

# Department of Applied Sciences

# AS -BOARD OF STUDIES MEETING

DATE: 02<sup>nd</sup> December 2022

VENUE: CS Block, NHCE

TIME: 2 pm onwards

MODE OF CONDUCTION: Blended

Chairman - BOS - Physics New Horizon College of Engineering (Autonomone)

Bangalore - 560103

New Horizon College of Engineering(Autonomous) Bangalore - 560103

A.O.D. - CHEMISTRY NEW HORIZON COLLEGE OF ENGINEERING

RANGALORE

Chairman - BOS - Chemistry New Horizon College of Engineering (Autonomous) Bangalore - 560103

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### NEW HORIZON COLLEGE OF ENGINEERING DEPARTMENT OF APPLIED SCIENCES BOARD OF STUDIES MEETING MEMBERS OF THE BOARD OF STUDIES

SI No.	Category	Nomination of the Committee	Name of the Person
1	Head of the Dept Physics		Dr. Revathi V, Professor and HOD
	Head of the Dept Chemistry	Chairperson	Dr.Anusuya Devi V S, Professor and HOD
	Head of the Dept Mathematics	gen - Miles	Dr.Srinivasa G, Professor and HOD
2	Faculty Members at different	1	Dr. Prashanth K S, Asso.Prof, Physics
2	level veering different	2	Dr. Jisha P K, Asso.Prof, Physics
	specializations	3	Dr. Raghu, Asso. Prof Chemistry
		4	Dr. SubashiniAsso, Prof, Chemistry
		5	Dr. Vijilius Helena Raj, Professor & COE,
			Mathematics
		6	Dr. Sudhir Patel, Sr. AP, Mathematics
3		1	Dr. M N Ravishankar, Professor, Dept of Physics, Dayanand Sagar College of Engineering Bengaluru
	Academic Council	2	Dr. K Fakruddin, Professor & Head, Dept of Physics, Ghousia College of Engineering, Ramanagaram
		3	Dr. Raviraj A Kusanur Associate Professor & HOD Department of Chemistry, R.V. College of Engineering, Bengaluru
	for case the lists	4	Dr.Dharma prakash Professor, Department of Chemistry, BMS College of Engineering, Bengaluru
	Agenda 3: Diseasaica confil	5	Dr. B.M.R Prasanna Professor, Department of Mathematics, Siddaganga Institute of Technology, Tumakur-572103.
71	EN CALL PROCESSION OF THE PROCESSION OF T	6	Dr. N. L. Ramesh Professor and Head Department of Mathematics, M. S. Ramaiah Institute of Technology, Bengaluru-54
	Expert from outside college, nominated by Vice-Chancello	Member	Dr. S. Manjunath, Professor and Head, Department of Mathematics, BNMIT, Bengaluru-70.

## NEW HORIZON COLLEGE OF ENGINEERING

#### DEPARTMENT OF APPLIED SCIENCES

### **BOARD OF STUDIES MEETING**

- Agenda 1: Discussion on syllabus for
  - 1. Applied Physics for Engineers CSE allied streams
  - 2. Applied Physics for Engineers ME
  - 3. Applied Physics for Engineers EEE allied streams
  - 4. Applied Physics Lab for Engineers
  - 5. Applied Chemistry for Engineers CSE allied streams
  - 6. Applied Chemistry for Engineers EEE allied streams
  - 7. Applied Chemistry for Engineers ME
  - 8. Applied Chemistry Lab for Engineers
  - 9. Foundation Mathematics for Engineers-I (IT Stream)
  - 10. Applied Mathematics for Engineers I (Non IT Stream)
  - 11. Foundation Mathematics for Engineers-II (IT Stream)
  - 12. Applied Mathematics for Engineers II (Non IT Stream)
  - 13. Mathematics for Computational Thinking (I M.Tech. for CSE)

(Including discussion on Course Outcomes, RBT levels, Programme Outcomes, and Reference Books).

- Agenda 2: Syllabus finalization and approval
- Agenda 3: Discussion on CIE and SEE

**DATE**: 02<sup>ND</sup> December 2022 **VENUE**: CS Block, NHCE

TIME: 2 pm Onwards
MODE: Blended

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6	Representative from Industry/corporate sector/ allied area relating to placement nominated by Academic Council	Member	Mr. Mohan Kumar, Practice Head in WIPRO, Bengaluru.
7	Meritorious alumnus nominated by Principal	Member	Mr.Nithin P V, MEE 2012-16 Batch Graduate Student, University of North Carolina, Charlotte, USA Working as Lead Engineer in Amazon, USA
8	Co-opted member	AS (Church)	Dr. Ramachandra Naik (Physics) Dr. Asha P K (Chemistry) Dr. Madhu Mohan Raju (Mathematics)
9	Special Invitee		Dr. Manjunatha , Principal
10.	Special Invitee		Dr.Anandi RJ ,Dean Academics

introduced to the Board month at

# WELCOME ADDRESS BY THE CHAIRMAN OF THE BOS AND INTRODUCTION OF MEMBERS

#### Minutes:

Dr. Revathi V, HOD, Dept of Physics, Chairman BOS – AS (Physics), Dr. Anusuya Devi HOD, Dept of Chemistry, Chairman BOS- AS (Chemistry) and Dr. Srinivasa G, HOD, Dept. of Mathematics, Chairman BOS- AS (Mathematics) warmly welcomed all the internal and external members of Applied Sciences Board. While expressing the purpose and significance of the meeting in their address, they introduced Dr. Manjunatha, Principal New Horizon College of Engineering, Dr.R J Anandhi, Dean Academics to all members. The meeting was conducted in blended mode. The invited members both from academic and industry, alumini were also introduced to the Board members.

We gave a brief introduction on leadership at NHEI and NHCE; and presented the dynamics of department of Applied Sciences through its Vision, Mission and Goals.

## NEW HORIZON COLLEGE OF ENGINEERING DEPARTMENT OF APPLIED SCIENCES BOARD OF STUDIES MEETING

## TITLE OF AGENDA:

Discussion and Scrutinization of I Year BE Physics theory and Lab, Chemistry theory and lab, (Branch specific) and Mathematics syllabus (I & II-year syllabus Branch specific)

#### Minutes:

Welcome and Introduction session of members was followed by introducing the Scheme of I & II Semester Engineering specific to various streams such as Computer Science allied streams, Electrical and Electronics allied streams and Mechanical Engineering stream.

Thereafter, the meet was opened individually for discussing the syllabus for the academic year 2022-23 under Department of Mathematics, Physics and Chemistry.

# **Minutes of Meeting Physics**

# Agenda: Syllabus finalization and approval.

Mapping of course outcomes with program outcomes were accepted by the members.

The following suggestions were given by BOS – Physics members in the proposed 2022-23 branch specific syllabus for Applied Physics (CSE, EEE and ME) and Applied Physics Lab (CSE, EEE and ME) considering the output from course exit survey

# Applied Physics - CSE allied Streams

- Alternative assessment continued in CIE which is in addition to Assignment and Quiz
- Extra Learning introduced in all the modules
- Suggestion provided to give assignment in extra learning topics

#### Module 1

No change. Proposed syllabus retained.

#### Module 2

No change. Proposed syllabus retained

#### Module 3

To remove the derivation of concentration of electrons. Just mention of expression Module 4

No change. Proposed syllabus retained.

#### Module 5

Introduced superconductivity. Quantum computing.

Suggestion given to include Quantum gates

BCS theory can be explained qualitatively.

# Applied Physics - EEE allied Streams

- Alternative assessment continued in CIE which is in addition to Assignment and Quiz
- Extra Learning introduced in all the modules
- Suggestion provided to give assignment in extra learning topics

#### Module 1

No change. Proposed syllabus retained.

#### Module 2

No change. Proposed syllabus retained

#### Module 3

To remove the derivation of concentration of electrons. Just mention of expression

#### Module 4

No change. Proposed syllabus retained.

#### Module 5

Introduced Maxwell's equations & EM waves Well appreciated by BOS members.

### Applied Physics - ME stream

- Alternative assessment continued in CIE which is in addition to Assignment and Quiz
- Extra Learning introduced in all the modules
- Suggestion provided to give assignment in extra learning topics

#### Module 1

No change. Proposed syllabus retained.

Module 2

No change. Proposed syllabus retained

Module 3

To remove the derivation of concentration of electrons. Just mention of expression

Module 4

No change. Proposed syllabus retained.

Module 5

Introduced Instrumentation Physics. Proposed syllabus retained

#### **Applied Physics Lab**

- All the proposed experiments of Applied Physics Lab are approved.
- It was suggested to make 10 experiments compulsory
- SEE examination for Lab retained. Well appreciated by BOS members

# Agenda: Discussion on CIE and SEE - CIE (50 marks) + SEE (50 marks)

CIE - 50 marks

Average of three IA - 25 marks

Two quizzes -5+5 = 10 marks

One assignment -5 marks

Alternative Assessment \*- 10 marks

# \*Alternative Assessment shall be: Workshops / NPTEL course / Working Model

The above pattern was accepted and approved by the board.

For Lab: CIE (50 marks) + SEE (50 marks)

CIE-50 marks

Day to Day evaluation - 20 marks

Internal Exam - 30 marks

The above pattern was accepted and approved by the board.

#### **Minutes of Meeting Applied Chemistry**

#### Agenda: Syllabus finalization and approval.

Mapping of course outcomes with program outcomes were suggested to revise.

The following suggestions were given by BOS – Chemistry members in the proposed 2022-23 branch specific syllabus for Applied Chemistry (CSE, EEE and ME Clusters) and Applied Chemistry Lab (CSE, EEE and ME Clusters) considering the output from course exit survey and following the VTU new scheme for the AY 2022-23.

#### Applied Chemistry - CSE allied streams

#### Module 1

No change. Proposed syllabus was accepted by the members.

#### Module 2

Suggested to reduce the syllabus for Analytical techniques.

#### Module 3

Suggested to introduce the structure and importance of Perovskite materials.

#### Module 4

No change. Proposed syllabus was accepted by the members.

#### Module 5

No change. Proposed syllabus was accepted by the members.

#### Applied Chemistry - EEE allied streams

#### Module 1

No change. Proposed syllabus was accepted by the members.

#### Module 2

Suggested to reduce the syllabus for Analytical techniques.

#### Module 3

Suggested to introduce the structure and importance of Perovskite materials.

#### Module 4

No change. Proposed syllabus was accepted by the members.

#### Module 5

No change. Proposed syllabus was accepted by the members.

#### Applied Chemistry - ME stream

#### Module 1

No change. Proposed syllabus was accepted by the members.

#### Module 2

Suggested to reduce the syllabus for Analytical techniques.

#### Module 3

Suggested to introduce the structure and importance of Perovskite materials.

#### Module 4

No change. Proposed syllabus was accepted by the members.

#### Module 5

Suggested to check suitability of time and syllabus proposed

## **Applied Chemistry Lab**

- All the proposed experiments of Applied Chemistry Lab are approved.
- Suggested to correct the title of part C in EEE and ME streams.

# Agenda: Discussion on CIE and SEE - CIE (50 marks) + SEE (50 marks)

CIE-50 marks

Average of three IA - 25 marks Two quizzes -5+5 = 10 marks . One assignment -5 marks

Alternative Assessment \*- 10 marks

<sup>\*</sup>Alternative Assessment shall be: Workshops / NPTEL course / Working Model The above pattern was accepted and approved by the board.

### **Minutes of Meeting Mathematics**

Agenda: Syllabus finalization and approval.

The following suggestions were given by BOS – Mathematics members, based on the changes done in the VTU Engineering Mathematics, in the proposed year 2022-23, Foundation Mathematics for Engineers-I (IT Stream-AIM, CEE, CSE(DS), CSE & ISE), Applied Mathematics for Engineers-II (Non IT Stream-ECE, EEE, & MEE), Foundation Mathematics for Engineers-II (IT Stream-AIM, CEE, CSE(DS), CSE & ISE), Applied Mathematics for Engineers-II (Non IT Stream-ECE, EEE, & MEE) with partially integrated Labs and Mathematics for Computational Thinking (I M.Tech. for CSE) syllabus.

# 1. Foundation Mathematics for Engineers-I (IT Stream-AIM, CEE, CSE(DS), CSE & ISE):

No changes, proposed syllabus retained.

Also asked to mention the title Reference Books in place of Text Books.

## 2. Applied Mathematics for Engineers-I (Non IT Stream-ECE, EEE, & MEE):

No changes, proposed syllabus retained.

Also asked to mention the title Reference Books in place of Text Books.

# 3. Foundation Mathematics for Engineers-II (IT Stream-AIM, CEE, CSE(DS), CSE & ISE):

No changes, proposed syllabus retained.

Also asked to mention the title Reference Books in place of Text Books.

## 4. Applied Mathematics for Engineers-II (Non IT Stream-ECE, EEE, & MEE):

No changes, proposed syllabus retained.

Also asked to mention the title Reference Books in place of Text Books.

## 5. Mathematics for Computational Thinking (PG: I semester M.Tech. for CSE):

No changes, proposed syllabus retained.

Also asked to mention the title Reference Books in place of Text Books.

Agenda: Discussion on CIE and SEE - CIE (50 marks) + SEE (50 marks)

CIE - 50 marks

Average of three IA – 25 marks

Two quizzes -5+5 = 10 marks

Two assignment -7.5 + 7.5 = 15 marks

SEE - 90% marks Theory + 10% marks Practicals

## MEMBERS PRESENT

S.NO	NAME	DESIGNATION AND AFFILIATION	PHONE NO.	SIGNATURE
1.	Dr. Revathi V	Professor and HOD, Physics, NHCE	9901415367	Revathe
2.	Dr. Prashanth K S	Asso.Prof, Physics, NHCE	9986248364	Dos
3.	Dr. Jisha P K	Asso.Prof, Physics, NHCE	7829730339	Aprish
4.	Dr. M N Ravishankar	Professor, Dept of Physics, Dayanand Sagar College of Engineering, Bangalore	9480489556	M.N.RAVISHANZAR
5.	Dr. K Fakruddin	Professor & Head, Dept of Physics, Ghousia College of Engineering, Ramanagaram	9886419379	Dr. K. Fakruddin Professo & HOD Physics Ghusis College of Engineering. Ramanagara - 562159
6.	Dr. Anusuya Devi VS	Professor and HOD Chemistry,NHCE	7019714060	of 260 C
7.	Dr. M S Raghu	Sr. AP, Chemistry, NHCE	9844626569	M
8.	Dr. Subashini K	Asso.Prof, Chemistry, NHCE	9611336446	9
9.	Dr. Asha PK	Sr. AP, Chemistry, NHCE	9611336446	Suc
10.	Dr. Raviraj A Kusanur	Associate Professor & HOD Chemistry, RVCE	9448823443	Bearing
11.	Dr.Dharma prakash	Professor, Chemistry, BMSCE	9731265431	( Bakers
12.	Dr.Srinivasa G,	Professor and HOD- Mathematics, NHCE	9449817583	5000
13.	Dr. Vijilius Helena Raj,	Professor & COE, Mathematics, NHCE	9448969034	A L
14.	Dr. B.M.R Prasanna	Professor, Department of Mathematics, Siddaganga Institute of Technology, Tumakur-572103.	9448893047	Whools

	Dr. N. L. Ramesh	Professor and Head Department of Mathematics, M. S. Ramaiah Institute of Technology.	9448351607	l
	Dr. Dr. S. Manjunath	Professor and Head, Department of Mathematics, BNMIT	9845420712	Dapyroh
17.	Mr. Mohan Kumar,	Practice Head in WIPRO, Bengaluru	9900260665	graph ha
	Mr.Nithin P V	Working as Lead Engineer in Amazon, USA	704-345-4536	NITHIN P.V.
19.	Dr. Ramachandra Naik	Assistant Professor, Physics, NHCE	7204408041	pis ?
	Dr. A. B. Madhu Mohana Raju	Asso. Prof., Mathematics, NHCE	9441035789	ABrinka
21.	Dr.Anandi Rj	Dean Academics, NHCE	9845705705	
22.	Dr. Manjunatha	Principal, NHCE	9901916000	

## VOTE OF THANKS BY THE CHAIRMAN-BOS

Chairman BOS-Physics& HOD-Physics, Dr. Revathi. V took the lead in acknowledging the presence of each of the members. She thanked all external members from academic and Research institutes along with HODs of each subject and faculty members under BOS –AS.

The presence of alumini member Mr.Nithin P V, (2012-16 Batch Mechanical Engg. Student) was greatly acknowledged for his insightful inputs by the Chairman BOS.

Chairman BOS- Chemistry & HOD- Chemistry Dr. Anusuya thanked the members for their useful suggestions and active participation in the BOS meeting.

Chairman BOS- Mathematics & HOD- Mathematics Dr. Srinivasa G thanked the members for attending the meeting in spite of their busy schedule.

All three HODs applauded the valuable inputs in deliberation in the meeting and appreciated their contribution of worthy suggestions.