

NEP 2020 Points

1. **Multidisciplinary/interdisciplinary:-**

The institute's vision and mission are to promote the overall development of both teachers and students. In order to fulfill the institution's vision, the mission statement explicitly concentrates on the needs of society, emphasising the adoption of a distinct and unique value system, an open workplace culture, extremely good academic and physical conditions, and an environment that is suitable for learning and creativity. First-year engineering students must take the fundamental Engineering sciences, such as physics, chemistry, and mathematics, whereas civil engineering students must adopt geology.

The curriculum by University, offers a credit system based on student choice in order to foster their overall academic development. The curriculum at present haven't included multidisciplinary flexible curriculum that enable multiple entry and exit at the end. The open elective subjects, audit courses, and honours courses are available to students. In addition to academics, proper steps are taken to establish an interdisciplinary or multidisciplinary research culture in teachers and students. They are urged to join teams made up of individuals from various academic fields as they take part in a variety of technical competitions. To engage in more multidisciplinary research endeavors to find solutions to society's most pressing issues and challenges, the Institution has established an Innovation and Incubation cell. The students are motivated and supported to carry out multidisciplinary start up based projects such as water conservation and reuse for sustainable food development using hydroponic systems. The civil engineering students along with the pharmacy department have established the aquaponic systems for water purification and reuse, fish culture and edible crop production using planted bio filter techniques for agricultural purpose. Few projects such as sustainable energy concepts of electricity generation from organic waste material and from used battery cells were completed at preliminary and laboratory scale level. Recent trends in research such as biofuel generation projects using plastic wastes and biodegradable wastes are under development.

2. Academic bank of credits (ABC):-

The institution promotes and makes sure that students choose to participate in online courses through national programmes like SWAYAM and NPTEL. In our institute, we are currently registered and in practice of ABC.

3. Skill development:-

The institute offers Student Training Program (STP) in the form of soft, communication, technical, fundamental, and aptitude training, research methodology, and technical report writing during third year of engineering as a stage toward self - confidence and self-learning that aids students in further improving their core skills. In the fourth year, the Institute is planning to implement the value-added courses on the recent technology advancements and major engineering disciplines to be taught by industry professionals to help students expand their skill sets in accordance with market demands. The Institute has carried out various activities through NSS in the neighborhood communities and the students participated, successfully completed the activities. For providing students, the opportunities of higher studies in abroad at various universities across the world, the Institution is taking initiatives by trying to make MOU's with the relative service providers which will provide the same free of cost. The institute has made memorandum of understanding with ZENSAR to provide aptitude training of 30 hours, soft skill development programmes, 60 to 90 hours of technical training to develop skill in programming languages like SQL, JAVA, python, AL and ML etc. IT also provides training in cyber security, cloud computing and other recent technological tools. In order to develop awareness of the environmental issues and their effects, such as biodiversity protection and sustainable development in the students, the Institute provides environmental Studies I and II credit courses during the first year of engineering. Elections, democracy, and the constitution are all covered in the course material.

4. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course):-

The students participate in intercollegiate FIRODIYA and PURUSHOTTAMDrama competitions and social events like NSS. Through NSS, the Institute has conducted a number of programmes in the surrounding communities, and the students have taken part and successfully carried out the tasks. A few of the events are Swachha Bharat Abhiyan, Street play, NSS special camp, NSS day celebration, shahid diwas, Marathi bhasha diwas, women's day, tribute to martyrs, Engineer's day, Covid vaccination drive, Mask distribution activity, Covid-19 awareness quiz, mask preparation and distribution, Savitribai Phule jayanti, Swami Vivekananda jayanti and Rajmata Jijau jayanti, Shivjayanti, University level camp participation, Road safety awareness activity, Savitribai Phule smurtidin, NSS special camp for rural development, Dr. A.P.J. Abdul Kalam jayanti etc. Blood donation camps were arranged regularly by the students of K.J. College in the college premises. The activity has been supported by hospitals and NGOs. To sensitize students to social issues, go cycle rally, tree plantation, free health check-up and yoga activities are carried out. The mentalities of students have been stimulated and they were made aware of their responsibilities as members of society courtesy to the NSS special camp for rural development. The students integrated themselves into village life and engaged in social activities to overcome the villagers' ignorance of many social issues. The students mould themselves with the village life and carried out the social activities to bridge the gap between villagers and their unawareness towards many social issues. The programs like Savitribai Phule jayanti, Swami Vivekananda jayanti and Rajmata Jijau jayanti, Shivjayanti etc. are carried out regularly every year to make students aware of the work, devotion and dedication of such great people in overall development of the nation. The college hosts the technical competition GRAVITY as well as the cultural and sports event KJ YOUTH FEST. It serves as the cornerstone of an annual festival of culture and sports. This activity encourages student creativity in areas such as modeling, analysis, planning, interpersonal skills, acting, singing, dancing, playing an instrument, and management.

5. Focus on Outcome based education (OBE):-

The Institute is affiliated with Savitribai Phule Pune University. The University develops the curriculum, and the institute adheres to it strictly. The design of the syllabus involves participation and contributions from the faculty of several departments. These teachers provide important input that helps to shape the curriculum. According to the standards and recommendations of statutory regulatory authorities, each course listed under a department's curriculum has Program Educational Objectives (PEOs), Program Outcomes (POs), and Program Specific Outcomes (PSOs). Teachers, students, and other stakeholders are informed about these POs and PSOs through the institute website, student/faculty notice boards, laboratory notice boards, posters in hallways and administrative offices, laboratory manuals, project workbooks, department news bulletins, faculty course files, etc. The faculty defines each course's course objectives and course results and discusses about it with the students. At the end of the semester, all departments map the course outcomes with POs and PEOs in order to strengthen the teaching-learning process for the upcoming semester. In addition to the already established curriculum, which includes Project Based Learning, Mini Projects, Seminars, Final Year Projects, and Internships, the institute also hosts Technical Design and project Competitions.

6. Distance education/online education:-

The institute motivates students to get certification for online and offline courses like NPTEL, Bytxl, IBM Skill Build, JTT Barkley, FUEL, ZENSAR etc. For productive academic teaching, the Institute utilizes online tools like Google Classroom, Microsoft Teams, etc. whenever the online training is required. Through these channels, information is circulated in the form of lecture notes, videos, etc. The institute has made Memorandum of understanding with JTT Barkley, ZENSAR and Bytxl to provide online education in various tools and quiz to develop softskills. The Institute has done MOU with IIT Kanpur Foundation for Advanced Continuing Education & Training (IFACET) for FDP, STTP etc. to be conducted for students and staff. The Institute effectively uses utility of virtual laboratory to strengthen the teaching and learning method.