

## **IIT Kharagpur introduces major curriculum reforms for UG students for the academic year 2024-25**

In line with the spirit of National Educational Policy (NEP 2020), IIT Kharagpur is introducing several path-breaking reforms in its UG programmes starting from the academic year 2024-25.

1. From the academic year 2024-25, admission to all UG programmes will be for 4-year, B.Tech and B.S levels only. The students will get an opportunity to opt for the 5-year dual degree programmes after 2<sup>nd</sup> or 3<sup>rd</sup> year of their study. Depending upon their suitability and interest, the students can choose a 5-year dual degree programme in his/her parent department or he/she can also choose the Interdisciplinary Dual Degree Programmes (IDDP) offered by several schools and centres of the Institute. This will also create interesting possibilities such as a B.S (Hons.) in Economics with M.Tech in Artificial Intelligence and Machine Learning or a B.Tech (Hons.) in Civil Engineering with M.Tech in Financial Engineering etc. These changes will facilitate the students to make informed choice after spending few semesters at IIT Kharagpur for Dual Degree, instead of making the choice before they join the institute.”
2. The branch change option at the end of the first year for UG students admitted through JEE (Advanced) is abolished. This is done to reduce the level of stress some students undergo to secure higher grades for branch change and availability of the option. Less than 10% of the students manage to change their branch every year, leaving the remaining 90% students dejected who undergo depression, sometime resulting in serious mental health issues and poor performance in subsequent semesters. The announcement of this new measure has been overwhelmingly welcomed by the existing students as well.
3. The UG students taking admission in 2024 will have the option of earning simultaneously a “Double Major” along with the B.Tech (Hons.) or B.S (Hons.) degree in the departments in which they take admission. The “Double Major” programme will be offered by several departments. Depending upon their interest and aptitude, the students can register for “Double Major” in any discipline after 1<sup>st</sup> year. For example, a student pursuing B.Tech (Hons.) in Mechanical Engineering can opt for a “Double Major” in “Economics” or a student pursuing B.S (Hons.) in Physics can opt for a “Double Major” in “Electronics and Electrical Communications Engineering” or “Artificial Intelligence and Machine Learning”.
4. IIT Kharagpur will also be introducing the Semester Away Program (SAP) for the undergraduate students from the academic year 2024-25. Under SAP, a UG student can spend one semester either in another reputed national or international institute or industry or research laboratories and earn full credits equivalent to the semester credits. If required, the UG students can also combine their mandatory summer internship of 8-weeks along with the semester long SAP program, thus getting an opportunity to spend almost 8 months in another reputed organization/industries anywhere in the world.
5. In addition, the institute also offers the students the possibility of earning a “Minor” or a “Micro-Specialization” in many of the disciplines of their interest. Taking into account the rapid developments in “Artificial Intelligence and Machine Learning (AI/ML)” and its huge potential for the nation, studying at least one AI/ML elective will be made mandatory for all the students along with several

other electives being offered in areas such as Linguistics, Happiness and Well-Being, Indian Knowledge Systems, Performing Arts etc. The institute also encourages the UG students to attend national and international conferences of repute and make presentations of the research work that they do at IIT Kharagpur by supporting them financially and promoting the creativity of the students through establishment of several Innovation Labs, Do-It-Yourself centres, Tinkering Labs, Tech Clubs etc.

**Prof. V K Tewari, Director, IIT Kharagpur remarked,** “The Double Major programme is expected to attract a large number of brilliant students to pursue studies in an area of their interest apart from the basic programme in which they take admission. It is hoped that they can do this without much mental stress as they can complete their B.Tech (Hons.)/B.S (Hons.) programme along with Double Major in 4 to 5 years depending upon their course completion plan. Once the branch change is abolished, the first year curriculum need not be common across all branches, and the departments have the opportunity to introduce relevant, department-specific subjects from 1<sup>st</sup> year onwards. The students can also get exposure to top organizations in the world through SAP, while the organizations can utilize the talent of the exceptionally brilliant IIT students to solve the challenging problems of the organization/industries. Depending upon the nature of the host organization, the students also have an opportunity of getting Pre-Placement Offers (PPOs) from the organizations along with offers for master’s or doctoral research in national and international universities/institutes.