

# **INDIAN INSTITUTE OF TECHNOLOGY GANDHINAGAR**

## **NORMS FOR THREE-YEAR B.SC. DEGREE IN ENGINEERING**

(As approved by the BoG in its 29<sup>th</sup> meeting held on 20<sup>th</sup> August 2020)

### **Background**

A number of undergraduate students joining the IIT system through the Joint Entrance Examination (JEE) find it difficult to undergo rigorous academic programme at the IITs, and are often faced with the prospect of having to leave the programme without obtaining a degree. The difficulty in going through the curriculum may arise due to a variety of reasons. Further, some of the students do go through the programme successfully with a decent CPI, even though their career interests lie elsewhere (civil services, MBA, family business, etc.).

IITGN has undertaken a number of steps to try and help students having academic difficulties. For instance, the 5-week Foundation Programme at the beginning of the first semester helps prepare the students to adjust in the new cultural milieu. The Counselling Service proactively identifies students facing a variety of challenges and provides help. An effective Guided Progress Scheme (GPS) has been developed, wherein the students are paid special attention and are allowed reduced academic load. Students facing difficulties with the English language are offered extra help via the Peer Assisted Learning Program. Academic Discussion Hours, which are conducted in informal hostel spaces, bring together junior and senior students for discussions on specific courses.

Despite these efforts, a few students still struggle to cope with the academic requirements. This leads to high failure rates, which then trigger mental health problems. With increasing student strength, and increasing number of distractions for the students, this is likely to rise. This problem was also acknowledged at the level of the IIT Council, and the Council in its 53<sup>rd</sup> meeting held on 27<sup>th</sup> November 2019 approved a proposal to allow such students to exit the program upon completion of a “minimum academic standard” with an alternate B.Sc. (Engineering) degree.

### **Graduation Requirements and Norms**

1. A three-year B.Sc. degree in Engineering be created at IITGN, without any sub-specialization.
2. This will only be an “Exit” degree and no separate admission will be offered into this program.

3. The graduation requirements for this degree will be lower and fairly flexible in order to enable students to exit comfortably with a degree (see Degree Requirements).
4. Any undergraduate student (including existing students), may apply for conversion to this program any time after the end of his/her fourth active semester.
5. A student opting for this program will typically not be permitted to convert back to the B.Tech. degree. In exceptional circumstances, the Chairman, Senate may approve re-conversion to B.Tech. upon recommendation of the Dean, Academic Affairs / Associate Dean (UG).
6. Instance of students exiting via the B.Sc. degree in Engineering should be rare, and efforts should be made to encourage students to complete their B.Tech. degree program.

### **Degree Requirements**

1. A student opting to exit the institute with a B.Sc. degree in Engineering degree will be required to complete at least 100 credits of coursework.
2. Out of these, at least 60 credits will have to be earned via courses in Engineering and/or Natural Sciences (Physics, Chemistry, Mathematics, Earth Science, some courses of Cognitive Science).
3. Further, up to 16 credits may be earned online via MOOCs. The norms for earning credits via MOOCs will be as applicable to B.Tech. students at the institute.
4. Minimum Registration, Overload, Underload, GPS, Pass/Fail, Repetition/Substitution of courses and other norms will be as applicable to B.Tech. students.

### **Minimum Residency and Maximum Duration:**

A student exiting via the B.Sc. degree in Engineering should have spent at least 6 active semesters at the institute. Further, the maximum permissible duration to obtain this degree will be 7 years from the date of enrolment in the original B.Tech. program.

### **Fees:**

Fees and fee payment norms will be as applicable to B.Tech. students.