



## **A report on NEP 2020 Aligned policies**

### **Resource Persons**

#### **Dr. Raghuveer and Associate Deans**

#### **The Changing Approach**

The institute adopts a Holistic approach toward every program being offered through the distribution of credits under various career categories. These include the basic sciences, human values, experiential learning, etc. Also, the Multi-disciplinary studies are supported in the form of minors being offered by various departments to all the students at the institute irrespective of their discipline. The institute offers necessary bridge courses for the students who do not process the background related to the subject. The institute also promotes domain-based study wherein the students are given the opportunity to identify the problem statements with respect to their domain of interest like energy, healthcare, environment, education, etc., and learn the required additional courses beyond their discipline to solve the same. These additional learning are supported in the form of open electives, multi-disciplinary minors, etc.

The institute offers Interdisciplinary / multi-disciplinary Projects with extra credits where the students from the different discipline of study are allowed to choose a problem statement that requires contributions from different disciplines, and they are made to work together towards solving the same.

The Social internship introduced for the students helps them to understand the problems faced by the people through the application of Design Thinking thereby enabling them to come out with innovative solutions. The potential ideas are then nurtured through our incubation facility to transform them into products /solutions.

The institute also supports earning credits through Informal Learning or challenge-based learning wherein the students will be allowed to choose a problem and start learning necessary things towards addressing it. Also, the knowledge gained will be applied in solving the problem through

a set of activities followed by the benchmarking of the same at National/International level competitions.

### **integration of humanities and science**

The institute ensures that the humanities and social sciences-related courses are offered across all the programs as per their requirement. Effective communication skills are imparted to the students across all the programs and the students are benchmarked through international certifications to ensure global standards on their language skills. In addition to that, students are given the choice of foreign language in order to explore the possibilities with respect to the career opportunities for employability, research, and innovation in appropriate countries abroad. The students are given the Design Thinking and Innovation course in their first year of study that prepares them to understand the 360 degrees of a problem and come out with innovative solutions to addressing the same. The course acts as a key enabler to kindle the innovator inside each student leading to the creation of more job providers than job seekers. The Social service activities like National Cadet Corps (NCC) and National Social Service (NSS) are given due credits as a part of the curriculum for the interested learners and the activities of the same are conducted by trained professionals. The basic sciences courses including physics, chemistry, and math (wherever required) ensure their foundational knowledge is strengthened in order to apply them effectively in their respective specialization. Ecology and Environment course give the awareness about various harmful activities leading to environmental hazards and how to overcome the same. This makes them become responsible citizens contributing to the sustainability of natural resources and protecting the same. Yoga / Meditation / Sports activities are made compulsory for the students for their physical and mental well-being and to take up the challenges of the future with utmost confidence. The Universal Human Values addresses the aspects like value system, gender sensitization, professional ethics, etc., such that students are exposed to the value system of the country and ensure that the opposite gender is treated and respected equally in all walks of life.

### **Flexible and innovative curricula.**

The institute offers a holistic experience to the students by offering courses under different categories. The students are given the opportunity to choose their career pathway viz. Employability, innovation and research and nurtured accordingly with the faculty members being trained as the facilitators in the appropriate pathway. To promote the engagement of students in

the innovative activities leading to potential solutions for the social problems, necessary academic flexibilities like self-learning, work in lieu courses, informal learning, acceleration / deceleration of subjects, etc are given. The student mentors ensure that the students are guided appropriately based on their interests and nurtured to excel in their chosen career pathway. The Social service activities like National Cadet Corps (NCC) and National Social Service (NSS) are given due credits as a part of the curriculum for the interested learners and the activities of the same are conducted by trained professionals.

The Smart Village Revolution project helps the students to spend some time with the villagers to understand the various problems faced by them and propose potential solutions for the same. The Social internship introduced for the students helps them to understand the problems better through the application of Design Thinking thereby enabling them to come out with innovative solutions.

The ecology and environment course give awareness about various harmful activities leading to environmental hazards and how to overcome the same. This makes them become responsible citizens contributing to the sustainability of natural resources and protecting the same. Also, the domain-based approach helps the students to identify the problem statements with respect to their domain of interest like energy, healthcare, environment, education, etc., and learn the required additional courses beyond their discipline to solve the same. These additional learning are supported in the form of open electives, multi-disciplinary minors, etc.

The institute offers Interdisciplinary / multi-disciplinary Projects with extra credits where the students from different disciplines of study are allowed to choose a problem faced by a society that requires contributions from different disciplines, and they are made to work together towards solving the same.

### **multidisciplinary flexible curriculum**

The institute offers multi-disciplinary studies in the form of Minors, wherein the learners are given the option to choose a bundle of courses offered by different departments of the institute. The students are counselled appropriately by their mentors in choosing the minors that suit their interests and given due awareness of the opportunities it offers. The institute ensures that the programs offered by the departments are developed in a modular approach to enable the students to attain the necessary outcomes and skills by the completion of each year of study. The modular approach enables the learner to be qualified to a certain level by the completion of each year of

study and allows them to grab the opportunities appropriate to that level. Since all the programs are internship/project/field work embedded ones, the completion of each year of study allows the students to practically apply their learning or experience the work environment where the learning is being practiced. Such vigorous internships/project experience brings necessary confidence to the students who wish to exit after any year of study. Also, the support for Multi Entry/Exit by credit transfer through Academic Bank of Credits (ABC) enrolment makes this process seamless and gives better scope for the students who wish to take the break and enter the academic system at a later stage. The students who otherwise want to continue the program of study also get benefited from this modular approach in the form of enhanced opportunities being provided to them when they move across the levels.

### **multidisciplinary research endeavors**

The institute has been promoting multi-disciplinary research among the faculty in a few of the Sustainable Development Goal (SDG) areas addressing of the most pressing issues like energy, climate change, etc. Faculty members enrolling in the research programs related to the broader SDG domains are given the necessary support by providing research mentors who have contributed to those areas. Necessary collaborations are made at both national and international levels by the institute and its faculty. The various cohorts established across the departments encourage the faculty and students to engage and promote research activities related to it. The institute is also taking necessary steps to become a nodal centre for promoting research related to regional multi-disciplinary problems. The research faculty also acts as research facilitators extending their support to the undergraduate and postgraduate students in pursuing research as a career in the future. In such cases necessary transferable skills are imparted to the budding researchers in order to carry out the research activities effectively inside the campus. The institute is working out on various partnership models to enable the students to get global exposure by creating opportunities for the international Internship on SDGs. The Design Thinking and Innovation course offered by the institute prepares them to understand the 360-degree of a problem and come out with innovative solutions to addressing the same.

The internships covering various aspects like Social, Technical and Industrial requirements embedded into the programs offered by the institute help the students to collaboratively work with the faculty supervisor and / or Industry mentors to better understand the problems and arrive at innovative solutions.

