NANDHA ENGINEERING COLLEGE

(AUTONOMOUS)

(Affiliated to Anna University, Chennai and Approved by AICTE, New Delhi) (Accredited by NAAC (A+ Grade))

Erode-638 052, Tamil Nadu, India, Phone: 04294 – 225585



Amendments [5] in **RULES AND REGULATIONS – 2017 [R17]**

for **UG Programmes**

[Applicable to the batch 2021-25 (regular) and

2022-25 (lateral entry students)]

Dr.U.S.Ragupathy Principal Nandha Engineering College (Autonomous)

Erodo - 638 052, Tamil Nadu

AMENDMENTS IN RULES AND REGULATIONS [Amendments R17] FOR B.E./ B.TECH. DEGREE PROGRAMME

EXISTING

Clause 10.5 Assessment for Online Course:

Students may be permitted to register for online courses (which are provided with certificate) as specified in clause 5.10. [R17 Amendment dated: 16.10.2020] On successful completion of the online courses, DCAA will assess the online courses by providing 75% weightage to the marks earned through online courses and 25% weightage to the assessment by DCAA by the credits specified retaining in the certification. Online course of 3 credits can be considered instead of one elective course (PSE/OE). The grading shall be awarded as per clause 16.1 with the prior approval of Principal.

Students may be permitted to register for online courses (which are provided with certificate) as specified in clause 5.10. On successful completion of the online courses, the final marks will be calculated by multiplying the marks earned through online course with a factor of 1.25 as per recommendations of committee. Online course of 3 credits can be considered instead of one elective course (PSE/OE). The grading shall be awarded as per clause 16.1 with the prior approval of Principal.

(Approved in 11th Academic Council - with effect from April-May 2024 onwards).

Clause 10.1

PROCEDURE FOR ASSESSMENT & AWARDING MARKS

Project Work (Marks: 100) [Mini project/ Design project/ Project Work -1 / Project Work -2]]

Project work will be evaluated by continuous assessment (40) and end semester assessment (60).

REVISED

Clause 10.5 Assessment for Online Course:

Students are permitted to optionally enroll and study online courses through SWAYAM - NPTEL platforms and credit transfer is to be done based on the marks and certificate provided by the NPTEL. The number of credits and transfer of credits are based on the procedure explained in Table-1 and the Mapping of the marks with the grades is explained in Table-2. Online course of 3 credits can be considered instead of one elective course (PSE/OE). The mapping of marks with grades is applicable, only if the student passes the course as per the guidelines of NPTEL.

Table-1: Duration and Number of credits

Number of weeks	Number of credits
4	1
8	2
12	3
16	4

Table 2: Mapping of Marks scored in NPTEL course and Credits earned

Letter Grade	Marks
O	90 -100
A+	80 - 89
A	70 - 79
B+	60 - 69
В	50 - 59
С	40 - 49

Clause 10.1

PROCEDURE FOR ASSESSMENT & AWARDING MARKS

Project Work (Marks: 100)
[Mini project/ Design project/
Project Work -1 / Project Work -2]]

Project work will be evaluated by continuous assessment (60) and end semester assessment (40).

	Continuous Assessm	ent- 40	Cor	ntinuous Assess	sment- 6	0
		Marks			M	[arks
Review-1		10	Review-1			20
Review-2	2	15	Review-2			20
Review-3	3	15	Review-3			20
		40				60
]				Semester Asses	ssment -	40
Project	Internal Examiner	10	Project	Examiner		10
Report	External Examiner	10	Report	Examiner		10
	Internal Examiner	10		Internal Exa	miner	10
Viva	External Examiner	20	Visco Vana	External Exa	miner	10
Voce	Supervisor	10	Viva Voce	Supervisor		10
	Examiner	10		Examiner		10
	<u> </u>	60				40

Procedure for Assessment and awarding marks, additional guidelines in clause 10.1 [Amendment-1. Dt. 10.08.2018]

Resubmission of project: If a student could not submit thesis in time/could not attend viva-voce exam/could not complete the industry project as per the specification of industry/fail to clear the project due to unforeseen circumstances, he/she is permitted to resubmit his work within 30 days after the publication of the results. Evaluation and passing requirements remain same as like regular project work course. Such resubmission of project work shall not be construed as an appearance for the eligibility of the student for the classification of the degree.

Clause 16 Award of Grade

16.1 After a student has satisfied the passing requirements prescribed in clause 11, the student shall be placed in one of the grades. All assessments of a course will be done on relative grading principle. However, for the purpose of reporting the performance of a student, letter grades, each carrying certain number of points, will be awarded as per the range of total marks (out of 100) obtained by the student in each subject as detailed below: For a given course, if the students' strength is greater than 30, the

The last date for submission of the project report is on the last working day of the semester. If a student fails to submit the project report on or before the specified deadline, it will be considered as fail in the Project Work and the student shall re-register for the same in the subsequent semester.

If a student has submitted the project report but absent in the end semester examination of project work, the student is deemed to be failed. In this case and also if a student attends and fails in the End semester examination of Project work of B.E. / B.Tech, he/she shall attend end semester examination again within 60 days from the date of declaration of the results. The subsequent viva-voce examination will not be considered as reappearance. In case, the student fails in the subsequent viva-voce examination also, the student shall redo the course again, when offered next.

Clause 16 Award of Grade

16.1 After a student has satisfied the passing requirements prescribed in clause 11, the student shall be placed in one of the grades. All assessments of a course will be done on relative grading principle except for the categories referred in Clause 16.2.2. Credits/grade/marks earned through online courses will be decided as per Clause 10.5. However, for the purpose of reporting the performance of a student, letter grades, each carrying certain number of points, will be awarded as per the range of total marks

relative grading method shall be adopted. However, if the students' strength is less than 30, then the fixed grading method shall be followed. (out of 100) obtained by the student in each subject as detailed below.

	0				
Letter Grade	Grade Points	Range of Percentage of Total Marks	Letter Grade	Grade Points	Range of Percentage of Total Marks
O (Outstanding)	10	91 to 100	O (Outstanding)	10	91 to 100
A + (Excellent)	9	81 to 90	A + (Excellent)	9	81 to 90
A (Very Good)	8	71 to 80	A (Very Good)	8	71 to 80
B + (Good)	7	61 to 70	B + (Good)	7	61 to 70
B (Average)	6	56 to 60	B (Average)	6	56 to 60
C (Satisfactory)	5	50 to 55	C (Satisfactory)	5	50 to 55
U (Reappearance)	0	< 50	U (Reappearance)	0	< 50
SA (Shortage of Attendance)	0	-	SA (Shortage of Attendance)	0	-
WD (Withdrawal)	0	-	WD (Withdrawal)	0	-

A student is deemed to have passed and acquired the corresponding credits in a particular course if he/she obtains any one of the following grades: "O", "A+", "A", "B+", "B", "C".

'SA' denotes shortage of attendance (as per clause 8.4) and hence prevented from writing the end semester examinations. 'SA' will appear only in the result sheet.

"U" denotes that the student has failed to pass in that course. "WD" denotes withdrawal from the exam for the particular course. The grades U and WD will figure both in the Grade Sheet as well as in the Result Sheet. In both cases, the student has to appear for the End Semester Examinations as per the Regulations.

If the grade U is given to Theory Courses/ Laboratory Courses it is not required to satisfy the attendance requirements (vide clause 8), but has to appear for the end semester examination and fulfill the norms specified in clause 14 to earn a pass in the respective courses.

If the grade U is given to EEC course (except Project Work), which are evaluated only through internal assessment, the student shall register for the course again in the subsequent semester, fulfill the norms as specified in clause 11 to earn A student is deemed to have passed and acquired the corresponding credits in a particular course if he/she obtains any one of the following grades: "O", "A+", "A", "B+", "B", "C".

'SA' denotes shortage of attendance (as per clause 8.4) and hence prevented from writing the end semester examinations. 'SA' will appear only in the result sheet.

"U" denotes that the student has failed to pass in that course. "WD" denotes withdrawal from the exam for the particular course. The grades U and WD will figure both in the Grade Sheet as well as in the Result Sheet. In both cases, the student has to appear for the End Semester Examinations as per the Regulations.

If the grade U is given to Theory Courses/ Laboratory Courses it is not required to satisfy the attendance requirements (vide clause 8), but has to appear for the end semester examination and fulfill the norms specified in clause 14 to earn a pass in the respective courses.

If the grade U is given to EEC course (except Project Work), which are evaluated only through internal assessment, the student shall register for the course again in the subsequent

pass in the course. However, attendance requirement need not be satisfied.

16.2 The grades O, A+, A, B+, B, C obtained for the one credit course shall figure in the Mark sheet under the title 'Value Added Courses'. The other grades U, SA will not figure in the mark sheet. semester, fulfill the norms as specified in clause 11 to earn pass in the course. However, attendance requirement need not be satisfied.

16.2.1 The grades O, A+, A, B+, B, C obtained for the one credit course shall figure in the Mark sheet under the title 'Value Added Courses'. The other grades U, SA will not figure in the mark sheet.

16.2.2 All assessments of a course will be done on relative grading principle except the following.

- In all the courses, if the number of students who have passed the course is less than or equal to 30 then absolute grading shall be followed with the grade range as specified in the Table.
- For the Project Work / Internship and Laboratory Courses, absolute grading procedure shall be followed as given in the Table below irrespective of the number of students who have passed the course.

Table	e – Gra	de ran	ge for	absolu	te grad	ding
О	A+	A	B+	В	С	U
91-	81-	71-	61-	56 -	50 -	<
100	90	80	70	60	55	50

Relative Grading:

For those students who have passed the course (theory course / embedded courses (theory + laboratory) / all other EEC except laboratory course/Project Work Courses), the relative grading shall be done. The marks of those students who have passed only shall be inputted in the software developed for relative grading. The relative grading evolved method normalizes the results data using the BOX-COX transformation method and computes the grade range for each course separately and awards the grade to each student. (theory course / embedded courses (theory laboratory) and all other EEC Courses) as given in the Table below. If the students' strength is greater than 30, the relative grading method shall be adopted.

Letter Grade	Grade Points	Range of Percentage of Total Marks
O (Outstanding)	10	91 to 100
A + (Excellent)	9	81 to 90
A (Very Good)	8	71 to 80
B + (Good)	7	61 to 70
B (Average)	6	56 to 60
C (Satisfactory)	5	50 to 55
U (Reappearance)	0	< 50
SA (Shortage of Attendance)	0	-
WD (Withdrawal)	0	-

16.3 GPA AND CGPA CALCULATION

After the results are declared, Grade Sheets will be issued to each student which will contain the following details:

- List of courses registered during the semester and the grades scored.
- Grade Point Average (GPA) for the semester and
- Cumulative Grade Point Average (CGPA) of all courses registered from first semester onwards.

During each semester, the list of courses registered and the grades scored in each course are used to compute the Grade Point Average (GPA). GPA is the ratio of the sum of the products of the number of credits of courses registered and the grade points corresponding to the grades scored in those courses, taken for all the courses, to the sum of the number of credits of all the courses in the semester.

$$GPA = \frac{\sum_{i=1}^{n} C_i GP_i}{\sum_{i=1}^{n} C_i}$$

Where,

• C_i - is the Credits assigned to the course,

16.3 GPA AND CGPA CALCULATION

After the results are declared, Grade Sheets will be issued to each student which will contain the following details:

- List of courses registered during the semester and the grades scored.
- List of courses studied for Hons., minor and any other additional courses in which the student has passed with the grades under the title additional courses.
- Grade Point Average (GPA) for the semester considering only the courses of curriculum (not the additional courses) and
- Cumulative Grade Point Average (CGPA) of all courses registered from first semester onwards considering only the courses of curriculum (not the additional courses). However, for the students who have successfully completed the requirements of B.E. / B.Tech (Hons) and B.E. / B.Tech (Minor) vide clause 18.5, grades scored in the six additional courses shall be taken into account for computation of CGPA.

The grades scored in each course are used to compute the Grade Point Average (GPA). GPA is the ratio of the sum of the products of the number of credits of courses (not the additional courses) registered and the grade points

- GP_i is the grade point corresponding to the letter grade obtained for each course
- n is number of all Courses successfully cleared during the particular semester in the case of GPA and during all the semesters in the case of CGPA.

CGPA will be calculated in a similar manner, considering all the courses enrolled from first semester. "U" and "SA" grades will be excluded for calculating GPA and CGPA.

corresponding to the grades scored in those courses, taken for all the courses, to the sum of the number of credits of all the courses in the semester.

$$GPA = \frac{\sum_{i=1}^{n} C_i GP_i}{\sum_{i=1}^{n} C_i}$$

Where,

- C_i is the Credits assigned to the course.
- GP_i is the grade point corresponding to the letter grade obtained for each course
- n is number of all Courses successfully cleared during the particular semester in the case of GPA and during all the semesters in the case of CGPA.

CGPA will be calculated in a similar manner, considering all the courses enrolled from first semester. "U" and "SA" grades will be excluded for calculating GPA and CGPA.

16.3.3 New Clause

If a student successfully completes all the requirements of the programme and also meets the requirements of B.E. / B. Tech. (Hons) or B.E. / B. Tech. Minor but desires not to opt for the additional qualification, then he/she has to submit a declaration with regard to the same 30 days before the completion of semester VIII.

16.3.4 New Clause

In the consolidated grade sheet the CGPA earned shall be converted into percentage of marks as follows:

Percentage of Marks = $CGPA \times 10$.

Clause 18.5 B.E / B.Tech (Hons) Specialisation in the same discipline,

B.E / B.Tech (Hons) and

B.E / B.Tech minor in other specialisation.

- 1. i). B.E / B.Tech. *Honours Specialisation* in the same discipline:
 - a. The student should have earned additionally a minimum of 18 credits from a vertical of the programme.
 - b. Should have passed all the courses in the first attempt.
 - c. Should have earned a minimum CGPA of 7.50.

ii). B.E / B.Tech. Honours:

- a. The students should have earned additional courses (minimum of 18 credits) from more than one vertical of the same programme.
- b. Should have passed all the courses in the first attempt.
- c. Should have earned a minimum CGPA of 7.50.

iii). B.E/B.Tech. (*minor* in other specialisation):

- The student should have earned additionally a minimum of 18 credits in any one of the verticals of other B.E/B.Tech programmes
- 2. Students can earn maximum of 6 credits in online mode (SWAYAM platform), out of these 18 credits.
- 3. B.E/ B. Tech. (Hons) Specialisation in the same discipline, B.E / B.Tech. Honors and B.E/B.Tech. minor in other specialisation degree will be optional for students.
- 4. For the categories 1(i) to 1(ii), the students will be permitted to register the courses from V Semester onwards provided the marks earned by the students until III semester should be *CGPA 7.50* and above and cleared all the courses in the *first attempt*.

Clause 18.5 B.E./B.Tech. (Hons) and B.E./B. Tech. minor with specialisation in another discipline.

B.E. / B. Tech. (Hons) and B.E. / B. Tech. minor with specialisation in another discipline.

(i) **B.E / B.Tech.** (Hons.)

- a. The students should have taken additional courses from a specified group of Programme Specific Elective courses (vertical) or from any of the verticals of the same programme and earned a minimum of 18 credits.
- **b.** Should have passed all the courses prescribed in the curriculum and additional courses in the first attempt.
- c. Should have earned a minimum of 7.50 CGPA taking into account of all the courses prescribed in the curriculum and additional courses.

(ii) B.E./B.Tech. Minor with specialisation in another discipline.

The student should have earned additionally a minimum of 18 credits in any one of the verticals offered from other B.E/B.Tech programmes.

- a. For these 18 credits students can optionally enroll and study a maximum of 6 credits in online mode from SWAYAM NPTEL platform (in addition to the three online courses permitted for courses of curriculum), as approved the Head of Department and the Principal.
- b. B.E / B.Tech. (Hons.) and B.E./B.Tech. minor with specialisation in another discipline will be optional for students and the students shall be permitted to select any one of them only.
- c. For the categories 18.5 (i), the students, including Lateral Entry, shall be permitted to register for the courses from Semester V onwards provided the students have earned a minimum CGPA of 7.50 until Semester III and have cleared all the courses in the first attempt.
- d. For the category 18.5 (ii), the students, including Lateral Entry, will be permitted to register the courses from Semester V onwards provided the marks earned by the students until Semester III is CGPA 7.50

- 5. For the category 1 (iii), the students will be permitted to register the courses from Semester V onwards provided the marks earned by the students until Semester III is *CGPA* 7.50 and above.
- 6. If a student decides not to opt for Honours, after completing certain number of additional courses, the additional courses studied shall be considered instead of the Professional Elective courses which are part of the curriculum. If the student has studied more number of such courses than the number of Professional Elective courses required as per the curriculum, the courses with higher grades shall be considered for the calculation of CGPA. Remaining courses shall be printed in the mark sheet, however, they will not be considered for calculation of CGPA.
- 7. If a student decides not to opt for Minor, after completing certain number of courses, the additional courses studied shall be considered instead of Open Elective courses which are part of the curriculum. If the student has studied more number of such courses than the number of open electives required as per the curriculum, the courses with higher grades shall be considered for calculation of CGPA. Remaining courses shall be printed in the mark sheet, however, they will not be considered for calculation of CGPA.

- and above.
- e. B.E/B.Tech. (Hons.) or B.E./ B.Tech. Minor shall be offered by the Department irrespective of the number of students enrolled.
- f. If a student decides not to opt for Honours, completing certain number additional courses, such additional courses studied shall be considered instead of the Programme Specific Elective courses which are part of the curriculum. If the student has studied more number of such courses than the number of Programme Specific Elective courses required as per the curriculum, the courses with higher grades shall considered for the calculation of CGPA. Remaining courses shall be printed in the grade sheet however, they will not be considered for calculation of CGPA and the same shall be indicated in a foot note appropriately. If the student has failed in the additional courses or faced shortage of attendance, they will not be printed in the grade sheet and will not be considered for CGPA calculation and classification of degree.
- g. If a student decides not to opt for Minor, after completing certain number of courses, the additional courses studied shall be considered instead of Open Elective courses which are part of the curriculum. If the student has studied more number of such courses than the number of open electives required as per the curriculum, the courses with higher grades shall be considered for calculation of CGPA. Remaining courses shall be printed in the grade sheet, however, they will not be considered for calculation of CGPA and the same shall be indicated in a foot note appropriately.

If the student has failed in the additional courses or faced shortage of attendance, they will not be printed in the grade sheet and will not be considered for CGPA calculation and classification of degree.

The student has to enroll for these additional courses separately and pay additional exam fee.

CLASSIFICATION OF THE DEGREE

FIRST CLASS WITH DISTINCTION (EXISTING)

Degree	Duration of programme	Duration permitted	Additional credits above the requirement of curriculum	CGPA	Pass in	Break of study	Prevention due to lack of attendance	Withdrawal from writing end semester examination
B.E / B.Tech. Honours Specialisation in the same discipline	3/4 years (Lateral entry, regular)	4/5 years (Lateral entry, regular)	18 credits from any one vertical of the same programme	8.50	First attempt	One year authorised break of study included in duration permitted	Not permitted	Will not be considered as an attempt
B.E / B.Tech. (Honours)	3/4 years (Lateral entry, regular)	4/5 years (Lateral entry, regular)	18 credits from more than one verticals of the same programme	8.50	First attempt	One year authorised break of study included in duration permitted	Not permitted	Will not be considered as an attempt
B.E / B.Tech. minor in other programme	3/4 years (Lateral entry, regular)	4/5 years (Lateral entry, regular)	18 credits from any one vertical of the other programme	8.50	First attempt	One year authorised break of study included in duration permitted	Not permitted	Will not be considered as an attempt

FIRST CLASS WITH DISTINCTION (REVISED)

B.E / B.Tech. (Honours)	3/4 years (Lateral entry, regular)	4/5 years (Lateral entry, regular)	18 credits from any one vertical of the same programme or from more than one verticals of the same programme	8.50	First attempt	One year authorised break of study included in duration permitted	Not permitted	Will not be considered as an attempt
B.E / B.Tech. minor in other programme	3/4 years (Lateral entry, regular)	4/5 years (Lateral entry, regular)	18 credits from any one vertical of the other programme	8.50	First attempt	One year authorised break of study included in duration permitted	Not permitted	Will not be considered as an attempt

CLASSIFICATION OF THE DEGREE

FIRST CLASS (EXISTING)

FIRST CLASS (EXISTING)	S(EXISIING)							
Degree	Duration of programme	Duration	Additional credits above the requirement of curriculum	CGPA Pass in	Pass in	Break of study	Prevention due to lack of attendance	Withdrawal from writing end semester examination
B.E / B.Tech. Honours Specialisation in the same discipline	3/4 years (Lateral entry, regular)	4/5 years (Lateral entry, regular)	18 credits from any one vertical of the same programme	7.50	First attempt	One year authorised break of study included in duration permitted	Not permitted	Will not be considered as an attempt
B.E / B.Tech. (Honours)	3/4 years (Lateral entry, regular)	4/5 years (Lateral entry, regular)	18 credits from more than one verticals of the same programme	7.50	First attempt	One year authorised break of study included in duration permitted	Not permitted	Will not be considered as an attempt
B.E / B.Tech. minor in other programme	3/4 years (Lateral entry, regular)	4/5 years (Lateral entry, regular)	18 credits from any one vertical of the other programme	6.50	ı	One year authorised break of study included in duration permitted	Included in duration permitted	
FIRST CLASS (REVISED)	S (REVISED)							
B.E / B.Tech. (Honours)	3/4 years (Lateral entry, regular)	4/5 years (Lateral entry, regular)	18 credits from any one vertical of the same programme or from more than one verticals of the same programme	7.50	First	One year authorised break of study included in duration permitted	Not	Will not be considered as an attempt
B.E / B.Tech. minor in other programme	3/4 years (Lateral entry, regular)	4/5 years (Lateral entry, regular)	18 credits from any one vertical of the other programme	6.50	ı	One year authorised break of study included in duration permitted	Included in duration permitted	1

Approved by 12th Academic Council_25.06.2024 Amendments [5]

SECOND CLASS: No change

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