

# *Gujarat Technological University*

[www.gtu.ac.in](http://www.gtu.ac.in)

## Minor/Specialization in Technology Entrepreneurship as an optional additional learning.

Gujarat Technological University (GTU) recognizes that every student is having different passions, career goals, skills and interests. Many employers in this knowledge driven economy look for people with a combination of major area of study along with minor or specialization in another area to see that the graduating student has a wider knowledge base.

Since February 2012, GTU's Student Start up Support System (S4) has been building up its support system for student entrepreneurs. Today it regularly offers mentorship through workshops and seminars, its co working space, CrowdFunding Initiators and bootcamps. Thus during the second semester of academic year 2014-15, S4 was able to attract as many as 22,000 students to its activities.

With an aim to take advantage of the demographic dividend in the nation, the availability of online MOOC's and a sunrise startup ecosystem that is propelling India from a developing nation to a developed nation, and to create new models of entrepreneurial education, GTU Academic Council has decided to offer Specialization in Technology Entrepreneurship (or a BE Minor in Technology Entrepreneurship). This will be an optional additional learning for the student in addition to his regular Bachelor of Engineering Program. It is envisaged that the students are oriented to think entrepreneurial with exposure to incubation value chain and design thinking from the early semesters itself so that they may plan their academic course work such as micro projects, mini projects, assignments, electives, workshops, design projects, practical labs, seminars and final year project towards achieving practical and real world outcomes that are measurable and verifiable at the end of the four year course. To develop a collaborative start up ecosystem in Gujarat, GTU has invited Technology Business Incubators to join GTU in this task. (Please see the invitation at <http://www.gtu.ac.in/circulars/15June/TBI>, through which applications for empanelment from reputed TBIs and start-up support institutions are being invited.)

GTU Students pursuing their B.E. and having an entrepreneurial mindset, will now have an option to work on their additional optional Coursework at any of the GTU empaneled Incubators or start-up support institutions. To be successful in this specialization, the students will be those, who are self-motivated and self-disciplined with an ability for self-learning.

Students who have entrepreneurial dreams would also be able to imbibe the practical aspects of creating a technology startup. This also increases their employability prospects after the engineering course, even if the startup does not succeed commercially while doing the Degree

course. The students, who have a flair for entrepreneurship, may also be able to pursue a career in TBIs full-time, with the added skills learned and the experience gained through this specialization.

Students who wish to pursue their Final Year Project in GTU empaneled Incubators or start-up support institutions are required to form teams of 4-6 students and form a real startup/company (partnership, Limited Liability Partnership or Private Limited company) and get incubated through GTU in a GTU empaneled Incubators or start-up support institutions

## Minor in Technology Entrepreneurship:

A student will need to undertake additional courses and earn 30 additional credits over and above the minimum requirement for Bachelor of Engineering degree to earn Minor in Technology Entrepreneurship. These 30 credits will be divided between preliminary and domain specific knowledge areas. Courses can be offered as an electives, minor projects, assignments, seminars, workshops, labs, case studies, MOOCs. GTU will soon publish the guidelines for the process of admission at the GTU empaneled Incubators or start-up support institutions along with course and credit details on the university website.

**Eligibility:** Degree Engineering Students enrolled in GTU affiliated colleges.

**Additional credits required to earn Minor in Technology Entrepreneurship:** 30

**Time of Registration:** In between 4th and 6th Semester.

**Progress Evaluation and criteria to award Minor in Technology Entrepreneurship:**

The GTU empaneled Incubators or start-up support institutions shall decide the progress evaluation process for the individual/teams and submit a report to the university every semester. The format for the progress report shall be made available at the beginning of the semester. In case of lack of progress the GTU empaneled Incubators or start-up support institutions may terminate the incubation and report the same to the university.

Once the individual/team meets the criteria, set by the university, for award of Minor/Specialisation/Certificate in Technology Entrepreneurship as evaluated and endorsed by the GTU empaneled Incubators or start-up support institutions, the individuals become eligible for the grant of Minor/Specialisation/Certificate and will be awarded the same at the end of the program.

In case of failure to meet the criteria set by the University for Award of Minor/Specialization at the completion of the final semester by the student, s/he will not receive Degree Certificate with Minor/Specialization. However the student may receive an Entrepreneurial learning transcript given by GTU empaneled Incubators or start-up support institutions.

## Specialization in Technology Entrepreneurship

**Eligibility:** Students enrolled in GTU Degree Engineering programs

**Time of Registration:** Registration can be done any time during the semester. For the case of a final year student wishing to pursue his/ her final-year project as a start-up in an accredited incubator, he/she needs to register and get accepted at GTU empaneled Incubators or start-up support institutions within 45 days from the start of the first semester of the final academic year.

**Progress Evaluation and criteria to award Specialization:**

Teams have to qualify in any of the following criteria for award of Specialization in Technology Entrepreneurship. This may be changed by University from time to time, according to domain of incubators.

- Revenue Realized – The team should have been able to earn a revenue of at least 250,000 INR either from a single product or cumulatively for all its products
- Profits Generated - The team should have been able to generate a profit of at least 100,000 INR either from a single product or cumulatively for its products
- Angel/Venture Funding – The team should have been able to raise an angel or venture capital funding of at least 5 Lakhs for its startup by way of dilution of equity shares.
- Patent Granted – The team should be able to win a Patent Grant in India or anywhere in the world for its product

**Guidelines for GTU empaneled Incubators or start-up support institutions:**

- Incubators who have focus on student startup programmes may accept students from University approved process to do their Final Year Project as a incubated startup in the TBI
- The Incubators may have their own selection criteria for acceptance of students into their incubation programme.
- It is expected that the Incubation programme would guide the students to move through various developmental stages of creating an actual startup including Team Formation, Building a Prototype, Customer Validation, Efficiency and Scale.
- The Incubation Programme for the student's team may also guide the teams to learn about various key aspects of creating a startup, which are Product, Engineering, Sales and Financial Governance, which are necessary for that stage.
- At each of the stages of progress of the startup, there will be detailed learning resources that the students will have to self-learn and submit to the incubator for validation.
- The Incubator as per their existing policy may provide connections to Industry Mentors, Angel Funds and Venture Capital Funds.
- The Incubator fees for their various services offered such as company registration, income tax, service tax, sales tax, ESI/PF registrations, and filing of returns, charges for rent, internet, and equipment may be paid by students within 15 days of start of each semester.
- Academic Scholarships/Financial Aid may be provided to meritorious students based on the existing policy of the incubator.

GTU will soon publish detailed guideline for the process of admission at the GTU empaneled Incubators or start-up support institutions along with course and credit details on its web-site.