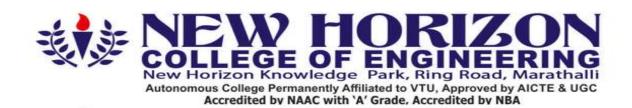


# 27<sup>th</sup> Academic Council Meeting AY 2025-2026

29th August 2025



## **OFFICE OF DEAN ACADEMICS**

# 27<sup>th</sup>Academic Council Meeting AY 2025-2026

29th August 2025

## MEMBERS OF THE ACADEMIC COUNCIL ACADEMIC YEAR 2025-26

SI No.	Category	SI No.	Name
I	Principal of the College - Chairman	1	Dr. Manjunatha
Ш	Dean – R&D	1	Dr Revathi V
III	Controller of Examination	1	Dr. Vijilius H Raj
IV	Director - Library and Alumni Relations	1	Dr. Anitha S Rai
		1	Dr. B Rajalakshmi
		2	Dr. Aravinda K
		3	Dr. Uma Reddy
		4	Dr. Sujitha S
		5	Dr. Asha Joseph
	All Hands of the Doub - Manchaus	6	Dr. Baswaraju Swathi
V	All Heads of the Dept Members	7	Dr. Vandana C P
		8	Dr. Asha V
		9	Dr. Rose Kavitha
		10	Dr. Anusuya Devi V S
		11	Dr. Srinivasa G
		12	Mr. Rakesh Chandrashekar
		1	Dr M. Jayanthi, Associate Professor
		2	Dr. Vijayasekaran G, Associate Professor
		3	Dr.J KarthiyayiniJ, Sr Assistant Professor
		4	Ms Asha Rani Borah, Sr Assistant Professor
	Tanahara af tha Callaga yanyaanting	5	Dr Karthika M, Associate Professor
VI	Teachers of the College representing	6	Dr Umamaheshwaran, Professor
	different level of teaching staff	7	Dr. J. Joshua Daniel Raj, Associate Professor
		8	Dr Srinath M K, Associate Professor
		9	Dr Arpana Prasad, Associate Professor
		10	Dr Dhanalakshmi R V, Associate Professor
		11	Dr Prashanth K S, Professor
		1	Mr. Rajesh Sakri, Segment Head, Europe/UK Sap Labs
VII	Experts from outside the college representing areas such as industry, R & D,	2	Mr. Ananthamani, Vice President – PLM & Mech/Elec Capgemini Engineering
	Tech. Edn		Dr. K N Subramanya, Principal, R V College of
		3	Engineering
		_	Dr. Shadashive Gowda, Principal-Vidya
		1	Vardhaka College of Engineering, Mysore
VIII	Nominees of University (VTU)		Dr. Shivyogimath,
		2	Prof., Dept. of Civil Engineering, Basaveswara
			Engineering College, Bagalkot
IX	Dean Academics – Member Secretary	1	Dr. R. J. Anandhi



## ACADEMIC COUNCIL MEETING – AY 2025-26 AGENDA

Date: 29/08/2025

**Venue: Conference Hall/Blended Mode** 

Time: 02.30 pm

## **AGENDA:**

- Discussion of Scheme of Study for 2<sup>nd</sup> year, 3<sup>rd</sup> year and final year UG Programs for the AY 2025-26 based on VTU guidelines
- Discussion of Scheme of Study for 1st year UG Program for the AY 2025-26 based on VTU guidelines
- Proposal and approval of scheme of study for PG programs for the AY 2025-26
- Proposed reforms in Teaching and Learning processes and evaluation process.
- Result analysis of VIII Semester BE
- Value Added Programs
- Research and Development Programs
- Skill Development activities
- IQAC Activities
- Any other points with approval of Chairman.



## ACM MEETING - AY 2025-26: ATTENDANCE SHEET

VENUE: CONFERENCE HALL/Blended Mode

Date: 29/08/2025

Time: 2:30 PM

SI No.	Category	SI No.	Name	Signature
110.	Principal of the College - Chairman	1	Dr. Manjunatha	Mr. tn
11	Dean-R&D	1	Dr Revathi V	Ruodes
111	Controller of Examination	1	Dr. Vijilius H Raj	Online
IV	Director - Library and Alumni Relations	1	Dr. Anitha S Rai	Shine.
		1	Dr. B Rajalakshmi	70 30 Aug.
		2	Dr. Aravinda K	Arable / 29.08.25
		3	Dr. Uma Reddy N. V	NV1 clay
		4	Dr. Sujitha S	Outerl.
		5	Dr. Asha Joseph	Della
		6	Dr. Baswaraju Swathi	3. Com
٧	All Heads of the Dept Members	7	Dr. Vandana C P	Va 29/8/2021
		8	Dr. Asha V .	Mm
*	gar	9	Dr. Rose Kavitha	V 'do
		10	Dr. Anusuya Devi V S	4816
		11	Dr. Srinivasa G	
		12	Mr. Rakesh Chandrashekar	29 M
		1	Dr M. Jayanthi, Associate Professor	7 2 2 7/190
		2	Dr Vijayasekaran G, Associate Professor	de nisas de cons
		3	Dr J Karthiyayini, Sr Assistant Professor	alum
		4	Ms Asha Rani Borah, Sr Assistant Professor	
	Teachers of the College	5	Dr Karthika M, Professor	ob thick
VIII	representing different level of	6	Dr Umamaheshwaran, Professor	
	teaching staff	7	Dr. J. Joshua Daniel Raj, Associate Professor	
		8	Dr Srinath M K, Associate Professor	Sills
		9	Dr Arpana Prasad, Associate Professor	
		10	Dr Dhanalakshmi R V, Associate Professor	,
	19	11	Dr Prashanth K S, Professor	10 ou
	,			BA ()

Prodeep Kote



## ACM MEETING – AY 2025-26: ATTENDANCE SHEET

VENUE: CONFERENCE HALL/Blended Mode

Date: 29/08/2025

Time: 2:30 PM

SI No.	Category	SI No.	Name	Signature
		1	Mr. Rajesh Sakri, Segment Head, Europe/UK Sap Labs	ONLINE
IX	Experts from outside the college representing areas such as industry, R & D, Tech. Edn	2	Mr. Ananthamani, Vice President – PLM & Mech/Elec Capgemini Engineering	ONLINE
		3	Dr. Shanmukha Nagaraj, R V College	ONLINE
		1	Dr. Shadashive Gowda, Principal- Vidya Vardhaka College of Engineering, Mysore	ONTINE
х	Nominees of University (VTU)	2	Dr. Shivyogimath, Prof., Dept. of Civil Engineering, Basaveswara Engineering College, Bagalkot	ONLINE
ΧI	Dean Academics – Member Secretary	1	Dr. R. J. Anandhi	Anaudhi.



## MINUTES OF THE 27th ACADEMIC COUNCIL MEETING

Date: 29th August 2025

Time: 02:30 PM

Venue: Conference Hall / Blended Mode

### **Members Present**

No.	Category	S1 No.	Name
I	Principal of the College - Chairman	1	Dr. Manjunatha
II	Dean - R&D	1	Dr Revathi V
III	Controller of Examination	1	Dr. Vijilius H Raj
IV	Director - Library and Alumni Relations	1	Dr. Anitha S Rai
v	All Heads of the Dept Members	1	Dr. B Rajalakshmi
	Wembers	2	Dr. Aravinda K
		3	Dr. Uma Reddy
		4	Dr. Sujitha S
		5	Dr. Asha Joseph
		6	Dr. Baswaraju Swathi
		7	Dr. Vandana C P
		8	Dr. Asha V
		9	Dr. Rose Kavitha



		10	Dr. Anusuya Devi V S
		11	Dr. Srinivasa G
		12	Mr. Rakesh Chandrashekar
VI	Teachers of the College representing different level of	1	Dr M. Jayanthi, Associate Professor
	teaching staff	2	Dr. Vijayasekaran G, Associate Professor
		3	Dr.J KarthiyayiniJ, Sr Assistant Professor
		4	Ms Asha Rani Borah, Sr Assistant Professor
		5	Dr Karthika M, Associate Professor
		6	Dr Umamaheshwaran, Professor
		7	Dr. J. Joshua Daniel Raj, Associate Professor
		8	Dr Srinath M K, Associate Professor
		9	Dr Arpana Prasad, Associate Professor
		10	Dr Dhanalakshmi R V, Associate Professor
		11	Dr Prashanth K S, Professor
VII	Experts from outside the college representing areas such as industry, R & D, Tech. Edn	1	Mr. Rajesh Sakri, Segment Head, Europe/UK Sap Labs
	maioty, it a D, Teelii Laii	2	Mr. Ananthamani, Vice President - PLM & Mech/Elec Capgemini Engineering
		3	Dr Shanmukha Nagaraj, Member



			Secretary - IQAC, RV College of Engineering
VIII	Nominees of University (VTU)	1	Dr. Shadashive Gowda, Principal-Vidya Vardhaka College of Engineering, Mysore
		2	Dr. Shivyogimath, Prof., Dept. of Civil Engineering, Basaveswara Engineering College, Bagalkot
IX	Dean Academics - Member Secretary	1	Dr. R. J. Anandhi

#### **Agenda & Proceedings**

Agenda. 1: Discussion of Scheme of Study for 2nd, 3rd, and Final Year UG Programs (AY 2025–26)

The council discussed and approved the scheme of study for

- 7th & 8th Sem (2022 Batch)
- 5th & 6th Sem (2023 Batch),
- 3rd & 4th Sem (2024 Batch) based on VTU guidelines.

Emphasis was laid on interdisciplinary projects, Ability Enhancement Courses (AEC), and industry-relevant curriculum updates.

#### **Suggestions & Discussion:**

- 1. It was resolved that 8th Semester Professional Elective courses may be conducted in hybrid mode, enabling flexibility and wider access to resources.
- 2. All students must complete their Internship Registration by the 7th Semester in the VTU portal.
- 3. HoDs are responsible for verification of registrations to ensure compliance.
- 4. Students must maintain a Work Diary throughout the internship and the same should be uploaded to the VTU portal as part of internship evaluation and compliance.
- 5. Feedback from HRD has highlighted that Critical Thinking and Coding courses offered under AECs were found to be very useful.



- 6. Self-study provisions in the curriculum will be validated with MOOC courses, ensuring proper credit transfer and academic rigor.
- 7. 2024 Scheme Unified foundation courses were introduced, aligning with HRD feedback to ensure consistency across programs.
- 8. BOS for the unified course will be with the course specialization departments. The course coordinators will be identified based on their experience (Maximum time handling the course) and past performance (Pass Percentage).
- 9. Social Connect & Responsibility courses to be made activity-based for better student engagement.
- 10. Design Thinking and Fabrication course based on the IDEA Lab framework have been introduced to foster creativity and practical skills among students.

**Resolution:** Approved unanimously.

**Annexure 1:** Scheme of UG Courses

## Agenda. 2: Discussion of Scheme of Study for 1st Year UG Programs (AY 2025-26)

The foundation courses for the 2025–26 batch were presented. Unified courses for CSE, AI & ML, ECE, EEE, and Mechanical streams were emphasized to strengthen placement readiness. Scheme revised with changes in ESC, PSC (SC), Communication Skills, and other foundation courses.

#### **Suggestions & Discussion:**

- 1. An Introduction to AI & Applications course will be mandatory for all UG programs.
- 2. Lab components and skill-based activities will be integrated into multiple courses to strengthen practical learning.

Resolution: Approved.

**Annexure 2:** Scheme of 1st Year UG Programs (AY 2025–26)

## Agenda. 3: Proposal and Approval of Scheme of Study for PG Programs (AY 2025-26)

The scheme and syllabus for MCA (2025–27 batch) with credit distribution was reviewed. M.Tech., Computer Science and Engineering (2025-27 batch) with credit distribution also reviewed



## Suggestions & Discussion:

- 1. MBA program credit revision and guidelines not yet received from VTU. Hence suggested to follow the previous year guidelines.
- 2. Mini Project of MCA program has 2 credits assigned. Expert member asked to revise the same to 4 credits.

Resolution: Approved.

Annexure 3: Scheme of PG Programs (AY 2025–27) - MCA, M.Tech.,

## Agenda. 4: Proposed Reforms in Teaching, Learning and Evaluation

- Strengthening CO-PO Mapping
- Ensuring RBT levels in course delivery and assessments
- Adoption of Virtual Labs
- Practicing various alternate assessment tools
- Mandatory Innovative Teaching Pedagogy integration in regular classes
- Introduction of Interdisciplinary Projects to promote multi-domain problemsolving
- Integration of Design Thinking, IDEA Lab Projects
- Strengthening AEC such as Critical Thinking, Problem-Solving, and Advanced Programming
- Embedding Entrepreneurship, Innovation, and IPR through minor projects and startup mentoring

Salient features of were discussed.

**Resolution:** Appreciated.

### Agenda. 5: Result Analysis of VIII Semester BE

The council reviewed the result analysis of VIII semester BE programs.

**Resolution:** Noted and accepted.

## Agenda. 6: Value Added Programs

Value-Added Programs status of 2021-25 and 2022-26 were reviewed.

**Resolution:** Approved with emphasis on continuous VAP practice.



## Agenda. 7: Research and Development Programs

The council noted that 589 Scopus-indexed papers were published in 2025 (till Aug). Achievements include over 600 patents published, 45 granted patents, and IIC 7.0 outcomes.

**Resolution:** Appreciated quality publications and accepted.

### Agenda. 8: Skill Development Activities

Execution framework, Programme Categories and Beneficiaries and calendar of events discussed.

#### **Suggestions & Discussions:**

1. Expert member asked to include the number of days the activities planned and the agency involved in the training

**Resolution:** The council appreciated the structured framework and approved the proposed calendar of Skill Development Activities for the academic year 2025–26. Departments are advised to strictly adhere to the SOP and ensure timely reporting postevents.

#### **Agenda. 9: IQAC Activities**

The IQAC report highlighted improvements in NBA/NAAC scores, QS I-GAUGE Diamond rating, and NIRF banding. Introduction of self-audit and peer audit mechanism were discussed.

**Resolution:** Accepted and Approved

#### Agenda. 10: Any Other Points with Chairman's Approval

- 1. Minor Degree Issues (18 Credits)
  - 16 students have successfully completed the Minor Degree program.
  - Some technical issues in the process were noted and addressed.
  - A separate certificate will be issued for the Minor Degree.
- 2. Honors Degree Certification
  - The Honors Degree will be reflected only in the original degree certificate.

**Recommendation:** Explore the possibility of issuing a single consolidated certificate covering Honors, Minor, and Major, instead of multiple certificates.

**Resolution:** Noted and approved.



#### Conclusion

The Dean Academics and Member Secretary of the Academic Council expressed deep gratitude to all members of the ACM for their active participation in discussions on the scheme and syllabus for AY 2025–26 and for their valuable inputs on reforms, quality initiatives, and institutional development.

She extended special thanks to the external expert, Dr. Shanmukha Nagaraj, Member Secretary – IQAC, RV College of Engineering, for his constructive inputs and academic perspectives which enriched the proceedings.

The Dean also acknowledged with appreciation the constant encouragement and support of the Honorable Chairman, the Principal of NHCE, and the distinguished members of the council in driving reforms, quality enhancement, and innovation in teaching, learning, and evaluation.

She concluded by placing on record her sincere thanks to all stakeholders for their commitment to excellence and student-centric academic growth at NHCE.

**Dean Academics - Member Secretary** 

Principal - Chairman ACM

B. E. in \_\_\_\_\_

## Scheme of Teaching and Examinations for 2022-2026 BATCH (2022 Scheme)

VII Se	mester												
S.	Course and Course		Course Title	Do.C	Credit Distribution				Overall	Contact		Marks	3
No.		Code	Course Title	BoS	L	Т	Р	S	Credits	Hours	CIE	SEE	Total
1	PCC	22XXX71		XX	3	0	0	0	3	3	50	50	100
2	PCCL	22XXL71		XX	0	0	1	0	1	2	50	50	100
3	PCC	22XXX72		XX	3	0	0	0	3	3	50	50	100
4	PCCL	22XXL72		XX	0	0	1	0	1	2	50	50	100
5	PCC	22XXX73		XX	3	0	0	0	3	3	50	50	100
6	PROJ	22XXX74	Project Phase - II	XX	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, C**IE**: 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.

### **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=1Credit
- 2-hoursTutorial(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

B. E. in \_\_\_\_\_\_ Scheme of Teaching and Examinations for 2022- 2026 BATCH (2022 Scheme)

	emester		1			5	*1 <b>.</b>		Overall	Contact		Marks	
S.	Course	and Course	Course Title	BoS	Cred	lit Dist	ributio	on	- 19 <del>-</del> 0-100 (Hermitel Co. 10)		CIE	SEE	Total
No.		Code	Course Title	503	L	T	Р	S	Credits	Hours	CIE	SEE	Total
1	PEC*	22XXX81X	Professional Elective Courses -III	XX	3	0	0	0	3	3	50	50	100
2	PEC*	22XXX82X	Professional Elective Courses -IV	xx	3	0	0	0	3	3	50	50	100
3	INT	22XXX83	Internship	XX	0	0	10	0	10	20	100	100	200
4	NCMC	22IKK84	Indian Knowledge Systems	XX	0	0	0	0	0	1	50	•	50
		1	Total		TENER IS				16	27	250	200	450

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

	Professional Elective Course-III	
22XXX811	22XXX814	
22XXX812	22XXX815	
22XXX813		

	Professional Elective Course-IV	
22XXX821	22XXX824	
22XXX822	22XXX825	
22XXX823		

#### **Elucidation:**

At the beginning of IV years of the program i.e., after VI semester, VII semester classwork and VIII semester Research Internship /Industrial Internship / Rural 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 Research Internship or Industrial Internship or Rural Internship. Research/Industrial /Rural Internship shall be carried out at an Industry, NGO, MSME, Innovation center, Incubation centre, Start-up, centre of Excellence (CoE), Study Centre established in the parent institute and/or at reputed research organizations/institutes. The mandatory Research internship /Industry internship / Rural 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 University examination after satisfying the internship requirements.

**Internship (Research/Industrial /Rural):** The internship shall be carried out at an Industry, NGO, MSME, Innovation center, Incubation center, Start-up, center of Excellence (CoE), Study Centre established in the parent institute and /or at reputed research organizations/institutes. The mandatory Internship (Research /Industry / Rural) 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.

**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.

**Industry internship:** 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.

**Rural Internship:** Rural development internship is an initiative of Unnat Bharat Abhiyan Cell, RGIT in association with AICTE to involve students of all departments studying in different academic years for exploring various opportunities in techno-social fields, to connect and work with Rural India for their upliftment.

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.

#### **Credit Definition:**

- 1-hour Lecture (L) per week=1 Credit
- 2-hoursTutorial(T) per week=1 Credit
- 2-hours Practical / Drawing (P) per week=1 Credit
- 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

B. E. in	1
<i>D</i> . <i>L</i> . II	<b>4</b>

## Scheme of Teaching and Examinations for 2023- 2027 BATCH (2022 Scheme)

V Sen	nester												
S.		and Course	Course Title	BoS	Credit Distribution				Overall	Contact	Marks		
No.	C	ode			L	Т	Р	S	Credits	Hours	CIE	SEE	Total
1	HSMS	22XXX51	Please refer the guidelines	XX	3	0	0	0	3	3	50	50	100
2	PCC	22XXX52		XX	3	0	0	0	3	3	50	50	100
3	PCCL	22XXL52		XX	0	0	1	0	1	2	50	50	100
4	PCC	22XXX53		XX	3	0	0	0	3	3	50	50	100
5	PCCL	22XXL53		XX	0	0	1	0	1	2	50	50	100
6	PEC	22XXX54X	Professional Elective Course-I	XX	3	0	0	0	3	3	50	50	100
7	AEC	22RMK55	Research Methodology and IPR	XX	1	1	0	0	2	3	50	50	100
8	AEC	22SDK56	Critical and Creative Thinking Skills	XX	0	0	1	0	1	2	50		50
9	UHV	22ESK57	Environmental Studies	Any Dept	1	0	0	0	1	1	50	50	100
10	PROJ	22XXX58	Mini Project-II	XX	0	0	1	0	1	0	50	50	100
		22NSS50	National Service Scheme (NSS)	NSS coordinator				0	0	2	50		50
11	NCMC	22PED50	Physical Education (PE) (Sports and Athletics)	Physical Education Director	0	0	0						
		22YOG50	Yoga	Yoga Teacher									
			Total		-				19	24	550	450	1000

**PCC**: Professional Core Course, **PCCL**: Professional Core Course laboratory, **UHV**: Universal Human Value Course, **NCMC**: Non-Credit Mandatory Course, **AEC**: Ability Enhancement Course, **PEC**: Professional Elective Course, **PROJ**: Mini Project work **L**: Lecture, **T**: Tutorial, **P**: Practical **S**: **SDA**: Self Study for Skill Development, **CIE**: Continuous Internal Evaluation, **SEE**:Semester End Evaluation

	Professional Elective Course-I						
22XXX541		22XXX544					
22XXX542		22XXX545					
22XXX543							

**22XXX51(HSMS)**- This course must be pertaining to economics and management of the concerned degree program. The course syllabus should have both economics and management topics and the course title should bear the word Management.

For IT allied Branches: Software Product Management

For Core Branches: Engineering Economics and Management / Industrial Management and Entrepreneurship

**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 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.

**Professional Elective Courses (PEC):** A professional elective (PEC) course is intended to enhance the depth and breadth of educational experience in the Engineering and Technology curriculum. Multidisciplinary courses can be added to supplement the latest trend and advanced technology in the selected stream of engineering.

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.

-	_		-	•		
- 4	ro	Ait.	116	htin	11	on.

1-hour Lecture (L) per week=1Credit

2-hoursTutorial(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

## B. E. in \_\_\_\_\_\_ Scheme of Teaching and Examinations for 2023- 2027 BATCH (2022 Scheme)

VI Se	mester													
S.	Cours	e and Course	Course Title	BoS	Cred	lit Dist	ributi	on	Overall	Contact		Marks		
No.		Code	Course ritte	В03	L	T	Р	S	Credits	Hours	CIE	SEE	Total	
1	PCC	22XXX61		XX	3	0	0	0	3	3	50	50	100	
2	PCCL	22XXL61		XX	0	0	1	0	1	2	50	50	100	
3	PCC	22XXX62		XX	3	0	0	0	3	3	50	50	100	
4	PCCL	22XXL62		XX	0	0	1	0	1	2	50	50	100	
5	PCC	22XXX63		XX	2	1	0	0	3	4	50	50	100	
6	PEC	22XXX64X	Professional Elective Course-II	XX	3	0	0	0	3	3	50	50	100	
7	PROJ	22XXX65	Project Phase-I	XX	0	0	2	0	2	0	50	50	100	
8	AEC	22SDK66	Problem Solving Skills	XX	0	0	1	0	1	2	50		50	
				If the course i			If the course is a Theory			у				
•	450	222444674	Alilly Falances of Community	\ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	1	0	0	0	1	1	F.0	F.0	100	
9	AEC	22XXX67X	Ability Enhancement Course – V	XX	^^		If the	cour	se is	a laborato	ory	50	50	100
					0	0	1	0	1	2				
10	OEC	24NHOP6XX	Industrial Open Elective Course-I	Offering Dept.	3	0	0	0	3	3	50	50	100	
		22NSS60	National Service Scheme (NSS)	NSS coordinator										
11	NCMC	22PED60	Physical Education (PE) (Sports and Athletics)	Physical Education Director	0	0	0	0	0	2	50		50	
		22YOG60	Yoga	Yoga Teacher										
			Total						21	25/26	550	450	1000	

**PCC**: Professional Core Course, **PCCL**: Professional Core Course laboratory, **NCMC**: Non-Credit Mandatory Course, **AEC**: Ability Enhancement Course, **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.

	Professional Elective Course-II						
22XXX641	22	22XXX644					
22XXX642	22	22XXX645					
22XXX643							

	Ability Enhancement Course – V						
22XXX671 22XXX674							
22XXX672		22XXX675					
22XXX673							

## **Industrial Open Elective Courses-I:**

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.

**Project Phase-I:** Students have to discuss with the mentor /guide and with their help he/she has to complete the literature survey and prepare the report and finally define the problem statement for the project work.

**Professional Elective Courses (PEC):** A professional elective (PEC) course is intended to enhance the depth and breadth of educational experience in the Engineering and Technology curriculum. Multidisciplinary courses can be added to supplement the latest trend and advanced technology in the selected stream of engineering.

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

B. E. in \_\_\_\_\_

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

III Se	mester												
S.	Course	and Course	Course Title	D-C	Cre	Credit Distribution			Overall	Contact	Marks		
No.		Code	Course Title	BoS	L	Т	Р	S	Credits	Hours	CIE	SEE	Total
1	BSC	24MAC31/ 24MAE31		BS	2	1	0	0	3	4	50	50	100
2	PCC	24XXX32		XX	3	0	0	0	3	3	50	50	100
3	PCCL	24XXL32		XX	0	0	1	0	1	2	50	50	100
4	PCC	24XXX33		XX	3	0	0	0	3	3	50	50	100
5	PCCL	24XXL33		XX	0	0	1	0	1	2	50	50	100
6	PCC	24XXX34		XX	3	0	0	0	3	3	50	50	100
7	PCC/ HSMS	24XXX35	Please refer the guidelines for HSMS	XX	3	0	0	0	3	3	50	50	100
						If the course is a Theory							
8	AEC	24XXX36X	Ability Enhancement Course III	XX	1	0	0	0	1	1	50	50	100
٥	ALC	24///30/	Ability Enhancement Course – III	٨٨		If th	ne cou	ırse is	a Laborato	ory	30	30	100
					0	0	1	0	1	2			
		24DTK37	Design Thinking and Fabrication	Any Dept	1	0	0	0	1	1	50	50	100
9	UHV		OR										
J	Onv	24UHK37	Universal Human Values and Life Skills	Any Dept	1	0	0	0	1	2	50	50	100
		24NSS30	National Service Scheme	-									
10	NCMC	24PED30	Physical Education and Sports	-	0	0	0	0	0	2	50		
		24YOG30	Yoga	-									
							Т	otal	19	24/26	500	450	950
			<u>,</u>								•	_	
11	NCMC*	24DMAT31	Basic Applied Mathematics -I	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, **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 Course, **ETC**: Emerging Technology Course, **PLC**: Programming Language Course, **CIE**: Continuous Internal Evaluation, **SEE**:Semester End Evaluation

	Ability Enhancement Course – III (0-0-1-0)								
24XXX361		24XXX364							
24XXX362		24XXX365	Bio Inspired Design and Innovation (1-0-0-0)						
24XXX363									

NCMC\*:24DMAT31: This non-credit mandatory course to be offered to Lateral entry students.

**24XXX35(HSMS)**- This course must be pertaining to economics and management of the concerned degree program. The course syllabus should have both economics and management topics and the course title should bear the word Management.

For IT allied Branches: Software Product Management

For Core Branches: Engineering Economics and Management / Industrial Management and Entrepreneurship.

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

B. E. in \_\_\_\_\_

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

IV Ser	nester												
S.	Course	and Course	Course Title	BoS	Cre	dit D	istribu	tion	Overall	Contact		Marks	
No.	(	Code	Course Title	ВОЗ	L	Т	Р	S	Credits	Hours	CIE	SEE	Total
1	BSC	24MAC41/ 24MAE41		BS	2	1	0	0	3	4	50	50	100
2	PCC	24XXX42		XX	3	0	0	0	3	3	50	50	100
3	PCCL	24XXL42		XX	0	0	1	0	1	2	50	50	100
4	PCC	24XXX43		XX	3	0	0	0	3	3	50	50	100
5	PCCL	24XXL43		XX	0	0	1	0	1	2	50	50	100
6	PCC	24XXX44		XX	3	0	0	0	3	3	50	50	100
7	PCCL	24XXL44		XX	0	0	1	0	1	2	50	50	100
8	PEC	24XXX45X	Professional Elective Course-I	XX	3	0	0	0	3	3	50	50	100
						If the course			e is a Theory				
	AFC	24777467	Ability Enhancement Course 11/	VV	1	0	0	0	1	1	F0	F0	100
9	AEC	24XXX46X	Ability Enhancement Course – IV	XX	If the course			urse i	s a Laborato	50	50	100	
9					0	0	1	0	1	2			
10	UHV	24UHK47	Universal Human Values and Life Skills	Any Dept	1	0	0	0	1	2	50	50	100
10	UHV		OR										
		24DTK47	Design Thinking and Fabrication	Any Dept	1	0	0	0	1	1	50	50	100
11	PROJ	24XXX48	Mini Project	XX	0	0	1	0	1	2	50	50	100
		24NSS40	National Service Scheme	-									
12	NCMC	24PED40	Physical Education and Sports	-	0	0	0	0	0	2	50		50
		24YOG40	Yoga	-									
			Total						21	28/30	600	550	1150
											•		
13	NCMC*	24DMAT41	Basic Applied Mathematics-II	BS		0	0	0	0 0	2	50		50
			1	l .					1	1			

**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

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

NCMC\*: 24DMAT41: This non-credit mandatory course to be offered to Lateral entry students.

	Professional Elective Course-I					
24XXX451		24XXX454				
24XXX452		24XXX455				
24XXX453						

Ability En	Ability Enhancement Course – IV (For IT allied Branches, all are Laboratory Courses 0-0-1-0) (Other branches can have 1-0-0-0 or 0-0-1-0)							
24XXX461	24XXX464							
24XXX462	24XXX465							
24XXX463								

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

B. E. in \_\_\_\_\_

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

V Sen	nester (Te	entative)											
S. No.	Course and Course Code		Course Title	BoS	Credit Distribution				Overall Credits	Contact	Marks		
NO.		oue			L	T	Р	S	Credits	Hours	CIE	SEE	Total
1	HSMS / PCC	24XXX51	Please refer the guidelines for HSMS	XX	3	0	0	0	3	3	50	50	100
2	PCC	24XXX52		XX	3	0	0	0	3	3	50	50	100
3	PCCL	24XXL52		XX	0	0	1	0	1	2	50	50	100
4	PCC	24XXX53		XX	3	0	0	0	3	3	50	50	100
5	PCCL	24XXL53		XX	0	0	1	0	1	2	50	50	100
6	ESC	24XXX54X	ESC/ ETC/ PLC (2:0:1:0)	XX	3	0	0	0	3	3	50	50	100
7	AEC	24RMK55	Research Methodology and IPR	XX	2	1	0	0	3	3	50	50	100
8	AEC	24SDK56	Critical and Creative Thinking Skills	XX	0	0	1	0	1	2	50	1	50
9	PROJ	24XXX57	Mini Project	XX	0	0	1	0	1	2	50	50	100
		24NSS50	National Service Scheme	-									
10	NCMC	24PED50	Physical Education and Sports	-	0	0	0	0	0	2	50		50
		24YOG50	Yoga	-									
			Total						19	25	500	400	900

**PCC**: Professional Core Course, **PCCL**: Professional Core Course laboratory, **UHV**: Universal Human Value Course, **NCMC**: Non-Credit Mandatory Course, **AEC**: Ability Enhancement Course, **PEC**: Professional Elective Course, **PROJ**: Mini Project work **L**: Lecture, **T**: Tutorial, **P**: Practical **S: SDA**: Self Study for Skill Development, **CIE**: Continuous Internal Evaluation, **SEE**:Semester End Evaluation

	Engineering Science Course / Emerging Technology Course / Programming Language Course (ESC/ETC/PLC)									
24XXX541		24XXX544								
24XXX542		24XXX545								
24XXX543										

**24XXX51(HSMS)**- This course must be pertaining to economics and management of the concerned degree program. The course syllabus should have both economics and management topics and the course title should bear the word Management.

For IT allied Branches: Software Product Management

For Core Branches: Engineering Economics and Management / Industrial Management and Entrepreneurship

**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:**

(iii)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 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.

(iv) 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.

**Professional Elective Courses (PEC):** A professional elective (PEC) course is intended to enhance the depth and breadth of educational experience in the Engineering and Technology curriculum. Multidisciplinary courses can be added to supplement the latest trend and advanced technology in the selected stream of engineering.

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

B.	E.	in	

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

VI Se	mester (	(Tentative)											
S.	Cours	e and Course	Course Title	Dec	Cred	lit Dist	ributi	on	Overall	Contact	Marks		
No.		Code	Course Title	BoS	L	Т	Р	S	Credits	Hours	CIE	SEE	Total
1	PCC	24XXX61		XX	3	0	0	0	3	3	50	50	100
2	PCCL	24XXL61		XX	0	0	1	0	1	2	50	50	100
3	PCC	24XXX62		XX	3	0	0	0	3	3	50	50	100
4	PCCL	24XXL62		XX	0	0	1	0	1	2	50	50	100
5	ESC	24XXX63X	ESC/ ETC/ PLC (2:0:1:0)	XX	3	0	0	0	3	3	50	50	100
6	PEC	24XXX64X	Professional Elective Course-II	XX	3	0	0	0	3	3	50	50	100
		24XXX65X	Ability Enhancement Course – V	xx		If the course				У			
	450				1	0	0	0	1	1	50	F0	100
7	AEC					If the	cours	se is	a laborato	ory	50	50	100
					0	0	1	0	1	2		50 50 50 50 50 50	
8	AEC	24SDK66	Problem Solving Skills	XX	0	0	1	0	1	2	50		50
9	PROJ	24XXX67	Project Phase- I	XX	0	0	2	0	2	4	50	50	100
10	OEC	24NHOP6XX	Industrial Open Elective Course-I	Offering Dept.	3	0	0	0	3	3	50	50	100
		24NSS60	National Service Scheme	-									
11	NCMC	24PED60	Physical Education	-	0	0	0	0	0	2	50		50
		24YOG60	Yoga	-									
			Total						21	26/27	550	450	1000

**PCC**: Professional Core Course, **PCCL**: Professional Core Course laboratory, **NCMC**: Non-Credit Mandatory Course, **AEC**: Ability Enhancement Course, **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.

	Engineering Science Course / Emerging Technology Course / Programming Language Course (ESC/ETC/PLC)									
24XXX631		24XXX634								
24XXX632		24XXX635								
24XXX633										

	Professional Elective Course-II								
24XXX641	2	24XXX644							
24XXX642	2	24XXX645							
24XXX643									

	Ability Enhancement Course – V								
24XXX651		24XXX654							
24XXX652		24XXX655							
24XXX653									

## **Industrial Open Elective Courses-I:**

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.

**Project Phase-I:** Students have to discuss with the mentor /guide and with their help he/she has to complete the literature survey and prepare the report and finally define the problem statement for the project work.

**Professional Elective Courses (PEC):** A professional elective (PEC) course is intended to enhance the depth and breadth of educational experience in the Engineering and Technology curriculum. Multidisciplinary courses can be added to supplement the latest trend and advanced technology in the selected stream of engineering.

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

B. E. i	<b>n</b>

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

VII Se	mester (T	entative)											
S.	Course	and Course	Course Title	BoS	Cred	it Dist	ributi	on	Overall	Contact	Marks		
No.		Code	Course ritte	В03	L	Т	Р	S	Credits	Hours	CIE	SEE	Total
1	PCC	24XXX71		XX	3	0	0	0	3	3	50	50	100
2	PCCL	24XXL71		XX	0	0	1	0	1	2	50	50	100
3	PCC	24XXX72		XX	3	0	0	0	3	3	50	50	100
4	PCCL	24XXL72		XX	0	0	1	0	1	2	50	50	100
5	PEC	24XXX73X	Professional Elective Course-III	XX	3	0	0	0	3	3	50	50	100
6	PROJ	24XXX74	Project Phase - II	XX	0	0	9	0	9	18	100	100	200
7	OEC	24NHOP7XX	Industrial Open Elective Course-II	Offering Dept.	3	0	0	0	3	3	50	50	100
							To	otal	23	34	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.

Professional Elective Course-III			
24XXX731		24XXX734	
24XXX732		24XXX735	
24XXX733			

## **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.

## **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.

#### **Scheme General Structure**

•	T	•		
Cred	lit I	loti	niti	On.
		<i>,</i> –		.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,

- 1-hour Lecture (L) per week=1Credit
- 2-hoursTutorial(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

## **NEW HORIZON COLLEGE OF ENGINEERING**

В.	E.	in	

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

VIII Se	emester	Tentative)											
S. Course and Course		ourse and Course Course Title	BoS	Credit Distribution				Overall	Contact	Marks			
No.		Code	Course Title	B03	L T P S		Credits	Hours	CIE	SEE	Total		
1	PEC*	24XXX81X	Professional Elective Courses -IV	XX	3	0	0	0	3	3	50	50	100
2	PEC*	24XXX82X	Professional Elective Courses -V	XX	3	0	0	0	3	3	50	50	100
3	UHV	24SCK83	Social Connect and Responsibilities	XX	0	0	1	0	1	2	50		50
4	INT	24XXX84	Internship	XX	0	0	10	0	10	10	100	100	200
	Total									18	250	200	450

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

	Professional Elective Course-IV								
24XXX811		24XXX814							
24XXX812		24XXX815							
24XXX813									

	Professional Elective Course-V									
24XXX821		24XXX824								
24XXX822		24XXX825								
24XXX823										

#### **Elucidation:**

**Research/Industrial /Rural Internship** shall be carried out at an Industry, NGO, MSME, Innovation center, Incubation center, Start-up, center of Excellence (CoE), Study Centre established in the parent institute and /or at reputed research organizations/institutes.

#### **Scheme General Structure**

The mandatory Research internship /Industry internship / Rural 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.

**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.

**Industry internship:** 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.

**Rural Internship:** Rural development internship is an initiative of Unnat Bharat Abhiyan Cell, RGIT in association with AICTE to involve students of all departments studying in different academic years for exploring various opportunities in techno-social fields, to connect and work with Rural India for their upliftment.

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.

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

## **CREDIT SCHEME OF I SEMESTER BE FOR AY: 2025-26**

AIM	L/ ECE/EE	E/ME									Ch	emistry	Cycle
S.	Course an	d Course	Course Title		Credit Distribution				Overall	Contact	Marks		
No.	Cod	e	Course Title	BOS	BOS L T P S		S	Credits	Hours	CIE	SEE	Total	
1	ASC	25MAT11	Applied Mathematics for Engineers – I	AS	3	1	0	0	4	5	50	50	100
2	ASC(IC)	25CHE12	Applied Chemistry for Engineers	Applied Chemistry for Engineers AS 3 0 1 0		4	4+2	50	50	100			
3	ESC -I 25ESC132 AIML/E		Elements of Electrical Engineering (for AIML/ECE/ME) Element of Mechanical Engineering (for	EEE / ME	2	0	0	0	2	4	50	50	100
3		25ESC133	EEE)		3	0	0	0	3	4	50	50	100
4	PSC(IC)	25CSE141 25ECE142 25EEE143 25MEE144	Problem solving using python (AIML) Basic Electronics (ECE) Basic Electrical Engineering (EEE) Basic Mechanical Engineering (ME)	Resp	3	0	1	0	4	4+2	50	50	100
5	ESC	25CAD15	Computer Aided Engineering Drawing	ME	2	0	1	0	3	5	50	50	100
6	AEC	25ENG16	AI-Powered Communication Skills	HSS	0	0	1	0	1	2	50	50	100
7	NCMC	25CIP17	Constitution of India and Professional Ethics	HSS	0	0	0	0	PP	1	100	-	100
8 AEC 25EDM18 Environment and Disaster Management AS 1 0 0							0	1	1	50	50	100	
	20 30 450 350 800												

## **CREDIT SCHEME FOR I SEMESTER BE, AY 2025-26**

CSE												Physi	cs Cycle
S	S. Course and				D	Credit Distribution			Overall	Contact	Marks		
No.		se and se Code	Course Title	BOS	L	T	P	S	Credits	Hours	CIE	SEE	Total
1	ASC	25MAT11	Applied Mathematics for Engineers – I	AS	3	1	0	0	4	5	50	50	100
2	ASC(IC)	25PHY12	Applied Physics for Engineers	AS	3	0	1	0	4	4+2	50	50	100
3	ESC-I	25ESC131	Elements of Electronics and Communication Engineering(for CSE)	ECE	3	0	0	0	3	4	50	50	100
4	PSC(IC)	24CSE141	Problem solving using python	CS	3	0	1	0	4	4+2	50	50	100
5	ETC	25ETC151	Robotics and Automation	ME	3	0	0	0	3	4	50	50	100
6	AEC	25UHV16	UHV and Indian Ethos	AS	0	0	0	0	PP	1	100	-	100
7	HSS	25KSK17 / 25KBK17	Samskrutika Kannada/ Balake Kannada	HSS	1	0	0	0	1	2	50	50	100
8	AEC	25IPL18	Inter-disciplinary Project based Learning	AS	0	0	0	1	1	2	50	50	100
2									20	30	450	350	800

## **CREDIT SCHEME FOR II SEMESTER BE, AY 2025-26**

CSE												Ch	emistry Cycle	
S. No	Course ar		Course Title		Credit Distribution				Overall	Contact	Marks			
		ode			L	Т	P	S	Credits	Hours	CIE	SEE	Total	
1	ASC	25MAT21	Applied Mathematics for Engineers – II	AS	3	1	0	0	4	5	50	50	100	
2	ASC	25CHE22	Applied Chemistry for Engineers	AS	3	0	1	0	4	4+2	50	50	100	
3	ESC -II	25ESC232	Elements of Electrical Engineering	EEE	3	0	0	0	3	4	50	50	100	
4	PLC	25PLC24	Programming in C	CS	3	0	0	0	3	4	50	50	100	
5	PLC	25PCL24	Programming in C Lab	CS	0	0	1	0	1	2	50	50	100	
6	ESC	25CAD25	Computer Aided Engineering Drawing	ME	2	0	1	0	3	5	50	50	100	
7	AEC	25ENG26	AI-Powered Communication Skills	HSS	0	0	1	0	1	2	50	50	100	
8	HSS	25CIP27	Constitution of India and Professional Ethics	HSS	0	0	0	0	PP	1	100	1	100	
9	AEC	25EDM28	Environment and Disaster Management	AS	1	0	0	0	1	1	50	50	100	
	•		Total		•		•	•	20	30	500	400	900	



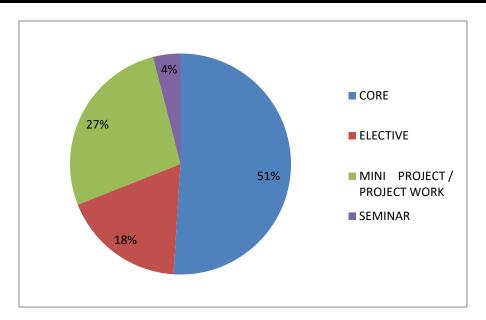
# CREDIT SCHEME FOR II SEMESTER BE, AY 2025-26

AIM	AIML / ECE/EEE/ME  Physics Cycle												
C	Cauraa	nd Course				Credi stribu			0 11			Marks	
S. No.		ode	Course Title	BOS	L	Т	P	S	Overall Credits	Contact Hours	CIE	SEE	Tot al
1	ASC	25MAT21	Applied Mathematics for Engineers – II	AS	3	1	0	0	4	5	50	50	100
2	ASC	25PHY22	Applied Physics for Engineers	AS	3	0	1	0	4	4+2	50	50	100
		25ESC231	Elements of Electronics and Communication Engineering – AIML/EEE/ME										
3 ESC-I	ESC-II	25ESC232	Elements of Electrical Engineering - ECE	Resp	3	0	0	0	3	4	50	50	100
4	PLC	25PLC24	Programming in C	CS	3	0	0	0	3	4	50	50	100
5	PLC	25PCL24	Programming in C Lab	CS	0	0	1	0	1	2	50	50	100
6	ETC	25ETC252	Introduction to AI and Applications	Resp	3	0	0	0	3	4	50	50	100
7	AEC	25UHV26	UHV and Indian Ethos	HSS	0	0	0	0	PP	2	100	-	100
8	HSS	25KSK27 / 25KBK27	Samskrutika Kannada/ Balake Kannada	HSS	1	0	0	0	1	2	50	50	100
9	AEC 25IPL28 Inter-disciplinary Project based Learning AS 0 0 0					1	1	2	50	50	100		
Total 20 31 500 400											850		

(ESC) Engineering Scio	ence Courses I &II	(PSC) Program specific courses (IC)						
25ESC131/231	Basic Electronics	25ECE141/241	Elements of Electronics & Communication Engineering					
25ESC132/232	Basic Electrical Engineering	25EEE142/242	Elements Electrical Engineering					
25ESC133/232	ESC133/232 Basic Mechanical Engineering		Elements of Mechanical Engineering					
		25CSE144/244	Problem solving using python					
(PLC) Programming I	Language Course	(PCL) Programmi	ing Language Course Lab					
25PLC14/24	Programming in C	25PCL14/24	Programming in C Lab					
(ETC) Emerging Tech	nology Courses I&II							
25ETC151/251	Robotics & Automation							
25ETC152/252	Introduction to AI and Applications							
25ETC153/253	Electric Vehicles							
25ETC154/254	Renewable Energy							

# DEPARTMENT OF MASTER OF COMPUTER APPLICATIONS MCA DEGREE CURRICULUM – COURSE CREDIT STRUCTURE ACADEMIC YEAR 2024-2025: SEMESTER I TO IV

SEMESTER	CORE	ELECTIVE	MINI PROJECT / PROJECT WORK	SEMINAR	TOTAL CREDITS
I	25	0	0	0	25
II	17	6	2	0	25
III	9	6	8	2	25
IV	0	6	17	2	25
TOTAL	51	18	27	4	100
% of Distribution	51%	18%	27%	4%	100%



NHCE/MCA/2024-25

# DEPARTMENT OF MASTER OF COMPUTER APPLICATIONS SCHEME OF FIRST SEMESTER MCA PROGRAM AY 2024-25

	20122				DIS	CRE STRIE		ON	ALL	OURS EORY)		MARK	S
S N O	BOARD / COURSE	COURSE CODE	COURSE	BOS	L	Т	P	S	OVERALL CREDITS	CONTACT HOURS WEEKLY (THEORY)	CIE	SEE	TOTAL
1	AS/BSC	24MATC11	COMPUTATIONAL MATHEMATICS	MCA	3	1	0	0	4	5	50	50	100
2	MCA/PCC	24MCA12	PROGRAMMING AND PROBLEM SOLVING WITH C	MCA	3	0	0	0	3	3	50	50	100
3	MCA/PCC	24MCA13	OBJECT ORIENTED PROGRAMMING WITH JAVA	MCA	3	0	0	0	3	3	50	50	100
4	MCA/PCC	24MCA14	SOFTWARE ENGINEERING AND TESTING	MCA	3	0	0	0	3	3	50	50	100
5	MCA/IPCC	24MCA15	LINUX OPERATING SYSTEM AND SHELL SCRIPTING	MCA	3	0	1	0	4	5	50	50	100
6	MCA/IPCC	24MCA16	DATA BASE MANAGEMENT SYSTEMS	MCA	3	0	1	0	4	5	50	50	100
7	MCA/PCCL	24MCAL17	PROGRAMMING WITH C LAB	MCA	0	0	1.5	0	1.5	3	50	50	100
8	MCA/PCCL	24MCAL18	PROGRAMMING WITH JAVA LAB	MCA	0	0	1.5	0	1.5	3	50	50	100
9	LS/AEC	22HSSC19	LIFE SKILLS FOR PROFESSIONALS -1	MCA	1	0	0	0	1	2	50	50	100
			TOTAL		19	1	5	0	25	32	450	450	900

L -Lecture (1 hour), T- Tutorial/Skill Development Activities (2 hours), P-Practical (2 hours), S-Self Study (hours – Nil)

\*Selected online courses will be given as per BOS recommendation.

<sup>\*</sup>PCC- Professional Core. IPCC-Integrated Professional Core Courses (No SEE for lab component only CIE),
PCCL- Professional Core Lab, AEC- Ability Enhancement Course.

<sup>\*</sup>BoS recommended certified online courses is offered in  $4^{\text{th}}$  semester

# DEPARTMENT OF MASTER OF COMPUTER APPLICATIONS SCHEME OF SECOND SEMESTER MCA PROGRAM AY 2024-25

					DI:		DIT BUTI	ON		MARK (x)		IARKS	3
S NO	BOARD/ COURSE	COURSE CODE	COURSE	BOS	L	Т	P	S	OVERALL CREDITS	CONTACT HOURS WEEKLY (THEORY)	CIE	EE	TOTAL
1	MCA/PCC	24MCA21	DATA STRUCTURES	MCA	3	0	0	0	3	3	50	50	100
2	MCA/PCC	24MCA22	ADVANCED JAVA AND ENTERPRISE ARCHITECTURE	MCA	3	0	0	0	3	3	50	50	100
3	MCA/PCC	24MCA23	DESIGN AND ANALYSIS OF ALGORITHMS	MCA	2	1	0	0	3	4	50	50	100
4	MCA/IPCC	24MCA24	COMPUTER NETWORKS	MCA	3	0	1	0	4	5	50	50	100
5	MCA/PEC	24MCA25X	PROFESSIONAL ELECTIVES-1	MCA	2	1	0	0	3	4	50	50	100
6	MCA/PEC	24MCA26X	PROFESSIONAL ELECTIVES-2	MCA	0	1	2	0	3	6	50	50	100
7	MCA/PCCL	24MCAL27	DATA STRUCTURES AND ALGORITHMS LAB	MCA	0	0	1.5	0	1.5	3	50	50	100
8	MCA/PCCL	24MCAL28	ADVANCED JAVA LAB	MCA	0	0	1.5	0	1.5	3	50	50	100
9	MCA/MP	24MCAL29	MINI PROJECT USING JAVA AND DBMS	MCA	0	0	2	0	2	-	50	50	100
10	LS/AEC	22HSSC210	LIFE SKILLS FOR PROFESSIONALS -2	MCA	1	0	0	0	1	2	50	50	100
TOTAL					14	3	8	0	25	33	500	500	1000

L -Lecture (1 hour), T-Tutorial/Skill Development Activities (2 hours), P-Practical (2 hours), S-Self Study (hours – Nil)
\*Selected online courses MCA/PCC will be given as per BOS recommendation.

<sup>\*</sup>PCC- Professional core. IPCC- Integrated Professional Core Courses (No SEE for lab component only CIE), MP- Mini Project, PEC- Professional Elective Courses.

<sup>\*</sup>BoS recommended certified online courses is offered in  $4^{\text{th}}$  semester

	PROFESSIONAL ELECTIVES-1									
SNO	COURSE	COURSE	BOS	D	TOTAL					
	CODE	000102	200	L	T	P	S	101112		
1	24MCA251	CLOUD COMPUTING	MCA	2	1	0	0	3		
2	24MCA252	CYBER SECURITY AND CYBER LAW	MCA	2	1	0	0	3		
3	24MCA253	CRYPTOGRAPHY AND NETWORK SECURITY	MCA	2	1	0	0	3		
4	24MCA254	ARTIFICIAL INTELLIGENCE	MCA	2	1	0	0	3		
5	24MCA255	USER INTERFACE AND USER EXPERIENCE DESIGN	MCA	2	1	0	0	3		

	PROFESSIONAL ELECTIVES-2									
SNO	COURSE	COURSE	BOS	D	TOTAL					
	CODE			L	Т	P	S			
1	24MCA261	BUSINESS INTELLIGENCE AND DATA ANALYTICS	MCA	0	1	2	0	3		
2	24MCA262	ASP .NET WITH C#	MCA	0	1	2	0	3		
3	24MCA263	MOBILE APPLICATION DEVELOPMENT	MCA	0	1	2	0	3		
4	24MCA264	NON RELATIONAL DATABASES (NoSQL)	MCA	0	1	2	0	3		

NHCE/MCA/2024-25 4

# DEPARTMENT OF MASTER OF COMPUTER APPLICATIONS SCHEME OF THIRD SEMESTER MCA PROGRAM AY 2024-25

					DIS		DIT BUTI	ON	ALL TS HOURS LY RY		MARKS		
S N O	BOARD/ COURSE	COURSE CODE	COURSE	BOS	L	Т	P	S	OVERALL	CONTACT HOURS WEEKLY (THEORY)	CIE	SEE	TOTAL
1	MCA/PCC	22MCA31	MACHINE LEARNING	MCA	3	0	0	0	3	3	50	50	100
2	MCA/PCC	22MCA32	FULL STACK DEVELOPMENT	MCA	3	0	0	0	3	3	50	50	100
3	MCA/PEC	22MCA33X	PROFESSIONAL ELECTIVES - 3	MCA	3	0	0	0	3	3	50	50	100
4	MCA/PEC	22MCA34X	PROFESSIONAL ELECTIVES – 4	MCA	3	0	0	0	3	3	50	50	100
5	MCA/PCCL	22MCAL35	MACHINE LEARNING LAB USING PYTHON	MCA	0	0	1.5	0	1.5	3	50	50	100
6	MCA/PCCL	22MCAL36	FULL STACK LAB	MCA	0	0	1.5	0	1.5	3	50	50	100
7	MCA/SP	22MCAL37	SOCIETAL PROJECT	MCA	0	0	2	0	2	1	50	50	100
8	MCA/INT	22MCA38	INTERNSHIP	MCA	0	0	6	0	6	,	50	50	100
9	MCA/SEM	22MCA39	TECHNICAL SEMINAR-1	MCA	0	0	0	2	2	-	50	50	100
			TOTAL		12	0	11	2	25	18	450	450	900

L -Lecture (1 hour), T- Tutorial (2 hours), P-Practical (2 hours), S-Self Study (hours – Nil)
PCC- Professional Core, PEC-Professional Elective Course, PCCL- Professional Core Course Lab,
SP- Societal Project, INT – Internship (06 weeks Internship to be completed in intervening vacation of Semester II and Semester III), SEM- SEMINAR

NHCE/MCA/2024-25

	PROFESSIONAL ELECTIVES - 3										
S	COURSE	COURSE	BOS	DI	CRE STRII		ON	TOTAL			
NO	CODE			L	T	P	S				
1	22MCA331	ADVANCED WEB DESIGNING	MCA	3	0	0	0	3			
2	22MCA332	CLOUD COMPUTING	MCA	3	0	0	0	3			
3	22MCA333	NON-RELATIONAL DATABASES	MCA	3	0	0	0	3			
4	22MCA334	INTERNET OF THINGS	MCA	3	0	0	0	3			
5	22MCA335	DEEP LEARNING	MCA	3	0	0	0	3			

	PROFESSIONAL ELECTIVES - 4										
S	COURSE	COURSE	BOS	DI	TOTAL						
NO	CODE			L	T	P	S				
1	22MCA341	DATA SCIENCE	MCA	3	0	0	0	3			
2	22MCA342	COMPUTER VISION	MCA	3	0	0	0	3			
3	22MCA343	AUGMENTED REALITY AND VIRTUAL REALITY	MCA	3	0	0	0	3			
4	22MCA344	MOBILE APPLICATION DEVELOPMENT	MCA	3	0	0	0	3			
5	22MCA345	AGILE SOFTWARE DEVELOPMENT	MCA	3	0	0	0	3			

NHCE/MCA/2024-25 2

# DEPARTMENT OF MASTER OF COMPUTER APPLICATIONS SCHEME OF FOURTH SEMESTER MCA PROGRAM AY 2024-25

S	BOARD/	COURSE		S	CREDIT DISTRIBUTION				ALL ITS	HOURS	MARKS		
NO	COURSE	CODE	COURSE	BOS	L	Т	P	S	OVERALL	CONTACT HOURS WEEKLY	CIE	SEE	TOTAL
1	MCA/PEC	22MCA41X	PROFESSIONAL ELECTIVES – 5	MCA	3	0	0	0	3	3	50	50	100
2	MCA/OEC	20NHOPXXX	OPEN ELECTIVE COURSE	MCA	3	0	0	0	3	3	50	50	100
3	MCA/SEM	22MCA42	TECHNICAL SEMINAR -2	MCA	0	0	0	2	2	-	50	50	100
4	MCA/PROJ	22MCA43	MAJOR PROJECT	MCA	0	0	17	0	17	-	50	50	100
5	AUD/AEC	23AUD44	BOS RECOMMENDED TWO CERTIFIED ONLINE COURSES						orocedur se provi		s per th	ie	PP
			TOTAL		6	0	17	2	25	6	200	200	400

L -Lecture (1 hour), T-Tutorial (2 hours), P-Practical (2 hours), S-Self Study (hours – Nil)
PEC-Professional Elective Course, SEM-Seminar, PROJ- Project Work, AUD/AEC – Audit Course / Ability Enhancement Course.

OEC-Industrial Open Elective Course, 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. These 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.

3

	PROFESSIONAL ELECTIVES - 5									
S	COURSE	COURSE	BOS	D	TOTAL					
NO	CODE			L	T	P	S			
1	22MCA411	PROFESSIONAL ETHICS	MCA	3	0	0	0	3		
2	22MCA412	DESIGN THINKING	MCA	3	0	0	0	3		
3	22MCA413	ENTREPRENEURSHIP AND INNOVATION MANAGEMENT	MCA	3	0	0	0	3		
4	22MCA414	DIGITAL MARKETING	MCA	3	0	0	0	3		
5	22MCA415	SOFTWARE PROJECT MANAGEMENT	MCA	3	0	0	0	3		

OPEN ELECTIVE COURSES									
S NO	COURSE CODE	COURSE	BOS	Г	CRE (ISTRI	DIT BUTIO	N	TOTAL	
	CODE			L	T	P	S		
1	20NHOP601	BIG DATA ANALYTICS USING HP VERTICA-1	MCA	3	0	0	0	3	
2	20NHOP602	VM WARE VIRTUALISATION ESSENTIALS-1	MCA	3	0	0	0	3	
3	20NHOP614	BLOCKCHAIN	MCA	3	0	0	0	3	
4	20NHOP728A	DATABASE ADMINISTRATION USING DB2	MCA	3	0	0	0	3	

NHCE/MCA/2024-25 4

## **NEW HORIZON COLLEGE OF ENGINEERING**

# M.Tech Computer Science and Engineering

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

			III	- Semest	er								
S.			Course Title	BoS	Г		edit butio	n	Overall	Contact Hours	Marks		
No.	С	ode	Gourse Title	200	L	T	Γ P S		Credits	Con	CIE	SEE	Total
1	PCC/CSE	24SCS31	Advanced Computer Network & Security	CSE	3	0	0	1	4	5	50	50	100
2	PEC/CSE	24SCS32X	Professional Elective – 3	CSE	3	0	0	0	3	3	50	50	100
3	OEC/DEP	23NHOPGXX	Open Elective Courses	CSE	3	0	0	0	3	3	50	50	100
4	PROJ/CSE	24SCS34	Project Work Phase – 1	CSE	0	0	3	0	3	-	100		100
5	SP/CSE	24SCS35	Societal Project	CSE	0	0	3	0	3	-	100		100
6	6 INT/CSE 24SCSI36 Internship (6 wks Internship completed during the intervening vacation of II & III semesters.)						0	6	-	50	50	100	
	Total								22	11	400	200	600
									1 200 0 11				

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

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.

## 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 an		Course Title	BoS	Credit Distribution			Overall	Contact Hours	Marks			
					L	T	P	S	Credits	Hours	CIE	SEE	Total
1	Project/ CSE	24SCS41	Project work phase – 2	CSE	0	0	20	0	20	-	100	100	200
2	AUD/AEC	24M00C2	BOS Recommended Online Courses	CSE	Classes and evaluation procedures are as per the policy of the on line course providers.  PP					PP			
	Total 20 - 100 100						100	200					

#### Note:

**ProjectWorkPhase-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 -1to 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.

Total Credits 19+19+22+20 = 80

# www.newhorizonindia.edu

Ring Road, Bellandur Post, Near Marathahalli Bengaluru, Karnataka 560103, India

# Follow us

