



# MAHATMA GANDHI INSTITUTE OF TECHNOLOGY (Autonomous)

Kokapet (Village), Gandipet (Mandal), Hyderabad-500 075

## Academic Regulations for B.Tech with *Minor Program*

### MR-22 Regulations

#### 1. Introduction

The philosophy behind Engineering as an academic discipline has been to orient the knowledge seekers in a manner that shatters the theoretical boundaries and pushes them into the realms of a practical world view.

The emphasis of MGIT has always been to orient the students towards the technologies that shall drive the world in the years to come; with this philosophy the University has decided to launch the **Bachelor of Technology in a particular branch with minor in a specified program** (Ex. B. Tech. in Mechanical Engineering with Minor in AI&ML) from the AY 2022-23 onwards.

The **Bachelor of Technology (B. Tech.) with Minor** program focuses on the fundamental principles of multiple Engineering disciplines, critical & analytical thinking and the ability to develop a distinctive approach to the interdisciplinary problems.

#### 2. Objectives

The key objectives of offering B. Tech. with Minor program are:

- To expand the domain knowledge of the students in one of the other branches of engineering.
- To increase the employability of undergraduate students keeping in view of better opportunity in interdisciplinary areas of engineering & technology.
- To provide an opportunity to students to pursue their higher studies in the inter-disciplinary areas in addition to their own branch of study.
- To offer the knowledge in the areas which are identified as emerging technologies/thrust areas of Engineering.

### 3. Minor courses and the offering departments

| S. No. | Minor Program                              | Eligible branch of students   | @Offering Department     | Award of Degree   |
|--------|--|---|--------------------------|---|
| 1.     | Artificial Intelligence & Machine Learning | All branches, except B. Tech. in CSE (AI&ML) /B. Tech. (AI&ML)/ B. Tech. (AI)/ B. Tech. CSE(AI) | CSE                      | “B. Tech. in <u>branch name</u> with Minor in Artificial Intelligence & Machine Learning” |
| 2.     | Cyber Security                             | All branches, except B. Tech. in CSE (Cyber Security)/ B. Tech. (Cyber Security)                | CSE                      | “B. Tech. in <u>branch name</u> with Minor in Cyber Security”                             |
| 3.     | Data Science                               | All branches, except B. Tech. in CSE (Data Science)/ B. Tech. (Data Science)                    | CSE                      | “B. Tech. in <u>branch name</u> with Minor in Data Science”                               |
| 4.     | IOT  | All branches, except B. Tech. in CSE (IOT) / B. Tech. (IOT)                                     | ECE                      | “B. Tech. in <u>branch name</u> with Minor in IOT”  |
| 5.     | Innovation and Entrepreneurship            | All branches.   | Management Science / MBA | “B. Tech. in <u>branch name</u> with Minor in Innovation and Entrepreneurship”            |

**Note: @ As per AICTE guide lines.**

### 4. Academic Regulations for B. Tech. Degree with Minor programs

1. The weekly instruction hours, internal & external evaluation and award of grades are on par with regular 4-Years B. Tech. program.
2. For B. Tech. with Minor, a student needs to earn additional 18 credits (over and above the required 160 credits for B. Tech degree). The list of courses of each Minor program, their respective credits weightage and semester-wise break-up of the courses are enclosed as Annexure. All these 18 credits need to be completed in III year and IV year only.
3. After registering for the Minor programme, if a student is unable to earn all the required 18 credits in a specified duration (twice the duration of the course), he/she shall not be awarded Minor degree. However, if the student earns all the required 160 credits of B.Tech., he/she will be awarded only B. Tech degree in the concerned branch.
4. There is no transfer of credits from Minor program courses to regular B. Tech. degree course & vice versa.
5. These 18 credits are to be earned from the additional Courses offered by the host department in the college as well as from the MOOCS platform.

6. For the course selected under MOOCS platform following guidelines may be followed:
  - a) Prior to registration of MOOCS courses, formal approval of the courses, by the University is essential. University before the issue of approval considers the parameters like the institute / agency which is offering the course, syllabus, credits, duration of the programme and mode of evaluation etc.
  - b) Minimum credits for MOOCS course must be equal to or more than the credits specified in the Minor course structure provided by the University.
  - c) Only Pass-grade/marks or above shall be considered for inclusion of grades in minor grade memo.
  - d) Any expenses incurred for the MOOCS courses are to be met by the students only.
7. The choice to opt/take a Minor program is purely on the choice of the students.
8. The student shall be given a choice of withdrawing all the courses registered and/or the credits earned for Minor program at any time; and in that case the student will be awarded only B. Tech. degree in the concerned branch on earning the required credits of 160.
9. The student can choose only one Minor program along with his/her basic engineering degree. A student who chooses an Honors program is not eligible to choose a Minor program and vice-versa.
10. The B. Tech. with a Minor program shall be offered from the AY 2022-23 onwards. The students who are pursuing their III year I semester in the current academic year can register for the Minor program if they fulfil the eligibility criteria.
11. A student can graduate with a Minor if he/she fulfils the requirements for his/her regular B. Tech. program as well as fulfils the requirements for Minor program.
12. The institute shall maintain a record of students registered and pursuing their Minor programs, minor program-wise and parent branch-wise. The same report needs to be sent to the University once the enrolment process is complete.
13. The institute / department shall prepare the time-tables for each Minor course offered at their respective institutes without any overlap/clash with other courses of study in the respective semesters.

## **5. Eligibility conditions for the student to register for Minor course**

- a) A student can opt for B.Tech. degree with Minor program if she/he has no active backlogs till II Year I Semester (III semester) at the time of entering into III year I semester.
- b) Prior approval of mentor and Head of the Department for the enrolment into Minor program, before commencement of III year I Semester (V Semester), is mandatory
- c) If more than 50% of the students in a branch fulfil the eligibility criteria (as stated above), the number of students given eligibility should be limited to 50%.

## **6. Registration for the courses in Minor Program**

- a) At the beginning of each semester, just before the commencement of classes, students shall register for the courses which they wish to take in the that semester.
- b) The students should choose a course from the list against each semester (from Minors course structure) other than the courses they have studied/registered for regular B.Tech. programme. No course should be identical to that of the regular B.Tech course. The students should take the advice of faculty mentors while registering for a course at the beginning of semester.
- c) The maximum No. of courses for the Minor is limited to two (three in case of inclusion of lab) in a semester along with regular semester courses.
- d) The registration fee to be collected from the students by the College is **Rs. 1000/-** per one credit.
- e) A fee for late registration may be imposed as per the norms.

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