

National Institute of Electronics and Information Technology(NIELIT)

Deemed to be University
UGC Approved University under Distinct Category
Main Campus: Bada Phull, Ropar (Roopnagar)- Punjab 140001

ACADEMIC ORDINANCE for DIPLOMA IN ENGINEERING

(Effective from the session 2024-25)

The Executive Council in its meeting held on

*** Campuses ***

North	North-East	West	South
Gorakhpur	Agartala	Ajmer	Calicut
Patna	Aizawl	Aurangabad	
Ropar	Imphal		
Srinagar	Itanagar		
	Kohima		

REGULATIONS

1. Short Title and Commencement

These regulations shall be called as “The Regulations for the Diploma in Engineering Program of NIELIT (Deemed to be University)”, effective from the Academic Year 2024-25. The regulations framed are subject to modifications from time to time by NIELIT (Deemed to be University).

2. Definitions

In the following, unless the context otherwise requires,

- i. “Academic Programme” shall mean a programme of courses or any other component leading to a Diploma in Engineering, as approved by the Board of Management from time to time.
“Academic Year” shall mean a period of nearly twelve months devoted to completion of requirements specified in the scheme of courses and the related examinations.
- ii. “Candidate” shall mean an individual who applies for admission to any Diploma programme of the University.
- iii. “BoM” shall mean the Board of Management of the University.
- iv. “BoS” shall mean the Board of Studies of the concerned Department.
- v. “Branch” shall mean the branch of knowledge studied by a student.
- vi. “CBCS” shall mean the Choice Based Credit System.
- vii. “CCC” shall mean Course Co-ordination Committee.
- viii. “CoE” shall mean the Controller of Examinations of the University.
- ix. “Course” shall mean a curriculum component of the academic programme identified by a designated code number, a title and specific credits assigned to it.
- x. “Diploma” shall mean the Diploma in Engineering.
- xi. “Department” shall mean Department established in the University for running the academic and research activities in a specified discipline.
- xii. “Discipline” shall mean the branch of knowledge studied by a student.
- xiii. “DDC” shall mean the Department Diploma Committee.
- xiv. “ESE” shall mean the final regular End-Semester Examination.
- xv. “EWS” shall mean the Economically Weaker Sections of the society.

- xvi. “Examiner” shall mean the instructor teaching a specified course who has been nominated as examiner.
- xvii. “HoD” shall mean the Head of Department.
- xviii. “MSE” shall mean the Mid-Semester Examination.
- xix. “Paper Setter” shall mean the faculty member responsible for setting a question paper.
- xx. “PWD” shall mean differently abled persons as specified by the Government of India from time to time.
- xxi. “PIO” shall mean Person of Indian Origin.
- xxii. “Registration” shall mean registration for a specific course or semester, at the start of the semester, of any programme of the University.
- xxiii. “SC/ST” shall mean the Scheduled Castes/Scheduled Tribes as notified by the Government of India/Government of NCT of Delhi, as applicable from time to time.
- xxiv. “Semester system” shall mean a programme wherein each academic year is apportioned into two semesters.
- xxv. “SGPA” shall mean the Semester Grade Point Average.
- xxvi. “CGPA” shall mean the Cumulative Grade Point Average
- xxvii. “Student” shall mean a student registered for a under graduate programme for full-time study leading to the Diploma in Engineering.
- xxviii. “University” shall mean the NIELIT Deemed to be University.

Note: ‘He’, ‘Him’ and ‘His’ implies ‘he/she’, ‘Him/Her’ and ‘his/her’, respectively. Words and expressions used but not defined in these Regulations and defined in the Act and Statutes, shall have the meanings respectively as assigned to them in the Act and Statutes.

3. Minimum Qualification for Admission

a) Admission for Diploma in Engineering First Year

Candidate must have passed 10th examination or equivalent from recognized Board along with science as compulsory subject with 50% (45% for SC/ST and PwD candidates) marks.

b) Admission for Diploma in Engineering Second Year through Lateral Entry Scheme

Candidate must have passed 10+2 examination or equivalent from recognized Board along with Physics, Chemistry and Mathematics as compulsory subjects with 50% (45% for SC/ST and PwD candidates) marks.

OR

Candidate must have passed full time ITI of two years course in relevant area from a recognized Board with 50% (45% for SC/ST and PwD candidates) marks.

OR

NIELIT 'O' Level

4. Selection Process for Admission

4 a) Selection Process for Admission for Diploma in Engineering First Year

- a) Only the Candidates meeting the minimum eligibility criteria will be eligible for admission.
- b) The eligible candidates have to register online.
- c) The application fees will be as applicable.
- d) The seats will be filled on merit list generated on the basis of percentage of marks obtained in 10th/ ITI/ 10+2.
- e) Admission of the Selected Candidates will be subject to their verification of Documents and payment of applicable fees.
- f) The category-wise Main List (selected) and Waiting List of the candidates for admission to (year 2024-25) to Diploma Programme will be displayed on the website and Notice Board of the University.
- g) The selected main and waiting list candidates are required to register on the day as notified along with the list of documents asked.
- h) Payment should be made according to the mentioned date failing which their admission to the university course will be treated as null and void.
- i) The candidates are required to produce all the originals certificates and fee at the time of counseling. No relaxation in time will be given for arranging the money or for bringing the original certificates from another place.
- j) Admission process of the Diploma Course will be treated as completed when the approved intake of candidates as per Seat Matrix are provisionally admitted and registered or a time limit decided by the competent authority is over, whichever is earlier.

4 b) Admission for Diploma in Engineering Second Year through Lateral Entry Scheme

- a) The seats will be filled on merit list generated on the basis of percentage of marks obtained in the eligible qualification.
- b) Remaining conditions are applied same as mentioned in point no. 4a) above

5. Category Wise Reservation

- a) Seats are reserved as per Govt. of India Rules, AICTE and/or University Approval.
- b) A quota of 15% is reserved for the SC candidates, 7.5% for ST candidates, 27% for Other Backward Classes, 3% for PWD candidates and 10% for Economic Weaker Section (EWS).
- c) Number of seats reserved are tentative and subjected to be change by Government orders given time to time

6. Age Criteria:

There is no minimum age requirement

7. Duration of the program

Total duration of the Diploma in Engineering program shall be 03 years, each year comprising of two semesters. Each semester shall normally have teaching for the 90 working days.

The student admitted to first year Diploma in Engineering shall complete the course within a period of six academic years from the date of first admission, failing which he / she has to discontinue the course. The students admitted under lateral entry scheme (2nd Year Diploma) shall complete the course within a period of five academic years from the date of first admission, failing which he / she has to discontinue the course.

A candidate, who has failed twice in first year due to any reason (either due to his / her non-appearance or he / she being not permitted to appear in semester examinations) shall not be allowed to continue his / her studies further.

Provided further that if a student wishes to continue third time in first year he / she may be allowed on the terms and conditions laid down by the University for such Permission but the maximum time allowed for completing the course will remain the same.

8. Curriculum

The three year curriculum has been divided into six semesters and shall include lectures, tutorials, practical's, seminars and projects etc. in addition to industrial training and educational tour etc. as defined in the scheme and executive instructions issued by the University from time to time. The curriculum will also include such other curricular, co-curricular and extracurricular activities as may be prescribed by the University from time to time.

9. Medium of Instruction and Examinations

Medium of instruction and examination shall be in English / Hindi.

10. Working Days in Each Semester

Each semester shall consist of not less than 90 working days. The odd semesters shall be conducted

from the month of June / July to November / December and the even semesters shall be conducted from December / January to May / June in every calendar year.

11. Attendance and Progress

- 11.1 Students of the programme are expected to attend every lecture, tutorial and practical class scheduled for them.
- 11.2. The students must have a minimum attendance of 75% of the total number of classes including lectures, tutorials and practicals, held in a subject till MSE/ESE in order to be eligible to appear in the MSE/ESE for that subject.
- 11.3. The Dean Academics, may allow relaxation in the minimum requirement of attendance up-to 10% for reasons to be recorded. This relaxation may be granted on the production of documents showing that the student was either busy in any authorized activities or was absent due to medical/other genuine reasons. The student should submit these documents to the HoD, within seven days of resuming the studies. Certificates submitted later will not be considered.
- 11.4 Relaxation in attendance maybe granted for a maximum of 2 times during the duration of the programme.
- 11.5 A student shall not be permitted to appear in the MSE/ESE if his/her attendance till MSE/ESE is below 60 % after relaxation given in clauses 14.3 and 14.4.
- 11.6 Students who are not allowed to appear in the ESE due to shortage of attendance shall be awarded 'F' grade. Such students shall have to register again for that course in subsequent years/summer semester to pass the course.
- 11.7 A student can register again for a different elective course in subsequent years/summer semester and pass the elective course.
- 11.8 The attendance shall be counted from the date of start of academic session. For first year students, attendance shall be counted from the date of the start of academic session or the actual date of admission, whichever is later.

12. Program / Course Credit structure

As per the philosophy of Choice Based Credit System(CBCS), certain quantum of academic work viz. theory classes, practical classes, project report, internship etc. are measured in terms of credits. On satisfactory completion of the courses, a candidate earns credits. The amount of credit associated with a course is dependent upon the number of hours of instruction per week in that course. Similarly, the credit associated with any of the other academic, co/extra-curricular activities

is dependent upon the quantum of work expected to be put in for each of these activities per week. The programme shall consist of 120 credits. A student shall be awarded the degree if he/she has earned 120 credits. CGPA shall be calculated on the basis of these 120 credits.

13. Credits and Grade System

(a) All programmes shall have credits associated with them as per their Lecture / Tutorial / Practical (LTP) structure and shall be determined as follows:

- One lecture hour per week per semester shall be assigned one credit.
- One practical hour per week shall be assigned half credit.

However, the credits associated with every programme will be a whole number, i.e., wherever the sum comes out to be in half credit on calculation following the aforesaid process, the half shall be rounded to the next whole number.

(b) The letter grades based upon the overall marks obtained in a subject will be as follows:

Table 13.1 Grade Allocation as per marks obtained

S. No.	Marks	Letter Grade	Grade Point	Grade Point
1.	>=90	O	<=100	10
2.	>=81	A+	<90	9
3.	>=72	A	<81	8
4.	>=63	B+	<72	7
5.	>=54	B	<63	6
6.	>=45	C	<54	5
7.	>=35	D	<45	4
9.		F	<35	0

'F' Grade will be treated as Carry Over Paper.

In addition to the above grades, there shall be two more letter grades 'I' and 'AB' which shall stand for 'Incomplete' and 'Absent Grades', respectively.

(c) Semester Grade Point Average (SGPA)

The SGPA is a weighted average of the grade points earned by a student in all the papers credited and described his / her academic performance in a semester. If the grade points associated with the letter grades awarded to a student are $g_1, g_2, g_3, \dots, g_k$, etc. and the corresponding credits are $c_1, c_2, c_3, \dots, c_k$, the SGPA is given by:

$$SGPA = \frac{c_1g_1 + c_2g_2 + c_3g_3 + \dots + c_kg_k}{c_1 + c_2 + c_3 + \dots + c_k}$$

Where, k is the number of papers for which the candidate remains registered during the semester.

(d) Cumulative Grade Point Average (CGPA)

The Cumulative Grade Point Average (CGPA) indicates the overall academic performance of a student in all the papers registered in that particular academic year.

It is computed in the same manner as the SGPA, considering all the papers (say, n), and is given by:

$$CGPA = \frac{\sum_{i=1}^n c_i g_i}{\sum_{i=1}^n c_i}$$

(e) Final CGPA

It is the weighted average of the CGPA of all years of study.

(f) Percentage equivalence of CGPA/Final CGPA

The conversion of CGPA/Final CGPA to exact percentage of marks does not have perfect rationale. However, its equivalent at best can be arrived at by multiplying by 10.00.

14. Academic work

A regular record of attendance both in Theory and Practical shall be maintained by the teaching staff of respective courses.

15. Course of study

The course of study for Diploma in Engineering shall include Semester-Wise Theory & Sessional. The number of hours to be devoted to each theory, tutorial and practical course in any semester shall not be less than forty (40). The total credits for the complete Diploma with respect to each course category are mentioned below:

Table 15.1 Credit Count with category Code

Course Category	Category Code	Credits
Humanities and Social Sciences	HS	8
Basic Sciences	BS	19
Engineering Science	ES	15
Program Core	PC	40
Program Electives	PE	16
Open Electives	OE	10
Project	MP	6
Summer Internship	SI	5
Seminar	SE	1
Audit Course	AU	0
Total		120

16. Examinations /Assessments

16A. Internal / Sessional Examination

- (a) The minimum Grade required to pass in each Theory & Practical paper is 'GRADE D'.
(b) In case of audit / qualifying paper the minimum Grade required to pass is Grade D. However, the Grade obtained in audit paper shall not be included in SGPA.

16B. End-Semester Examination

There will be two End Semester Examinations in all theory and project subjects viz.

- a) Odd (I, III, V) Semester Examination and
- b) Even (II, IV, VI) Semester Examination, in an academic year.

16C. Carry Forward of Marks

In case, if a student gets the back in a course / paper, the sessional marks of the subject concerned will be carried forward in the total of marks when he re-appears for the examination of the course in which he has got the back.

16D. Heads of Passing

- (a) The minimum passing marks in each theory subject (including Internal/ Sessional marks) will be 35%.

(b) The minimum passing marks in each comprehensive viva / project will be 50 %.

(c) A student, in order to pass must satisfy the following:

Minimum 45% marks in aggregate of a particular academic year inclusive of both semesters of that academic year.

16E. Carry Over System

Maximum number of carry over papers (Theory / viva / project) permissible for promotion to next year will be 50% of the total subjects offered in a year.

16F. Promotion

(a) A candidate satisfying all the requirements under clause 16A shall be promoted to the next academic year of study.

(b) A candidate shall be eligible for provisional promotion with carryover paper (PCP) status to the next academic year of study provided he/she fails to satisfy the requirements of clause 16 A

(a) in not more than permissible carry over paper as mentioned in clause 16D.

(c) If a candidate satisfies the requirement of clause 16A (a) but fails to satisfy the requirement of 16A (b) he / she shall be eligible for provisional promotion with carryover paper (PCP –A (aggregate)status. He / she may choose up to a maximum of 50% of theory papers of that particular academic year as per his / her choice to pass the examination of that.

16G. Ex-studentship

A candidate opting for ex-studentship shall be required to appear in all the theory / practical / viva papers in the end semester examinations of both semesters / annual examination of the same academic year However, the sessional marks of theory & practical both shall remain the same as those secured earlier.

17. Evaluation of Performance

Evaluation of performance of the students in a programme shall be a continuous process based on their performance in the class test, quizzes, assignments and the end semester examinations.

a) Theory papers in semester system (Maximum Marks: 100)

The evaluation will be done through two Internal / Sessional examinations and one end semester examination.

a) Each Internal / Sessional examination will carry a weightage of 10 marks,

b) The end semester examination will carry a weightage of 70 marks.

c) The remaining 10 marks will be awarded on the basis of attendance and performance in quizzes and assignments.

b) Summer Training, Project Report, Seminar etc.

Summer Training, Project Report, Seminar, and other learning oriented activities shall have associated maximum marks and credits, as stated in the syllabus. The evaluation Scheme would be, as tabulated below:

Table 17.1 Evaluation Scheme

Evaluation Scheme			
Examination Type	Internal	External	Total
a) Theory	30	70	100
b) Practical	30	70	100
c) Seminar	100	--	100
d) Industrial Training	100	--	100
e) Project	60	140	200

c) Question paper pattern for End-Semester Examinations

a) Multiple Choice Questions (MCQs)	=	20 x 1	=	20
b) Long Answers (Answer 5 out of 8)	=	5 x 10	=	50
Total Marks	=			70

d) Question paper pattern for Internal / Sessional Examinations (to be conducted twice in a Semester)

a) Long Answers (Answer 4 out of 6)	=	2.5 x 2	=	10
Total Marks	=	2 x 10		20

18. Award of Division

- (a) The division shall be awarded on the basis of final year result.
- (b) A student who qualifies for the award of the degree securing 'D' or above grades' in all the subjects in his / her first attempt in six consecutive semesters and secures a CGPA of 8.00 or above shall be awarded **FIRST DIVISION WITH DISTINCTION**.
- (c) A student who qualifies for the award of the degree by securing 'D' or above grades' in all the subjects in the stipulated maximum duration for the BCA programme and secures a CGPA not less than 6.50 shall be awarded **FIRST DIVISION**.
- (d) All other students who qualify for the award of degree by securing 'D or above grades' in all subjects in the stipulated maximum duration for the BCA programme and secures a CGPA between 5.0 and 6.49 shall be awarded **SECOND DIVISION**.
- (e) All other students who qualify for the award of degree by securing 'D or above grades' in all subjects in the stipulated maximum duration for the BCA programme and secures a CGPA less than 5.0 shall be awarded **THIRD DIVISION**.

19. Scrutiny and Re-evaluation

- (a) Scrutiny shall be allowed in only theory papers, in which Re-totaling of the marks awarded will be done and only unchecked answers (if any) will be evaluated.
- (b) Re-evaluation of theory / practical papers is not permitted.

20. Unfair Means

Cases of unfair means shall be dealt as per the rules of the University.

21. Result

- (a) The result of a candidate shall be declared on the basis of the performance of both semesters of the same academic year.
- (b) Result of the final year shall be declared on the basis of working out final CGPA which is the weighted average of CGPA of all years of the study.

22. Improvement

There shall be no provision of Improvement examination in all the courses running in the University.

23. Grade Card

- (a) A copy of the Grade Card shall be issued to each student at the end of each academic year. The duplicate copy, if required can be obtained on payment of prescribed fee.
- (b) The Grade Report Card of a student may be withheld if he / she has not paid his / her dues or if there is a case of indiscipline pending against him / her or for any other such reasons.

24. Re-Admission

A candidate may be allowed for re-admission provided he / she satisfies one of the following conditions:

- (a) A candidate is declared fail.
- (b) A candidate promoted with carry over papers and opts for re-admission.