A Guide Book of Regulations for MTech for Working Professionals

IIIT Kottayam was established in 2015 with a major objective to set up an education model which can produce best-in-class human resources in IT and which can harness the multidimensional facets of IT in various domains. The IIIT Kottayam is expected to contribute significantly to global competitiveness through the key sectors of the Indian economy and Industry, focusing on applied research and education in IT in selected domain areas. The institute is located at Vallichira village, Block No.20, Kottayam District.

Contents

Ordinances

1. The Indian Institute of Information Technology Kottayam awards the degree of Master of Technology (M.Tech) in any IT related discipline to a candidate who has successfully completed the stipulated Programme of study.

2. The Programme of study with the governing rules and regulations are formulated by the Senate of the Institute. The Senate can modify or change the structure, the governing rules and regulations from time to time.

3. A candidate becomes eligible for the award of the M.Tech degree after fulfilling all the academic requirements prescribed by the Senate of the Institute.

4. The award shall be made upon the recommendation of the Senate of the Institute after ratification by the Board of Governors of the Institute.

5. All M.Tech for Working professionals programmes offered by the Institute shall be governed by these M.Tech Ordinances.

6. The M.Tech Ordinances shall be applicable to any new discipline(s)/specialization under these programmes that may be introduced in future.

Regulations

R.1. M.Tech. Programme and Duration

The Institute shall have the following M.Tech for Working Professionals:

- **MTech in Artificial Intelligence (AI) and Data Science**

- **MTech in Cyber Security**

- **MTech in Computer Science and Engineering with Specialization in Big Data and Machine Learning**

- **MTech in Computer Science and Engineering with Specialization in FinTech**

1. Duration of the M.Tech for Working Professionals programme

1. The minimum duration of the M Tech Programme (excluding dropped semester(s)) is 3 years from the date of admission.

2. The maximum duration of the M Tech programme is 5 years from the date of admission

R.2. Admission

1. The number of seats in each branch of the M.Tech programme for which admission is to be made in the Institute, will be decided by Senate.

2. Admission to the M.Tech for Working Professionals of the Institute normally takes place twice in every year. However, the institute has the right to either offer only once or not offering the programme at all in any academic year. Admission is granted on the basis of admission test/ interview.

3. **Eligibility criteria:** The eligibility criteria for M.Tech for Working professionals in (i) AI and Data Science (ii) Cyber Security and (iii)CSE with Specialization in Big Data and Machine learning is as follows.

   - The candidate must be employed in Industry/R&D/Academics at the time of applying. Only the employment acquired after the award of the qualifying degree will be considered.

   - The candidate must have a B.Tech./BE/AMIE degree in any discipline or MCA or MSc/MS degree in CS/IT/Mathematics/ Physics/Statistics. The candidate should have scored at least 60% aggregate in the degree examination.

   The eligibility criteria for M.Tech for Working professionals in CSE with Specialization in FinTech is as follows.

   - The candidate must be employed in Industry/R&D/Academics at the time of applying. Only the employment acquired after the award of the qualifying degree will be considered.

   - The candidate must have a B.Tech./BE/AMIE degree in any discipline or any Masters degree with Mathematics as one of the subjects (in either UG/PG) and at least 60% aggregate marks in PG, are eligible to apply for FinTech specialization. Also, the candidate must have a background in Computer Programming; Diplomas/certificates/NPTEL courses in computer programming will be considered. The decision of the internal committee will be final and binding in deciding the eligibility.

R.3. Categories of Admission

The Institute admits M.Tech for Working professionals under the following categories.

1. **Self-financing** A candidate in this category works towards the M.Tech Programme in a self-supporting and self-paced manner. The Institute will not provide any assistantship/fellowship to such a student.

2. **Sponsored** A candidate in this category is sponsored and supported by a recognized R&D organization, academic institution, government organization or industry for doing M Tech in the Institute on a self-paced manner. The Institute does not provide any assistantship/fellowship to such a student.

R.4. Registration and Enrolment

1. Each academic session is divided into two semesters of approximately fourteen weeks duration: an odd semester and an even semester. The classes will be held on Friday afternoons, Saturdays, Sundays and other public holidays to ensure that approximately 14 hr lectures are dedicated for a one credit course without sacrificing the quality of education.

2. The Senate-approved schedule of academic activities for a session, inclusive of dates for registration, mid-semester and end-semester examinations, etc., shall be laid down in the Academic Calendar for the session.

3. Every student is required to register for approved courses through the assigned Faculty Advisor/Thesis Supervisor at the commencement of each semester on the day fixed for such registration and notified in the Academic Calendar.

4. Except for the first semester, registration of a semester will be done during a specified week before end-semester examination of the previous semester (pre-course registration).

5. From the second semester onwards all students have to enrol on a specified day at the beginning of a semester. A student will be eligible for enrolment only if:

   (a) Cleared all Institute, Library dues and fines (if any) of the previous semesters;

   (b) Paid all required advance payments to the Institute for the current semester, and

   (c) Not been debarred from registering on any specific ground.

   Late registration/enrolment will be permitted with a fine as decided from time to time up to two weeks from the last date specified for registration.

6. The registration sheet contains the course number, course name, number of credits and category for each course taken in that semester. The student makes the choice of course in consultation with his Faculty Advisor.

7. In case, a student wants to skip a semester by not crediting the courses due to unavoidable circumstances such as onsite work or any other valid reasons, such a student should register the semester with a minimum fee prescribed by the institute from time to time to ensure the continuation in the programme.

8. A student who obtains a **CGPA** lower than 5.00 with a grade of **D** in some courses at the end of the programme may be permitted by the Chairman, Senate, on the recommendations of the Dean (Academics) / PIC (Academics) to re-register one or more **D** graded courses, provided, the course(s) is /are being offered therein. The number of such courses to be repeated will be as many as are required to get a **CGPA** of 5.00 for getting the degree.

9. When a student re-registers for a course, in accordance with clause 4.7, his/her better of the grades will be used for **CGPA** calculation and it is limited to 5.0. Also separate grade card whether improved or same or failed is issued to students in the current semester. If not improved from **D** grade one repeat exam will be allowed to write again.

10. A student may add and drop course(s) with the concurrence of the Thesis Supervisor/Faculty Advisor/Head of the Department, and under intimation to the concerned course instructors and the academic section, provided this is done within the date mentioned in the Academic Calendar and as per the conditions given in clause 4.4.

11. An elective may be available if it is currently offered by the Institute and if there are at least 15 students to take up the course.

12. A student once enrolled in a specialization will not be allowed to enrol on a different specialization.

R.5. Semester break from the Programme

1. A student who has been admitted to an M Tech. programme of the Institute may be permitted to take a semester break from the Institute on the grounds of prolonged illness or grave calamity in the family, or he/she has gone onsite from the organization for one semester or more, provided:

   (1) The student applies to the Institute within at least 6 (six) weeks of the commencement of the semester, stating fully the reasons for such semester break together with supporting documents and endorsement of his/her guardian.

   (2) The Institute is satisfied that, counting the period of semester break, the student is likely to complete his/her requirements of the M.Tech. Degree within the time limits specified in Clause R.1.1.

(3) There are no outstanding dues or demands in the Institute/Department/Library.

2. A student who has been granted a semester break from the Institute under the provisions of Clause R.5.1 will be required to pay fees/charges (except tuition fees and hostel dues) till such time as his/her name is on the Roll List. However, fees once paid will not be refunded.

3. A student will be permitted only one or two such semester breaks during his/her tenure as a student of the M.Tech programme.

R.6. Termination from the Programme

1. A student's studentship in a programme may be terminated on the following grounds:

   (a) If a student is absent for more than 6 (six) weeks in a semester without sanctioned leave.

   (b) A decision is taken on disciplinary grounds.

   (c) On having been found to have produced false documents or having made a false declaration at the time of seeking admission.

   (d) A student fails to secure an SGPA of 4.0 in two consecutive semesters. However, a student securing a CGPA below 4.0 may be allowed to continue in the following semester on the recommendation of Dean (Academics) / PIC (Academics). Subsequently, the student will be issued a warning.

   (e) The maximum permissible duration of the programme has been exceeded.

R.7. Faculty Advisor and Class Committee

1. To help the students in planning their courses of study and for getting general advice on the academic programme, the Institute will assign a certain number of students to a faculty member who will be called their Faculty Advisor.

2. Every class of the M.Tech programme will have a Class Committee consisting of Faculty and students representative.

3. The constitution of the Class Committee will be as follows:

   (i) HoD or one Faculty nominated by the Dean (Academics) / PIC (Academics) to act as the Chairman of the Class Committee.

   (ii) course coordinators/ faculty members of each of the lecture-based courses

   (iii) One student from the respective class; and

   (iv) Faculty Advisors of the respective class.

4. The basic responsibilities of the Class Committee are

   (a) to review the progress of the classes periodically,

   (b) to discuss problems concerning curriculum and syllabi and the conduct of the classes.

   (c) The method of assessment in the course will be decided by the teacher in consultation with the class committee and will be announced to the students at the beginning of the semester.

(d) Each class committee will communicate its recommendations to the Dean (Academics) / PIC (Academics).

(e) The Class Committee without student members is responsible for the finalization of the semester results.

(f) The class committee with students representatives is conducted once in a semester after the midsem examination (class committee meeting date is indicated in the academic calendar).

R.8. Attendance and Course Feedback

1. Students are expected to attend all the classes. Every teaching staff member handling a class will take attendance till 3 calendar days before the last instructional day in the Semester. A minimum of 80% attendance is required to write the end-semester examination.

2. The incomplete grade **I** is a transitional grade that will be given to the students who miss the end-semester examinations under exceptional circumstances (e.g., serious medical reasons, represented the Institute in approved events) as determined by the course instructor/faculty advisor/Head of the department and approved by the Dean (Academics) / PIC (Academics). Makeup examination will be given to the students provided they meet 80% attendance and other academic requirements as per the rules and regulations of the institute. The actual grade after the makeup examination will be taken and will reflect in the transcript, replacing the **I** grade. In case the student obtains an **F** grade in the makeup examination, the student will be eligible to write the repeat end-semester exam.

3. A student who has an attendance lower than 80%, whatever may be the reason for the shortfall in attendance, will be awarded an **L** grade. The students who have **L** grade in at least one course will have to repeat the courses in which he/she has insufficient attendance in the upcoming semester.

4. Withdrawal of a registered course in a semester is usually permitted/enforced under exceptional cases, for example, due to prolonged illness. **W** grade is given in these circumstances, and the student is asked to repeat the concerned course with the same course number taking all the examinations when it is offered next. The new grade obtained by the student will be taken into consideration and appear in the transcript. However, the previous **W** grade will also appear in the transcript till the course is successfully completed. **W** grade will not have any effect on the calculation of SGPA and CGPA. If a student has a **W** grade in a registered course in a particular semester, SGPA will be calculated based on the grades obtained in other registered courses of that semester. A similar rule will apply to CGPA as well.

5. The teacher handling a course must finalize the attendance 3 calendar days before the last instructional day of the course in the semester. The particulars of all students who have attendance less than 80% in that course will be announced in the class by the corresponding teacher. Copies of the same should also be sent to the Dean (Academics) / PIC (Academics) and Heads of Departments concerned. Students who secure less than 80% will be awarded **L** grade. Such students will not be permitted to appear for the end sem examination. They have to re-register for the course in the following semester if it is offered.

6. **Condonation of Attendance:** Those students who have more than 80% attendance for the period other than their medical leave can be considered for condonation of attendance provided their overall attendance in a course, including the period of illness, does not fall below 50

(a) The 15% waiver that is granted shall accommodate the absence of the student for personal reasons and minor illness.

(b) The institute can consider an additional waiver for students who have suffered major/long term illness that requires hospitalization. Such candidates need to submit a medical certificate issued/endorsed by the Institute Doctor and it shall be the decision of the Director/Dean (Academics) / PIC (Academics) to permit such students on a case-to-case basis as deemed appropriate.

7. All the students are expected to complete the course feedback form. Online course feedback by students will be taken with full confidentiality for every course.

8. **Project work requirement**

The student must complete a minimum of **25 credits** of coursework before starting the project work.

R.9. Assessment and Grading

1. There will be continuous assessment of a student's performance throughout the semester, and grades will be awarded by the teacher concerned or the appropriate committee appointed for this purpose on the following basis. In case of

   (a) courses with theory component alone, the evaluation will be based on instructors' continuous assessments and end semester examination, and

   (b) courses with theory component and laboratory component, the evaluation will be on the basis of continuous assessment of the tasks assigned and end semester test/viva.

   (c) Continuous assessment will be adopted for assessment of all the courses. In this regard, tests, quizzes, assignments, course projects etc., appropriate for the course will be conducted. The Academic Advisory Committee / Senate will decide from time to time on the system of tests and examinations in each course in each semester. A general guideline for the assessment procedure of a course with theory component alone, with respective weightage is given below.

      - Assignments : 20
      - Quizzes : 10
      - Mid Semester Examination : 20
      - End Semester Examination : 50

   For a one-credit course, a general guideline for the assessment procedure is given below.

      - Assignments/Quizzes : 20
      - End Semester Examination : 80

   For courses with theory and lab component, a general guideline for the assessment procedure is given below.

      - Theory component: scaled to 70
         – Assignments : 20
         – Quizzes : 10
         – Mid Semester Examination : 20
         – End Semester Examination : 50
      - Lab component: 30

(d) However, if any change in the above guideline is required, the details of the weightage of marks for the assessment criteria have to be announced to the students in consultation with the Class Committee and prior approval from the Chairman of the Senate. at the beginning of the semester. Total weightage for continuous evaluations will be between 50% to 60% and should not be more than 60%. The weightage for the end semester examination will be (100 - weightage of continuous evaluation).

(e) End Semester Exam, as well as Final Project Review, shall be conducted in Offline mode. The offline exam centres will be the Off-Campus centre in Trivandrum, Main campus in Kottayam or other Exam centres in Bangalore, Pune, Hyderabad and Allahabad/ Delhi, subject to the availability of sufficient candidates and administrative feasibility.

2. The evaluation of the project/thesis work will be based on sessional work assigned by the thesis supervisor, seminar, project/thesis report and project/thesis evaluation committee's assessment (mentioned in Clause 9.7 below).

The mid-semester and end-semester examinations will be conducted centrally by the Academic section of the Institute every semester. Every course (except one-credit courses) must have mid-semester and end-semester examinations. The duration of the examinations will be one and a half hours and three hours (changes may be allowed depending upon the mode of examinations), respectively. No course can have an examination of shorter durations. The class tests or quizzes will be organized by the instructor concerned.

3. The weightage assigned to different components of the assessment will be announced by the concerned instructor(s) at the beginning of the semester.

4. Debarring: A student may be debarred from appearing in the end semester examination due to the following reasons:

   1. If any disciplinary action is taken against the student.

   2. On the recommendation of a teacher, if his/her attendance in the Lecture/Tutorial/Practical classes is less than the prescribed minimum during the semester.

5. **Makeup Examination**

   1. Students who have missed the end-semester examination will be awarded **F** grade. If the student missed the exam for valid reasons and have been awarded **I** grade are eligible for a makeup examination which may be held a few days after the end semester examinations.

   2. No makeup examination will be scheduled for the mid-semester examination and quizzes. It is entirely up to the instructor to ascertain the proficiency of the student by whatever means considered appropriate to him/her if he/she is satisfied with the bonafide of the case.

   3. Students who have failed or missed the end semester examination may be permitted to proceed with the registration for the next semester and to write the respective courses' examination along with the next semester's exam by paying a prescribed fee (irrespective of the number of courses). In this case, the student may write the odd semester exam in the upcoming even semester and vice versa. However, the grade received for the course may be improved at best to a $\mathbf{B}^-$ grade.

6. The final grades for a course must be submitted after the end-semester examination by the concerned instructor(s) to the academic office and finalized by the Grade Finalization Committee and recommend to the Dean (Academics) / PIC (Academics), within the date stipulated in the academic calendar.

7. **Evaluation of M Tech. Project/Thesis:**

   1. The project work is normally in two phases; each spread over a semester. At the end of the first phase, the student is required to submit a preliminary report of his/her work by a prescribed date to be evaluated by an Internal Project Evaluation Committee (See Annexure I). There will be a comprehensive viva on the project work at the end of the first phase. The second phase of the work is continued in the following semester.

   2. The second phase of project work is also evaluated in the same manner as in the first phase. However, in the second phase, the students must submit bounded copies of the report for examination.

   3. There will be a comprehensive viva on the project work at the end of the second phase.

   4. Those who fail in the first phase assessment will be required to re-register for the first phase in the following semester. Likewise, those who obtain an **F** grade in the second phase of assessment will be required to re-register for it in a subsequent semester.

   5. For students having insufficient progress either in the first/second phase project, an extension of time not exceeding ten weeks from the announced last date for submission of the project report may be granted. In such cases, the concerned students will be temporarily awarded an **I** grade. A comprehensive viva will be conducted on the project work after the allowed extension. Further, if the reports are not submitted within the allowed period of time, the **I** grade will be automatically converted to an **F** grade.

8. Based on the performance of a student, each student is awarded a final letter grade in each course at the end of the semester. The letter grades and the corresponding grade points are as follows:

Letter Grade	Grade Points	Remarks
A	10	Excellent
A-	9	Very good
B	8	Good
B-	7	Fair
C	6	Average
C-	5	Poor
D	4	Pass
F	0	Fail
I		Incomplete (Subsequently to be changed into valid grade)
L		Insufficient attendance
W		Withdrawal due to special circumstances
U		Course Audit

9. A student is considered to have completed a course successfully and earned the credits if he secures a letter grade other than **I**, **L**, **U**, **W** or **F** in that course. A letter grade **F** in any course implies a failure in that course.

   The grade card issued at the end of the semester to each student will contain the following:

   - the credits for each course registered for that semester.
   - the letter grade obtained in each course
   - the total number of credits earned by the student up to the end of that semester.

- the Cumulative Grade Point Average (CGPA) of all the courses taken from the first semester

The **GPA** will be calculated according to the formula:

$$GPA = \frac{\sum_i (C_i GP_i)}{\sum_i C_i}$$

where C_i = credit for the course, GP_i = the grade point obtained for the course and $\sum_i C_i$ =the sum of credits in overall courses taken in that semester, including those in which the student has secured **F** and **W** grades.

For the cumulative grade point average (**CGPA**) a similar formula is used where the sum $\sum_i C_i$ is the sum of credits in overall courses taken in all the semesters completed up to the point in time.

10. **Re-count/Re-evaluation of Answer Papers**

    In case any student feels aggrieved, he can contact the teacher concerned within one week from the announcement of the results. The student shall have access to his answer paper/s in the end-semester examination which may be shown to him by the teachers concerned. In case of any counting mistakes and if the teacher feels that the case is genuine, he may re-examine the case and forward a revised grade, if any, to Dean (Academics) / PIC (Academics) through the Chairman of the Class Committee with justification for the revision. If the student is still not satisfied, re-evaluation of the answer paper can be done by paying a prescribed fee.

11. The Faculty advisor may permit a student to register for an audit course provided the course instructor allows auditing a course. The word **U** shall be written alongside the Course Name on the Grade Card. The audit course and the grade **U** shall not carry any credits and grade points. Pass or fail status will be shown in the grade card as **PP** for passed and **NP** for not passed. However, a student is not required to register again for passing a failed audit course.

R.10. Course Structure

1. Every MTech programme will have a curriculum and syllabi for the courses approved by the Senate. The Senate, from time to time, will revise curriculum and syllabi as per the need and technological advancement. The Board of Studies (BoS) will discuss and recommend the syllabi of all Postgraduate courses offered by IIIT Kottayam to the Senate for consideration and approval.

2. Teaching of the courses shall be reckoned in credits; Credits are assigned to the courses based on the following general pattern:

   1. One credit for each lecture period

   2. One credit for two hours of Laboratory or Practical or Project session.

3. In order to qualify for an MTech degree of the institute, a student is required to complete the credit requirement as prescribed in the curriculum for a particular programme.

4. Medium of instruction, examination and project/thesis reports will be in English.

5. Thesis supervisor: Master's Project/Thesis supervisor(s) for a student will be appointed from amongst the faculty members of the IIIT Kottayam.

LSC	L: Level of the course (5, 6 or 7)
	S: Semester (1 = Odd, 2 = Even)
	C: Course number semester
LTPC	L: Lecture hours per week
	T: Tutorial hours per week
	P: Practical hours per week
	C: Credits

R.11. Course Code

The courses are numbered in the format XYZ LSC (LTPC) and the numbering may be understood as **XYZ: Course Code** and

R.12. Degree Requirement

A student shall be declared to be eligible for award of the MTech degree if he/she has

1. Registered and successfully completed all the courses and projects;

2. Successfully acquired the minimum required credits (60) with a CGPA of 5.0 as specified in the curriculum corresponding to the branch of study within the stipulated time;

3. No disciplinary action is pending against the student;

4. No dues to the institute and

5. The award of the MTech degree must be recommended by the Senate and approved by the Board of Governors of the institute.

R.13. Conduct and Discipline

Disciplinary policies of Indian Institute of Information Technology Kottayam
(IIIT Kottayam) are put in place to ensure a secure, academically enriching environment for all members of the community and to promote civility on campus. Students of IIIT Kottayam are expected to show personal integrity, respect for Institute resources, respect for others rights, for the values of scholarship and teaching. Students are expected to adhere to the institute rules and regulations. Any violation will be handled according to the rules set forth by the Senate and Board of Governors of IIIT Kottayam. The administrators of the Institute will notify parents/guardians if a student violates the Code of Conduct. Any of the following shall constitute a violation of the Code of Conduct for students and makes the student liable to disciplinary action by the Institute.

- Lack of courtesy and disorderly conduct or disruptive acts (within or outside Institute premises).

- Any act that compromises the safety/security of individuals or Institutional facilities.

- Wilful damage or unauthorized removal of Institute property.

- Unauthorized access to institutional facilities/records.

- Tampering of data/records (reading, copying or destroying).

- Any act of fraud/misrepresentation/dishonesty.

- Misappropriation of any belongings of fellow students/staff/faculty.

- Adoption of unfair means during examinations or misconduct in research.

- Infringement of personal privacy.

- Ragging in any form.

- Caste/religion/ethnicity/gender/physical disability based discriminatory behaviour/remarks.

- Sexual harassment/assault.

- Possession of banned substances or dangerous items (illegal drugs, weapons, firearms etc.) that endangers the safety of the student himself/herself or others.

- Any act that affects the reputation/orderly conduct of the Institute.

R.14. Power to Modify

1. In an exceptional case, the Director as a Senate Chairman may, at his discretion, override any of the above provisions.

2. Notwithstanding all that has been stated above; the Academic Advisory Committee/ Senate has the right to modify any of the above regulations from time to time.

Annexure I

	Internal Project Evaluation Committee (IPEC)	
1.	Head of the Department (HOD) (*ex-officio*)	Chairperson
2.	Faculty member to be nominated by the HOD	Member Secretary (Faculty in charge PG Programme)
~~3.~~	~~One faculty from Other Department chosen by the Guide~~	~~Member~~
3.	Guide	Member
4.	Co-guide (if any)	Member

Note: In addition to the members listed in the table, the final review for the second phase will consist of an external expert from industry /higher educational institution.