

GUIDE BOOK OF REGULATIONS

**for Integrated M.Tech. (with BCA MCA) Programme in AI &
Data Science**



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ORDINANCE

- 0.1. The Indian Institute of Information Technology Kottayam awards the Integrated MTech. (with BCA-MCA) Degree in AI & Data Science to a candidate who has successfully completed the stipulated program of study.
- 0.2. The Program of study with the governing rules and regulations is formulated by the Senate of the Institute. The Senate can modify or change the structure, the governing rules and regulations from time to time.
- 0.3. A candidate becomes eligible for the award of Integrated MTech. (with BCA-MCA) Degree in AI & Data Science after fulfilling all the academic requirements prescribed by the Senate of the Institute.
- 0.4. The award shall be made upon the recommendation of the Senate of the Institute after ratification by the Board of Governors of the Institute.
- 0.5. All Integrated MTech. (with BCA-MCA) degrees in AI & Data Science offered by the Institute shall be governed by the Integrated M.Tech Ordinances.
- 0.6. The Integrated M.Tech Ordinances shall be applicable to any new discipline(s)/specialization under these programs that may be introduced in the future.

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1 Program Structure for Integrated M.Tech. (BCA, MCA) Degree Programs in AI & Data Science [R.1]

- 1.1. The program spans across 12 semesters (6 Years) – Semester I to Semester XII comprising of three levels – BCA level (Semester I through Semester VI), MCA level (Semester VII through Semester X) and Integrated M.Tech. Level (Semester XI through Semester XII).
- 1.2. Candidates admitted to the Integrated MTech. (with BCA-MCA) will have the flexibility to exit at the following levels:
 - (1.2.1) Learners who have successfully completed Semester I through Semester VI and opt to exit at this level can receive a BCA degree in AI & Data Science.
 - (1.2.2) Learners who have successfully completed Semester I through Semester X and opt to exit at this level can receive a BCA degree and MCA degree in AI & Data Science.
 - (1.2.3) Learners who have successfully completed Semester I through Semester XII can receive a BCA degree, MCA degree and Integrated M.Tech. degree in AI & Data Science.
- 1.3. The maximum duration for completion of the program is **10 years**.
- 1.4. The medium of instruction, assessments, project reports and examinations will be English.
- 1.5. Each course is assigned a credit based on the following pattern:
 - (1.5.1) One credit for each lecture hour
 - (1.5.2) One credit for each practical session of 2-hour duration

- 1.6. The lecture and practical sessions will be conducted online.
- 1.7. The classes will be held on Saturdays, Sundays and if required on Friday evenings (6 PM to 9 PM).

2 Admission Procedure [R.2]

- 2.1. Admission will be granted on the basis of National level entrance examination which will be conducted online.
- 2.2. Candidates can enter the program by securing admission to Semester I.
- 2.3. Admission to the program normally takes place two times in a year (January and July session). In this regard, the decision of the competent authority will be final.
- 2.4. **Eligibility Criteria:** The eligibility criteria for candidates to apply to the program is as follows:
 - (2.4.1) The candidate must be employed in Industry/R&D/Academics at the time of applying.
 - (2.4.2) All candidates who have passed the Class 12 examination and scored atleast 50% aggregate (47.5% aggregate in case of OBC (Non-creamy layer) category candidates and 45% aggregate in case of SC/ST/PWD category candidates) with Mathematics as one of the subjects in Class 12 are eligible to apply for the program.
 - (2.4.3) All candidates who possess a Diploma (after Class 10) recognised by AICTE or a state board of technical education in CS/IT/allied areas of at least 3 year duration and scored atleast 50% aggregate (47.5% aggregate in case of OBC (Non-creamy layer) category candidates and 45% aggregate in case of SC/ST/PWD category candidates) are eligible to apply for the program.

- (2.4.4) All candidates who have passed the Higher Secondary Certificate vocational examination and scored atleast 50% aggregate (47.5% aggregate in case of OBC (Non-creamy layer) category candidates and 45% aggregate in case of SC/ST/PWD category candidates) are eligible to apply for the program.
- (2.4.5) All candidates who have passed any Public School / Board / University examination in India or in any foreign country recognised as equivalent to the 10+2 system by the Association of Indian Universities (AIU) and scored atleast 50% aggregate (47.5% aggregate in case of OBC (Non-creamy layer) category candidates and 45% aggregate in case of SC/ST/PWD category candidates) are eligible to apply for the program.
- (2.4.6) All candidates who have passed the Intermediate or Pre-University Course (of 2 year duration) offered by a recognised Board and scored atleast 50% aggregate (47.5% aggregate in case of OBC (Non-creamy layer) category candidates and 45% aggregate in case of SC/ST/PWD category candidates) are eligible to apply for the program.
- (2.4.7) All candidates who have passed the final examination of the 2 years course offered by the Joint Services Wing of the National Defence Academy and scored atleast 50% aggregate (47.5% aggregate in case of OBC (Non-creamy layer) category candidates and 45% aggregate in case of SC/ST/PWD category candidates) are eligible to apply for the program.
- (2.4.8) All candidates who have passed the General Certificate Education (GCE) examination (London / Cambridge / Sri Lanka) at the Advanced (A) level. and scored atleast 50% aggregate (47.5% aggregate in case of OBC (Non-creamy layer) category candidates and 45% aggregate in case of SC/ST/PWD category candidates) are eligible to apply for the program.
- (2.4.9) All candidates who have passed the High School Certificate Examination of the

Cambridge University or International Baccalaureate Diploma of the International Baccalaureate Office, Geneva and scored atleast 50% aggregate (47.5% aggregate in case of OBC (Non-creamy layer) category candidates and 45% aggregate in case of SC/ST/PWD category candidates) are eligible to apply for the program.

(2.4.10) All candidates who possess the Senior Secondary (XII) Certification (with a minimum of five subjects) offered by the National Institute of Open Schooling and scored atleast 50% aggregate (47.5% aggregate in case of OBC (Non-creamy layer) category candidates and 45% aggregate in case of SC/ST/PWD category candidates) are eligible to apply for the program.

(2.4.11) It is desirable for the candidates to possess knowledge of any one programming language.

2.5. Reservation policies for SC, ST, OBC, Persons With Disabilities (PWD) and Economically Weaker Sections (EWS) will be as per the Government of India norms. Candidates belonging to OBC (Non-creamy layer)/SC/ST/PWD/EWS category are required to submit an attested copy of the category Certificate at the time of applying for the program.

3 Enrolment [R.3]

3.1. The academic calendar (batchwise) with the schedule of academic activities for a semester, inclusive of dates for enrolment and end-semester examinations, etc., will be provided to the learners after the admission procedure.

3.2. From Semester II onwards for candidates entering the program, every eligible learner is required to enrol for the courses of the semester before the commencement of each semester on the day specified in the Academic Calendar.

- 3.3. A learner will be eligible for enrolment to the MCA level only if he/she has successfully completed all courses upto Semester VI and
- (3.3.1) Paid all pending dues and required advance payments to the Institute for the current semester.
 - (3.3.2) Not been debarred from enrolling on any specific ground.
- 3.4. A learner will be eligible for enrolment to the Integrated M.Tech. level only if he/she has successfully completed all courses upto Semester X and
- (3.4.1) Paid all pending dues and required advance payments to the Institute for the current semester.
 - (3.4.2) Not been debarred from enrolling on any specific ground.
- 3.5. Late enrolment will be permitted with a fine as decided from time to time up to one week from the last date specified for enrolment.

4 Temporary Withdrawal from the Programme [R.4]

- 4.1. A student who has been admitted to the Integrated M Tech. programme of the Institute may be permitted to withdraw temporarily 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:
- (4.1.1) The student applies to the Institute within at least 6 (six) weeks of the commencement of the semester or from the date he last attended his/her classes, whichever is later, stating fully the reasons for such withdrawal together with supporting documents and endorsement of his/her guardian.

- (4.1.2) The Institute is satisfied that, counting the period of withdrawal, the student is likely to complete his/her requirements of the Integrated M.Tech. Degree within the time limits specified in Clause R.1.3.
- (4.1.3) There are no outstanding dues or demands in the Institute/ Department/ Library/ Hostel.
- (4.1.4) A student who has been granted a temporary withdrawal from the Institute under the provisions of Clause R.4.1 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.

5 Termination from the Programme [R.5]

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

- (5.1.1) If a student is absent for more than 6 (six) weeks in a semester without sanctioned leave.
- (5.1.2) A decision is taken on disciplinary grounds.
- (5.1.3) On having been found to have produced false documents or having made a false declaration at the time of seeking admission.
- (5.1.4) 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). Subsequently, the student will be issued a warning.
- (5.1.5) The maximum permissible duration of the programme has been exceeded.

6 Faculty Adviser and Class Committee [R.6]

- 6.1. 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 Adviser.
- 6.2. Every class of the Integrated M.Tech programme will have a Class Committee consisting of Faculty and student representatives.
- 6.3. The constitution of the Class Committee will be as follows: (i) One Faculty nominated by the Dean 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 Advisers of the respective class.
- 6.4. The basic responsibilities of the Class Committee are
 - (6.4.1) To review the progress of the classes periodically,
 - (6.4.2) To discuss problems concerning curriculum and syllabi and the conduct of the classes.
 - (6.4.3) 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.
 - (6.4.4) Each Class Committee will communicate its recommendations to the Dean (AA).
 - (6.4.5) The Class Committee without student members is responsible for the finalization of the semester results.
 - (6.4.6) The Class Committee with students representatives is conducted once in a semester after the first Mid Semester Examinations (Class Committee meeting date is indicated in the academic calendar).

7 Assessment and Grading [R.7]

7.1. The learner's performance will be assessed throughout the semester and grades will be awarded by the instructor(s) concerned or the appropriate committee appointed for this purpose.

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

Theory component: scaled to 70%

- a. Assignments/Quizzes : 20 %
- b. Mid Semester Examinations : 20%
- c. End Semester Examination : 60%

Lab component: 30%

7.3. A general guideline for the assessment procedure of a course with theory component alone (except one-credit courses) with respective weightage is given below.

- a. Quiz & Assignments: 20%
- b. Mid Semester Examination: 20%
- c. End Semester Examination: 60%

7.4. A general guideline for the assessment procedure of a one-credit course with respective weightage is given below.

- a. Quiz & Assignments: 20%
- b. End Semester Examination: 80%

7.5. However, if any change in the above guideline is required, the details of the weightage of marks for these semester evaluations will be announced to the learners at the

beginning of the semester.

7.6. The End-Semester Examination for every course will be conducted offline by the Institute. The offline examination can be conducted at different centres in India, as per the decision of the competent authority.

7.7. Project Evaluation:

(7.7.1) A project supervisor will be appointed from amongst the faculty members of IIIT Kottayam.

(7.7.2) The project work is normally in two stages/phases; each spread over a semester. At the end of each stage/phase of the project, the learner is required to submit a report of their work by a prescribed date.

(7.7.3) The evaluation of the project will be performed by Project Evaluation Committee (PEC). PEC is constituted by the concerned department and the project co-ordinator will submit to the academic section the names of the project examiners.

(7.7.4) For the final review of the M.Tech. Project Phase II (in Semester XII), the PEC will include an external expert from industry/academia.

(7.7.5) The project report, prepared according to the prescribed format available in the Academic Section, will be submitted to the Department at least one week before the probable date of oral examination. The whole evaluation process should be completed by a deadline stipulated by the Academic Section.

(7.7.6) The Department will record the date of submission of the project and arrange to send the project reports to the examiners. The project coordinator will inform the date of the oral examination to the examiners and send a copy to the Academic Section. The project will be evaluated by the Project Evaluation

Committee and the result will be submitted to the Project Coordinator, who in turn will forward it to the Academic Section.

(7.7.7) On successful completion of the oral examination, each learner will be required to submit one corrected bound copy and a soft copy of the project report to the Department/ supervisor(s).

(7.7.8) A learner will be eligible for enrolment in Mini Project Phase II from Semester VIII only if he/she has successfully completed Mini Project Phase I from Semester VII.

(7.7.9) A learner will be eligible for enrolment in IMTP-II in Semester XII only if he/she has successfully completed IMTP-I from Semester XI.

(7.7.10) If a learner fails to successfully complete the Project, he/she has to re-enrol for the corresponding Project in the next semester by paying a prescribed re-enrolment fee.

7.8. Debarring: A learner may be debarred from appearing in the end-semester examination due to the following reasons:

(7.8.1) If any disciplinary action is taken against the learner.

(7.8.2) On the recommendation of the instructor(s), if his/her attendance in the Lecture/Tutorial/Practical classes is less than the prescribed minimum during the semester.

7.9. General Instruction: All the learners are expected to complete the course feedback form for each semester. Online course feedback by learners will be taken with full confidentiality for every course.

7.10. Based on the performance of a learner, each learner 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:

Table 1: Letter Grades and Grade Points

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
L	0	Insufficient attendance

7.11. A learner is considered to have completed a course successfully and earned the credits if he/she secures a letter grade other than F or L in that course. A letter grade F in any course implies a failure in that course.

7.12. The grade cards issued at the end of each Semester at every level for each learner will contain the following:

(7.12.1) the course number and name of each course enrolled for that semester/s

(7.12.2) the credits for each course enrolled for that semester/s

(7.12.3) the letter grade obtained in each course

(7.12.4) the total number of credits earned by the learner up to the end of that semester.

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

7.13. **Repeat Examination:** Learners must attend the end-semester examinations for all the enrolled courses.

- (7.13.1) If a learner fails to successfully complete any course for which he/she has enrolled, he/she can go for one repeat attempt of the end semester examination at IIIT Kottayam when the examination of the failed course is next offered, by paying a prescribed examination fee.
- (7.13.2) The maximum number of repeat attempts that can be undertaken by each learner for the end semester examination to successfully complete the course/s is one. If the learner fails to complete the course/s in the repeat attempt, he/she can go for a re-enrolment of the course whenever the course is next offered. Each learner must successfully complete all the courses within a total duration of 10 years.
- (7.13.3) If a learner wants to improve the grade received for any course, he/she can also attend the end-semester examination when the course is next offered, by paying a prescribed examination fee. However, only one attempt will be permitted for improvement of the grade of each course.

7.14. The Grade Point Average (GPA) will be calculated according to the formula:

$$GPA = \frac{\sum_i (C_i * GP_i)}{\sum_i C_i} \quad (1)$$

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 learner has secured F grade.

7.15. 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.

8 Attendance [R.8]

- 8.1. Every teaching staff member handling a course will take attendance till one week before the last week of the semester. A minimum of 80% attendance is required to write the end-semester examination.
- 8.2. The teaching staff member handling a course must finalise the attendance one week before the last week of the semester. The particulars of all learners who have attendance less than 80% in that course of the semester will be announced in the class by the corresponding teaching staff member.
- 8.3. A learner who has an attendance lower than 80%, whatever may be the reason for the shortfall in attendance, will not be permitted to appear for the end semester examination in the course in which the shortfall exists and will be awarded **L grade**.
- 8.4. If a learner is not allowed to attend the end-semester examination due to an attendance shortage, he/she will have to re-enrol for the course when the course is next offered.
- 8.5. A learner who received L grade in one or more courses will not be eligible to enrol for the subsequent semester.

9 Essential Requirements to continue the Program [R.9]

- 9.1. A learner should have a minimum of 5.0 CGPA for the courses successfully completed at the end of Semester VI (BCA) to continue to Semester VII.
- 9.2. A learner should have a minimum of 5.0 CGPA for the courses successfully completed at the end of Semester X (MCA) to continue to Semester XI.

10 Eligibility for Award of the Integrated M.Tech. (with BCA-MCA) degree [R.10]

10.1. A learner shall be declared eligible for award of the BCA degree only if he/she has:

(10.1.1) Registered and successfully completed all courses and projects (if any).

(10.1.2) Successfully acquired the minimum required credits (100) as specified in the curriculum corresponding to the branch of study.

(10.1.3) No disciplinary action is pending against the learner.

10.2. A learner shall be declared eligible for award of the MCA degree only if he/she has:

(10.2.1) Registered and successfully completed all courses and projects (if any).

(10.2.2) Successfully acquired the minimum required credits (68) as specified in the curriculum corresponding to the branch of study.

(10.2.3) No disciplinary action is pending against the learner.

10.3. A learner shall be declared eligible for award of the Integrated M.Tech. degree only if he/she has:

(10.3.1) Registered and successfully completed all courses and projects (if any).

(10.3.2) Successfully acquired the minimum required credits (210) as specified in the curriculum corresponding to the branch of study within the stipulated time.

(10.3.3) No disciplinary action is pending against the learner.

10.4. However, at the end of each programme BCA/ MCA/ Integrated M.Tech (when the required total credits are earned), if the CGPA obtained by the student is less than 5, then the student is allowed to improve only those courses whose GP is less than 6 by repeating the course until the student earns a CGPA of 5 (limited to 5 if it is

more than 5) within the stipulated maximum period of the programme subject to the special approval of Dean/Director. If they still fail to earn a CGPA of 5 within the maximum period of the programme, they will be given only a course completion certificate.

11 Program Fees [R.11]

- 11.1. The detailed fee structure for the program will be provided along with the announcement for admission to the program.
- 11.2. Refund of any fees (Application fee, Admission fee, Semester fee, Examination fee, etc.) is not applicable under any circumstances.

12 Conduct and Discipline [R.12]

Disciplinary policies of the 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. Learners of IIIT Kottayam are expected to show personal integrity, respect for Institute resources, and respect for others rights, for the values of scholarship and teaching. Learners are expected to adhere to the institute rules and regulations. Any violation will be handled according to the rules set forth by the competent authority of IIIT Kottayam. The administrators of the Institute will notify parents/guardians if a learner violates the Code of Conduct. Any of the following shall constitute a violation of the Code of Conduct for learners and makes the learner 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.
- * 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 learner himself/herself or others.
- * Any act that affects the reputation/orderly conduct of the Institute

13 Power to Modify [R.13]

- 13.1. In exceptional cases, the competent authority may at his/her discretion override any of the above provisions.
- 13.2. Notwithstanding all that has been stated above, the competent authority has the right to modify any of the above regulations from time to time.

14 Legal and Other Matters

- 14.1. Any legal matter relating to Rules and Regulations shall be subjected to jurisdictions of Court(s) at Kochi.