VISION OF THE DEPARTMENT

To be in the frontier of Computer Science and Engineering and to produce globally competent graduates with moral values committed to build vibrant nation.

MISSION OF THE DEOPARTMENT

Emerge as a leading center of academic excellence involving research while adopting innovative strategies of industrial integration to create the value driven, responsible, and future ready professionals, entrepreneurs, and innovators.

PROGRAMME EDUCATIONAL OBJECTIVES (PEOs)

1. Competent professionals with knowledge of Computer Science & Engineering to pursue variety of careers/higher education.
2. Proficient in successfully designing innovative solutions to real life problems that are technically sound, economically viable and socially acceptable.
3. Efficient team leaders, effective communicators and capable of working in multi-disciplinary environment following ethical values.
4. Capable of adapting to new technologies and constantly upgrade their skills with an attitude towards lifelong learning.

PROGRAMME OUTCOMES (POs)

1. **Engineering knowledge**: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
2. **Problem analysis**: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
3. **Design/development of solutions**: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
4. **Conduct investigations of complex problems**: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
5. **Modern tool usage**: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
6. **The engineer and society**: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
7. **Environment and sustainability**: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
8. **Ethics**: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

9. Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
10. **Communication**: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
11. **Project management and finance**: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
12. **Life-long learning**: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

PROGRAMME SPECIFIC OUTCOMES (PSOS)

1. **PSO 1**: The ability to understand, analyze and develop computer programs in the areas related to algorithms, system software, multimedia, web design, big data analytics, and networking for efficient design of computer-based systems of varying complexity.
2. **PSO 2**: The ability to understand the evolutionary changes in computing, apply standard practices and strategies in software project development using open-ended programming environments to deliver a quality product for business success, real world problems and meet the challenges of the future.
3. **PSO 3**: The ability to employ modern computer languages, environments, and platforms in creating innovative career paths to be an entrepreneur, lifelong learning and a zest for higher studies and also to act as a good citizen by inculcating in them moral values & ethics.

SCHEME STRUCTURE

For 2024 Admitted B.Tech Batch

Semester	I	II	III	IV	V	VI	VII	VIII
	BSC (3L+1T+0P)=4	BSC (3L+1T+0P)=4	BSC (2L+1T+2P)=4	PCC (3L+1T+0P)=4	PCC (3L+1T+0P)=4	PCC (3L+1T+0P)=4	PCC (2L+1T+2P)=4	PCC (2L+1T+2P)=4
	BSC (2L+1T+2P)= 4	HSMC (1L+1T+2P)=3	PCC (2L+1T+2P)=4	PCC (2L+1T+2P)=4	PCC (2L+1T+2P)=4	PCC (2L+1T+2P)=4	OEC (2L+1T+2P)=4	OEC (2L+0T+0P)=2
	BSC (2L+1T+2P)=4	ESC (2L+1T+2P)=4	PCC (2L+1T+2P)=4	PCC (2L+1T+2P)=4	PCC (2L+1T+2P)=4	PCC (2L+1T+2P)=4	PEC (2L+1T+2P)=4	EP (0L+0T+20P)=10
	HSMC (1L+1T+2P)= 3	ESC (2L+1T+2P)=4	PCC (2L+1T+2P)=4	PEC (2L+1T+2P)=4	PEC (2L+1T+2P)=4	PEC (2L+1T+2P)=4	EP (0L+0T+6P)=3	
	ESC (2L+1T+2P)=4	ESC (2L+1T+2P)=4	PEC (2L+1T+2P)=4	PEC (2L+1T+2P)=4	PEC (2L+1T+2P)=4	PEC (2L+1T+2P)=4	EP (0L+0T+2P)=1	
	ESC (0L+0T+4P)=2	BSC (0L+0T+4P)=2	HSMC (2L+1T+0P)=3	HSMC (2L+1T+0P)=3	PCC (0L+0T+4P)=2	PCC (0L+0T+4P)=2		
	EP (0L+0T+2P)=1	EP (0L+0T+2P)=1	EP (0L+0T+2P)=1	EP (0L+0T+2P)=1	EP (0L+0T+2P)=1	EP (0L+0T+2P)=1		
					BSC (0L+0T+2P)=1	BSC (0L+0T+2P)=1		
Total Credit	22	22	24	24	24	24	16	16

COURSE CATEGORY

Category	Course code	Number of Courses	Credit	Credit %
Basic Science courses	BSC	8	24	14%
Engineering Science Courses	ESC	5	18	10%
Humanities and Social Sciences including Management courses	HSMC	4	12	7%
Professional core courses	PCC	16	60	35%
Professional Elective courses	PEC	8	32	19%
Open Elective courses	OEC	2	6	3%
Engineering Projct	EP	9	20	12%
Total		**52**	**172**	100%

EXAMINATION MARKS AND CREDIT DISTRIBUTION SCHEME

Type	Theory			Practical			L	T	P	Total Credit
	End Sem Test (EST)	Mid Sem Test (MST)	Continuous Evaluation	End sem	Mid Sem Test (MST)	Continuous Evaluation				
T1	60	30	10	-	-	-	3	1	0	4
T2	60	30	10	-		-	2	1	0	3
T3	60	30	10	-		-	2	0	0	2
T4	40	20	10	10	10	10	2	1	2	4
T5	40	20	10	10	10	10	1	1	2	3
T6	-	-	-	50	20	30	0	0	2	1
T7	-	-	-	50	20	30	0	0	4	2
T8	-	-	-	50	20	30	0	0	6	3
T9	-	-	-	100	20	30	0	0	20	10
T10	-	-	-	30	-	20	0	0	2	1