

Jan 2025 TERM GRADING DOCUMENT

The following is the schedule of the 2 quizzes and final exam which students have to attend in person at centres across the country and outside India.

Quiz Schedule:

- Quiz 1: Sunday, February 23, 2025, 2pm-6pm
- Quiz 2: Sunday, March 16, 2025, 2pm-6pm
- End term exam: Sunday, April 13, 2025, 9am-12pm, 2pm-5pm

In-person at centres

(If required, we will do a morning session for the quiz)

Programming Exams Schedule (Remote Proctored Online Mode):

- OPPE1 Day 1: Saturday, March 1, 2025
- OPPE1 Day 2: Sunday, March 2, 2025
- OPPE2 Day 1: Saturday, March 29, 2025
- OPPE2 Day 2: Sunday, March 30, 2025
- OPPE2 Day 3: Saturday, April 5, 2025
- OPPE2 Day 4: Sunday, April 6, 2025

Eligibility to appear for the OPPE 1:

- Student has to complete the OPPE System Compatibility Test (SCT) exam.

Eligibility to appear for the OPPE 2:

- Most courses have eligibility criteria to attend the final exam. If you do not become eligible to write the final exam, OPPE2 will also not be scheduled for you as you will be awarded WA/WQ grade and anyway have to repeat the entire course the next time including all assessment components.

Assignment Deadlines:

- NONE OF THE ASSIGNMENT DEADLINES WILL BE CHANGED THIS TIME FROM THE SCHEDULE GIVEN BELOW. THE DATES HAVE BEEN SUFFICIENTLY ADJUSTED FOR ACCOMMODATING THE QUIZZES AND OPPEs.

Content Release Dates and Assignment Deadlines:

- Week 1:
 - Content Release: Friday, January 10, 2025
 - Assignment Deadline (Foundation): Wednesday, January 22, 2025
 - Assignment Deadline (Diploma & Degree): Sunday, January 26, 2025
- Week 2:
 - Content Release: Friday, January 17, 2025
 - Assignment Deadline (Foundation): Wednesday, January 29, 2025
 - Assignment Deadline (Diploma & Degree): Sunday, January 26, 2025
- Week 3:
 - Content Release: Friday, January 24, 2025
 - Assignment Deadline (Foundation): Wednesday, February 5, 2025
 - Assignment Deadline (Diploma & Degree): Sunday, February 2, 2025
- Week 4:
 - Content Release: Friday, January 31, 2025
 - Assignment Deadline (Foundation): Wednesday, February 12, 2025

- Assignment Deadline (Diploma & Degree): Sunday, February 9, 2025
- Week 5:
 - Content Release: Friday, February 7, 2025
 - Assignment Deadline (Foundation): Wednesday, February 19, 2025
 - Assignment Deadline (Diploma & Degree): Sunday, February 16, 2025
- Week 6:
 - Content Release: Friday, February 14, 2025
 - Assignment Deadline (Foundation): Wednesday, February 26, 2025
 - Assignment Deadline (Diploma & Degree): Sunday, March 2, 2025
- Week 7:
 - Content Release: Friday, February 21, 2025
 - Assignment Deadline (Foundation): Wednesday, March 5, 2025
 - Assignment Deadline (Diploma & Degree): Sunday, March 2, 2025
- Week 8:
 - Content Release: Friday, February 28, 2025
 - Assignment Deadline (Foundation): Wednesday, March 12, 2025
 - Assignment Deadline (Diploma & Degree): Sunday, March 9, 2025
- Week 9:
 - Content Release: Friday, March 7, 2025
 - Assignment Deadline (Foundation): Wednesday, March 19, 2025
 - Assignment Deadline (Diploma & Degree): Tuesday, March 23, 2025
- Week 10:
 - Content Release: Friday, March 14, 2025
 - Assignment Deadline (Foundation): Wednesday, March 26, 2025
 - Assignment Deadline (Diploma & Degree): Sunday, March 30, 2025
- Week 11:
 - Content Release: Friday, March 21, 2025
 - Assignment Deadline (Foundation): Wednesday, April 2, 2025
 - Assignment Deadline (Diploma & Degree): Sunday, March 30, 2025
- Week 12:
 - Content Release: Friday, March 21, 2025
 - Assignment Deadline (Foundation): Wednesday, April 9, 2025
 - Assignment Deadline (Diploma & Degree): Sunday, April 6, 2025

Degree Level Courses

Course Level

The first digit of the 4-digit course code indicates the course level.

Example: CT CS1001 is a level 1 course.

Deep Learning CS3004 is a level 3 course.

Industry 4.0 MS4001 is a level 4 course.

BSc Level

Students must complete both core pairs and SPG at the BSc level.

Credits = 20.

All 20 credits can be earned from:

IITM BS courses.

NPTEL (maximum 4 credits from Table 2).

Crediting campus courses (IITM or other institutes).

Implementation: Effective from September 2023 for the batch entering the degree level in September 2023.

BS Level

Mandatory completion of 2 courses at level 4 or higher in each of the BP and BD categories. (Refer to course category in Table 1).

Of the remaining 12 credits:

Mandatory 4 credits in the HS/MG category.

HS/MG credits can be from in-house electives or NPTEL-Table 3.

Remaining credits from any other in-house/campus electives or Apprenticeship electives.

Apprenticeship

Completely optional.

Students can complete the BS level with coursework alone.

Recommendations for Additional Learning

Enhance skills beyond the program curriculum.

Recommended Resources:

C++ programming - Prof Partha Das, IIT Kgp - <https://nptel.ac.in/courses/106105234>

Introduction To Haskell Programming - Prof. S. P Suresh CMI -
<https://nptel.ac.in/courses/106106137>

Competitive programming - Prof. Neeldhara Misra, IIT Gn -
<https://nptel.ac.in/courses/106106231>

Cloud computing - Prof SK Ghosh, IIT Kgp - <https://nptel.ac.in/courses/106105167>

Blockchain and its applications - Prof. Sandip Chakraborty & Prof. Shamik Sural, IIT Kgp -
<https://nptel.ac.in/courses/106105235>

Compiler Design - Prof. Santanu Chattopadhyay, IIT Kgp -
<https://nptel.ac.in/courses/106105190>

SWAYAM NPTEL Approved Dep/Free Elective course list:

<https://docs.google.com/spreadsheets/d/e/2PACX-1vSJXV0JECyoQvgWvBIVxO13G0KRm5a1qNCRBa7rAw8GDY4e0cfm1KiVCwIgsed80ObtzQ1rfxJWIR/pubhtml?gid=399341609&single=true>

SWAYAM NPTEL Approved HS/MG course list:

<https://docs.google.com/spreadsheets/d/e/2PACX-1vSJXV0JECyoQvgWvBIVxO13G0KRm5a1qNCRBa7rAw8GDY4e0cfm1KiVCwIgsed80ObtzQ1rfxJWIR/pubhtml?gid=1418834182&single=true>

Collaboration with Microsoft and AWS certification programs for discounted courses.

Emphasis on learning programming and data science beyond the curriculum for resume enhancement.

Course Specific Information

1. Software Testing

Quiz 1: February 23, 2025

Quiz 2: March 16, 2025

End Term: April 13, 2025

In-person attendance at designated centers.

Eligibility for End Term:

Average of best 5 of first 7 weekly assessments $\geq 40/100$.

Attendance in at least one of the two quizzes.

Eligibility for Final Grade: Attendance in End Term exam.

Overall Score:

GAA = Average score in First 10 weekly graded assignments.

Qz1 = score in Quiz I (0 if not attempted).

Qz2 = score in Quiz II (0 if not attempted).

F = score in End Term exam.

$T = 0.1GAA + 0.4F + 0.25Qz1 + 0.25Qz2$.

2. Software Engineering

Quiz 1: Not applicable.

Quiz 2: March 16, 2025

End Term: April 13, 2025

In-person attendance at designated centers.

Eligibility for End Term:

Average of best 5 of first 7 weekly assignments $\geq 40/100$.

Submission of Group project Milestone.

Eligibility for Final Grade:

Attendance in End Term exam.

Submission of group project (All milestones) is mandatory.

Score in group project ≥ 0 .

Overall Score:

GAA = Average score in First 10 weekly graded assignments.

Qz2 = score in Quiz II (0 if not attempted).

GP1 = Group project Milestone 1-3.

GP2 = Group project Milestone 4-6.

PP = Project Presentation.

CP = Course participation activity.

F = score in End Term exam.

$T = 0.05GAA + 0.2Qz2 + 0.4F + 0.1GP1 + 0.1GP2 + 0.1PP + 0.05CP.$

(Group project details provided in the course).

3. Deep Learning

Quiz 1: February 23, 2025

Quiz 2: March 16, 2025

End Term: April 13, 2025

In-person attendance at designated centers.

Bonus Marks: Average of 3 programming activity assignments (weeks 4, 9, 11). Maximum bonus marks 5.

Eligibility for End Term:

Average of best 5 of first 7 weekly assessments $\geq 40/100$.

Attendance in at least one of the two quizzes.

Eligibility for Final Grade: Attendance in End Term exam.

Overall Score:

GAA = Average score in First 10 weekly graded assignments.

Qz1 = score in Quiz I (0 if not attempted).

Qz2 = score in Quiz II (0 if not attempted).

F = score in End Term exam.

$T = 0.1GAA + \text{Max}((0.4F + 0.25Qz1 + 0.25Qz2), 0.5F + 0.3 \text{Max}(Qz1, Qz2)) + \text{Bonus (as applicable)}$

$T = 0.1GAA + 0.4F + 0.25Qz1 + 0.25Qz2 + \text{Bonus (as applicable if passed)}$

4. AI: Search Methods for Problem Solving

Quiz 1: February 23, 2025

Quiz 2: March 16, 2025

End Term: April 13, 2025

In-person attendance at designated centers.

Eligibility for End Term:

Average of best 5 of first 7 weekly assessments $\geq 40/100$.

Attendance in at least one of the two quizzes.

Eligibility for Final Grade: Attendance in End Term exam.

Overall Score:

GAA = Average score in First 10 weekly graded assignments.

Qz1 = score in Quiz I (0 if not attempted).

Qz2 = score in Quiz II (0 if not attempted).

F = score in End Term exam.

$T = 0.1GAA + \text{max}(0.45F + 0.35\text{max}(Qz1, Qz2), 0.4F + 0.25Qz1 + 0.25Qz2)$

$T = 0.1GAA + 0.4F + 0.25Qz1 + 0.25Qz2 + \text{bonus (as given below, if you pass the course)}$

Bonus marks for those who pass the course: 5

Programming Assignment 1 will be released between Quiz 1 and Quiz 2. The dates will be announced in the forum. This assignment will be evaluated offline.

5. Strategies for Professional Growth

Quiz 1: Not applicable

Quiz 2: March 16, 2025

End Term: April 13, 2025

In-person attendance at designated centers.

Eligibility for End Term: Average of best 5 of first 7 weeks' graded assignments $\geq 40/100$

Eligibility for Final Grade: Attending the end-term exam

Overall Score:

GAA = Average score in First 10 weekly graded assignments

GP = score in Group Project (0, if not participated)

Qz2 = score in Quiz II (0, if not attempted), based on weeks 1-7 (Subjective & Objective)

F = score in final exam, based on weeks 1-12 (Subjective & Objective)

T = Total score (out of 100)

$T = 0.15GAA + 0.25GP + 0.25Qz2 + 0.35F$

Project:

Milestone I

Timeline: Week 1 to Week 3

Submission Date: End of Week 3

Marks: 50 marks

Evaluation and Score Release: Before Week 5

Milestone II

Timeline: Week 4 to Week 6

Submission Date: End of Week 6

Marks: 50 marks

Evaluation and Score Release: Before End-Term

Eligibility for Bonus:

- Only if you do the SCT, will the bonus be applicable to you and added to your final course score. Even if you attend the mock tests, only if you do the SCT, you will get the bonus.

Eligibility to appear for the OPPE 1:

- Student has to complete the OPPE System Compatibility Test (SCT) exam.

Eligibility to appear for the OPPE 2:

- If the Average of the scores of the best 5 out of the first 7 Weekly programming assignments (GrPA) $\geq 40/100$ AND Average of the best 5 out of the first 7 weekly assessments (objective and programming) scores $\geq 40/100$, then we will schedule the OPPE2 for you.

Eligibility to appear for the End Term Exam:

- Average of the best 5 out of the first 7 weekly assessments (objective and programming) scores $\geq 40/100$.

Eligibility to obtain the final course grade:

- Both the conditions below should be satisfied:
 - i. Attending the End Term exam AND
 - ii. Minimum score to be obtained in one of the programming exams (OPPE1, OPPE2) should be $\geq 40/100$.

Final Course Score Calculation:

- For eligible students:
 - GAA1 = Average score in Best 10 objective assignments out of First 11 graded objective assignments
 - GAA2 = Average score in Best 10 programming assignments out of First 11 graded programming assignments
 - Qz1 = score in Quiz I (0, if not attempted)
 - PE1 = score in OPPE1 (0, if not attempted)
 - PE2 = score in OPPE2 (0, if not attempted)
 - F = score in final exam
 - $T = 0.1 \text{ GAA1 (objective)} + 0.1 \text{ GAA2 (programming)} + 0.1 \text{ Qz1} + 0.4 \text{ F} + 0.25 \text{ max(PE1, PE2)} + 0.15 \text{ min(PE1, PE2)}$ — capped to 100

Grade Possibilities for Students:

1. Absent, Absent - U: Repeat the course.
2. Absent, Present ≥ 35 - I_OP: Complete OPPE alone in next term; Both OPPEs will be scheduled. GA, quiz and ET marks will be carried over OR Repeat the entire course.
3. < 35 - U: Repeat the course.
4. Present, score $< 40/100$, Present ≥ 40 - I_OP: Complete OPPE alone next term. Both OPPEs will be scheduled, GA, quiz and ET marks will be carried over OR Repeat the entire course.
5. < 40 - U: Repeat the course.
6. Absent - I_BOTH: Complete ET and OPPE in next term, Both OPPE will be scheduled for you. GA and quiz marks will be carried over OR Repeat the entire course.
7. Present, Score $> 40/100$, Absent - I: Complete ET alone in next term; OPPE will NOT be scheduled. GA, quiz and OPPE marks will be carried over OR Repeat the entire course.
8. Present - Grade as per the Total score T.

Bonus Marks:

- Course Participation Marks are for encouraging and incentivizing students to participate more in the activities of the course. These marks will be added ONLY for the students who pass the course and will only impact the course grade, not the pass criteria.

Information about Course Grades:

- S, A, B, C, D, E - Pass grade; U/WA/WQ - Fail grade; I - Incomplete