



NEW HORIZON COLLEGE OF ENGINEERING

Autonomous College Permanently Affiliated to VTU, Approved by AICTE & UGC
Accredited by NAAC with 'A' Grade, Accredited by NBA

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

11th BOARD OF STUDIES MEETING

Minutes of Meeting ACADEMIC YEAR 2025-26

DATE : 14-08-2025
VENUE : Conference Room, CSE – Netaji Subhash Chandra Bose Block, NHCE
TIME : 2.00 PM-4:00 PM

Handwritten signature

1 | Page
Professor HOD
Department of Computer Science and Engineering
New Horizon College of Engineering

CONTENTS

Sl. No	PARTICULARS	Page No
1	Agenda for the meeting	3
2	List of Members	4
3	List of Members present	7
4	Welcome address by the chairman of BOS	10
5	Presentation by chairman of BOS about department achievements	11
6	Presentation of proceedings of the previous BOS meeting by chairman of BOS	11
7	Proposed course details of B.E 2024-2028 batch 3rd and 4th semester, B.E 2022-2026 batch 7th and 8th semester and M.Tech 2024-2026 batch, 3rd and 4th semester	11
8	Presentation of draft of scheme & syllabus for the commencement semesters of (Particulars-7) schemes for ratification	26
9	Recommendations/ suggestions of BOS members	27
10	Implementation of recommendation of BOS members	29
11	Approval of scheme & syllabus of Particulars 7 & 8	29
12	Vote of Thanks	30

AGENDA FOR THE MEETING

1. Welcome address by the chairman of BOS
2. Presentation by chairman of BOS about department achievements
3. Presentation of proceedings of the previous BOS meeting by chairman of BOS
4. Proposed course details of B.E 2024-2028 batch 3rd and 4th semester, B.E 2022-2026 batch 7th and 8th semester and M.Tech 2024-2026 batch, 3rd and 4th semester
5. Presentation of draft of scheme & syllabus for the commencement semesters of (Particulars-4) schemes for ratification
6. Recommendations/ suggestions of BOS members
7. Implementation of recommendation of BOS members
8. Approval of scheme & syllabus of agenda 4,5
9. Vote of thanks by the chairman of BOS

NEW HORIZON COLLEGE OF ENGINEERING, BANGALORE
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

LIST OF MEMBERS-BOARD OF STUDIES

A.Y:2025-26

S. No	Category	Nomination of the committee	Name of the person	Designation& Affiliation
1	Head of the Department	Chairperson	Dr. B. Rajalakshmi	Professor & Head of the Department, Dept of CSE, NHCE hod_cse@newhorizonindia.edu 9841711347
2	Special Invitees (one academician from Institution of National Eminence, IIT,NIT,IIM,IISC)	1	Dr. Manjunatha	Head of the Institution, New Horizon College of Engineering, principal@newhorizonindia.edu +91-80-662977Extn: 5002
		2	Dr. Annappa	Professor, Department of Computer Science and Engineering, National Institute of Technology, Surathkal annappa@nitk.ac.in
		3	Dr. R J Anandhi	Professor & Dean Academics, New Horizon College of Engineering, dean.academics@newhorizonindia.edu 91-80-66297777Extn:2026
3	Internal Subject Experts	1	Dr. Asha Joseph	Professor& Head of the Department, Dept of CSE, NHCE hod_cse01@newhorizonindia.edu 9449123958
		2	Dr. C P Vandana	Associate Professor &Head of the Department, Dept of ISE, NHCE hod_ise@newhorizonindia.edu 9945721293
		3	Dr. B. Swathi	Associate Professor & Head of the Department, Dept of CSE(DS), NHCE hod_ds@newhorizonindia.edu 9620681234

4	Faculty members at different level with different specialization	1	Dr. G. Vijayasekaran	Associate Professor, Dept of CSE, NHCE dr.vijayasekaran.g_cse_nhce@newhorizonindia.edu 7871330003
		2	Dr. Pramila Rani K	Associate Professor, Dept of CSE, NHCE, pramilaranik@newhorizonindia.edu 8971471249
		3	Dr. J. Karthiyayini	Sr. Assistant Professor, Dept. of ISE, NHCE karthiyayinij@newhorizonindia.edu 9731521707
		4	Dr. Sunil	Professor, Dept. of CSE(DS), NHCE dr.sunil.kv_ds_nhce@newhorizonindia.edu 9886406414
		5	Ms. Usha Rani M	Assistant Professor, Dept of CSE, NHCE, usha.rm_cse2_nhce@newhorizonindia.edu 9494741876
		6	Ms. Salna Joy	Assistant Professor, Dept of CSE, NHCE salnajoy.nhce@newhorizonindia.edu 9606826996
5	Subject expert from outside the college nominated by Academic Council	1	Dr. Shyam P. Joy	Professor & Head of the Department Department of Artificial intelligence and Machine Learning CMR Institute of Technology. shyam.p@cmrit.ac.in 8105642642
6	Experts from outside the college nominated by VTU	1	Dr. B.R. Shambhavi	Professor & Head, Dept. of CSE BMS College of Engineering-Bengaluru shambhavibr.ise@bmsce.ac.in 9886784959
7	Representative from Industry/ Corporate sector / allied area related to placements, nominated by Academic Council	1	Ms. Supriya K	Senior Technical Architect-DMTS, DELL India supriya.kannery@ dell.com 9845085303
8	Meritorious alumni nominated by Principal	1	Ms. Shreya Pradeep	Software Engineer, Lowe's, Bangalore shreya.pradeep@lowes.com 9739537679
		2	Ms. Vanshika Sai Ramadurgam	Software Engineer, Goldman Sachs 9901833434

9	Co-opted members	1	Dr. Nirmala.M	Professor, Dept of CSE, NHCE dr.nirmalam.nhce@newhorizonindia.edu 9626689838
		2	Dr. Santhosh Krishna B V	Associate Professor, Dept of CSE, NHCE santhoshkbv@newhorizonindia.edu 8610196443
		3	Dr. T Kavitha	Professor, Dept of CSE, NHCE, dr.kavithat_cse2_nhce@newhorizonindia.edu 9884591122
		4	Dr. Sonali Mahure	Associate Professor, Dept of CSE, NHCE, dr.sonaliym_cse2_nhce@newhorizonindia.edu 8263909205
		5	Dr. J. Joshua Daniel Raj	Associate Professor, Dept of CSE(DS), NHCE, joshuadr@newhorizonindia.edu +919019347627
		6	Ms. Rama Bansidhar Dan	Assistant Professor, Department of ISE, NHCE ramabd.nhce@newhorizonindia.edu 9830618633
		7	Mr. Muralidharan	Senior Manager – HR, Corporate Relations - Training - Placements 9790713875

[Signature]
11.07.2025
BOS Member Secretary

[Signature]
11/7/25
HOD-ISE

[Signature]
11/7/25
HOD-CS(DS)

[Signature]
11/7/25
HOD2-CSE

[Signature]
11.07.25
BOS Chairman & HOD1-CSE

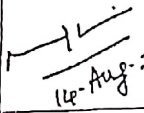
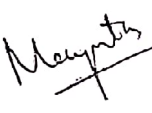
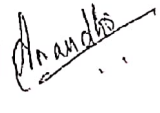

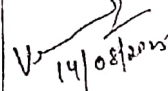
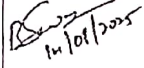
[Signature]
12/7/25
Dean Academics

[Signature]
12/7/2025
Principal

LIST OF MEMBERS PRESENT

NEW HORIZON COLLEGE OF ENGINEERING, BANGALORE DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Attendance sheet for BoS meeting held on 14-08-2025

S. No	Category	Nomination of the committee	Name of the person	Designation & Affiliation	Signature
1	Head of the Department	Chairperson	Dr. B. Rajalakshmi	Professor & Head of the Department, Dept of CSE, NHCE hod_cse@newhorizonindia.edu 9841711347	 14-Aug-25
2	Special Invitees (one academician from Institution of National Eminence, IIT, NIT, IIM, IISC)	1	Dr. Manjunatha	Head of the Institution, New Horizon College of Engineering, principal@newhorizonindia.edu +91-80-662977 Extn: 5002	
		2	Dr. Annappa	Professor, Department of Computer Science and Engineering, National Institute of Technology, Surathkal annappa@nitk.ac.in	ONLINE
		3	Dr. R J Anandhi	Professor & Dean Academics, New Horizon College of Engineering, dean.academics@newhorizonindia.edu 91-80-6629777 Extn: 2026	
3	Internal Subject Experts	1	Dr. Asha Joseph	Professor & Head of the Department, Dept of CSE, NHCE hod_cse01@newhorizonindia.edu 9449123958	 14/08/2025
		2	Dr. C P Vandana	Associate Professor & Head of the Department, Dept of ISE, NHCE hod_ise@newhorizonindia.edu 9945721293	 14/08/2025
		3	Dr. B. Swathi	Associate Professor & Head of the Department, Dept of CSE (DS), NHCE hod_ds@newhorizonindia.edu 9620681234	 14/08/2025

Carta 2025

4	Faculty members at different level with different specialization	1	Dr.G.Vijayasekaran	Associate Professor, Dept of CSE, NHCE dr.vijayasekaran.g_cse_nhce@newhorizonindia.edu 7871330003	<i>G.V. Vijayasekaran</i> 14/08/25
		2	Dr. Pramila Rani K	Associate Professor, Dept of CSE, NHCE, pramilaranik@newhorizonindia.edu 8971471249	<i>Pramila Rani K</i> 14/8/25
		3	Dr.J.Karthiyayini	Sr. Assistant Professor, Dept. of ISE, NHCE karthiyayini@newhorizonindia.edu 9731521707	<i>J. Karthiyayini</i> 14/8/25
		4	Dr. Sunil	Professor, Dept. of CSE(DS), NHCE dr.sunil.kv_ds_nhce@newhorizonindia.edu 9885406414	<i>Sunil</i> 19/8/25
		5	Ms. Usha Rani M	Assistant Professor, Dept of CSE, NHCE, usha.rm_cse2_nhce@newhorizonindia.edu 9494741876	<i>M. Ushanani</i> 14/08/25
		6	Ms. Salna Joy	Assistant Professor, Dept of CSE, NHCE salnajoy.nhce@newhorizonindia.edu 9606826995	<i>Salna Joy</i> 14/8/25
5	Subject expert from outside the college nominated by Academic Council	1	Dr. Shyam P. Joy	Professor & Head of the Department Department of Artificial Intelligence and Machine Learning CMA Institute of Technology. shyam.p@cmait.ac.in 8105642642	ONLINE
6	Experts from outside the college nominated by VTU	1	Dr. B.R.Shambhavi	Professor & Head, Dept. of CSE BMS College of Engineering- Bengaluru shambhavi.br.ise@bmsce.ac.in 9886784959	<i>B.R. Shambhavi</i>
7	Representative from Industry/ Corporate sector / allied area related to placements, nominated by Academic Council	1	Ms. Supriya K	Senior Technical Architect-BMIS, DELL India supriya.kannery@dell.com 9845085303	<i>Supriya K</i> 14/8/25

G. Vijayasekaran

8	Meritorious alumni nominated by Principal	1	Ms. Shreya Pradeep	Software Engineer, Lowe's, Bangalore shreya.pradeep@lowes.com 9739537679	<i>Shreya Pradeep</i>
		2	Ms. Vanshika Sai Ramadurgam	Software Engineer, Goldman Sachs 9901833434	<i>Vanshika</i>
9	Co-opted members	1	Dr. Nirmala.M	Professor, Dept of CSE, NHCE dr.nirmalam.nhce@newhorizonindia.edu 9626689838	<i>M.N.</i> 14/12/25
		2	Dr. Santhosh Krishna B V	Associate Professor, Dept of CSE, NHCE santhoshkbv@newhorizonindia.edu 8610196443	<i>S.K.</i>
		3	Dr. T Kavitha	Professor, Dept of CSE, NHCE, dr.kavitha_cse2_nhce@newhorizonindia.edu 9884591122	<i>Kavitha</i> 14/12/25
		4	Dr. Sonali Mahure	Associate Professor, Dept of CSE, NHCE, dr.sonali_m_cse2_nhce@newhorizonindia.edu 8263909205	<i>Sonali</i> 14/12/25
		5	Dr. J. Joshua Daniel Raj	Associate Professor, Dept of CSE(DS), NHCE, joshuadr@newhorizonindia.edu +919019347627	<i>J.D.R.</i>
		6	Ms. Rama Bansidhar Dan	Assistant Professor, Department of ISE, NHCE ramabd.nhce@newhorizonindia.edu 9830618633	<i>Rama</i> 14/12/25
		7	Mr. Muralidharan	Senior Manager – HR, Corporate Relations - Training - Placements 9790713875	<i>M.M.</i> 14/12/25

A. Vijayalakshmi

AGENDA -1

Welcome Address by the Chairman of BOS

The 11th Board of Studies meeting for Department of Computer Science and Engineering was scheduled on 14th August 2025 at 2.00 PM.

At the outset, Chairperson **Dr. B. Rajalakshmi**– Professor & Head – Department of Computer Science and Engineering, welcomed all the members to the 11th Board of Studies meeting.

The Chairperson further expressed special thanks to **Dr.B.R.Shambhavi**, an expert, nominated by VTU, Special Invitees from NIT Surathkal, **Dr. Annappa** and a subject expert from outside the college nominated by Academic Council **Dr. Shyam P. Joy**, Professor & Head, Department of AI & ML, CMR Institute of Technology, Bangalore.

The chairperson also expressed her gratitude to industrial nominee by Academic Council, **Ms. Supriya K**, Senior Technical Architect-DMTS, DELL India, Bangalore, for sparing the time from her busy schedule to attend the meeting.

Internal subject experts **Dr. Asha Joseph**, Professor & Head, Department of CSE, **Dr. C P Vandana**, Associate Professor & Head, Department of ISE, **Dr. B. Swathi** Associate Professor & Head, Department of CSE (DS) also attended the meeting.

The meeting was also attended by meritorious alumnus **Ms. Shreya Pradeep**, Software Engineer Lowe's, Bangalore and **Ms. Vanshika Sai Ramadurgam**, Software Engineer, Goldman Sachs, nominated by the Principal, Co-opted members **Dr. Nirmala M**, **Dr. Santhosh Krishna B V**, **Dr. T Kavitha**, **Dr. Sonali Mahure**, **Dr. J. Joshua Daniel Raj**, **Ms. Rama Bansidhar Dan**, **Mr. Muralidharan**– Senior Manager – HR, and internal faculty members **Dr. G. Vijayasekaran** (BoS Member Secretary), **Dr. Pramila Rani K**, **Dr. J. Karthiyayini**, **Dr. Sunil**, **Ms. Usha Rani M** and **Ms. Salna Joy** with different specialization.

A. V. Narasimha

AGENDA -2

Presentation by chairman of BOS about department achievements

Chairperson of BOS Dr. B. Rajalakshmi, Professor & Head, Department of Computer Science and Engineering, presented the achievements of the department for the previous year.

AGENDA -3

Presentation of proceedings of the previous BOS meeting by chairman of BOS

Chairperson of BOS Dr. B. Rajalakshmi, Professor & Head, Department of Computer Science and Engineering, briefed the proceedings of previous BOS meeting acknowledging their contribution for betterment in framing the scheme & syllabus.

AGENDA -4

**Proposed course details of B.E 2024-2028 batch 3rd and 4th semester, B.E
2022-2026 batch 7th and 8th semester and M.Tech 2024-2026 batch,
3rd and 4th semester.**

.....

A. Rajalakshmi

Scheme of Teaching and Examinations for 2024- 2028 BATCH (2024 Scheme)

21	NCMC	24DMA131 *	Basic Applied Mathematics -I	BS	0	0	0	0	2	50	--	50
----	------	------------	------------------------------	----	---	---	---	---	---	----	----	----

24BIVA131*: This non-credit mandatory course to be offered with only CIE and no SEE to Lateral entry students.

Professor & HOD
Department of Computer Science and Engineering
New Horizon College of Education

NEW HORIZON COLLEGE OF ENGINEERING
B. E. in Computer Science and Engineering
Scheme of Teaching and Examinations for 2024- 2028 BATCH (2024 Scheme)

IV Semester														
S. No.	Course and Course Code		Course Title	BoS	Credit Distribution					Overall Credits	Contact Hours	Marks		
					L	T	P	S	CIE			SEE	Total	
1	BSC	24MAC41	Discrete Mathematics and Graph Theory	BS	2	1	0	0	3	4	50	50	100	
2	PCC	24CSK42	Object Oriented Programming using Java	CS	3	0	0	0	3	3	50	50	100	
3	PCCL	24CSLK42	Object Oriented Programming using Java LAB	CS	0	0	1	0	1	2	50	50	100	
4	PCC	24CSK43	Linux Operating System	CS	3	0	0	0	3	3	50	50	100	
5	PCCL	24CSLK43	Linux Operating System Lab	CS	0	0	1	0	1	2	50	50	100	
6	PCC	24CSK44	Database Management System	CS	3	0	0	0	3	3	50	50	100	
7	PCCL	24CSLK44	Database Management System Lab	CS	0	0	1	0	1	2	50	50	100	
8	PEC	24CSE45X	Professional Elective Course-I	CS	3	0	0	0	3	3	50	50	100	
9	AEC	24CSE46X	Ability Enhancement Course – IV	CS	If the course is a Theory					1	50	50	100	
					1	0	0	0	1					
					If the course is a Laboratory									
10	UHV	24SCK47	Design Thinking and Fabrication	Any Dept	1	0	0	0	1	2	50	50	100	
11	PROJ	24CSE48	Mini Project	CS	0	0	1	0	1	0	50	50	100	
		24NSS40	National Service Scheme	-										
		24PED40	Physical Education and Sports	-	0	0	0	0	0	2	50	--	50	
12	NCMC	24YOG40	Yoga	-										
Total										21	27/28	600	550	1150
13	NCMC	24DMAT41*	Basic Applied Mathematics-II	BS	0	0	0	0	0	2	50	--	50	

BSC: Basic Science Course, **PCC:** Professional Core Course, **PCCL:** Professional Core Course laboratory, **UHV:** Universal Human Value Course, **NCMC:** Non-Credit Mandatory Course, **AEC:** Ability Enhancement Course, **PROJ:** Mini Project work, **L:** Lecture, **T:** Tutorial, **P:** Practical **S:** SDA: Self Study for Skill Development, **K:** This letter in the course code indicates common to all the stream of engineering. **ESC:** Engineering Science

Un-verified

Course, ETC: Emerging Technology Course, PLC: Programming Language Course, CIE: Continuous Internal Evaluation, SEE: Semester End Evaluation.

24DMAT41*: This non-credit mandatory course to be offered with only CIE and no SEE to Lateral entry students.

Professional Elective Course-I			
24CSE451	Knowledge Engineering	24CSE454	Computer Graphics
24CSE452	Introduction to Cloud Computing and Virtualization	24CSE455	Fundamentals of Information Security
24CSE453	Software Testing and Automation	24CSE456	Entrepreneurship and Innovation Management

Ability Enhancement Course – IV			
24CSE461	IoT Programming	24CSE464	UI / UX Design
24CSE462	Automated Software Testing with Tosca	24CSE465	Programming in C++
24CSE463	Data Visualization with Python		

Mini-project work: Mini Project is a laboratory-oriented/hands on course that will provide a platform to students to enhance their practical knowledge and skills by the development of small systems/applications etc. Based on the ability/abilities of the student/s and recommendations of the mentor. A student can do mini project as

- (i) A group of 2 if mini project work is single discipline (applicable to all IT allied branches)
- (ii) A group of 2- 4 if mini project work is single discipline (applicable to all Core Branches)
- (iii) A group of 2 - 4 students if the Mini Project work is a multidisciplinary (Applicable to all Branches)

CIE procedure for Mini-project:

(i) **Single discipline:** The CIE marks shall be awarded by a committee consisting of the Head of the concerned Department and two faculty members of the Department, one of them being the Guide. The CIE marks awarded for the Mini-project work shall be based on

hvvjvov svasvov

the evaluation of the project report, project presentation skill, and question and answer session in the ratio of 50:25:25. The marks awarded for the project report shall be the same for all the batches mates.

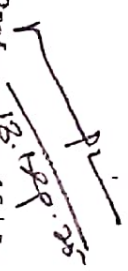
(ii) **Interdisciplinary:** Continuous Internal Evaluation shall be group-wise at the college level with the participation of all the guides of the project

The CIE marks awarded for the Mini-project, shall be based on the evaluation of the project report, project presentation skill, and question and answer session in the percentage ratio of 50:25:25. The marks awarded for the project report shall be the same for all the batch mates

National Service Scheme /Physical Education/Yoga: All students have to register for any one of the courses namely National Service Scheme (NSS), Physical Education (PE) (Sports and Athletics), and Yoga (YOG) with the concerned coordinator of the course during the first week of III semesters. Activities shall be carried out between III semester to the VI semester (for 4 semesters). Successful completion of the registered course and requisite CIE score is mandatory for the award of the degree. The events shall be appropriately scheduled by the colleges and the same shall be reflected in the calendar prepared for the NSS, PE, and Yoga activities. These courses shall not be considered for vertical progression as well as for the calculation of SGPA and CGPA, but completion of the course is mandatory for the award of degree.

Credit Definition: 1-hour Lecture (L) per week=1Credit 2-hours Tutorial(T) per week=1Credit 2-hours Practical / Drawing (P) per week=1Credit 2-hous Self Study for Skill Development (SDA) per week = 1 Credit	03-Credits courses are to be designed for 40 hours in Teaching-Learning Session 02- Credits courses are to be designed for 25 hours of Teaching-Learning Session 01-Credit courses are to be designed for 15 hours of Teaching-Learning Sessions
---	--

U.V. Prasad Babu


Professor G. H. B. P. a g e
 Department of Computer Science and Engineering
 New Horizon College of Engineering
 Bengaluru – 560 103

NEW HORIZON COLLEGE OF ENGINEERING
A. E. in Computer Science and Engineering
Scheme of Teaching and Examinations for 2022- 2026 BATCH (2022 Scheme)

VII Semester													
S. No.	Course and Course Code		Course Title	Bos	Credit Distribution				Overall Credits	Contact Hours	Marks		
					L	T	P	S			C/E	SEE	Total
1	PCC	22CSE71	Full Stack Technologies	CS	3	0	0	0	3	3	50	50	100
2	PCCL	22CSL71	Full Stack Technologies Lab	CS	0	0	1	0	1	2	50	50	100
3	PCC	22CSE72	Software Testing	CS	3	0	0	0	3	3	50	50	100
4	PCCL	22CSL72	Software Testing Lab	CS	0	0	1	0	1	2	50	50	100
5	PCC	22CSE73	Generative AI	CS	3	0	0	0	3	3	50	50	100
6	PROJ	22CSE74	Project Phase - II	CS	0	0	10	0	10	20	100	100	200
7	OEC	23NHOP7XX	Industrial Open Elective Course-II	Offering Dept.	3	0	0	0	3	3	50	50	100
Total									24	36	400	400	800

PCC: Professional Core Course, **PCCL:** Professional Core Course laboratory, **PEC:** Professional Elective Course, **OEC:** Open Elective Course, **PROJ:** Project work, **L:** Lecture, **T:** Tutorial, **P:** Practical **S:** **SDA:** Self Study for Skill Development, **CIE:** Continuous Internal Evaluation, **SEE:** Semester End Evaluation.

Industrial Open Elective Courses-II:

Credit for OEC is 03 (L: T: P: S) can be considered as (3: 0: 0 : 0). The teaching and learning of these Courses will be based on hands-on. The Course Assessment will be based on CIE and SEE in practical mode. This Courses will be offered by Centre of Excellence to students of all the branches. Registration to Industrial open electives shall be documented and monitored on college level.

U. V. Prasad

Prof. Dr. P. V. S. S. S.

Project Phase-II:

The objective of the Project work is

- (i) To encourage independent learning and the innovative attitude of the students.
- (ii) To develop interactive attitude, communication skills, organization, time management, and presentation skills.
- (iii) To impart flexibility and adaptability.
- (iv) To inspire team working.
- (v) To expand intellectual capacity, credibility, judgment and intuition.
- (vi) To adhere to punctuality, setting and meeting deadlines.
- (vii) To install responsibilities to oneself and others.
- (viii) To train students to present the topic of project work in a seminar without any fear, face the audience confidently, enhance communication skills, involve in group discussion to present and exchange ideas.

CIE procedure for Project Work:

(1) Single discipline: The CIE marks shall be awarded by a committee consisting of the Head of the concerned Department and two senior faculty members of the Department, one of whom shall be the Guide.

The CIE marks awarded for the project work, shall be based on the evaluation of the project work Report, project presentation skill, and question and answer session in the percentage ratio of 50:25:25. The marks awarded for the project report shall be the same for all the batch mates.

(2) Interdisciplinary: Continuous Internal Evaluation shall be group-wise at the college level with the participation of all guides of the college. Participation of external guide/s, if any, is desirable. The CIE marks awarded for the project work, shall be based on the evaluation of project work Report, project presentation skill, and question and answer session in the percentage ratio of 50:25:25.

The marks awarded for the project report shall be the same for all the batch mates.

SEE procedure for Project Work: SEE for project work will be conducted by the two examiners appointed by the University. The SEE marks awarded for the project work shall be based on the evaluation of project work Report, project presentation skill, and question and answer session in the percentage ratio of 50:25:25.

Credit Definition:	
1-hour Lecture (L) per week=1 Credit	03-Credits courses are to be designed for 40 hours in Teaching-Learning Session
2-hour Tutorial(T) per week=1 Credit	02- Credits courses are to be designed for 25 hours of Teaching-Learning Session
2-hours Practical / Drawing (P) per week=1 Credit	01-Credit courses are to be designed for 15 hours of Teaching-Learning Sessions
2-hous Self Study for Skill Development (SDA) per week = 1 Credit	

ANIRUDH SANKARAN

NEW HORIZON COLLEGE OF ENGINEERING
B. E. in Computer Science and Engineering
Scheme of Teaching and Examinations for 2022- 2026 BATCH (2022 Scheme)

VIII Semester													
S. No.	Course and Course Code	Course Title	Bos	Credit Distribution				Overall Credits	Contact Hours	Marks			
				L	T	P	S			CIE	SEE	Total	
1	PEC*	22CSE81X	Professional Elective Courses -I/II	CS	3	0	0	0	3	3	50	50	100
2	PEC*	22CSE82X	Professional Elective Courses -IV	CS	3	0	0	0	3	3	50	50	100
3	INT	22CSE83	Internship	CS	0	0	10	0	10	20	100	100	200
Total									16	26	200	200	400

PEC*: Professional Elective Course (Online / Hybrid), L: Lecture, T: Tutorial, P: Practical S: SDA: Self Study for Skill Development, INT: Industry Internship / Research Internship, CIE: Continuous Internal Evaluation, SEE: Semester End Evaluation.

Professional Elective Course-III			
22CSE811	Concurrent Programming	22CSE814	Entrepreneurship and Resource Management
22CSE812	Human Computer Interaction	22CSE815	Social Media Networks
22CSE813	Soft Computing		
Professional Elective Course-IV			
22CSE821	Design Thinking	22CSE824	Ethics in AI
22CSE822	Service Oriented Architecture	22CSE825	Storage Area Networks
22CSE823	Recommender Systems		

Approved by

Elucidation:

At the beginning of IV years of the program i.e., after VI semester, VII semester classwork and VIII semester Internship shall be permitted to be operated simultaneously by the University so that students have ample opportunity for an internship. In other words, a good percentage of the class shall attend VII semester classwork and a similar percentage of others shall attend to Internship.

Internship: The mandatory Internship is for 14 to 20 weeks. The internship shall be considered as a head of passing and shall be considered for the award of a degree. Those, who do not take up/complete the internship shall be declared to fail and shall have to complete it during the subsequent SEE examination after satisfying the internship requirements. If the students are opting for the 8th semester, the following internship options are available:

- Industry Internship
- Research Internship
- Skill Enhancement Courses
- Post-Placement Training as Internship
- Online Internship

Industry internship: It is an extended period of work experience undertaken by students to supplement their degree for professional development. It also helps them learn to overcome unexpected obstacles and successfully navigate organizations, perspectives, and cultures. Dealing with contingencies helps students recognize, appreciate, and adapt to organizational realities by tempering their knowledge with practical constraints. Students undertaking industry internships must ensure the organization is listed on the VTU Internship Portal. If not, request the organization to register on the portal.

Research internship: A research internship is intended to offer the flavor of current research going on in the research field. It helps students get familiarized with the field and imparts the skill required for carrying out research. Research internships must be carried out in recognized research centers. Ensure that these centers are registered on the portal.

Skill Enhancement Courses: Students can take Skill-based courses with credits totalling the same as those of the internship. Students must be taken from registered providers listed on the VTU Internship Portal.

Post-Placement Training as Internship: The post-placement training is also considered an internship. For students placed during their 6th/7th semester and willing to take the training during their final year, colleges must inform the recruiting companies in advance to register on the VTU Internship Portal.

Online Internship: Reputed online internship platforms, including those identified by NSDC, are already listed on the VTU Internship portal. If colleges come across other eligible organizations not yet listed, they are informed to ask the organization to register on the VTU Internship portal.

The faculty coordinator or mentor has to monitor the student's internship progress and interact with them to guide for the successful completion of the internship. The students are permitted to carry out the internship anywhere in India or abroad. University shall not bear any expenses incurred in respect of the internship. With the consent of the internal guide and Principal of the Institution, students shall be allowed to carry out the internship at their hometown (within or outside the state or abroad), provided favorable facilities are available for the internship and the student remains regularly in contact with the internal guide.

NEW HORIZON COLLEGE OF ENGINEERING

M.Tech Computer Science and Engineering

Scheme of Teaching and Examinations for 2024 - 2026 BATCH (2024 Scheme)

III - Semester														
S. No.	Course and Course Code		Course Title	Bos	Credit Distribution					Overall Credits	Contact Hours	Marks		
					L	T	P	S	CIE			SEE	Total	
1	PCC	24SCS31	Advanced Computer Network & Security	CS	3	0	0	1	4	5	50	50	100	
2	PEC	24SCS32X	Professional Elective - 3	CS	3	0	0	0	3	3	50	50	100	
3	OEC	23NHOPGXX	Open Elective Courses	CS	3	0	0	0	3	3	50	50	100	
4	PROJ	24SCS34	Project Work Phase - 1	CS	0	0	3	0	3	-	100	--	100	
5	SP	24SCS35	Societal Project	CS	0	0	3	0	3	-	100	--	100	
6	INT	24SCSI36	Internship (6 weeks Internship completed during the intervening vacation of II & III semesters.)	CS	0	0	6	0	6	-	50	50	100	
Total									22	11	400	200	600	

Important Note: During the 3rd semester, students should enroll in and finish the recommended BOS Online (NPTEL) Courses for the 4th semester, as the evaluation will take place during the 4th semester.

Legends: PCC: Professional core courses, PEC: Professional Elective Courses, IPCC-Integrated Professional Core Courses. MPS-Mini Project With Seminar; AUD/AEC; Audit Courses/ Ability Enhancement Courses (Mandatory), PCCL – Professional Core Course lab, L - Lecture, P-Practical, T / SDA-Tutorial / Skill Development Activities (Hours are for Interaction between faculty and students)

Professional Elective - 3	
Course Code	Course Title
24SCS321	Prompt Engineering
24SCS322	Distributed Computing
24SCS323	Crime Detection and Forensics
24SCS324	High Performance Computing
24SCS325	Service Oriented Architecture

hivitsy an'ny fampianarana

Professor B. HOD
Department of Computer Science and Engineering
New Horizon College of Engineering
V. Bengaluru-560 102

23NHOPGXX – Open Elective Courses			
23NHOPG01	Data Analytics using R Programming	23NHOPG08	Cisco – Routing & Switching-2
23NHOPG02	Robotic Process Automation	23NHOPG10	5G mobile Communication
23NHOPG03	SAP	23NHOPG11	VLSI Physical Design-I
23NHOPG04	Product Life Cycle Management	23NHOPG12	Juniper Network Operating System
23NHOPG05	Industry 4.0	23NHOPG14	VLSI Physical Design-II
23NHOPG06	Schneider – Industrial Automation	23NHOPG15	Advanced Networking
23NHOPG07	Cisco – Routing & Switching-1		

Note:

Project Work Phase-1: It's an opportunity for students to look into into real-world challenges, applying theoretical knowledge to practical scenarios. This phase typically involves project selection, literature review, problem identification, and proposal formulation.

Societal Project: Aims to bridge technology with societal needs. It encourages students to address real-world challenges by leveraging their technical expertise for societal betterment. This initiative fosters a sense of responsibility, innovation, and ethical application of technology in creating solutions that positively impact communities.

Internship: Those, who have not pursued /completed the internship, shall be declared as fail in the internship course and have to complete the same during subsequent University examinations after satisfying the internship requirements. Internship SEE (University examination) shall be as per the University norms.


CIE marks shall be awarded by a committee comprising of HoD as Chairman, Guide/co-guide if any, and a senior faculty of the department. The CIE marks awarded for project work phase -1, shall be based on the evaluation of Project Report, Project Presentation skill, and performance in the Question and Answer session in the ratio of 50:25:25.

University of Kalyani

NEW HORIZON COLLEGE OF ENGINEERING
M.Tech Computer Science and Engineering
Scheme of Teaching and Examinations for 2024 - 2026 BATCH (2024 Scheme)

IV – Semester														
S. No.	Course and Course Code		Course Title	Bos	Credit Distribution					Overall Credits	Contact Hours	Marks		
					L	T	P	S	CIE			SEE	Total	
1	Project	24SCS41	Project work phase – 2	CS	0	0	20	0	20	-	100	100	200	
2	AUD/AEC	24MOOC2	Online Courses	CS	Classes and evaluation procedures are as per the policy of the online course providers.									pp
Total									20	-	100	100	200	

6/11/2024 5:04:30 AM


 13. sep. 25
Professor & HOD
 Department of Computer Science and Engineering
 New Horizon College of Engineering
 Bengaluru - 560 103

Project Work Phase-2: Students in consultation with the guide/co-guide (if any) in disciplinary project or guides/co-guides (if any) of all departments in case of multidisciplinary projects, shall continue to work of Project Work phase -1 to complete the Project work. Each student / batch of students shall prepare project document, and present a seminar.

CIE marks shall be awarded by a committee comprising of HoD as Chairman, all Guide/s and co-guide/s (if any) and a senior faculty of the concerned departments. The CIE marks awarded for project work phase -2, shall be based on the evaluation of Project Report, Project Presentation skill, and performance in the Question and Answer session in the ratio of 50:25:25.

SEE shall be at the end of IV semester. Project work evaluation and Viva-Voce examination (SEE), after satisfying the plagiarism check, shall be as per the University norms.

13. sep. 25

25 | Page

AGENDA -5

Presentation of draft of scheme & syllabus for the commencement semesters of (Particulars - 4) schemes for ratification

The Chairperson presented the draft of scheme and contents of syllabus. The details were scrutinized by the members of the Board.

The presentation for the ratification of a draft scheme and syllabus for semester courses is a crucial step in the academic process. The members formally accepted and appreciated the proposal of new courses. The objective of this presentation is to provide a comprehensive overview of the proposed courses, including their structure, content, assessment methods, and alignment with learning objectives.

In summary, the presentation session for draft scheme and syllabus ratification was very informative aimed at presenting comprehensive details about all intrinsic details of Core (Theory & Lab), PE (Professional Electives), OEC (Open Elective Courses), and AEC (Ability Enhancement courses) and Project work. After emphasizing the courses' content, structure, assessment methods, and alignment with learning outcomes, ultimately seeking approval and endorsement from panel of external experts and university nominee.

Handwritten signature

Handwritten signature
13.12.25
Professor & HOD -
Department of Computer Science and Engineering
New Horizon College of Engineering
Bengaluru - 560 103

AGENDA -6

Recommendations/ Suggestions of BOS Members

The following suggestions were given by the BoS members in the scheme and syllabi.

B.E II Year Scheme and Syllabi for 2024-2028 batch (3rd and 4th semester)

1. It is advisable to remove Data Structures from first year
2. Project presentations may be incorporated under the courses Software Engineering and Project Management
3. Additional hours should be allocated to the topic Trees in Advanced Data Structures, while introductory hours can be reduced
4. Dr. B. Rajalakshmi suggested organizing a bridge course for lateral entry students to help them cope up with Data Structure fundamentals covered in the first year, as many lateral entry students come from different discipline, not only from CSE
5. New programming languages such as Python, REST and Golang could be included more extensively in the syllabus
6. Students may be encouraged to contribute case studies to open-source Linux projects.
7. Linux OS Theory course could be renamed as "Operating Systems"
8. Cluster Databases may be included as part of DBMS
9. Fundamentals of Information Security should be shifted from a Professional Elective Course (PEC) to a core course, considering its importance

B.E IV Year Scheme and Syllabi for 2022-2026 batch (7th and 8th semester)

1. The Full Stack Lab may include a project component as part of CIE evaluation
2. The statement under Virtual Lab — "Not included in CIE or SEE" — may be removed and faculty can be allowed to include it in evaluation
3. David Foster can be considered as a textbook for Generative AI, instead of just a reference book
4. In Software Testing, students should execute an end-to-end pipeline including test plan, report, presentation and must be able to explain the entire workflow
5. Professional Electives (PEC) and Open Electives can be offered through NPTEL, while Internships may be taken in the 7th or 8th semester or extended flexibly up to 1 year, depending on requirements
6. Internship credits may be reduced to 6 or 8 to maintain balance in the curriculum

M.Tech II Year Scheme and Syllabi for 2024-2026 batch (3rd and 4th semester)

1. Advanced Databases course can be included
2. Distributed Computing may include advanced topics
3. Lab component should be incorporated into the Crime Detection and forensics course for practical exposure
4. Three internship schemes should be introduced in the curriculum, allowing students the flexibility to choose based on their interests and career goals

Handwritten signature

General Academic Policy Suggestions

1. Credit transfer provisions may be considered for students under the 25 USN syllabi to ensure flexibility and alignment with academic mobility practices

4. വിശദീകരിക്കുക

13. SEP. 25
Professor & HOD

Department of Computer Science and Engineering
New Horizon College of Engineering
Bengaluru – 560 103

•

Implementation of Recommendation of BOS Members

The chairperson constituted the following groups to review and implement the recommendations of the BOS members in the scheme and syllabus of the curriculum based on industry needs

3rd and 4th Semester Courses (2024 -2028 Batch)

Dr. Roja Ramani, Associate Professor

7th and 8th Semester Courses(2022 - 2026 Batch)

Dr. Nirmala M, Professor

3rd and 4th M-Tech Semester Courses (2024-2026 Batch)

Ms. Chempavathy, Sr. Asst Prof

AGENDA -8

Approval of scheme & syllabus of agenda 4 & 5

The Board of Studies members reviewed the modified draft of the scheme & syllabus with their recommendations/suggestions being incorporated appropriately for the following:

1. B.E 3rd and 4th semester for 2024-2028 batch
2. B.E 7th and 8th semester for 2022-2026 batch
3. M.Tech 3rd and 4th semester for 2024- 2026 batch

Finally, the members approved the draft of the same with the modifications for final implementation.

विष्णुसंस्कृतम्.

13.11.25
 Professor & HOD
 Department of Computer Science and Engineering
 New Horizon College of Engineering
 Bengaluru - 560 103

AGENDA -9

Vote Of Thanks by the Chairman of BOS

The chairman of BOS thanked the external members for their fruitful participation on behalf of the Principal and the Management. She also thanked **Dr. Annappa, Dr. B. R. Shambhavi , Dr. Shyam P Joy, Ms. Supriya K, Ms. Shreya Pradeep and Ms. Vanshika Sai Ramadurgam** and all the other members of the BOS for their active participation.

Dr.B. Rajalakshmi

BOS - Chairman

Prof & Head – CSE

h.v. Rajalakshmi