

JALPAIGURI GOVERNMENT ENGINEERING COLLEGE

Jalpaiguri - 735102, West Bengal
(An Autonomous Government Engineering College)

EVALUATION AND MONITORING MECHANISM FOR SKILL ENHANCEMENT COURSES SEC-181 AND SEC-282

Applicable from	Academic Year 2026-27
Applicable to	CE, EE, ME, CSE, ECE and IT
Reference	Office Order No. 24082026-P2(Skill), dated 24.08.2026
Overall Coordinator	Dr. Md Naim Hossain, Department of Mechanical Engineering

1. Purpose

This document defines the uniform mechanism to be followed by the designated Departmental SEC Coordinators for monitoring and evaluation of students registered under SEC-181 and SEC-282. The objective is to ensure that students of all six B.Tech. departments are evaluated through a common, transparent and auditable procedure, while allowing variation in the actual skill course selected by individual students.

The evaluation mechanism is based on the adopted first-year syllabus, which requires students to select an approved skill course, demonstrate the acquired skill through an artefact, portfolio or supervised task, manage their own learning, and present the acquired skill and its application before a departmental committee.

2. Department-Wise Responsibility

Department	Designated SEC Coordinator / Member
Civil Engineering	Mr. Somenath Guha
Electrical Engineering	Mr. Bhaskar Lodh
Mechanical Engineering	Mr. Rajesh Roy
Computer Science & Engineering	Mr. Swarup Samanta
Electronics & Communication Engineering	Mr. Jaydip Lahiri
Information Technology	Ms. Debamita Saha

Overall SEC Committee Coordinator: Dr. Md Naim Hossain, Department of Mechanical Engineering.

3. Role of the Departmental SEC Coordinator

1. Guide students in the selection of an approved SEC course.
2. Ensure that the selected skill course is relevant to the student's parent discipline or has justified interdisciplinary relevance.
3. Approve the selected course before the student registers.
4. Maintain the department-wise registration list for SEC-181 and SEC-282.
5. Verify enrolment in the external or Institute-offered course.
6. Carry out the three prescribed progress-monitoring checkpoints.
7. Verify assignment/practical-work records and platform progress.
8. Verify platform examination results, where applicable.
9. Conduct or coordinate the institutional practical/skill examination for Institute-offered courses.
10. Evaluate the student's skill artefact/portfolio.

11. Conduct or coordinate the final presentation and viva-voce.
12. Verify certificates and completion records, where applicable.
13. Prepare the final 100-mark evaluation sheet for each student.
14. Maintain supporting documentary evidence for audit and academic records.
15. Submit the department-wise consolidated marks and supporting records to the Overall SEC Committee Coordinator.

4. Courses Eligible for Evaluation

Category A - External / Online Skill Course: An approved skill course offered through SWAYAM Plus, FutureSkills Prime, NPTEL/SWAYAM, or another external platform specifically approved by the SEC Committee.

Category B - JGEC Department/Institute-Offered Skill Course: A structured practical, hands-on, technical or professional skill course offered by the concerned department/Institute using College faculty, laboratories, workshops, software, equipment, invited experts, industry collaborators or approved training partners.

Only courses appearing in the currently approved departmental SEC basket shall ordinarily be accepted for evaluation. The approved basket shall be reviewed each session and may change depending on platform availability, departmental facilities, faculty expertise and academic requirements.

5. Departmental Relevance Verification

Before approving registration, the Departmental SEC Coordinator shall examine whether the proposed skill course has reasonable relevance to the student's parent engineering discipline, professional development, employability, or an approved interdisciplinary area connected to engineering practice.

This condition is particularly important for students who may exercise the first-year exit option. The adopted curriculum requires 6 credits from skill-based courses earned during the first and second semesters for eligibility toward the UG Certificate in the relevant discipline/subject, in addition to the prescribed work-based vocational/internship/apprenticeship requirement. Therefore, SEC-181 and SEC-282 shall be selected in consultation with and after approval of the respective Departmental SEC Coordinator.

6. Evaluation Workflow

Course Approval → Registration Verification → Checkpoint I → Checkpoint II → Checkpoint III → Final Skill Assessment → Artefact / Portfolio Evaluation → Presentation & Viva → Final Marks Compilation

7. Stage I - Course Approval

- Course title and platform/provider
- Official course link, where applicable
- Current availability and registration window
- Departmental relevance
- Duration/workload
- Eligibility and prerequisites
- Assessment mechanism
- Certification requirement
- Course/examination fee, where applicable

- Fallback option, wherever prescribed

Approval shall be recorded in the prescribed SEC Course Approval/Registration Form. A student who independently registers for an unapproved course shall not automatically become eligible for SEC credit.

8. Stage II - Registration Verification

After registration, the student shall submit proof of successful enrolment. The Departmental SEC Coordinator shall maintain the following information:

- Student name, roll number and registration number
- Department and semester
- SEC code (SEC-181 / SEC-282)
- Selected course title
- Platform/provider
- Official course URL, where applicable
- Platform registration/enrolment ID, where available
- Registered email ID
- Date of registration
- Proof of successful enrolment

9. Three Mandatory Progress Checkpoints

Student progress shall be formally monitored at three checkpoints during the semester.

9.1 Checkpoint I - Registration and Commencement

- Approved course selection
- Successful registration
- Access to course resources
- Commencement of learning/practical activity
- Awareness of deadlines
- Initial participation

9.2 Checkpoint II - Mid-Semester Progress

- Percentage of course completed
- Assignments/practical exercises completed
- Attendance/engagement
- Progress of hands-on activity
- Progress of artefact/project/portfolio
- Any difficulty requiring corrective action

9.3 Checkpoint III - Pre-Final Assessment

- Substantial/final course completion
- Completion of prescribed assignments
- Examination registration, where applicable
- Readiness for final platform/institutional assessment
- Completion status of skill artefact/portfolio

- Readiness for presentation and viva-voce

10. Prescribed Evaluation Scheme

All six departments shall use the following common 100-mark evaluation structure prescribed for SEC-181/SEC-282:

Evaluation Component	Maximum Marks
Registration, progress and participation	20
Platform / periodic assignments	20
Proctored platform examination / equivalent supervised skill examination	30
Skill artefact / portfolio	15
Presentation and viva-voce	15
TOTAL	100

11. Component I - Registration, Progress and Participation (20 Marks)

Activity	Marks
Timely approved registration	5
Checkpoint I	5
Checkpoint II	5
Checkpoint III / sustained participation	5
TOTAL	20

Suggested scoring principle:

- 5 marks: fully compliant and completed within the notified timeline.
- 3-4 marks: minor delay or incomplete evidence but satisfactory progress.
- 1-2 marks: substantial delay or irregular participation.
- 0 marks: non-participation/non-registration.

12. Component II - Platform / Periodic Assignments (20 Marks)

A. External Platform Course

Where the platform provides a numerical assignment percentage, the SEC assignment mark may be converted as:

$$\text{SEC Assignment Marks} = (\text{Platform Assignment Score} / 100) \times 20$$

Example: If the student obtains 80% in platform assignments, the SEC assignment mark will be 16/20. The consolidated or weighted platform assignment score should be used where several assignments are provided.

B. Institute/Department-Offered Course

The corresponding 20 marks shall be based on periodic laboratory exercises, practical jobs, programming assignments, design exercises, workshop exercises, field exercises or other skill tasks prescribed by the concerned department.

13. Component III - Proctored Examination / End-Course Skill Examination (30 Marks)

13.1 External Platform Course

Where the approved external platform provides a numerical examination score, the SEC examination mark may be converted as:

$$\text{SEC Examination Marks} = (\text{Platform Examination Score} / 100) \times 30$$

Example: For a platform examination score of 70%, the converted SEC examination mark will be 21/30. The platform's own qualifying requirement must also be satisfied wherever applicable.

13.2 Institute/Department-Offered Course

Where no external proctored examination exists, the concerned department shall conduct an equivalent supervised end-course practical/skill examination carrying 30 marks. The assessment shall test whether the student can independently apply the skill acquired.

- Practical execution of a task
- Fabrication or workshop task
- Programming or debugging task
- CAD/design task
- Circuit development/testing
- Measurement exercise
- Data-analysis task
- Field exercise
- Any other approved practical demonstration

14. Component IV - Skill Artefact / Portfolio (15 Marks)

The student shall demonstrate the acquired skill through an artefact, portfolio, project, completed practical job or supervised task. Depending on the course, the artefact may include a programme/software, CAD model, engineering drawing, manufactured component, circuit, prototype, wiring job, survey output, GIS map, data-analysis workbook, dashboard, laboratory job, design report, technical portfolio or another approved form of evidence.

Criterion	Marks
Technical correctness / functionality	6
Application of acquired skill	4
Documentation / quality of presentation	3
Independent execution / reproducibility	2
TOTAL	15

15. Component V - Presentation and Viva-Voce (15 Marks)

Every student shall present the acquired skill and its application before a departmental evaluation panel/committee. The Departmental SEC Coordinator may seek assistance from other faculty members where necessary.

Criterion	Marks
Understanding of the acquired skill	6
Ability to explain/demonstrate application	4
Presentation and communication	3
Response to viva questions	2
TOTAL	15

16. Final Evaluation Sheet

Component	Maximum Marks	Marks Obtained
Registration, progress and participation	20	
Platform/practical assignments	20	
Proctored examination / supervised skill examination	30	

Skill artefact / portfolio	15	
Presentation and viva-voce	15	
TOTAL	100	

The final result shall be processed in accordance with the prevailing College examination/pass regulations and the approved SEC requirements.

17. Verification of External Course Records

- Course registration
- Platform dashboard
- Completion percentage
- Assignment score
- Examination result
- Certificate, where applicable
- Course title and course period
- Student's registered name
- Certificate/result identification details, where available

A completion certificate alone shall not replace the prescribed JGEC evaluation components of artefact/portfolio and presentation/viva-voce.

18. Evaluation of Department-Offered Courses

External Course Component	Department-Offered Equivalent
Registration/platform progress	Registration, attendance and progress
Platform assignments	Practical/laboratory assignments
Proctored platform examination	Supervised practical/skill examination
Skill artefact	Skill artefact/project/job
Presentation/viva	Presentation/viva

This equivalence ensures that students following different SEC routes remain comparable under the same 100-mark evaluation structure.

20. Handling Course Withdrawal or Platform Failure

1. Verify the reported issue.
2. Consult the approved fallback list.
3. Approve migration to the fallback course or another equivalent approved option.
4. Record the change formally.
5. Specify how previously completed work, if any, will be treated.

No course change shall be made independently by the student.

21. Students at Risk of Non-Completion

At Checkpoints II and III, the Departmental SEC Coordinator shall identify students at risk due to insufficient progress, missed assignments, non-registration for the examination, poor attendance, incomplete practical work or other deficiencies. Such students shall be informed of the deficiency and advised to take corrective action within the available academic schedule. A record of such communication should be maintained.

22. Department-Wise Consolidated Result

Sl.	Student	Roll	Course	Provider	Prog. 20	Assign. 20	Exam 30	Artefact 15	Viva 15	Total	Status
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The signed departmental result shall be forwarded to the Overall SEC Committee Coordinator along with supporting records as required.

23. Responsibility of the Overall SEC Committee Coordinator

- Receive the six departmental evaluation sheets.
- Check completeness of submissions.
- Ensure that the common assessment framework has been followed.
- Identify major inconsistencies, if any.
- Coordinate clarification with the concerned Departmental SEC Coordinator.
- Consolidate the departmental records.
- Submit the consolidated result/recommendation to the competent College authority.

The Overall Coordinator shall not ordinarily re-evaluate individual students unless a discrepancy, grievance or exceptional case requires review.

24. Records to be Preserved by Each Departmental SEC Coordinator

1. Approved departmental course basket
2. Student course-approval/registration forms
3. Registration records
4. Checkpoint I records
5. Checkpoint II records
6. Checkpoint III records
7. Assignment/practical records
8. Platform/end-course examination results
9. Certificate verification records
10. Artefact/portfolio evaluation sheets
11. Presentation/viva sheets
12. Final individual evaluation sheets
13. Consolidated departmental marks sheet
14. Course-change/fallback records
15. Exceptional-case documentation

25. Student Communication

Departmental SEC Coordinators shall periodically remind students that the SEC course basket is dynamic and may change from semester to semester. Students must contact the designated Departmental SEC Coordinator for the latest approved list before registration. External platform links, fees, schedules and course availability shall not be assumed to remain unchanged from a previous semester.

26. Uniformity Across Departments

- Prior course approval
- Three formal progress checkpoints
- Common 100-mark assessment structure
- Documentary verification
- Artefact/portfolio requirement
- Presentation and viva requirement
- Common departmental result format
- Submission to the Overall SEC Committee Coordinator

This common framework shall be followed across CE, EE, ME, CSE, ECE and IT even though the nature of the selected skill courses may differ.

ANNEXURE I - STUDENT PROGRESS MONITORING FORM

Student Name: _____

Roll No.: _____

Registration No.: _____

Department: _____

SEC (SEC-181 / SEC-282): _____

Course: _____

Provider / Institute Unit: _____

Item	Checkpoint I	Checkpoint II	Checkpoint III
Registration verified			
Course progress			
Assignments / practical work			
Practical / skill activity			
Artefact / project			
Examination readiness			
Remarks			

Departmental SEC Coordinator

Signature

Date

ANNEXURE II - INDIVIDUAL FINAL EVALUATION FORM

Student Name: _____

Roll No.: _____

Registration No.: _____

Department: _____

SEC: _____

Approved Course: _____

Platform / Institute Unit: _____

Assessment Component	Maximum	Awarded
Registration / progress / participation	20	
Assignments / practical work	20	
Proctored examination / skill examination	30	
Artefact / portfolio	15	
Presentation / viva-voce	15	
TOTAL	100	

Course completion verified (Yes/No): _____

Certificate verified (Yes/No/NA): _____

Mandatory examination successfully completed (Yes/No/NA):

Remarks: _____

Departmental SEC Coordinator

Signature

Date

ANNEXURE III - DEPARTMENTAL CONSOLIDATED EVALUATION SHEET

Department: _____

SEC: _____

Academic Year: _____

Semester: _____

Sl.	Student	Roll	Approved Course	Platform / Institute	Progress 20	Assignment s 20	Exam 30	Artefact 15	Viva 15	Total 100	Status
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Prepared and verified by Departmental SEC Coordinator: _____

Signature: _____ Date: _____

SUBMISSION

The completed departmental evaluation records shall be submitted to:

Dr. Md Naim Hossain
Overall Coordinator
Committee for Skill Enhancement Courses
Jalpaiguri Government Engineering College