7.3 Institutional Distinctiveness

7.3.1 - Highlight the performance of the institution in an area distinct to its priority and thrust

Title: Holistic Multidisciplinary Learning

Multidisciplinary learning is to emphasize the integration of various disciplines or subject areas to provide a comprehensive and interconnected understanding of the world. The curriculum is designed to incorporate concepts, theories, and methodologies from different disciplines. Rather than studying subjects in isolation, students are encouraged to make connections between different disciplines and explore how they intersect and influence one another. The choice-based credit system facilitates the students to take courses of their choice, learn at their own pace, undergo additional courses and acquire more than the required credits, and adopt an interdisciplinary approach to learning.

The following are some of the pathways to inculcate multidisciplinary learning to the students.

1. Open Elective Courses (OEC):

The open elective course allows students to choose from a diverse range of subjects outside of their main field of study. These courses are typically offered in colleges which provides the flexibility to explore various academic areas and broaden their knowledge. Open elective courses are optional and can be selected based on personal interest or to develop new skills. They allow students to delve into different disciplines and gain a well-rounded education. The students shall study Inter-disciplinary courses offered in other Engineering/Technology Programmes through regular mode.

2. Multidisciplinary Project:

The goal of multidisciplinary learning is to provide students with a more holistic and well-rounded education by breaking down the traditional barriers between subjects. It recognizes that real-world problems and challenges are rarely confined to a single discipline, and addressing them requires a combination of perspectives and expertise. The final year students can choose the multi-disciplinary project instead of project work. The Multi-disciplinary project consists of:

- Phase I Concept Learning
- Phase-II Multi-disciplinary Project Work

Salient Features of Multi-disciplinary Project:

- The students should undergo the Phase I concept learning in the 7th semester.
- The students who choose multi-disciplinary are exempted from one professional /open elective course in the 7th semester.
- In Phase I, the evaluation will be carried out mainly through presentation and not through written examination.
- In Phase II, the evaluation will be similar to project work.

3. Inter disciplinary Courses:

An interdisciplinary curriculum is a type of teaching method or course plan that incorporates the contributions of several disciplinary subjects on a single topic. The goal of interdisciplinary curriculum is to provide students not only with an understanding of the central topic, but a deep comprehension of the relationships and broader context of the topic. Courses such as this can serve to expand the understanding of students from both disciplines, while providing a deeper understanding of the core premise. The interdisciplinary courses can be taught in a formal, traditional manner, they lend themselves nicely to more student cantered, interactive teaching styles associated with progressive education and its outcomes

The following are the benefits of holistic multidisciplinary learning to the students:

Integrated knowledge: Students gain a deeper understanding of concepts by exploring them from multiple angles. They can see the connections between different subject areas, leading to a more comprehensive understanding of complex issues.

Critical thinking skills: By engaging with different disciplines, students develop critical thinking skills as they analyze, evaluate, and synthesize information from various sources. They learn to think creatively and find innovative solutions to problems.

Real-world relevance: Multidisciplinary learning helps students see the practical applications of knowledge in real-world contexts. They develop a broader perspective and are better equipped to address complex, interdisciplinary challenges they may encounter in their personal and professional lives.

Collaboration and communication: Multidisciplinary learning often involves collaborative projects, encouraging students to work in teams with peers from different backgrounds. This fosters effective communication, cooperation, and appreciation for diverse perspectives.

Adaptability and versatility: Multidisciplinary learners are more adaptable and versatile in a rapidly changing world. They can draw upon a wider range of knowledge and skills, making them well-prepared for various career paths and lifelong learning.

To facilitate holistic multidisciplinary learning, the college implements cross-curricular projects, interdisciplinary courses, and integrated thematic units. Teachers play a vital role in guiding students' exploration and helping them make connections between different subjects. Holistic multidisciplinary learning provides a more holistic and interconnected approach to education, empowering students to become lifelong learners and engaged global citizens.