft copy the UG 2018 Scheme approved by the department curriculum committee for /our perusal.

You will be paid TA and DA as per RVCE (Autonomous) norms.

Your contribution to drafting and finalizing the scheme and syllabus will help us in strengthening the VTU Autonomy.

With regards,

Dr. Vinod Kallur

Bos in Chemical Engineering R.V. Collega of Engineering Mysare Rossi. Fengaluru-69



Email: hod.ch@rvce.edu.in vinodkallur@rvce.edu.in

Office: +91 67178047 Mobile: +91 991643794

26th April, 2019

Ms Baijayanti Ghosh Head, Department of Coatings INM Technologies Bengaluru

Dear Madam,

I am happy to inform you that you have been identified as a Special Invitee to BoS in Chemical Engineering, RVCE. You are invited to participate in the proceedings of meeting of BoS in Chemical Engineering scheduled to be held on 3rd May 2019 at 9.30 AM at the department seminar hall. The agenda is as follows:

- 19.1 Department Academic and other achievements
- 19.2 Approval of UG 2018 scheme of teaching and examination
- 19.3 Approval of 3rd and 4th semester syllabus of UG 2018 Scheme
- 19.4 Approval of Equivalence of courses of PG 2016 and courses of PG 2018.
- 19.5 Swayam and NPTEL courses as professional electives
- 19.6 Any other subject with the permission of the chair.

I have sent by mail the draft copy the UG 2018 Scheme approved by the department curriculum committee for your perusal.

You will be paid TA and DA as per RVCE (Autonomous) norms.

Your contribution to drafting and finalizing the scheme and syllabus will help us in strengthening the VTU Autonomy.

With regards,

Dr. Vinod-Kallur

BoS in Chemical Engineering R.V. College at Engineering Mysore Pond, Pengalaru-59



R. V. COLLEGE OF ENGINEERING

DEPARTMENT OF CHEMICAL ENGINEERING

Autonomous Institution affiliated to Visvesvaraya Technological University, Belagavi)
Approved by All India Council for Technical Education, New Delhi.

BoS Meeting 3rd of May 2019 Minutes of meeting

A BoS meeting was held in the department of chemical engineering on 3rd of May 2019. The agenda for the meeting was as follows:

- 19.1 Department Academic and other achievements
- 19.2 Approval of UG 2018 scheme of teaching and examination
- 19.3 Approval of 3rd and 4th semester syllabus of UG 2018 Scheme
- 19.4 Approval of Equivalence of courses of PG 2016 and courses of PG 2018.
- 19.5 Swayam and NPTEL courses as professional electives
- 19.6 Any other subject with the permission of the chair.

The following members were present.

Internal Members		
1	Dr Vinod Kallur	Associate Professor and Head.
2	Dr M A Lourdu Antony Raj	Professor
3	Dr R Suresh	Professor
4	Dr Basavaraja R J	Associate Professor
5	Dr Rajalakshmi M	Assistant Professor
7	Smt Anupama V Joshi	Assistant Professor

Aca	demic Council cial Invitee)	the college to be nominated by the
I	Dr B R Veena	Associate Professor, Chemical Engineering Department Dayananda Sagar College of Engineering Bengaluru 560 078.
	Subject Experts from outside cial Invitee)	the college to be nominated by VC
1	Dr Umesh B. Deshannavar	Professor & Head Department of Chemical Engineering KLE Dr. M. S. Sheshagiri College of Engineering & Technology Belgaum - 590 008

Dr. K B Shyam Prasad was not able to attend the meeting because of various reasons of personal concern.

The chairman extended a hearty welcome to all the members present and thanked them for accepting the invitation and made it convenient to attend the meeting. He briefed the members about the feed-back collected from employers, alumni, present students and faculty before preparing the draft scheme and also informed the members about the guide lines given by the Dean, Academics, RVCE Autonomous in preparing the scheme.

The minutes of this meeting have been recorded below:

19.1	Department Academic and other achievements
Dr. Vinod Kallu	outlined agenda for the meeting and briefed the departmental activities to the
	Milestones of the department were highlighted and curriculum revision
	obal electives offered by the department. Funded projects and patent details
	Student achievements in curricular and extra-curricular activities

19.2	pproval of UG 2018 scheme of teaching and examination		
Dr. Vinod Kallur	 Presented proposed scheme for UG 2018. Student can gain additional 20 credits through Swayam and NPTEL etc to get BE honors. Introduction of Design thinking lab was highlighted and its intend was explained. 		
	• Thermodynamics, Process calculation and Process Dynamics and		

	control course syllabus is formulated common for chemical and biotechnology departments.
	It has been proposed to include kinetic modelling for atleast in one unit.
	Alumni feedback on scheme was briefed.
1	Briefed on availability and utility of software tools like UNISIM,
	STARCCM+, COMSOL, ANSYS and MATLAB.
	 Highlighted advantages of various phase presentations in project
	evaluation and other members appreciated the seriousness in project
	evaluation.
	• Explained about conduction of PDP programs as part of Professional
	Practice.
	 Explained about Bridge Course Mathematics and C programming.
	 Put forward proposal on 5A1 set electives will be NPTEL course.
Dr. M A Lourdu	 Suggested NPTEL should be additional but not mandated.
Antony Raj	 Five credits for Transport Phenomena is to be reconsidered.
Dr. B R Veena	 Software component can be included in alternate evaluation methods.
	CPU is too early in third semester.
×	• Thermodynamics being common may affect TD specific to
	Biotechnology.
	Retain electives list also along with NPTEL courses .
	 Suggested to include Applied Mathematics in Chemical Engineering.
Dr. Umesh	• Suggested that Instrumentation or basic engineering skills should be
Deshannavar	learnt by students themselves and not to be taught.
	 Highlighted importance of dedicated course on Social Innovation.
	Suggested AICTE reference book list may be referred to.
	 Suggested NPTEL should be additional but not mandated. If it is
	guidelined by AICTE that NPTEL courses are to be chosen electives
	and there are not enough courses available in which cases it is
	necessary to have Plan B. Keep listed electives as plan B against
	NPTEL proposed electives.
#it	• When the student joins chemical engineering it is important for him to
	know what is the syllabus. Keeping Elective courses as NPTEL as
	surprise element may not be a good idea.
	Suggested that Advanced polymer composites may be framed as
	polymer composites.
Dr. Chetan S	Students when introduced to kinetic modelling either as par tof
Raghuveer	Technical Chemistry or Reaction Engineering should be encouraged

to calculate rate and solution to models using software tools.

- Basics of programming is important. Proposed basic MATLAB.
- It is better to give basics for everything in the syllabus than introduce any advance course.
- Said that the software tools available for the students are sufficient and good.
- Suggested that Instrumental methods of analysis to have as core.
- Suggested to involve Alumni expertise with respect to AI, IoT, Machine Learning and Big Data Analytics.

The BoS was convinced and agreed to have CPU in third semester. Convinced and agreed to have IMA in fifth semester. Committee agreed to have proposed list of courses available as plan B in case. Committee agreed to have Drawing component of Chemical Equipment Design and Drawing using drawing software.

All BoS members appreciated introduction of elective courses like Big Data, Machine Learning, and Artificial Intelligence.

Post discussion the BoS members approved UG 2018 scheme. Members appreciated and expressed that the mix of chemical engineering courses and interdisciplinary exposure.

19.3	Approval of 3rd and 4th semester syllabus of UG 2018 Scheme	
Dr. Vinod Kallur	 Presented draft syllabus of 3rd and 4th semester courses before the committee. Elaborated about clustering of Maths 3 and Maths 4. Proposed to have STARCCM+ and UNISIM as part of laboratory component for Process Simulation and Modeling. 	
Dr. M A Lourdu Antony Raj	 Suggested removal of Slurry Transport and Pneumatic conveying from Momentum Transfer as it is included in Particulate technology. Process Calcualtion: Explained formulation of Process Calculation syllabus. Highlighted on elimination of repetition between Mass Transfer and Process Calculation. Removed combustion problems of unit III from 16 scheme which is covered in material and energy balance in Unit V. Some additions in humidity and saturation chapter. Problems using humidity chart have been introduced. 	

	Tw. 2 1 m 2 4
	Particualte Technology:
	 Packed and fluidized bed has been shifted to momentum transfer.
	Reorganization of syllabus storage and conveying shifted to
	Unit II.
	Sedimentation has been shifted along with Motion of particles
	through fluids. Concept of equal settling velocities have been
	introduced.
f	Reorganization to bring all separation of solids together.
Dr. R Suresh	Momentum Transfer:
	Flow through packed and fluidized beds has been added from
	Particulate Technology.
	Tarrosano Tesmology.
	Heat Transfer:
	No major changes over 16 scheme syllabus.
	110 major changes over 10 seneme symbous.
	Inputs to Engineering Materials:
	Corrosion to be introduced in detail.
	Nanomaterial synthesis are to be removed.
	Alloys are to be introduced.
Dr. B R Veena	Proximate and ultimate is covered in CPC and may be
bi. bit voond	removed from CPU.
	Operational and construction part of Cooling Tower to be
	removed from Mass Transfer and introduced as Cooling
	Tower in CPU.
	Expressed that have STARCCM+ and UNISIM as part of
	laboratory component for Process Simulation and Modeling
	and assess both one from each may become complex for
	students.
	Suggested to send faculty for a formal training on AI, loT.
	Machine Learning and Big Data analytics.
	Expressed concern over Gibbs free energy applications for
	Photosynthesis . glycolysis may be difficult for chemical
	engineering students.
	Thermodynamics:
(6)	Suggested not to combined to have common syllabus between
	Chemical and Biotechnology. Expressed that aspects Unit V is
	not applicable to chemical engineers.
	Reference book on Foust for Particulate technology.

	 Expressed concern over repetition of evaporator concepts i Heat Transfer and Process Calculation. Was convinced and agreed post syllabus review.
Dr. Umesh Deshannavar	Chemical Plant Utilities: Insulation may be removed from CPU as it would is taught in heat transfer. Water treatment for plant service requirement can be added.
(9)	Testing of models in Process in Process control was suggested. Chemical Technology: Industrial starch derivatives to be added along with starch.
Dr. Chetan S Raghuveer	Appreciated the proposal of introducing Simulink as part of Process Control Laboratory component.
Other	
	 Suggested to remove repetition between Transport phenomena and Heat, Mass and Momentum transfer courses. Appreciated the proposal of introducing Simulink as part of Process Control Laboratory component. Chemical Plant Utilities: Safety component from 16 scheme is removed and cooling towers has been added. Thermodynamics: Unit V has been changed to accommodate biotechnology component. Dr. Vijayakumar explained concepts in Unit V are general and easily can be learnt by Chemical Engineering students.
	Chemical Technology: Unit V chapter on polymer and rubber has been reduced. No further change over 16 scheme.

Post extensive discussion the BoS members approved 3rd and 4th semester provisional syllabus under UG 2018 scheme. Members appreciated the care taken in proper organization of syllabus components.

19.4	Approval of Equivalence of courses of PG 2016 and courses of PG 2018.
Dr. R Suresh	Explained about courses that need equivalence in 3 rd semester PC

Page 6 of 8

All members reviewed the syllabus and approved the equivalence.

19.5 Swayam and NPTEL courses as professional electives 18.

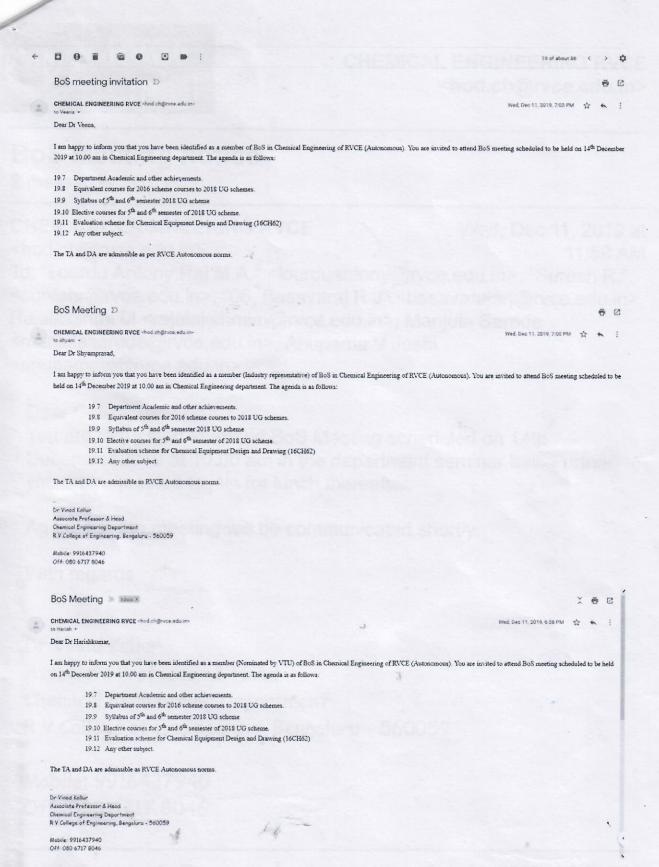
- Committee member expressed their opinion strongly that mandating NPTEL courses in place of local electives should not be mandated.
- In case mandated, based on the courses available in SWAYAM and NPTEL or any other
 equivalent MOOC course at the time of beginning of 5th semester department to
 carefully choose a set of four courses for credit transfer for electives. It was
 recommended that 12 weeks course are to be chosen for elective group.
- As a plan B set of local electives are to be defined and retained. Set of local electives are
 to be anyway defined in case of non-availability of courses.

The meeting ended with a vote of thanks by Dr. Vinod Kallur.

1	Dr Vinod Kallur	Associate Professor and Head.	July 3, 5, 19
2	Dr M A Lourdu Antony Raj	Professor	1. d. Lowden Ante
3	Dr R Suresh	Professor	19/3/19
4	Dr Basavaraja R J	Associate Professor	exposition of the
5	Dr Rajalakshmi M	Assistant Professor	Rajalakhmin 9/1/2
7	Smt AnupamaV Joshi	Assistant Professor	10 3/5 /19.
8	Dr B R Veena	Associate Professor, Chemical Engineering Department Dayananda Sagar College of Engineering, Bengaluru 560 078.	Bayy 03/05/19
9	Dr Chetan Raghuveer	Enfros Technologies Pvt. Ltd Bengaluru	- 105/19
10	Baijayanthi Ghosh	Head. Department of Coatings, INM Technologies, T M	Sailartah

Page 7 of 8

		Industrial Estate, Kenchanahalli Mysore Road, Bengaluru – 560059	
11	Dr Umesh B. Deshamavar	Professor & Head Department of Chemical Engineering KLE Dr. M. S. Sheshagiri College of Engineering & Technology Belgaum - 590 008	Behannavar 03.05.2019



Ok 200



CHEMICAL ENGINEERING RVCE hod.ch@rvce.edu.in>

BoS Meeting notice

2 messages

CHEMICAL ENGINEERING RVCE

Wed, Dec 11, 2019 at

<hod.ch@rvce.edu.in>

11:59 AM

To: "Lourdu Antony Raj M.A." <lourduantony@rvce.edu.in>, "Suresh R." <sureshr@rvce.edu.in>, "06. Basavaraj R J" <basavarajarj@rvce.edu.in>, Rajalakshmi M <rajalakshmim@rvce.edu.in>, Manjula Sarode <manjulasarode@rvce.edu.in>, Anupama V Joshi <anupamavj@rvce.edu.in>

Dear Colleagues,

You are requested to attend BoS Meeting scheduled on 14th December 2019 at 10.00 am in the department seminar hall. Further you are requested to join for lunch thereafter.

Agenda of the meeting will be communicated shortly.

With regards

Dr Vinod Kallur
Associate Professor & Head
Chemical Engineering Department
R V College of Engineering, Bengaluru - 560059

Mobile: 9916437940 Off: 080 6717 8046

Suresh R. <sureshr@rvce.edu.in> Thu, Dec 12, 2019 at 6:31 PM To: CHEMICAL ENGINEERING RVCE <hod.ch@rvce.edu.in>

Dear sir 14
As I have some urgent work kindly excuse me.I will be on leave

CHEMICAL ENGINEERING DEPARTMENT R V College of Engineering, Bengaluru (Autonomous Institute affiliated to VTU, Belagavi)

BoS Meeting 14th December 2019 Minutes of the Meeting

Meeting of Board of Studies was called on 14th December 2019. The agenda for the meeting was as follows.

- 19.7 Department Academic and other achievements.
- 19.8 Equivalent courses for 2016 scheme courses to 2018 UG schemes.
- 19.9 Syllabus of 5th and 6th semester 2018 UG scheme
 19.10 Elective courses for 5th and 6th semester of 2018 UG scheme.
- 19.11 Evaluation scheme for Chemical Equipment Design and Drawing (16CH62)
- 19.12 Any other subject.

BoS Members:

Sl. No.	Names	Designation	Signature
1	Dr Vinod Kallur	Chairman, Associate Professor & Head	All 4. 12:19
2	Dr M A Lourdu Antony Raj	Member, Professor	TA. Xmohn Antony R
3	Dr R Suresh	Member, Professor	Leave of absence
4	Dr Basavaraja R J	Member, Associate Professor	Haland
5	Dr Rajalakshmi M	Member, Assistant Professor	Resolution: 17, 14/12/19
6	Dr Manjula Sarode	Member, Assistant Professor	Leave of absence
7	Smt Aunapama Joshi	Member, Assistant Professor	naturally leave
8	Dr Harish Kumar S	VTU Nominee, Professor, MIT, Manipal	Shah iule
9	Dr K B Shyam Prasad	Industry Representative Master Engineer Momentive Performance Materials India Pvt. Ltd. Bengaluru	dignily
10	Baijayanthi Ghosh	Alumni Representative Head, Department of Coatings, INM Technologies, Bengaluru	baijantant 14/19
11	Dr B R Veena	External Member. Associate Professor, DSCE, Bengaluru	Leave of absence

CHEMICAL ENGINEERING DEPARTMENT

R V College of Engineering, Bengaluru (Autonomous Institute affiliated to VTU, Belegavi)

Minutes of Board of Studies in Chemical Engineering held on 14th December 2019

Dr. Vinod Kallur, Head of the department welcomed the members.

The following points were discussed:

Agenda #	da # Discussions and Resolutions			
19.7	Department Academic and other achievements			
apprecia Student	• Dr. Vinod Kallur presented the department academic and other achievements. Members appreciated the entrepreneurial spirit of Alumni Nivedha who is recognized internationally. Student achievements and parents published were also appreciated.			
Dr. Vince	od Kallur also discussed about introducing Design thinking Lab in the curriculum aractivity points.	nd		

Agenda #	Agenda # Discussions and Resolutions	
19.8	COLOTIO 1	
• The cred	dit difference two schemes 2016 and 2018 is 25 credits. Members suggested that the may be conducted in parallel if the content of the syllabus for the same course differs. er possible the common course or content may be covered commonly.	

Agenda #	Discussions and Resolution	ıs	
19.9	Syllabus of 5 th and 6 th semester 2018 UG scheme		

- The scheme of 5th and 6th semester already approved was presented.
- Action taken on the feedback by the stake holders was discussed. Instrumental Methods of Analysis is included in the syllabi as per the feedback received from Alumni
- It was suggested the course Instrumental Methods of Analysis (18CH55) should include introduction chapter in errors in experimental observation and few general aspects of analysis such as calibration and sampling methods. Dr. Shyam Prasad accepted to extend his help in this regard.
- Dr, Harish Kumar opined that Internship at the end of 4th semester is too early. He suggested shifting to the end of 6th semester.
- The committee approved for inclusion of Minor Project in 6th Semester and for the for the following electives.
 - Internet of Things (18CS6C1) in 5th Semester
 - Energy conversion systems (18CH7F4) in 7th Semester
 - Machine Learning (18CS6D1) in 6th semester

	Discussions and Resolutions
Agenda #	
19.10	Elective courses for 5 th and 6 th semester of 2018 UG scheme.

- Introduction of MOOCS courses as a group in elective was well appreciated.
- The members expressed the concern that the student may have to pay fees to register for the elective. This is concern as the student has already paid tuition fees. It is recommended that the License for platform offering MOOCS may be obtained by the institute.



RV COLLEGE OF ENGINEERING®, Bengaluru - 59

Department of Chemical Engineering

www.rvce.edu.in; hod.ch@rvce.edu.in; +91-9916437940; 080-6717 8046

Agenda#	Agenda # Discussions and Resolutions	
19.11	Evaluation scheme for Chemical Equipment Design and Drawing (16CH62)	

- The members recommended that CIE for Chemical Equipment Design and Drawing (16CH62) may be conducted for 150 marks and be reduced to 100. The CIE will have two components (i) 100 marks for tests, quizzes and selfstudy. (ii) Marks for Practice / Laboratory will have 50 marks.
- SEE to have 100 marks for and three hours duration.

Agenda#	Discussions and Resolutions		
19.12	Any other subject		

- In any other subject, credit difference between 2016 and 2012 schemes was discussed.
- The following students were admitted in 2012 scheme and subsequently joined 2016 scheme in 3rd semester onwards.

Sl. No.	Name	USN
1.	Parth Bharadwaj	1RV15CH043
2.	Shalom N Oguri	1RV15CH028

• The students will complete 198 credits in 2016 scheme falling short of two credits. The students are permitted to take an additional course Constitution of India and Legal Studies for Engineers (16HSC16) to make up for two credits.

Meeting concluded thanking the members.



-	Semester:	VI	
	CHEMICAL EQUIPMENT DE	SIGN AND DRAWING	
	(Theory & Pr	actice)	
Cou	rse Code: 16CH62	CIE Marks: 100	
Cre	dits: L:T:P:S: 3:0(1)1	SEE Marks: 100	
Hou	Hours: 36L SEE Duration: 3Hrs		
Cou	rse Learning Objectives:		
1	1 Understand the chemical engineering principles applicable to design chemical engineering		
	equipment.		
2	2 Apply standard codes for design of chemical plant equipment.		
3	3 Develop skill to design process equipment used widely in the chemical industry.		
4	4 Impart practical knowledge on the shape and drawing of the process equipment.		

Unit-I	
Process and Mechanical Design and Drawing of Heat Exchanger: Types of Heat exchanger, process design of Double pipe heat exchanger and shell and tube heat exchanger. (The detailed dimensional drawings shall include sectional front view, Full Top/side view).	08 Hrs
Unit – II	
Process and Mechanical Design and Drawing of Condenser: Types of condensers process design of horizontal and vertical condensers. (The detailed dimensional drawings shall include sectional front view, Full Top/side view)	07 Hrs
Unit -III	
Process and Mechanical Design of evaporator: Introduction, types of evaporators, methods of feeding of evaporators, general design consideration of Single Effect evaporator. (The detailed dimensional drawings shall include sectional front view, Full Top/side view)	07 Hrs
Unit –IV	
Process design of distillation column: Design of bubble cap distillation column. (The detailed dimensional drawings shall include sectional front view, Full Top/side view and bubble cap view).	07Hrs
Unit –V	
Process design of absorption column: Design of packed bed absorption column. (The detailed dimensional drawings shall include sectional front view, Full Top/side view)	07Hrs

Course	Outcomes: After completing the course, the students will be able to	
CO1:	Understand design procedure of process equipments.	
CO2:	Apply chemical engineering principles to design process equipments.	
CO3:	Estimate physical dimensions of various parts of chemical process equipments and accessories	
CO4:	Analyze various design options at all design stages	

Refere	ence Books
1	Chemical Engineers Handbook, R.H.Perry and D.W.Green, 7th Edition, 1998, McGraw Hill, ISBN: 0-07-115982-7.
2	Chemical Engineering, J.M.Coulson and J.F.Richardson, Vol.6, 3 rd Edition 1993, Pregman Press, ISBN: 0750641428.
3	Process Equipment Design, Brownell and Young, 1 st Edition, 1959, Wiley publications, ISBN: 0471113190.
4	Process Equipment Design, M.V.Joshi, 3rd Edition, Reprint 1998, Macmillan and Co. India, Delhi, ISBN 023-063-8104.

Continuous Internal Evaluation (CIE); Theory (100 Marks)

CIE is executed by way of quizzes (Q), tests (T), Self-study (S) and Laboratory (L). A minimum of three quizzes are conducted and each quiz is evaluated for 10 marks adding up to 30 marks. All quizzes are conducted online. Faculty may adopt innovative methods for conducting quizzes effectively. The number of quizzes may be more than three also. The three tests are conducted for 50 marks each and the sum of the marks scored from three tests is reduced to 50. The marks for self-

Practice/Laboratory - 50 marks

Drawing practice of designed equipments (10 problems) will be evaluated for 40 marks and Viva is

The total marks obtained in theory and practice (100+50) will be reduced to 100 and awarded as CIE

Semester End Evaluation (SEE); Theory (100 Marks)

SEE for 100 marks is executed by means of an examination. The Question paper for each course contains two parts, Part - A and Part - B. Part - A consists of objective type questions for 20 marks covering the complete syllabus. Part - B consists of two questions carrying 80 marks for the design and sketch of equipment. Student is required to answer any one. There shall not be split of equipments

CO/PO	DOI	DOG	1		CO-	PO Ma	pping					
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	POO	PO10	nous	
CO1	2	1	1	_=			-	100	109	POIO	PO11	PO12
CO ₂	3	3	2	2	1	1	-	-	-	9 1		-
CO3	1	1	2	2	2	1	-		1 .		-	-
CO4	`3	3	2	2	2	1	2	-	-	-	-	-
				3	2	2	3	1	1	1	1	

High-3: Medium-2: Low-1

Submitted > Approved to Conduct CIE for 150 rudued to 100. The 100 mark in for theory & 50 is for practical. This has approved from Bos. of chemical Eigeneing department. N.K. fink

CHEMICAL ENGINEERING DEPARTMENT RV College of Engineering®, Bengaluru (Autonomous Institute affiliated to VTU, Belagavi)

Date: 5th March 2020

Board of Studies meeting, Chemical Engineering

Following are the agenda points

19.13	To read and record the minutes of previous meeting;
19.14	Approval for modification in the 2018 scheme;
19.15	The second of th
19.16	Approval for electives offered by other departments;
19.17	Guidelines for BE Honors;
19.18	Approval of detailed syllabus of 5 th and 6 th semester of 2018 scheme;
19.19	Offering Energy systems as Global Elective for other PG programs;
19.20	Any other subject.

Bos Members

	Names	Address	Signature
1	Dr Vinod Kallur	Chairman, Associate Professor and Head	dala
		Department of Chemical Engineering	Cham
2	Dr M A Lourdu Antony Raj	Member, Professor	MA. Lander Antse
3	Dr R Suresh	Member ,Professor	121
		Department of Chemical Engineering	
4	Dr Basavaraja R J	Member, Associate Professor	Pokalanan
5	Dr Rajalakshmi M	Member, Assistant Professor	Biolotahni-M
6	Dr Manjula Sarode	Member, Assistant Professor	5 Maryut
7	Smt AunapamaV Joshi	Member, Assistant Professor	Natornata logue
		Associate Professor, Chemical	N SOCIATION PROCES
8	Dr B R Veena	Engineering Department	- 1
0	DI B R Veena	Dayananda Sagar College of	VeenaBR
		Engineering, Bengaluru 560 078.	05/03/2020
		Prof & Head, Chemical Engineering	
9	Dr G N Rameshaiah	BMS College of Engineering	(m 6-
		Bull Temple Road, Bangalore 560019	5.3.202
		Professor	
10	Dr Harish Kumar S	Department of Chemical Engineering	101.
10	Di Harisii Kumai S	Manipal Institute of Technology,	1300
		Manipal - 576104	5/3/201
		Master Engineer	1
11	Dr. V. D. Shyam Proced	Momentive Performance Materials India	Leave of absence
1	Dr K B Shyam Prasad	Pvt. Ltd. Survey No: 9, Electronics City	
		Phase 1, Bengaluru – 560100	•
		Head of the Department	" i and onth
12	Smt Paijayanthi Ghash	Department of Coatings, INM	bai and mil
12	Smt.Baijayanthi Ghosh	Technologies, T M Industrial Estate,	75/3/2020
		Kenchanahalli, Bengaluru – 560059	

CHEMICAL ENGINEERING DEPARTMENT RV College of Engineering®, Bengaluru (Autonomous Institute affiliated to VTU, Belagavi)

Minutes of Board of Studies in Chemical Engineering held on 5th March 2020

Dr Vinod Kallur, Chairman, BoS, welcomed the members.

The following points were discussed:

Agenda #	Discussions and Resolutions	
19.13	To read and record the minutes of previous meeting;	
	ates of the previous meeting were read and recorded.	

Agenda #	Discussions and Resolutions
19.14	Approval for modification in the 2018 scheme;

Changes made in the joint BoS meeting were discussed.

The committee suggested replacing Numerical methods course with a course that incorporates mathematics. The committee approved the replacement of existing electives (Operations Research, Sustainability) with other electives in line with the suggestions from Joint BoS.

Agenda #	Discussions and Resolutions
19.15	Selection and approval for NPTEL Courses to be offered as professional elective of 2018 scheme;

The committee approved the inclusion of MOOCS courses as electives for V semester

The committee suggested following four MOOCS courses as electives:

- 1. Electrochemical Technology in pollution control
- 2. Environmental Quality Monitoring and Analysis
- 3. Multiphase flows
- 4. Membrane Technology

Assessment of MOOCs course is different from regular CIE and SEE evaluation. This difference may be suitably addressed.

The committee expressed their concern if the students fail in MOOCS elective and what steps to be taken for such students.

Agenda #	Discussions and Resolutions
19.16	Approval for electives offered by other departments;

It is resolved to include the Machine learning (CS Board) and Big data analytics (IEM Board) as elective courses for Chemical Engineering Program (UG).

CHEMICAL ENGINEERING DEPARTMENT RV College of Engineering®, Bengaluru (Autonomous Institute affiliated to VTU, Belagavi)

Minutes of Board of Studies in Chemical Engineering held on 5th March 2020

Agenda #	Discussions and Resolutions
19.17	Guidelines for BE Honors;
	mittee suggested to include publication (2 Credits) in addition to MOOCs courses by

The committee suggested to include publication (2 Credits) in addition to MOOCs courses by the students for the award of BE Honors.

Agenda #	Discussions and Resolutions
19.18	Approval of detailed syllabus of 5 th and 6 th semester of 2018 scheme;
	the syllabi of all the courses of 2018 scheme were discussed and approved by the committee

Agenda #	Discussions and Resolutions
19.19	Offering Energy systems as Global Elective for other PG programs;
Offering glob	al elective for PG (Energy Management) was accepted.

Agenda #	Disci	ssions and Resolutions
19.20	Any other subject.	
Members suc	grested to explore the possibility of incl	uding Biochemical Engineering as core course.

leeting concluded thanking the members.



RV Educational Institutions ® RV College of Engineering

Autonomous Institution Affiliated to Visvesvaraya Technological University, Belagavi Approved by AICTE, New Delhi

DEPARTMENT OF CHEMICAL ENGINEERING

Dr. Vinod Kallur Associate Professor & HoD

Phone: 080-68188223; e-mail: hod.ch@rvce.edu.in

for the BoS Meeting held on 5th March 2020 The

Agenda #	Agenda Details	These electives are replaced with Water conservation Management and Biofuel Engineering Tof	
19.13	To read and record the minutes of previous meeting.		
19.14	Approval for modification in the 2018 scheme The committee approved the replacement of existing electives Operations Research and Sustainability with other electives.		
19.15	Selection and approval for NPTEL Courses to be offered as professional elective of 2018 scheme Committee suggested the following courses to be considered: 1. Electrochemical Technology 2. Environmental Quality Monitoring, Analysis 3. Multiphase flows 4. Membrane Technology Steps to be taken for NPTEL Failed students	The course suggested were not available in the NPTEL Portal. Following courses were offered: 1. Fluidisation Engineering 2. Polymers: Concepts, properties, uses and sustainability 3. Downstream techniques in bioprocess 4. Fundamentals of micro and nanofabrication 5. Th joy of computing using PYTHON The students who fail in these courses were asked to take the same courses when it was again offered. Students accordingly registered for the courses.	
19.16	Approval for electives offered by other departments Suggested that Machine learning (CS Board) and BIG Data analytics (IEM Board)	Machine Learning (CS Board) is included in the curriculum Instead of Big Data, Internet of Things (CS Baord) is included in the curriculum	
19.17	Guidelines for BE Honors: Suggestion to include 2 credits for publication	Publication is a skill and is evaluated as part of project work. There are no credits allocated for publication.	
19.18	Approval of detailed syllabus of 5 th and 6 th semester of 2018 scheme	Incorporating the suggestions given in agenda points 19.14, 19.15, 19.16 the syllabus is implemented.	
19.19	Offering Energy systems as Global Elective for other PG programs;	The global elective (Energy Management) has been included in the PG syllabus	
19.20	Any other subject. Suggestion to include Biochemical Engineering as a core course.	Since there is a constraint of reduced credits, this suggestion is not incorporated and is included as an elective.	

Mohni Achung

Kyn

July 18:3:22

Newa-B.R. Pejalshiri.T.
18/3/22

John 18/3/22



Autonomous Institution Affiliated to Visvesvaraya Technological University, Belagavi Approved by AICTE, New Delhi

ACTION TAKEN REPORT for the BoS Meeting held on 5th March 2020

SI. No.	Names	Designation	Signature
1.	Dr. Vinod Kallur	Chairman BoS, Associate Professor and HoD	18.3.22
2.	Dr Harish Kumar S	VTU Nominee (External), Professor	attended Online
3.	Dr K B Shyam Prasad	Industry Representative	Kguir
4.	Dr B R Veena	External Member, Professor	NewaBA.
5.	Ms Mohini V. Acharya	Alumni Representative, Entrepreneur	Mohnin Achnesse
6.	Dr R Suresh	Member, Professor	And
7.	Dr Basavaraja R J	Internal Member, Associate professor	Hodonary 18.03.22
8.	Dr Rajalakshmi M	Internal Member, Assistant professor	Rojelothni.11 18/3/22
9.	Dr Manjula Sarode	Internal Member, Assistant professor	a Mary 18/3/22
10.	Ms Anupama Joshi	Internal Member, Assistant professor	John 18/3/22



CHEMICAL ENGINEERING RVCE < hod.ch@rvce.edu.in>

Board of Studies meeting

CHEMICAL ENGINEERING RVCE <hod.ch@rvce.edu.in> To: Veena Sridhar <veenasridhara@gmail.com>

Tue, Mar 15, 2022 at 2:15 PM

Dear Dr Veena,

Greetings from the department of Chemical Engineering!

We have scheduled a Board of Studies (Autonomous, Chemical Engineering) meeting on 18th March 2022 at 10.00 am in the department seminar hall. The agenda is as follows:

- 1. Activities of the department in the previous year
- 2. Salient features of 2021 scheme
- 3. Feedback of Alumni and current final year students
- 4. Finalization and approval of scheme and syllabus of 3rd and 4th semester 2021 scheme.
- 5. Evaluation in 2021 scheme
- 6. Any other subject with the permission of the chair

You are requested to attend the meeting as per the schedule.

You are eligible for TA and DA as per RVCE Autonomous norms.

With best regards,

Dr Vinod Kallur
Associate Professor & Head
Chemical Engineering Department
R V College of Engineering, Bengaluru - 560059

Mobile: 9916437940 Off: 080 6818 8223



CHEMICAL ENGINEERING RVCE <hod.ch@rvce.edu.in>

Board of Studies meeting

1 message

CHEMICAL ENGINEERING RVCE < hod.ch@rvce.edu.in>
To: Mohini Acharya < mohini.acharya@gmail.com>

Tue, Mar 15, 2022 at 2:30 PM

Dear Mohini,

Greetings from the department of Chemical Engineering!

We have scheduled a Board of Studies (Autonomous, Chemical Engineering) meeting on 18th March 2022 at 10.00 am in the department seminar hall. The agenda is as follows:

- 1. Activities of the department in the previous year
- 2. Salient features of 2021 scheme
- 3. Feedback of Alumni and current final year students
- 4. Finalization and approval of scheme and syllabus of 3rd and 4th semester 2021 scheme.
- 5. Evaluation in 2021 scheme
- 6. Any other subject with the permission of the chair

You are requested to attend the meeting as per the schedule.

You are eligible for TA and DA as per RVCE Autonomous norms.

With best regards,

Dr Vinod Kallur Associate Professor & Head Chemical Engineering Department R V College of Engineering, Bengaluru - 560059

Mobile: 9916437940 Off: 080 6818 8223



CHEMICAL ENGINEERING RVCE < hod.ch@rvce.edu.in>

Invitation for BoS Meeting

5 messages

CHEMICAL ENGINEERING RVCE < hod.ch@rvce.edu.in>
To: "Harish S. Kumar [MAHE-MIT]" < harish.kumar@manipal.edu>

Tue, Mar 15, 2022 at 2:15 PM

Dear Dr Harish.

Greetings from the department of Chemical Engineering!

We have scheduled a Board of Studies (Autonomous, Chemical Engineering) meeting on 18th March 2022 at 10.00 am in the department seminar hall. The agenda is as follows:

- 1. Activities of the department in the previous year
- 2. Salient features of 2021 scheme
- 3. Feedback of Alumni and current final year students
- 4. Finalization and approval of scheme and syllabus of 3rd and 4th semester 2021 scheme.
- 5. Evaluation in 2021 scheme
- 6. Any other subject with the permission of the chair

You are requested to attend the meeting as per the schedule.

You are eligible for TA and DA as per RVCE Autonomous norms.

With best regards,

Dr Vinod Kallur Associate Professor & Head Chemical Engineering Department R V College of Engineering, Bengaluru - 560059

Mobile: 9916437940 Off: 080 6818 8223

Harish S. Kumar [MAHE-MIT] <harish.kumar@manipal.edu>
To: CHEMICAL ENGINEERING RVCE <hod.ch@rvce.edu.in>

Tue, Mar 15, 2022 at 4:47 PM

Dear Dr Vinod,

Greetings from Manipal Institute of Technology (MIT), Manipal Academy of Higher Education (MAHE), Manipal.

As discussed, I am not in a position to attend the meeting physically. Kindly let me know whether I can join online.

Thank you



CHEMICAL ENGINEERING RVCE < hod.ch@rvce.edu.in>

Board of Studies meeting

CHEMICAL ENGINEERING RVCE < hod.ch@rvce.edu.in>
To: shyam prasad < kbshyamprasad@gmail.com>

Tue, Mar 15, 2022 at 2:16 PM

Dear Dr Shyamprasad,

Greetings from the department of Chemical Engineering!

We have scheduled a Board of Studies (Autonomous, Chemical Engineering) meeting on 18th March 2022 at 10.00 am in the department seminar hall. The agenda is as follows:

- 1. Activities of the department in the previous year
- 2. Salient features of 2021 scheme
- 3. Feedback of Alumni and current final year students
- 4. Finalization and approval of scheme and syllabus of 3rd and 4th semester 2021 scheme.
- 5. Evaluation in 2021 scheme
- 6. Any other subject with the permission of the chair

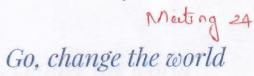
You are requested to attend the meeting as per the schedule.

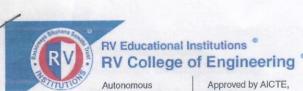
You are eligible for TA and DA as per RVCE Autonomous norms.

With best regards,

Dr Vinod Kallur
Associate Professor & Head
Chemical Engineering Department
R V College of Engineering, Bengaluru - 560059

Mobile: 9916437940 Off: 080 6818 8223





Institution Affiliated to Visvesvaraya Technological University, Belagavi Approved by AICTE, New Delhi

DEPARTMENT OF CHEMICAL ENGINEERING **Board of Studies**

Date: 18th March 2022

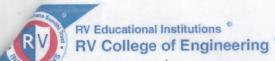
Venue: Chemical Engineering Seminar Hall

Meeting of Board of Studies was called on 18th March 2022. The agenda for the meeting as follows:

- 22.1 Read and record the minutes of previous meeting
- HoD presentation on recent achievements and improvements of the department. 22.2
- Salient features of 2021 scheme
- Finalization of 3rd and 4th semester scheme and syllabus 22.4
- Any other subjects with the permission of the chair 22.5

BoS Members present:

SI. No.	Names	Designation	Signature	
1.	Dr. Vinod Kallur	Chairman BoS, Associate Professor and HoD	July 18.03.22	
2.	Dr Harish Kumar S	VTU Nominee (External), Professor	attended Online	
3.	Dr K B Shyam Prasad	Industry Representative	Span	
4.	Dr B R Veena	External Member, Professor	New BR.	
5:	Ms Mohini V. Acharya	Alumni Representative, Entrepreneur	Mohini Achungo	
6.	Dr R Suresh	Member, Professor	3	
7.	Dr Basavaraja R J	Internal Member, Associate professor	flagaral 15.03.22	
8.	Dr Rajalakshmi M	Internal Member, Assistant professor	Rojalokhmin 18/3/12	
9.	Dr Manjula Sarode	Internal Member, Assistant professor	& Harrig 13/22.	
10.	Ms Anupama Joshi	Internal Member, Assistant professor	Joda 18 3 22	



Autonomous Institution Affiliated to Visvesvaraya Technological University, Belagavi Approved by AICTE, New Delhi

DEPARTMENT OF CHEMICAL ENGINEERING Board of Studies

Minutes of Meeting - held on Friday, 18th March 2022

Dr. Vinod Kallur, HoD-Chemical Engineering welcomed all the members and gave a brief update about the Department activities and achievements of the last year.

The following points were discussed.

Agenda# 22.1	Read and record the minutes of previous meeting
	Discussion and Resolution
The minute	es of the previous meeting were read and recorde.

22.2	HoD presentation on recent achievements and improvements of the department.	
	Discussion and Resolution	

- 1. Departmental activities and various achievements were briefed by HoD.
- 2. HoD briefed about UG placement activities.
- 3. The recent developments on the patent publications were briefed
- The centre for Hydrogen and Green technology and its activities over the year were introduced. He also mentioned that student chapter of Indian plastic Institute is established.
- 5. MOU's of the Department with the various agencies were briefed.

Agenda # 22.3	Salient features of 2021 scheme
	Discussion and Resolution

- 1. Some of the salient features of 2021 scheme was introduced to the members including the total number of credits and experiential learning component.
- 2. An overview of the first-year scheme was given highlighting the importance of IDEA Lab, Design lab, Yoga and Indian knowledge system.
- 3. General template from 3rd to 8th semester was shown and course allotment and category based on the AICTE, and VTU guidelines was also discussed.
- 4. The credit distribution over 3rd to 8th semester, professional core, professional elective, global elective, MOOC course, project work was introduced to the members.

Institution Affiliated to Visvesvaraya Technological University, Belagavi Approved by AICTE, New Delhi

Agenda # 22.4	Finalization of 3 rd and 4 th semester scheme and syllabus	
22.4	Discussion and Resolution	

The scheme proposed for 3rd and 4th semester was presented and the members approved for the same. The syllabus of the 3rd semester was discussed in detail and the course wise deliberations are listed below. Action taken on the feedback by the stake holders was discussed.

Momentum transfer (21CH33)	Shyam Prasad opined that some topics of the momentum transfer Unit I appears to be overlapping with the CBSE + 2 class and can be eliminated.
Process calculations (21CH32)	Dr Veena opined that recycle, bypass and purging with reactions can be eliminated to reduce the content and it was clarified that it was already done so.
Engineering Mathematics – III (21MA31C)	The topics covered in the mathematics was discussed. There was suggestion that Laplace transform need not be repeated in Process Control.
Thermodynamics (21CH45)	Dr. Veena suggested that there are a few topics which overlaps with the CBSE + 2 syllabus and students already would have studied it and such topics may be ignored
Engineering Mathematics – IV (21MA41)	Members felt that the Machine learning word can be eliminated from the title
Industrial Chemistry (21CH36)	Approval was taken to include Industrial Chemistry in the scheme Shyam Prasad appreciated that it is in line with the industry which are all going green and being sustainable.
Summer Internship- I (21CH310)	Approval was taken to include Summer Internship- I in the scheme

Approval was taken for the proposed NPTEL courses (subjected to change as per the availability at the time of the semester):

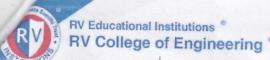
- 1. Technologies For Clean and Renewable Energy Production
- 2. Colloids and Surfaces
- 3. Natural Gas Engineering
- 4. Application of Spectroscopic Methods in Molecular Structure Determination
- 5. Introduction to Polymer Science

Dr. Shyam Prasad suggested that the opinion that the undergraduate syllabus should be a bridge between +2 and industry and graduate study.

Discussed about open-ended experiments that were added in lab component of the courses as per the action taken on the feedback by the students

The changes suggested by the members are incorporated in the syllabus and it is finalised.

Neeva-18/3/22 Bejalethini. 1



Autonomous Institution Affiliated to Visvesvaraya Technological University, Belagavi Approved by AICTE, New Delhi

Agenda # 22.5	Any other subjects with the permission of the chair
****	Discussion and Resolution

HOD presented a case for scheme change from 2016 to 2018 for a student, Samanvitha Aurya B, bearing USN 1RV18CH407. The student joined to 3rd semester as lateral entry student in 2016 scheme. She could pass some courses in 3rd and 4th semester. For personal reasons she discontinued her studies. She expressed willingness to resume her studies by joining 5th semester in the next academic year 2022-23. However, for 5th semester there will be 2018 scheme. Since the courses in 3rd and 4th semesters in 2016 and 2018 scheme are same, (except design thinking lab) HOD proposed that she may be permitted to join 5th semester in 2018 scheme with a condition that she will complete her 3rd and 4th semester courses in 2016 scheme. The members approved that she may be permitted to join 5th semester in 2018 scheme by adjusting the credits as it may be necessary.

Dean, academics addressed the members and gave brief overview about the experiential learning, ability enhancement program and internships.

Dr Veena greatly appreciated the efforts of the institution in incorporating the experiential learning and many internships and opined that sometimes it is necessary to go on the trial basis to weigh the outcomes.

Meeting concluded with Charman thanking the members.

July 18.3.22

18/3/22

32

RV Educational Institutions ® RV College of Engineering

Autonomous Institution Affiliated to Visvesvaraya Technological University, Belagavi

Approved by AICTE, New Delhi

DEPARTMENT OF CHEMICAL ENGINEERING

Dr. Vinod Kadur Associate Professor & HoD

Phone: 080-68188223; e-mail: hod.ch@rvce.edu.in

RVE / CHEM /

/22-23

Date: 22.11.2022

Constitution of Board of Studies Chemical Engineering (Autonomous), RV College of Engineering, Benagaluru-560059

As per the communication from Visvesvaraya Technological University, Belagavi and the extract of proceedings of 34th Academic Council Meeting held on 20th August 2022, the following Board of Studies is constituted for the term 2022-2024.

Category	SI No	Name & Address
Chairperson	1	Dr Vinod Kallur, Associate Professor and Head. Department of Chemical Engineering R.V. College of Engg. Mysore Road, Bangalore-560059 Mob:9916437940 Email: vinodkallur@rvce.edu.in
	1	Dr Suresh R, Professor, Department of Chemical Engineering R.V. College of Engg. Mysore Road, Bangalore-560059 Mob:9964116340 Email: sureshr@rvce.edu.in
Faculty members at different levels, covering different specialization	2	Dr Jagadish H Patil, Associate Professor Department of Chemical Engineering R.V. College of Engg. Mysore Road, Bangalore-560059 Mob:7975330206 Email: jagadishhpatil@rvce.edu.in
to be nominated by the Academic Council	3	Dr Vidya C, Assistant Professor Department of Chemical Engineering R.V. College of Engg. Mysore Road, Bangalore-560059 Mob:9620166222 Email: vidyacl@rvce.edu.in
1	4	Dr Rajalakshmi M, Assistant Professor Department of Chemical Engineering R.V. College of Engg. Mysore Road, Bangalore-560059, Mob:99535455117 Email: rajalakshmim@rvce.edu.in



RV Educational Institutions ** RV College of Engineering **

Autonomous Institution Affiliated to Visvesvaraya Technological University, Belagavi

Approved by AICTE, New Delhi

DEPARTMENT OF CHEMICAL ENGINEERING

Dr. Vinod Kallur Associate Professor & HoD

Phone: 080-68188223; e-mail: hod.ch@rvce.edu.in

A HOD		
	5	Dr Ujwal Shreenag M, Assistant Professor Department of Chemical Engineering R.V. College of Engg. Mysore Road, Bangalore-560059 Mob:8050842363 Email: ujwalshreenagm@rvce.edu.in
	-4	Dr M G Basavaraj
	1	Associate Professor Department of Chemical Engineering Indian Institute of Technology- Madras, Chennai 600 036
Subject Experts from		Cell: 9003235220
outside the college to be		E mail:basa@iitm.ac.in
nominated by the		Dr Balakriahna Prabhu
Academic Council		Professor & Head
	2	Department of Chemical Engineering
	2	Manipal Institute of Technology
		Pin Code:576104
		Cell: 9880530636
		E mail:balakrihna.prabhu@manipal.edu Dr Vidya Shetty
Subject Experts from outside the college (VTU Nominee)	1	Professor Department of Chemical Engineering National Institute of Technology Karnataka –Surathkal Srinivasnagar P.O, Mangalore -575025 Cell: 9844771919 E mail:vidyaks@nitk.ac.in
Representative from		Dr Chetan Raghuveer
Industry/Corporate Sector/ Allied area relating to Placement, to be nominated by the Academic Council	1	Director, Enfros Technologies Pvt Ltd ,109,1 st Phase Harohalli Industrial are, Bengaluru-562112 Cell: 968223007 E mail:chetan.raghuveer@gmail.com
Post graduate		Ms Aayushi Jain
meritorious alumnus,		Vice President of External Relations
nominated by the		MoEVing Unit 914 A, 9 th floor, BPTP Park
Principal	h	Centre Sector 30, Gurugram, Haryana, India -122001 Cell:9625730881 Email:aayushi@moeving.com

Head of the Department
Department of Chemical Engineering

Myser Road Bevovidyanikarang ® Pest Bengaluru 8 560859 u-560 05080 -68188223 / 8224 Karnataka, India

hod.34rvce.edu.in

FRINCIPAL PRINCIPAL Go, change the world BENGALURU - 560 059

ational Institutions ocillege of Engineering o

Autonomous Institution Affiliated to Visvesvaraya Technological University, Belagavi

Approved by AICTE, New Delhi

DEPARTMENT OF CHEMICAL ENGINEERING Minutes of BoS Meeting (ONLINE, WebEx) - held on Friday, 02nd December 2022

Dr. Vined Kallur, HoD-Chemical Engineering welcomed all the members and gave a brief update about the Department activities and achievements of the last year. The following points were discussed.

Agenda# 22.6	BoS Constitution and Introduction of Members
	Discussion and Resolution
• The	chairman welcomed all the members present and thenland the

- The chairman welcomed all the members present and thanked them for accepting the invitation and made it convenient to attend the meeting.
- The Chairman introduced all the members in the newly constituted BoS for the period 2022-24. Following is the constitution of BoS.

Sl.No	Name	Institute/Organisation	BoS Designation
01	Dr Vinod Kallur	Associate Prof and Head Chemical Engineering Department, RVCE	Chairman
02	Dr Vidya Shetty	Professor, Chemical Engineering Department, NITK, Surathkal	VTU Nominee
03	Dr Balakrishna Prabhu	Professor & Head, Chemical Engineering Department, MIT, Manipal	Experts from outside
04	Dr M G Basavaraj	Professor, Chemical Engineering Department, IIT-M, Chennai	Nominated by Academic Council
05	Dr Chetan Raghuveer	Director, Enfros Technologies Bengaluru	Corporate Representative
06	Ms Aayushi Jain	Vice President, MoEVing, Haryana	P G alumnus
07	Member	Dr Suresh R,	Professor Chemical Engineering Department, RVCE
08	Member	Dr Jagadish H Patil,	Associate Professor Chemical Engineering Department, RVCE
09	Member	Dr Vidya C	Assistant Professor Chemical Engineering Department, RVCE
10	Member	Dr Rajalakshmi M	Assistant Professor Chemical Engineering Department, RVCE
11	Member	Dr Ujwal Shreenag Meda	Assistant Professor Chemical Engineering Department, RVCE

ational Institutions ollege of Engineering

autonomous Institution Affiliated to Visvesvaraya Technological University, Belagavi Approved by AICTE, New Delhi

Agenda # 22.7	Department Profile
	Discussion and Resolution
Cen rese	profile of the department with details of thrust areas, research, entrepreneurship and tre of Hydrogen and Green technology, faculty involvement in various centres of arch, Centres of Excellence/Competence, placement records of recently graduated h were presented before the board by the chairman.

Agenda # 22.8	Outlines of 2018, 2021 Scheme
	Discussion and Resolution

 Chairman emphasized and detailed on NEP implementation and its implication in curriculum design. Change in the weightage given to experiential learning was highlighted. Distribution of courses across various categories was elaborated. Changes made in 2021 scheme in comparison with 2018 scheme were highlighted. Details of ability enhancement courses and NPTEL electives, computational electives, global electives in 2018 scheme were presented.

		2018 Scheme	Total
Theory Course	CIE .	80 marks for Quizzes and test	100
		3	
J		20 marks for Experiential learning	
	SEE	3 hours, 100 marks	100
Composite	CIE	80 marks for Quizzes and test	150
Theory and		20 marks for Experiential learning	
Lab		40 marks Lab record	
		10 marks for lab test	
	SEE	3 hours, 100 marks	150
e		3 hours, 50 marks	

2021 Scheme			Total
Theory Course	CIE	80 marks for Quizzes and test	100
		20 marks for Experiential learning	
	SEE	3 hours, 100 marks	100
Composite	CIE	80 marks for Quizzes and test	150
Course		20 marks for Experiential learning	
(Theory and		40 marks Lab rec 36 d	
Lab)		10 marks for lab test	
	SEE	3 hours, 100 marks; Lab 3 hour, 50 marks	150

ational Institutions College of Engineering

Autonomous Institution Affiliated to Visvesvaraya Technological University, Belagavi

hange.

Approved by AICTE, New Delhi

Agenda # 22.9	Salient Features of 2022 Scheme
	Discussion and Resolution
	Chairman proposed the scheme proposal by VTU Belagavi. Physics, Mathematics and Chemistry will be offered cluster wise. The clusters are as follows:
•	CV:CV
	CS: CSE, IS, AI&ML, Cyber Security (CY), BT
	EE: EEE, ECE, E&I, TE
•	ME: ME, IE, AS, CH
Emerging t	echnology has a basket of course offered by various departments and student should
choose one	course. In emerging technology, Chemical Department is offering Global Climate

	Salient Features of 2022 Scheme
22.10	
	The NPTEL courses for current 5th Semester
771	

 The following courses were offered as Electives in Group A of 5th Semester of 2021-22 academic year

Code	Title
18CH5A1	Fluidization Engineering
18CH5A2	Polymers: Concepts, Properties, Uses and Sustainability
18CH5A3	Principles of Downstream Techniques in Bioprocess
18CH5A4	Fundamentals of Micro and Nanofabrication
18CH5A5	The joy of computing with Python

However, in the current session of NPTEL, these courses are not offered excepting the course 'The Joy of Computing with Python-18CH5A5. Therefore, it is proposed to include the following courses from NPTEL in group A elective of 5th Semester of academic year 2021-2022, in addition to the course 18CH5A5

Code	Title
18CH5A1	Characterization of Polymers, Elastomers and Composites
18CH5A2	Non-conventional Energy Resources
18CH5A3	MembraneTechnology
18CH5A4	Biomass Conversion and Biorefinery

• The BOS committee members approved the list of Elective A Group courses proposed.

college of Engineering

Affiliated to Viscesvaraya Technological University, Belagavi Approved by AICTE,

Agenda #	Syllabus of global Climate Change – Emerging Technology
22.11	Symmons or great
	Discussion and Resolution
	The detailed syllabus of global climate change was presented by Dr. Rajalakshmi M following were the points of discussion and suggestions. Aayushi Jain appreciated the initiative of introducing Global Climate Change and elaborated the value added by this course. She suggested inclusion of carbon models. She also suggested to map and extend the contents in unit 4 and unit 5 to electives offered during higher semesters. Dr. Vidya Shetty suggested inclusion of basics of geological aspects climate change. Dr. M G Basavaraj expressed that the Global climate change course is descriptive and suggested we could include branch specific topics in unit 4 to 5 and suggested inclusion of carbon footprint concepts in the course. Dr. Rajalakshmi explained that the course is designed to not have any pre-requisites and highlighted the role of Experiential Learning component in the course. Balakrishna Prabhu suggested to include socio-economic aspects of climate change mitigation strategies. The chairman accepted these suggestions and will be incorporated either in the Syllabus Content or covered as a part of Experiential Learning.

Agenda #	Any other subject
22.12	Discussion and Resolution
ye be	the chairman informed that this meeting was convened with a short notice so that the first- ar syllabus is ready as classes have started and therefore it was online. Next meeting will conducted offline in RVCE campus and chairman requested all the members to attend, communication in this regard will be sent well advance.

The meeting concluded with the Chairman thanking the members.

Rojelotshmi M

Head of the Department
Department of Chemical Engineering
RV College of Engineering®
Mysuru Road, Bengaluru-560 059

38



CHEMICAL ENGINEERING RVCE < hod.ch@rvce.edu.in>

(no subject)

3 messages

CHEMICAL ENGINEERING RVCE < hod.ch@rvce.edu.in>

Sun, Jun 18, 2023 at 7:40 AM

To: "Dr. Vidya Shetty K" <vidyaks95@nitk.ac.in>

Dear Dr Vidya Shetty,

Greetings from the Department of Chemical Engineering, RVCE!

I am glad to inform you that the BoS(Chemical Engineering, RVCE Autonomous) is scheduled to be held on 23rd June 2023 at 10.00 AM in the Department. Following is the agenda:

- 1. Read and record the minutes of the previous meeting held online;
- 2. Brief report of the Department activities;
- 3. Overview of the changes in the curriculum in the light NEP-2020 implementation;
- 4. Discussion, finalization and approval of 3rd and 4th Semester syllabus of 2022 scheme;
- 5. Discussion, finalization and approval of 5th and 6th Semester syllabus of 2021 scheme;
- Any other subject;

We will communicate a brief on the 2021 and 2022 scheme shortly. I request you to attend the BoS meeting and let us know your travel plans.

With regards,

Dr Vinod Kallur Associate Professor & Head Chemical Engineering Department R V College of Engineering, Bengaluru - 560059

Mobile: 9916437940 Off: 080 6818 8223

Vidya Shetty K Faculty Chemical Dept <vidyaks95@nitk.edu.in>
To: CHEMICAL ENGINEERING RVCE <hod.ch@rvce.edu.in>

Sun, Jun 18, 2023 at 11:04 AM

Dear Dr Kallur

I will attend the meeting .

I will send the travel plans soon.

Best regards Vidya Shetty [Quoted text hidden]

Vidya Shetty K Faculty Chemical Dept <vidyaks95@nitk.edu.in>
To: CHEMICAL ENGINEERING RVCE <hod.ch@rvce.edu.in>

Mon, Jun 19, 2023 at 7:35 AM

Dear Sr Kallur

My travel plans is provided below for a necessary action.

6/12/24, 1:54 PM



CHEMICAL ENGINEERING RVCE < hod.ch@rvce.edu.in>

BoS Meeting

1 message

CHEMICAL ENGINEERING RVCE < hod.ch@rvce.edu.in>

Sun, Jun 18, 2023 at 7:36 AM

To: balakrishna.prabhu@manipal.edu

Dear Dr Balakrishna Prabhu,

Greetings from the Department of Chemical Engineering, RVCE!

I am glad to inform you that the BoS(Chemical Engineering, RVCE Autonomous) is scheduled to be held on 23rd June 2023 at 10.00 AM in the Department. Following is the agenda:

- 1. Read and record the minutes of the previous meeting held online;
- 2. Brief report of the Department activities;
- 3. Overview of the changes in the curriculum in the light NEP-2020 implementation;
- 4. Discussion, finalization and approval of 3rd and 4th Semester syllabus of 2022 scheme;
- 5. Discussion, finalization and approval of 5th and 6th Semester syllabus of 2021 scheme;
- 6. Any other subject;

We will communicate a brief on the 2021 and 2022 scheme shortly. I request you to attend the BoS meeting and let us know your travel plans.

With regards,

Dr Vinod Kallur Associate Professor & Head Chemical Engineering Department R V College of Engineering, Bengaluru - 560059

Mobile: 9916437940 Off: 080 6818 8223



CHEMICAL ENGINEERING RVCE < hod.ch@rvce.edu.in>

BoS Meeting

2 messages

CHEMICAL ENGINEERING RVCE < hod.ch@rvce.edu.in > To: Chetan Raghuveer < chetan.raghuveer@gmail.com >

Sun, Jun 18, 2023 at 7:43 AM

Dear Dr Chetan,

Greetings from the Department of Chemical Engineering, RVCE!

I am glad to inform you that the BoS(Chemical Engineering, RVCE Autonomous) is scheduled to be held on 23rd June 2023 at 10.00 AM in the Department. Following is the agenda:

- 1. Read and record the minutes of the previous meeting held online;
- 2. Brief report of the Department activities;
- 3. Overview of the changes in the curriculum in the light NEP-2020 implementation;
- 4. Discussion, finalization and approval of 3rd and 4th Semester syllabus of 2022 scheme;
- 5. Discussion, finalization and approval of 5th and 6th Semester syllabus of 2021 scheme;
- 6. Any other subject;

We will communicate a brief on the 2021 and 2022 scheme shortly. I request you to attend the BoS meeting.

With regards,

Dr Vinod Kallur Associate Professor & Head Chemical Engineering Department R V College of Engineering, Bengaluru - 560059

Mobile: 9916437940 Off: 080 6818 8223

Chetan <chetan.raghuveer@gmail.com>
To: CHEMICAL ENGINEERING RVCE <hod.ch@rvce.edu.in>

Mon, Jun 19, 2023 at 9:27 AM

Dear Sir,

I confirm my presence at the moment, should there be a change in the plans of my visit I will update.

Thanks & Regards [Quoted text hidden]

Chetan Raghuveer Cell: +91 96862 53007



CHEMICAL ENGINEERING RVCE < hod.ch@rvce.edu.in>

BoS Meeting

2 messages

CHEMICAL ENGINEERING RVCE < hod.ch@rvce.edu.in>

Sun, Jun 18, 2023 at 7:59 AM

To: Aayushi Jain <aayushijain1592@gmail.com>

Dear Dr Aayushi,

Greetings from the Department of Chemical Engineering, RVCE!

I am glad to inform you that the BoS(Chemical Engineering, RVCE Autonomous) is scheduled to be held on 23rd June 2023 at 10.00 AM in the Department. Following is the agenda:

- 1. Read and record the minutes of the previous meeting held online;
- 2. Brief report of the Department activities;
- 3. Overview of the changes in the curriculum in the light NEP-2020 implementation;
- 4. Discussion, finalization and approval of 3rd and 4th Semester syllabus of 2022 scheme;
- 5. Discussion, finalization and approval of 5th and 6th Semester syllabus of 2021 scheme;
- 6. Any other subject;

We will communicate a brief on the 2021 and 2022 scheme shortly. I request you to attend the BoS meeting.

With regards,

Dr Vinod Kallur Associate Professor & Head Chemical Engineering Department R V College of Engineering, Bengáluru - 560059

Mobile: 9916437940 Off: 080 6818 8223

Aayushi Jain <aayushijain1592@gmail.com> To: CHEMICAL ENGINEERING RVCE <hod.ch@rvce.edu.in> Sun, Jun 18, 2023 at 8:32 AM

Great, look forward to being part of it.

Do share the calendar invite with the meeting link.

Regards
[Quoted text hidden]

[danied feministra



Institution Affiliated to Visvesvaraya Technological University, Belagavi New Delhi

Meeting 25 Dr. Vinod Kallur, BE, MTech, PhD Head, Chemical Engineering Department RV College of Engineering®, Mysuru Road, RV Vidyaniketan Post, Bengaluru - 560059

E-Mail: hod.ch@rvce.edu.in Ph Mobile: 9916437940, (O): 080-68188223

DEPARTMENT OF CHEMICAL ENGINEERING BoS Meeting Attendance

Following are the members who attended the BoS Meeting on 23rd June 2023 at 10.00 am in the department.

Sl.No	Name .	Institute/Organisation	BoS Designation	
01	Dr Vinod Kallur	Associate Prof and Head Chemical Engineering Department, RVCE	Chairman	Jelle
02	Dr Vidya Shetty	Professor, Chemical Engineering Department, NITK, Surathkal	VTU Nominee	Janim
03	Dr Balakrishna Prabhu	Professor & Head, Chemical Engineering Department, MIT, Manipal	Experts from outside	- 23.6.23
04	Dr M G Basavaraj	Professor, Chemical Engineering Department, IIT- M, Chennai	Nominated by Academic Council	W4. 23.62
05	Dr Chetan Raghuveer	Director, Enfros Technologies Bengaluru	Corporate Representative	Absent
06	Ms Aayushi Jain	Vice President, MoEVing, Haryana	P G alumnus	Attended online
07	Dr Suresh R	Professor Chemical Engineering Department, RVCE	Member	held
08	Dr Jagadish H Patil	Associate Professor RVCE	Member	Three
09	Dr Vidya C	Assistant Professor RVCE	Member	An
10	Dr Rajalakshmi M	Assistant Professor RVCE	Member	Rojalekhmin
11	Dr Ujwal Shreenag Meda	Assistant Professor RVCE	Member	e \$000

23.6.23

Head of the Department Department of Chemical Engineering RV College of Engineering® Mysuru Road, Bengaluru-560 059



to Visvesvaraya Technological University, Belagavi New Delhi

DEPARTMENT OF CHEMICAL ENGINEERING

Minutes of BoS Meeting - held on Friday, 23rd June 2023

Dr. Vinod Kallur, HoD-Chemical Engineering welcomed all the members and gave a brief update about the Department activities and achievements of the last year. The following points were discussed.

Agenda # 23.1	Read and record the minutes of the previous meeting held online;	
	Discussion and Resolution	
	e minutes of the meeting of the previous meeting which was held online were read and orded by the chairman.	

Agenda# 23.2	Department footprint and recent achievements	
	Discussion and Resolution	

- The chairman welcomed all the members present and thanked them for accepting the invitation and made it convenient to attend the meeting.
- The Chairman briefed about the footprints of the Department to the members, highlighting the recent NBA visit and the members congratulated the Chairman for six years of the NBA accreditation.

Sl.No	Name	Institute/Organisation	BoS Designation
01	Dr Vinod Kallur	Associate Prof and Head Chemical Engineering Department, RVCE	Chairman
02	Dr Vidya Shetty	Professor, Chemical Engineering Department, NITK, Surathkal	VTU Nominee
03	Dr Balakrishna Prabhu	Professor & Head, Chemical Engineering Department, MIT, Manipal	Experts from outside Nominated by
04	Dr M G Basavaraj	Professor, Chemical Engineering Department, IIT-M, Chennai	Academic Council
05	Dr Chetan Raghuveer	Director, Enfros Technologies Bengaluru	Corporate Representative
06	Ms Aayushi Jain	Vice President, MoEVing, Haryana	P G alumnus
07	Member	Dr Suresh R,	Professor

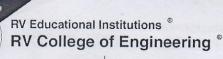
RV Educational Institutions * RV College of Engineering *

TITUTION	Autonomous	Approved by AICTE,	
	Institution Affiliated to Visvesvaraya Technological	New Deihi	Chemical Engineering Department, RVCE
08	University, Belagavi Member	Dr Jagadish H Patil,	Associate Professor Chemical Engineering Department, RVCE
09	Member	Dr Vidya C	Assistant Professor Chemical Engineering Department, RVCE
10	Member .	Dr Rajalakshmi M	Assistant Professor Chemical Engineering Department, RVCE
11	Member	Dr Ujwal Shreenag Meda	Assistant Professor Chemical Engineering Department, RVCE

Agenda # 23.3	Department Profile, brief report of the Department activities;	B ₂ N
	Discussion and Resolution	

- The profile of the department with details of thrust areas, research, entrepreneurship and Centre of Hydrogen and Green technology, faculty involvement in various centres of research, Centres of Excellence/Competence, patents, consultancy work were presented before the board by the chairman.
- Various LMS platform and ICT tools used in the institution was highlighted. English language laboratory, design thinking lab, industry visits, partial course delivery by industry experts, lectures delivered in the Department
- Experiential learning was explained to the members and the members opined that 40% of the marks is allotted to experiential learing and 60% to the content of the course. The content of the course has specified number of hours of engagement, but on the other hand, the experiential learing has no minimum or maximum limit for the number of hourse of engagement and this has to be addresses. NEP based evaluation of the experientail learning may be followed. Dr. Basavaraj opined that the EL evaluation should be done in a more defined way to ensure that the students deserve the marks they are awarded.

Agenda # 23.4	Overview of the first year 2022 scheme	
choi	2022 scheme for the first year was presented and the members appreicated that it is ce based and the students have a wide range of option in the basket courses labs having only CIE and no SEE was brought to their notice.	



Autonomous Institution Affiliated to Visvesvaraya Technological University, Belagavi Approved by AICTE, New Delhi

Agenda # 23.5	Discussion, finalization and approval of 5th and 6th Semester syllabus of 2021 scheme;

- Cluster elective was explained to the members.
- Dr. Vidya Shetty opined that the tutorial hours are significantly less and preferably more core courses should have tutorial
- Dr.Balakrishna Prabhu opined that the mass transfer should be taught in two parts, MT-1 and MT-2, and it was explained that the MT-2 will be taught in the name of 'separation processes'.
- Dr. Vidya Shetty expressed that Process simulation and modelling should be renamed as process modelling and simulation.
- Dr. Vidya Shetty opined that pharmaceutical technology course can be taught in the higher semester as an elective.
- The members unanimously expressed that instead of professional core 3 (dept elective), a
 core course should be introduced as the board strongly believed that the number of core
 courses are considerably less.
- The members expressed that for the course, Design of the water system, the aspect of design is not sufficient, some parameters of design must be incorporated to the syllabus.
- Dr. Basavaraja and Dr. Vidya Shetty expressed that in PMS course, Unit V title should be changed to numerical methods instead of numerical analysis of simulation and numerical methods in unit V should be realigned. The course is focused on the modelling of the chemical engineering unit operations but instead the focus should be on modelling and hence the contents should be rearranged and modify.
- Energy Engineering can be considered to be incorporated as one of the department core elective

Agenda #	Discussion, finalization and approval of 3rd and 4th Semester syllabus of 2022
23.6	scheme;

- 3rd and 4th semester scheme and syllabus were presented to the members.
- Members opined that the curriculum should be designed holistically, and scheme should be prepared for the entire course rather than year wise.
- Clarity is required for the introduction of the lab related question in the theory SEE question paper.
- Filtration experiment should be included in the particulate technology course.
- Dr. Basavaraj opined that syllabus are framed with the reference books that are very old and archaic. Instead, there are very good new books that can be considered as textbooks.
- The members opined that the mathematics course M-4 can be replaced by a core course like Mass transfer-1

The meeting concluded with the Chairman thanking the members.

23/6/23 MD 23/6/2

. . .

018 cl. 2.20

lead of the Department

46