

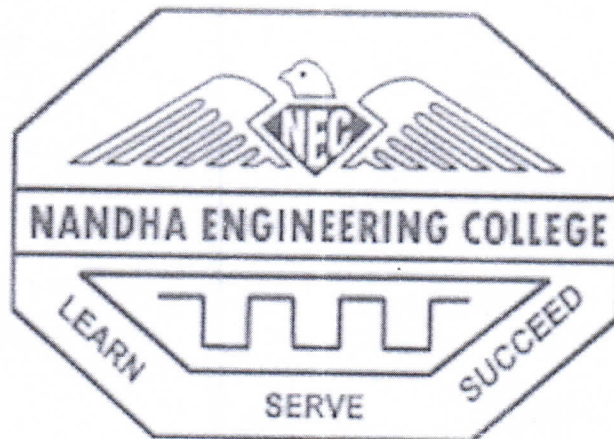
# NANDHA ENGINEERING COLLEGE

(AUTONOMOUS)

(Affiliated to Anna University, Chennai and approved by AICTE New Delhi with NBA & NAAC accreditation)

Erode-638 052

Tamil Nadu, India



## RULES AND REGULATIONS – 2017 [R17] CHOICE BASED CREDIT SYSTEM (CBCS)

Common to all B.E. / B.Tech. Full-Time Programmes

(Applicable to the batch of students admitted from the academic year 2017-2018 onwards)

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Approved in 5<sup>th</sup> Academic Council Meeting, 16.06.2017

**Dr. N. Rangarajan, B.Sc., B.Tech., M.E., Ph.D.,**  
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**REGULATIONS 2017 (R17) CBCS for B.E./ B.Tech. DEGREE PROGRAMME**

**1. PREAMBLE**

Institution is gearing up for several initiatives towards academic excellence, quality improvement and administrative reforms. In view of this priority and in-keeping with the Institution's Vision and Mission; process was already initiated towards introduction of semester system, grading system, credit system and CBCS (in which the students can choose courses of their own choice) in line with UGC and Anna University, Chennai guidelines.

In order to enhance the flexibility in learning and to keep up-to-date developments to satisfy the needs of the students, Nandha Engineering College has framed this RULES AND REGULATIONS-2017. In short, it will be referred to as R17.

Academic Programmes of the Institute are governed by rules and regulations approved by the Governing Council. The academic rules and regulations are applicable to the students admitted into first year of four year undergraduate programs offered by the college leading to Bachelor of Engineering (B.E) / Bachelor of Technology (B.Tech) degree from the academic year 2017-18 onwards.

**2. DEFINITIONS AND NOMENCLATURE**

In this Regulation, unless the context otherwise specifies

- 2.1 **"Programme"** means Degree Programme (i.e) B.E./B.Tech. Degree Programme.
- 2.2 **"Discipline"** means Branch or Specialization of B.E./B.Tech. Degree Programme, like Civil Engineering, Mechanical Engineering, etc.
- 2.3 **"Course"** means a theory or practical subject that is normally studied in a semester, like Engineering Mathematics, Engineering Physics, etc.
- 2.4 **"Credit"** means a numerical value allocated to course units to describe the students' workload required per week.
- 2.5 **"Grade"** means the letter grade assigned to each course based on the marks range specified.
- 2.6 **"Grade point"** means a numerical value (0 to 10) allocated based on the grade assigned to each course.
- 2.7 **Choice Based Credit System (CBCS):**
  - CBCS is a flexible system of learning that permits students to learn at their own pace
  - Choose electives from a wide range of elective courses offered by the departments
  - Adopt an inter-disciplinary approach in learning
  - Make best use of the expertise of available faculty.
- 2.8 **"University"** means affiliating University, ANNA UNIVERSITY, CHENNAI.
- 2.9 **"Head of the Institution"** means the Principal of the College.
- 2.10 **"Controller of Examinations"** means the authority of the College who is responsible for all activities of the Examinations.
- 2.11 **"HoD"** means Head of the Department
- 2.12 **"BoS"** means Board of Studies
- 2.13 **"AC"** means Academic Council
- 2.14 **"GB"** means Governing Body.

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- 2.15 "SCAA" means Standing Committee for Academic Affairs.  
2.16 "DCAA" means Department Committee for Academic Affairs

### 3 ADMISSION PROCEDURE

#### 3.1 Regular Admission

The students seeking admission to the first semester of the eight semesters B.E. / B.Tech. Degree Programme shall require satisfying eligibility rules as prescribed by the University and the Government of Tamil Nadu from time to time.

#### 3.2 Lateral Entry Admission

The students who possess the Diploma in Engineering / Technology awarded by the State Board of Technical Education, Tamil Nadu or its equivalent are eligible to apply for Lateral entry admission to the third semester of B.E. / B.Tech. degree programme and required to satisfy the conditions of admissions there to prescribed by the University and the Government of Tamil Nadu.

(OR)

The candidates who possess the Degree in Science (B.Sc.,) (10+2+3 stream) with Mathematics as a subject at the B.Sc. Level are eligible to apply for Lateral entry admission to the third semester of B.E. / B.Tech. Such candidates shall undergo two additional Engineering subject(s) in the third and fourth semesters as prescribed by the respective Board of Studies (BoS).

### 4 PROGRAMMES OF STUDY

The programmes of study offered by the college with the approval of the University and All India Council for Technical Education, New Delhi are as follows:

#### B.E. Degree

- Agriculture Engineering (AG)
- Civil Engineering (CE)
- Computer Science and Engineering (CS)
- Electronics and Communication Engineering (EC)
- Electrical and Electronics Engineering (EE)
- Electronics and Instrumentation Engineering (EI)
- Mechanical Engineering (ME)

#### B.Tech. Degree

- Chemical Engineering (CH)
- Information Technology (IT)

### 5 STRUCTURE OF PROGRAMMES

#### 5.1 Curriculum & Courses

Every B.E. / B. Tech. Programme will have a curriculum comprising courses of study with the prescribed syllabi. Each course is assigned with certain number of credits based on the contact hours L-T-P-C (L- Lecture, T- Tutorial, P- Practical, C- Credit) as specified in section 5.5. The hours per week mentioned for each course refer to periods per week.

#### 5.2 Categorization of Courses

Syllabi of every Programme consist of Theory, Theory cum Practical and Practical courses with well-defined Program Outcomes, Programme Educational Objectives (PEO), Programme Specific Objectives (PSO) and Course Outcomes (CO) as per Outcome Based Education (OBE). The courses shall cover:

- a **Humanities and Social Sciences (HS)** courses include Technical English, Engineering Ethics and Human Values, Communication skills, Environmental Science and Engineering.

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- b Basic Science (BS)** courses include Mathematics, Physics, Chemistry, Biology, etc.
- c Engineering Science (ES)** courses include Engineering practices, Engineering Graphics, Basics of Electrical / Electronics / Mechanical / Computer Engineering, Instrumentation etc.
- d Programme Core (PC)** courses include the core courses relevant to the chosen specialization/branch.
- e Programme Specific Elective (PSE)** courses include the elective courses relevant to the chosen specialization/ branch.
- f Open Elective (OE)** courses include the courses relevant to the chosen specialization / branch which a student can choose from the curriculum of other B.E. / B. Tech. programmes and elective courses offered under HS, BS and ES categories.
- g Employability Enhancement Course (EEC)** includes Employability Skills, Personality Development Courses, Project Work and/or Internship, Seminar, Professional Practices, Training at Industry/Research organization and online courses.

**5.3 Personality and Character Development:**

All students shall enroll in any one of the personality and character development programmes (NSS/NSO/YRC/RSP) and undergo training for about 80 hours and attend a camp of about seven days. The training shall include classes on hygiene and health awareness and also training in first-aid.

- National Service Scheme (NSS) will have social service activities in and around the College /Institution.
- National Sports Organization (NSO) will have Sports, Games, Drills and Physical exercises.
- Youth Red Cross (YRC) will have activities related to social services in and around College/Institutions.
- Road Safety Patrol (RSP) will have awareness camp in and around the College /Institution.

While the training activities will normally be during weekends, the camp will normally be during vacation period.

**5.4 Number of courses per semester:**

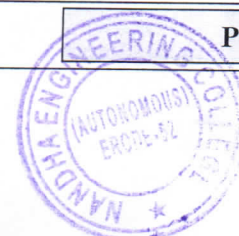
Curriculum of a semester shall normally have a blend of theory course not exceeding 6, laboratory and Employability Enhancement Course(s) not exceeding 4. Each course may have credits assigned as per clause 5.5. However, the total number of courses per semester shall not exceed 10 (including EEC).

**5.5 Credit Assignment:** Each course is normally assigned certain number of credits as given below.

Contact period per week	Credits (C)
1 Lecture period (L)	1
2 Tutorial periods (T)	1
2 Practical Periods (P) (Laboratory / Seminar / Project Work / etc.)	1

**5.6 Elective Courses:**

A list of Elective courses will be declared at the beginning of each semester by the departments/College. Every student shall opt electives from the list of electives relating to his/her degree programme in consultation with the Academic coordinator and the HoD. The student will be required to study different types of





electives like Open Electives (OE) and Programme Specific Electives (PSE). A student shall undergo **5 (minimum) to 7 (maximum) Programme Specific Elective (PSE) courses and 2 (minimum) to 4 (maximum) Open Elective (OE) courses subject to maximum of 9 elective courses.** Open electives and Programme specific electives will spread over from 3<sup>rd</sup> semester to 8<sup>th</sup> semester. Open electives are the elective courses offered by a department for students of other branches and Programme Specific electives are courses offered by a department to the students of their own branches only.

**5.7 Industrial Training/ Internship:**

The students may undergo Industrial training for a period as specified in the Curriculum during summer / winter vacation. In this case the training has to be undergone continuously for the entire period.

The students may undergo Internship at Research organization / University (after due approval from the DCAA) for the period prescribed in the curriculum during summer / winter vacation, in lieu of Industrial training.

If Industrial Training / Internship **is not prescribed in the curriculum**, the student may undergo Industrial Training / Internship optionally and the credits earned will be indicated in the Mark Sheet. If the student earns three credits in Industrial Training / Internship, the **student may drop one Programme Specific Elective (PSE)**. In such cases Industrial Training / Internship needs to be undergone continuously from one organization only. However, if the number of credits earned is 1 or 2, these credits shall not be considered for classification of the degree. The student is allowed to undergo a maximum of 6 weeks Industrial Training / Internship during the entire duration of study.

Duration of Training/Internship	Credits
2 weeks	1
4 weeks	2
6 weeks	3

**5.8 Industrial Visit:**

Every student is expected to undergo one industrial visit every year starting from third semester to six semester of the programme, subject to the approval of the Head of the Department and Head of the Institution.

**5.9 Value Added Courses (VAC):**

Students can opt for any one of the VAC offered by the various departments in III, IV, V, VI and VII semesters.

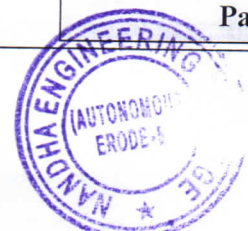
**5.10 Online Courses:**

- Students will be permitted to register for the online courses (which are provided with certificate) offered by SWAYAM/ reputed institutions like IITs, NITs and other Universities with the prior approval of Head of the Department and Head of the Institution.
- If a student wishes to **avail exemption for online courses**, he/she can do so by exercising his/her option in writing to the respective HoD the beginning of the semester subject to a **maximum of three credits**. Decision on exemption of courses (PSE/OE) will be taken by the committee constituted by the Chairman, Academic Council by following the equivalence norm (contact hours, credits & Grade). Grades earned by the students for the online courses which are not claimed for exemption, will not be included in the computation of CGPA.

*(Handwritten Signature)*

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Approved in 5<sup>th</sup> Academic Council Meeting, 16.06.2017

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5.11 **One-Credit Courses:**

- Students can opt for one credit courses from 3<sup>rd</sup> semester onwards as and when offered by different departments of 15 hours duration. These courses will be offered & assessed by experts from industry/ other institutions on specialized topics. Students will be permitted to register for the one credit courses offered by other departments also with the recommendation of DCAA & approval of the committee constituted by the Chairman Academic council provided the student has fulfilled the necessary pre-requisites of the course. There is no limit on the number of one credit courses a student can register.
- If a student wishes to **avail exemption of elective subjects** in the 7<sup>th</sup> or 8<sup>th</sup> semesters, he/she can do so by exercising his/her option in writing to the respective Head of the Department during the beginning of the semester by following the equivalence norm that one elective course in the 7<sup>th</sup> or 8<sup>th</sup> semester is equivalent to three one credit courses completed by the student. Decision on exemption of courses will be taken by the committee constituted by the Chairman, Academic Council. The grades earned by the students for the one-credit courses which are not claimed for exemption of an elective course, will not be included in the computation of CGPA.
- If a student who registers for one-credit courses does not successfully complete the course, the registration of that course will be considered as cancelled. Further, it will not be treated as arrear and no supplementary examination will be conducted; alternatively, if he/she wishes, he/she can re-register for the same course in the ensuing semesters and successfully complete it as and when it is offered subsequently.

5.12 **Embedded Course:**

An embedded course is a combination of theory, laboratory and project components as given below.

- Embedded Theory, Lab & Project course
- Embedded Theory & Lab course
- Embedded Theory & Project course (Project Based Learning course - PBL)
- Embedded Lab & Project course

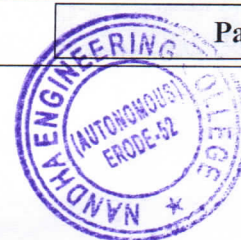
Students shall register for a minimum of one embedded course with project as a component during each semester starting from 3<sup>rd</sup> semester to 6<sup>th</sup> semester.

5.13 **Self-Study Courses:**

- A student can opt a course (maximum of two courses) under Self-Study mode (preferably from 7<sup>th</sup> semester), which may be either an Open Elective (OE) or a Programme Specific Elective (PSE) on specific approval of committee constituted by the Chairman Academic council provided the student has CGPA of 7.5 & above, with no standing arrears.
- The students shall study on their own under the guidance of a faculty member approved by the Head of the Department who will be responsible for the periodic monitoring and evaluation of the course.

  
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5.14 **Project Work:**

Every student shall be required to undertake a suitable project in industry / research organization / department in consultation with the Head of the Department and the faculty guide and submit the project report thereon at the end of the semester in which the student is registered, on dates announced by the College/Department. A student shall register for the final Project Work as specified in the curriculum (only after 7<sup>th</sup> semester of his/her studies).

5.15 For the **award of the degree**, a student has to earn certain minimum total number of credits specified in the curriculum of the relevant Programme.

5.16 **Medium of instruction:** The medium of instruction, examinations, project report etc. shall be in English.

**6 DURATION OF THE PROGRAMME**

6.1 **Minimum Duration:** The duration for the B.E. / B.Tech. degree programmes shall extend over a period of 4 years (8 semesters) for the students admitted in the first semester and 3 years ( 6 semesters) for the students admitted in third semester (Lateral Entry students). The four academic years will be divided into eight semesters with two semesters per year.

**Maximum Duration:** The student shall complete all the passing requirements of the B.E. / B.Tech. degree programme within a **maximum period of 7 years** (14 semesters) for the students admitted in the first semester and **6 years** (12 semesters) for the students admitted in third semester (Lateral Entry students).

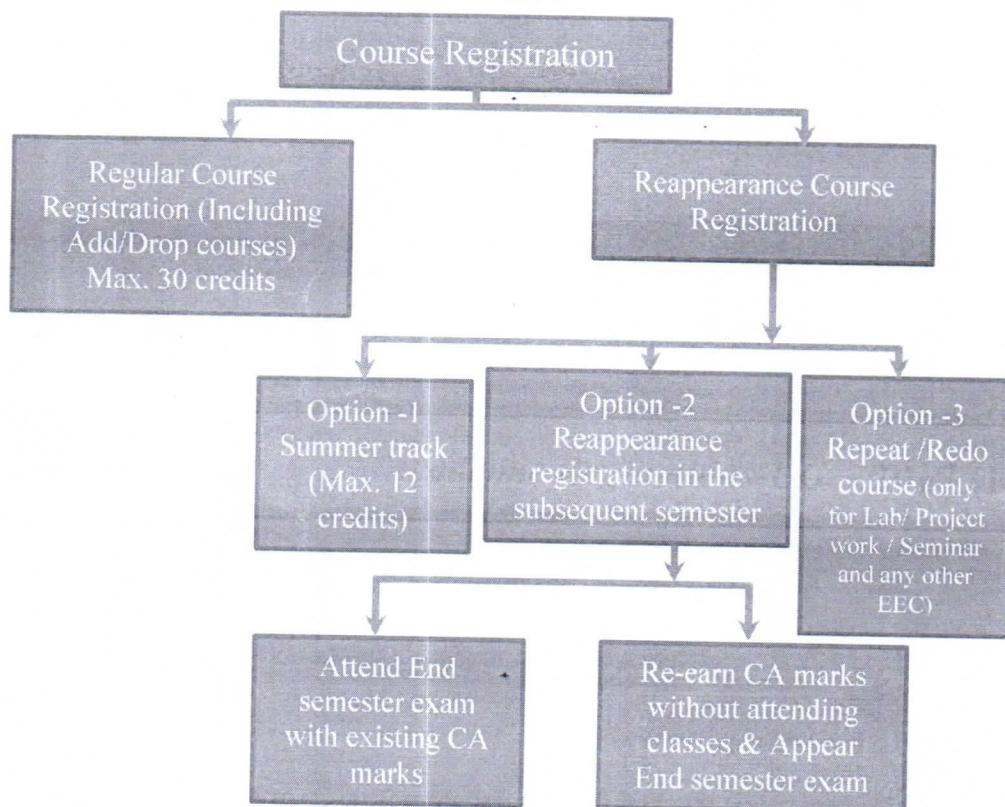
6.2 Each semester shall normally consist of 75 working days or 540 periods of 50 minutes each. The Head of the Institution shall ensure that every teacher imparts instruction as per the number of periods specified in the syllabus and that the teacher teaches the full content of the specified syllabus for the course being taught.

6.3 The total duration for completion of the programme reckoned from the commencement of the first semester to which the student was admitted shall not exceed the maximum duration specified in clause 6.1 irrespective of the period of break of study (vide clause-14) or prevention (vide clause-8.4) in order that the student may be eligible for the award of the degree (vide clause-17).

**7 COURSE REGISTRATION**

7.1 It is mandatory for all students to register every semester till the end of his/her study, for courses that he/she is going to study in the semester through a Course Registration Processes. The list of courses offered under each programme will be announced prior to the registration by the respective Heads of department. Depending on the academic and non-academic resources available, courses offered may vary. Students will get a chance to make their own plan of study by changing the pace with which they study depending on the number of courses for which they register. A typical structure for course registration is given below.





**7.2 COURSE REGISTRATION FOR ODD AND EVEN SEMESTER**

- The enrollment for all the courses of the succeeding semester will commence 10 working days prior to the last working day of current Semester. However, the student shall confirm the enrollment by registering for the courses within the first five working days after the commencement of the concerned semester and complete the registration process duly authorized by the Head of the Department. The registration details of the candidates may be approved by the Head of the Institution and forwarded to the Controller of Examinations. The student is allowed to register for courses for which the student has not enrolled, if the courses fall under reappearance category.
- After registering for a course, a student shall attend the classes, satisfy the attendance requirements as per clause-8.1, earn Continuous Assessment marks and appear for the End Semester Examinations.
- A department shall offer a course only if a minimum number of students register for that course. This minimum number may vary from course to course and shall be specified by the department from time to time.

7.3 Each student, on admission shall be assigned to a Proctor (vide clause-21) who shall advice and counsel the student about the details of the academic programme, choice of courses and course registration considering the student’s academic background and career objectives.

**7.4 FLEXIBILITY TO ADD OR DROP COURSES**

7.4.1 A Student has to earn the total credits specified in the curriculum of the respective Programme of study, in order to be eligible to obtain the degree.

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However, if the student wishes, then he/she is permitted to earn more than the total number of credits prescribed in the curriculum.

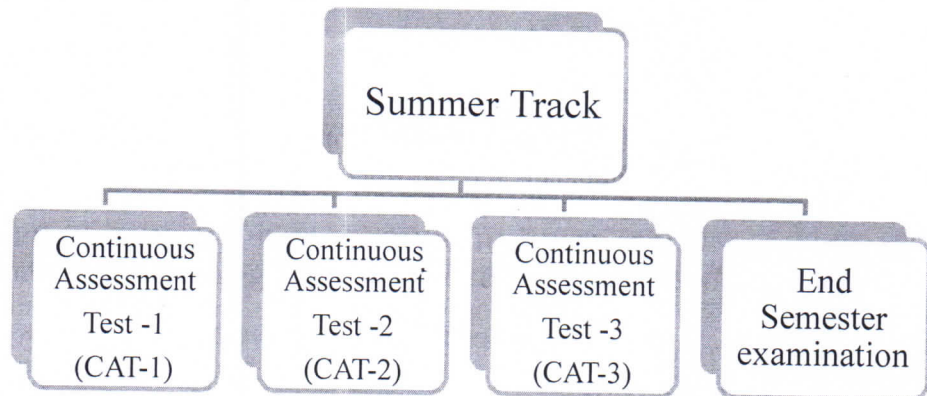
7.4.2 Student has the option of registering for additional courses or dropping existing courses from III to VIII semesters. Total number of credits of such courses cannot exceed 6. However the maximum number of credits the student can register in a particular semester shall be 30 credits.

**7.5 REAPPEARANCE, REPEAT (or) REDO REGISTRATION**

If a student obtained RA grade in the End semester examination, then he/she has following options.

- ✓ Option -1 Summer track (Max. 12 credits)
- ✓ Option -2 Reappearance registration in the subsequent semester
- ✓ Option -3 Repeat /Redo course (only for Lab/ Project work / Seminar and any other EEC)

7.5.1 **Summer Track:** A summer track is conducted between the even and odd semesters during the summer period for about 28 working days. The typical structure of the summer track is given below



The following students may take courses in the summer track

Optional (if he/she wants)

- Has arrears in the regular semester and opts to re-earn his/her continuous assessment marks (CAT)
- Arrear in the courses registered during previous reappearances in the end semester/summer track examinations.

Mandatory

Prevented to attend end semester examination due to lack of attendance (Clause 7.5.5).

The maximum number of credits a student can register for a summer track shall be 12.

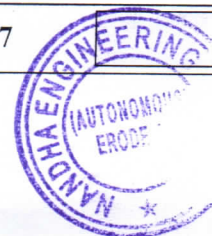
7.5.2 Reappearance registration in the subsequent semester for Theory course: If a student fails in a theory course,

- The student shall do **reappearance registration** for that course in the subsequent semester.
- He/she can attend end semester examination with the **existing Continuous Assessment** marks.

(OR)

- The student may **re-earn Continuous Assessment** marks without attending classes if he/she wishes and attend end semester examination.

*N. Rengasamy*



- 7.5.3 Repeat /Redo course for Lab/ Project work / Seminar and any other EEC:  
If a student fails in any Laboratory Course/ Project work / Seminar and any other EEC course, he/she has to register for the arrear course in the subsequent semester under repeat/redo mode. In this case, the student shall attend the classes, satisfy the attendance requirements (vide clause 8.1), earn Continuous Assessment marks and appear for the End Semester Examinations.
- 7.5.4 Programme Specific Elective (PSE) or Open Elective (OE): If a student fails in a PSE or OE theory course, the student may register for the same or any other professional elective or open elective course respectively in the subsequent semesters. RA grade will not appear in the mark sheet.
- 7.5.5 Lack of Attendance: If a student is prevented from writing end semester examination of a course due to lack of attendance, the student has to register for that course under summer track mode and fulfill the requirements as per clause 7.5.1. If the course, in which the student has lack of attendance, is a Programme specific Elective or an Open Elective, the student may register for the same or any other Programme Specific Elective or Open Elective course.
- 7.5.6 A student who has already appeared for a course in a semester and passed the examination is not entitled to re-appear the same course for improvement of Grade/Marks.

#### 8 REQUIREMENTS FOR APPEARING FOR THE END SEMESTER EXAMINATION OF A COURSE

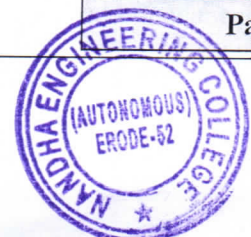
A student who has fulfilled the following conditions (vide clause 8.1 and 8.2) shall be deemed to have satisfied the attendance requirements for appearing for end semester examination of a particular course.

- 8.1 Ideally every student is expected to attend all periods and earn 100% attendance. However, the student shall secure not less than 75% attendance course wise taking into account the number of periods required for that course as specified in the curriculum.
- 8.2 If a student secures attendance between 65% and 74% in any course in the current semester due to medical reasons (hospitalization / accident / specific illness) or due to participation in the College / University / State / National / International level Sports events with prior permission from the Head of the Department concerned and Principal, the student shall be given exemption from the prescribed attendance requirement and the student shall be permitted to appear for the end semester examination of that course. In all such cases, the student should submit the required documents on joining after the absence to the Head of the Department through the Proctor.
- 8.3 A student shall normally be permitted to appear for End semester examination of the course if the student has satisfied the attendance requirements (vide Clause 8.1 & 8.2) and has registered for examination in those courses of that semester by paying the prescribed fee.
- 8.4 Students who do not satisfy clause 8.1 and 8.2 and who secure **less than 65%** attendance in a course will not be permitted to write the End-Semester Examination of that course. The student has to register and repeat this course under summer track mode vide clause 7.5.5.
- 8.5 In the case of reappearance registration for a course (vide Clause 7.5.2), the attendance requirement as mentioned in Clauses 8.1 & 8.2 is not applicable.

Approved in 5<sup>th</sup> Academic Council Meeting, 16.06.2017

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However, the student has to register for examination in that course by paying the prescribed fee.

- 8.6 A student who has already appeared for a course in a semester and passed the examination is not entitled to reappear in the same course for improvement of letter grades / marks.
- 8.7 The student academic progress, character and conduct have to be satisfactory.

**9 ASSESSMENT SCHEME FOR COURSES**

The system of assessment is semester pattern. The End Semester examination for theory and practical courses shall be conducted for duration of three hours.

- 9.1 Total marks for each course (Theory, Practical, Embedded course & Project work) will be 100, comprising of two components namely,
- Continuous Assessment (CA) throughout the semester
  - End Semester Examination

However, there are some courses like one credit courses (offered by industries), Mini projects, Human Excellence, etc., have only continuous assessment for 100 marks without an end semester examination. The Department Committee for Academic Affairs (DCAA) shall recommend such courses every semester with assessment pattern to SCAA for approval. The scheme of assessment shall be made available to the students during the course registration.

- 9.2 Each course shall be evaluated for a maximum of 100 marks as illustrated below.

S. No.	Category of Course	Continuous Assessment (CA) marks	End semester Exam.(ES) marks	Total Marks
a	Theory Courses	40	60	100
b	Embedded Courses	45	55	100
c	Laboratory Courses/ Project work	50	50	100
d	Employability Enhancement Courses (EEC), One credit Courses, Mini Project, Human Excellence courses, etc.	100	-	100

- 9.2.1 For all the practical courses, students shall obtain bonafide certificate for the Record completed from the Faculty in-charges and Head of the Department on or before the day of the practical examination. Students who have not obtained the bonafide certificate are not permitted to appear for the examination.

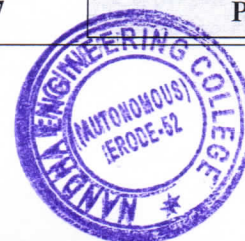
- 9.2.2 Project work may be allotted to a single student or to a group of students not exceeding 4 per group.

- 9.3 For the end semester examinations in both theory and practical courses including project work the internal and external examiners shall be appointed by the Principal.

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**10 PROCEDURE FOR ASSESSMENT & AWARDING MARKS**

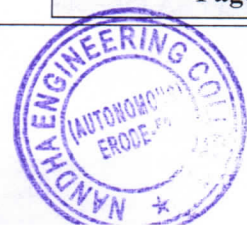
10.1 The assessment shall be done as per the procedure laid down below:

Theory Course			Practical Course		
Continuous Assessment	40 Marks		Continuous Assessment	50 Marks	
End Semester Examination	60 Marks		End Semester Examination	50 Marks	
Total	100 Marks			100 Marks	
<b>Continuous Assessment Scheme for Theory Course (40%)</b>			<b>Continuous Assessment Scheme for Practical Course (50%)</b>		
Component	Marks		Components	Marks	
<ul style="list-style-type: none"> <li>• Three CAT exams. (Duration 1 hour, 30 minutes &amp; Best two will be considered)</li> </ul>	Written test: 2 x 15	30	(a) Experiments: <ul style="list-style-type: none"> <li>• Preparation - 10</li> <li>• Conduct of Experiments - 30</li> <li>• Observation &amp; Results -30</li> <li>• Record -10</li> <li>• Viva voce -20</li> </ul>	100*	
Online: 3 tests (Best two)	2 x 2.5	5	(b) CAT for Lab: 2 (exams.) x 50 (marks)	100**	
Assignments/Tutorials/Quiz/ - 2	2 x 2.5	5	Add (a) + (b) and reduce the total marks to 50 marks.		
Continuous Assessment Marks	-	40	Continuous Assessment Marks	50	
<b>End Semester Examination Scheme for Theory Course (60%)</b>			<b>End Semester Examination Scheme for Practical Course (50%)</b>		
Examination duration : 3 hours Max. marks : 100 → Reduced to 60 marks			Examination duration : 3 hours Max. marks : 100 → Reduced to 50 marks		

**Embedded Course**

Every component of an embedded course will be assessed individually. 50 % weightage will be given to each component.

(a) Components of Embedded Course: Theory + Project			
Theory (50%)		Project (50%)	
40 % weightage for CA 20 marks	60 % weightage for End semester examination 30 marks	50 % weightage for CA – 25 marks	50 % weightage for End semester exam – 25 marks
<ul style="list-style-type: none"> <li>• Two CAT exams. , Duration 1 hour, 30 minutes (Best one will be considered) 1 x 15 = 15 marks</li> <li>• Assignment (one no.): 1 x 5 = 5 marks</li> </ul>	End semester Examinations will be conducted for 100 marks & reduced to 30 marks	<ul style="list-style-type: none"> <li>• Review-1 :10 marks</li> <li>• Review-2 :10 marks</li> <li>• Report : 5 marks</li> </ul>	End semester Examinations will be conducted for 100 marks & reduced to 25 marks
Passing Requirement: Secure not less than 50% of total marks (including continuous assessment and end semester examination) subject to minimum of 45% of marks prescribed for the end semester examination (Clause 11.5).		Passing Requirement: Secure not less than 50% of total marks (including continuous assessment and end semester examination) subject to minimum of 45% of marks prescribed for the end semester examination (Clause 11.5).	





(b) Components of Embedded Course: Theory + Laboratory			
Theory (50%)		Laboratory (50%)	
40 % weightage for CA (20 marks)	60 % weightage for End semester exam (30 marks)	50 % weightage for CA (25 marks)	50 % weightage for End semester exam (25 marks)
<ul style="list-style-type: none"> <li>• Two CAT exams. , Duration 1 hour, 30 minutes (Best one will be considered) 1 x 15 = 15 marks</li> <li>• Assignment (one no.): 1 x 5 = 5 marks</li> </ul>	End semester Examinations will be conducted for 100 marks & reduced to 30 marks	Similar to lab course	End semester Examinations will be conducted for 100 marks & reduced to 25 marks
Passing Requirement: Secure not less than 50% of total marks (including continuous assessment and end semester examination) subject to minimum of 45% of marks prescribed for the end semester examination in the theory component (Clause 11.5).		Passing Requirement: Secure not less than 50% of total marks (including continuous assessment and end semester examination) subject to minimum of 45% of marks prescribed for the end semester examination (Clause 11.5).	
A student shall be deemed to have passed in Embedded course if he/she satisfies the passing requirements of individual components of the course. If a student fails in any one of the components in Embedded course, he/she shall do reappearance registration for the failed component of the course alone. RA will appear till he/she satisfies the passing requirement of both components of Embedded course.			
<b>Assessment Scheme for Non-Credit courses</b>			
Comments like <u>Very Good, Good &amp; Satisfactory</u> will be given as qualitative measure of achievement.			

Project Work (Marks: 100)					
[Mini project/Design project/project phase-1/phase-2]					
Project work will be evaluated by continuous assessment and end semester assessment					
Continuous Assessment - 50 Marks				End Semester Assessment - 50 Marks	
	Guide	Committee	Total	Internal Examiner	40
0 <sup>th</sup> Review	10	10	20	External Examiner	40
1 <sup>st</sup> Review	20	20	40	Report	20
2 <sup>nd</sup> Review	20	20	40	Total	100
			100		

The Head of the Department shall constitute a review committee consists of Head of the Department, Guide and a senior faculty member. There shall be three reviews during the semester by the review committee. The students shall make presentation on the progress made before the committee.

**10.2 ASSESSMENT FOR SEMINAR / CASE STUDY:**

The seminar / Case study shall carry 100 marks and shall be evaluated through continuous assessment only. Every student is expected to present a minimum of 2 seminars per semester before the evaluation committee and for each seminar; marks can be equally apportioned (if seminar/case study is specified in the curriculum). The three member committee appointed by Head of the Department will evaluate the seminar and at the end of the semester the marks can be

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consolidated and taken as the final mark. The evaluation shall be based on the seminar paper / report (40%), presentation (40%) and response to the questions asked during presentation (20%).

**10.3 ASSESSMENT FOR INDUSTRIAL TRAINING / INTERNSHIP**

The Industrial Training/ Internship shall carry 100 marks and shall be evaluated through continuous assessment only. At the end of Industrial training / Internship, the student shall submit a brief report on the training undergone and a certificate from the organization concerned. The evaluation will be made based on this report and a Viva-Voce Examination, conducted internally by a three member Departmental Committee constituted by the Head of the Department. Certificates (issued by the Organization) submitted by the student shall be attached to the mark list and sent to Controller of Examinations by the Head of the Department.

**10.4 ASSESSMENT FOR ONE CREDIT COURSE**

The one credit course shall carry 100 marks and shall be evaluated at the end of the course by the course handling faculty (Industry/Institutional). The list of students along with the marks and the grades earned may be forwarded to the Controller of Examinations. The Head of the Department may identify a faculty member as coordinator for the course to monitor the conduct and evaluation process of the course.

**10.5 ASSESSMENT FOR ONLINE COURSE**

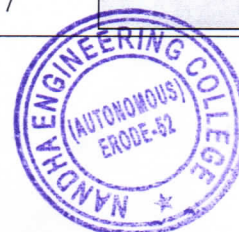
Students may be permitted to register for online courses (which are provided with certificate) with the recommendations of DCAA & approval of a committee constituted by the Principal subject to a maximum of three credits. Online course of 3 credits can be considered instead of one elective course. After successful completion of online courses, students have to register for end semester examinations with the recommendations of DCAA and the same shall be evaluated through End Semester Examination only.

**10.6 ASSESSMENT FOR SELF STUDY COURSE**

The Faculty member approved by the Head of the Department shall be responsible for periodic monitoring and evaluation of the course. The assessment shall be through Continuous Assessment and End Semester Examination as like a theory course.

**10.7 Question Paper Patterns**

<b>Continuous Assessment Test (CAT)</b>					
Question Paper Patterns	Part-A	Part-B	Part - C	Part - D	Total marks
I	5 x 1 = 5	5 x 2 = 10	1 x 7 = 7	2 x 14 = 28 (2 out of 4)	50
II	1 x 10 = 10	2 x 20 = 40 (2 out of 4)	-	-	50
III	5 x 2 = 10	4 x 4 = 16 (4 out of 6)	2 x 12 = 24 (2 out of 4)	-	50
IV	5 x 2 = 10	3 x 8 = 24 (3 out of 5)	1 x 16 = 16 (1 out of 2)	-	50





<b>End Semester Examination</b>					
Question Paper Patterns	Part-A	Part-B	Part - C	Part - D	Total marks
I	10 x 1 = 10	10 x 2 = 20	1 x 14 = 14*	4 x 14 = 56 (4 out of 8)	100
II	1 x 20 = 20*	4 x 20 = 80 (4 out of 8)	-	-	100
III	10 x 2 = 20	5 x 4 = 20 (5 out of 8)	5 x 12 = 60 (5 out of 8)	-	100
IV	10 x 2 = 20	4 x 8 = 32 (4 out of 6)	3 x 16 = 48 (3 out of 5)	-	100

NB: \* Compulsory question

Question paper pattern may be revised time to time as per the recommendations of SCAA and approval of BoS & Academic council.

### 11 PASSING REQUIREMENTS FOR A COURSE

- 11.1 A student who secures not less than 50% of total marks (including continuous assessment and end semester examination) prescribed for the course with a minimum of 45% of the marks prescribed for the end semester examination in both theory and practical courses (including project work), shall be declared to have passed the examination.
- 11.2 If a student fails to secure a pass in a theory course (except electives), the student shall do reappearance registration for that course in the subsequent semester (Clause 7.5).
- 11.3 If the course, in which the student has failed, is a professional elective or an open elective, the student may be permitted to register for the same or any other professional elective or open elective course in the subsequent semesters, attend the classes and fulfill the attendance requirements.
- 11.4 If a student fails to secure a pass in a laboratory course/ project work/EEC, the student shall register for the course again, when offered next and redo the course (Clause 7.5).
- 11.5 A student is declared to have successfully passed an embedded course if he/she has secured

**Theory:**

- A minimum of 45% marks in the End Semester examination of the theory component
- A minimum of 50% marks on combining both CA marks and End Semester exam marks of the theory component.

**Laboratory/Project:**

- A minimum of 45% marks in the end semester examination for laboratory/project component.
- A minimum of 50% marks on combining both CA marks and end semester exam marks of the laboratory/project component.

A student shall be deemed to have passed in Embedded course if he/she satisfies the passing requirements of individual components of the course.

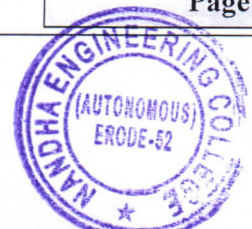
### 12 REVALUATION OF ANSWER SCRIPTS

- 12.1 A student shall apply for revaluation (in a prescribed format) of his / her semester examination answer script in a theory course within 2 weeks from the declaration of results, on payment of a prescribed fee through proper application to the Controller of Examinations. The Controller of Examinations shall arrange for the





- reevaluation and the results shall be intimated to the candidate concerned. Reevaluation is not permitted for practical courses and project work.
- 12.2 A student can apply for the Photocopy of his/her end semester examination answer script on payment of the prescribed fee through proper application to the Controller of Examinations after the end semester/reevaluation results are announced to get himself / herself convinced of the valuation/reevaluation.
- 12.3 **Review :** Candidates not satisfied with Reevaluation can apply for Review of his/her examination answer paper in a theory course, within the prescribed date on payment of a prescribed fee through proper application to Controller of Examination through the Head of the Institution. Candidates applying for Reevaluation only are eligible to apply for Review.
- 13 **PROVISION FOR WITHDRAWAL FROM END SEMESTER EXAMINATION**
- 13.1 A student may, for valid reasons, (medically unfit / unexpected family situations / sports approved by HoD and Principal) be granted permission to withdraw from appearing for the end semester examination in any course or courses in ANY ONE of the semester examinations during the entire duration of the degree programme. The application shall be sent to Dean (Academics) through HoD with required documents.
- 13.2 Withdrawal application shall be valid only if the student is otherwise eligible to write the examination (Clause 8) and if it is made within TEN working days before the commencement of the end semester examination in that course or courses and also recommended by the Head of the Department.
- 13.3 Notwithstanding the requirement of mandatory TEN working days' notice, applications for withdrawal for special cases under extraordinary conditions will be considered on the merit of the case.
- 13.4 Withdrawal shall not be considered as an appearance for deciding the eligibility of a student for First Class with Distinction.
- 14 **BREAK OF STUDY FROM A PROGRAMME**
- 14.1 A student is permitted to go on break of study for a maximum period of one year either as two breaks of one semester each or a single break of one year.
- 14.2 The application for break of study (prescribed format) shall be duly filled by the student and submitted through the Head of the Department to the Dean (Academics) in advance, in any case, not later than the last date of the first assessment period. In the case of short term employment/ training/ internship, the application for break of study shall be approved and forwarded by the HoD to the Dean (Academics).
- 14.3 The students permitted to rejoin the programme after break of study / prevention due to lack of attendance, shall be governed by the Curriculum and Regulations in force at the time of rejoining. The students rejoining in new Regulations shall apply to the Dean (Academics) in the prescribed format through Head of the Department at the beginning of the readmitted semester itself for prescribing additional/equivalent courses, if any, from any semester of the regulations in-force, so as to bridge the curriculum in-force and the old curriculum.
- 14.4 The total period for completion of the programme reckoned from, the commencement of the first semester to which the student was admitted shall not exceed the maximum period specified in clause 6.1 irrespective of the period of break of study in order that the student may be eligible for the award of the degree (vide clause-17).
- 14.5 In case there is any period of break of study more than the permitted duration of break of study, the student shall be permitted to continue the programme only if





the approval is obtained from the Dean (Academics) through the concerned HOD before the end of the semester in which the student has taken break of study.

- 14.6 If a student has not reported to the department for a period of two consecutive semesters without any intimation, the name of the student shall be deleted permanently from the college enrollment. Such students are not entitled to seek readmission under any circumstances.

**15 PROCEDURE FOR RE-JOINING THE PROGRAMME**

- 15.1 A student who desires to rejoin the programme after a period of discontinuance or who upon his/her own request is permitted by the authorities to repeat the study of any semester, may join the semester which he/she is eligible or permitted to join, only at the time of its normal commencement for a regular batch of students and after obtaining the approval from the Commissioner of Technical Education and the University.

15.2 Rejoining/ Readmission under different regulations:

- a) A student, who initially joins the college in previous Regulation and has to rejoin in an academic term of the present Regulation due to any reason, shall be bound by the rules of the current Regulation.
- b) After readmission, the student is required to study the courses prescribed in the new Regulation.
- c) If the student has already passed any course in the earlier Regulation/semesters of study, such courses are exempted. He/she has to undergo additional subjects to earn minimum required credit for the award of degree as per the recommendations of the committee.
- d) In case, the students who do not have option of acquiring required credits with the existing courses offered as per the curriculum under autonomy, credit balance can be achieved by clearing the additional courses offered. The additional courses that are offered can be of theory or laboratory courses and shall be offered during semester or summer break.

15.3 Transfer from other colleges (from Autonomous College/Anna University/other University):

- a) Students seeking transfer from Affiliated Colleges/Autonomous Institutions/University are required to follow the prevailing guidelines of Directorate of Technical Education (DOTE) and Anna University, Chennai.
- b) A committee comprising Dean (Academics) and Head of the Department of the concerned discipline shall decide the courses and credits balance between old and new regulations on case to case basis for the students rejoined under different Regulations or transfer. The committee will specify additional or equivalent academic course work to be undertaken by such students who rejoin the current Regulations subject to approval of respective BoS and Director (Academic Courses), Anna University, Chennai.

- 15.4 Procedure for Rejoining / Readmission / Transfer is subjected to change as per University guidelines.

**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 absolute marks basis. 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:

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Approved in 5<sup>th</sup> Academic Council Meeting, 16.06.2017

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Letter Grade	Grade Points	Range of Percentage of Total Marks
O (Outstanding)	10	90 to 100
A + (Excellent)	9	80 to 89
A (Very Good)	8	70 to 79
B + (Good)	7	60 to 69
B (Above average)	6	50 to 59
RA (Reappearance Registration)	0	0 to 49
SA (Shortage of Attendance)	0	-
W (Withdrawal)	0	-

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

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,
- $GP_i$  - 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. "RA" and "SA" grades will be excluded for calculating GPA and CGPA.

16.3.1 The credits earned through one credit courses shall not be considered for calculating GPA and CGPA.

16.3.2 If a student studies more number of electives (PSE/OE) than required as per the student's programme curriculum, the courses with higher grades alone will be considered for calculation of CGPA.

**17 ELIGIBILITY FOR THE AWARD OF DEGREE**

A student shall be declared to be eligible for the award of the degree if he/she has satisfied the following:

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Approved in 5<sup>th</sup> Academic Council Meeting, 16.06.2017





- Successfully gained the required number of total credits as specified in the curriculum corresponding to the student's programme within the stipulated time.
- Successfully completed the course requirements, appeared for the End-Semester examinations and passed all the subjects prescribed in all the 8 semesters within a maximum period of 7 years reckoned from the commencement of the first semester of the programme and 6 years for the lateral entry students from the date of admission to the third semester of the programme.
- Successfully passed any additional courses prescribed by the college whenever readmitted under regulations other than R17.
- Successfully completed the PCD courses like NSS / NSO / YRC/RSP.
- No disciplinary action pending against the student.

## 18 CLASSIFICATION OF THE DEGREE AWARDED

### 18.1 FIRST CLASS WITH DISTINCTION:

A student who satisfies the following conditions shall be declared to have passed the examination in First class with Distinction:

- ✓ Should have passed the examination in all the courses of all the eight semesters (6 semesters in the case of Lateral Entry) in the student's First Appearance within **five years** (**four years** in the case of Lateral Entry).
- ✓ Withdrawal from examination (vide Clause 13) will not be considered as an appearance.
- ✓ Should have secured a CGPA of not less than 8.50
- ✓ One year authorized break of study (if availed of) is included in the five years (four years in the case of lateral entry) for award of First Class with Distinction.
- ✓ Should NOT have been prevented from writing end semester examination due to lack of attendance in any semester.

### 18.2 FIRST CLASS:

A student who satisfies the following conditions shall be declared to have passed the examination in First class:

- ✓ Should have passed the examination in all the courses of all eight semesters within **Six years** (all six semesters within **five years** in case of lateral entry).
- ✓ One year authorized break of study (if availed of) or prevention from writing the End Semester examination due to lack of attendance (if applicable) is included in the duration of **six years** (**five years** in the case of lateral entry) for award of First Class.
- ✓ Should have secured a CGPA of not less than 7.00

### 18.3 SECOND CLASS :

All other students (not covered in clauses 18.1 and 18.2) who qualify for the award of the degree shall be declared to have passed the examination in Second Class.

A candidate who is absent in end semester examination in a course / project work after having registered for the same shall be considered to have appeared in that examination for the purpose of classification (subject to clause 13 and 14)

### 18.4 RANK:

- A student shall be eligible for award of ranking only if he/she has passed the examination in first class with distinction or first class in having passed all the courses in first attempt. Those who have availed the provision of break of study / withdrawal will not be eligible for rank.
- The rank is determined based on the total marks secured from III Semester to VIII Semester.





- Ranks shall be awarded in each branch of study for the top two students out of total number of students appeared for the Regular Examinations.

**19 DISCIPLINE**

- Every student is expected to follow the rules and regulations laid down by the Institute and the affiliating University, as published from time to time.
- Every student is required to observe disciplined and decorous behavior both inside and outside the college and not to indulge in any activity which will tend to bring down the prestige of the college. The Head of the Institution shall constitute a disciplinary committee to enquire into acts of indiscipline and notify the punishment. In case of any serious disciplinary action which leads to suspension or dismissal, then a special committee shall be constituted by the Head of the Institution for taking the final decision.
- If a student indulges in malpractice in any of the examinations, he / she shall be liable for punitive action as prescribed by the Institution / University from time to time

**20 CHANGE OF BRANCH:**

There shall be no branch transfers after the completion of admission process.

**21 PROCTOR SCHEME**

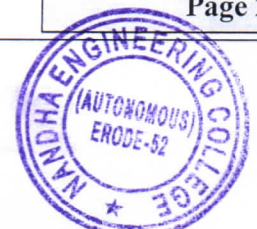
To enable the students in planning their courses of study and for general advice on the academic programme, the Head of the Department of the students will attach a certain number of students (15 to 20) to a faculty member of the Department who shall function as Proctor for those students throughout their period of study. Such Proctors shall advise the students and monitor the courses undergone by the students, check the attendance and progress of the students attached to him/her and counsel them periodically. If necessary, the Proctor may also discuss with or inform the parents about the progress of the students.

**22 CLASS COMMITTEE**

22.1 Every class shall have a class committee consisting of teachers of the class concerned, student representatives and a chairperson who is not teaching the class. It is like the "Quality Circle" (more commonly used in industries) with the overall goal of improving the teaching-learning process. The functions of the class committee include

- Solving problems experienced by students in the class room and in the laboratories.
- Clarifying the regulations of the degree programme and the details of rules therein particularly clause 5 and 6 which should be displayed on college Notice-Board.
- Informing the student representatives the academic schedule including the dates of assessments and the syllabus coverage for each assessment.
- Informing the student representatives the details of Regulations regarding weightage used for each assessment. In the case of practical courses (laboratory / drawing /project work / seminar etc.) the breakup of marks for each experiment / exercise /module of work, should be clearly discussed in the class committee meeting and informed to the students.
- Analyzing the performance of the students of the class after each test and finding the ways and means of solving problems, if any.
- Identifying the weak students, if any, and requesting the teachers concerned to provide some additional help or guidance or coaching to such weak students.

22.2 The class committee for a class under a particular branch is normally constituted by the head of the department. However, if the students of different branches are





- mixed in a class (like the first semester which is generally common to all branches), the class committee is to be constituted by the Principal.
- 22.3 The class committee shall be constituted within the first week of each semester.
- 22.4 At least four student representatives (usually 2 boys and 2 girls) shall be included in the class committee.
- 22.5 The chairperson of the class committee may invite the Faculty adviser(s) and the Head of the department to the meeting of the class committee.
- 22.6 The Principal may participate in any class committee of the institution.
- 22.7 The chairperson is required to prepare the minutes of every meeting, submit the same to Principal within two days of the meeting and arrange to circulate it among the students and teachers concerned. If there are some points in the minutes requiring action by the management, the same shall be brought to the notice of the Management by the Head of the Institution.
- 22.8 The first meeting of the class committee shall be held within one week from the date of commencement of the semester, in order to inform the students about the nature and weightage of assessments within the framework of the Regulations. Two or three subsequent meetings may be held in a semester at suitable intervals. The Class Committee Chairman shall put on the Notice Board the cumulative attendance particulars of each student at the end of every such meeting to enable the students to know their attendance details to satisfy the clause 8 of this Regulation. During these meetings the student members representing the entire class, shall meaningfully interact and express the opinions and suggestions of the other students of the class in order to improve the effectiveness of the teaching-learning process.

### 23 COURSE COMMITTEE

COMMON COURSE COMMITTEE - A theory course handled by more than one faculty member shall have a "Common Course Committee" comprising of all teachers teaching that course and some students who have registered for that course. There shall be two student representatives from each batch of that course. One of the teachers shall be nominated as Course Coordinator.

MULTIPLE COURSES COMMITTEE - If a programme has in a semester, course(s) handled by a single teacher, there will be have a "Multiple Courses Committee" comprising of all the above teachers and two student representatives from each course. One of the above teachers, nominated by the Head of the Department shall coordinate the activities of this committee. The functions of this committee is similar to that of the common course committee.

The "Course committees" shall meet in order to arrive at a common scheme of evaluation for the test and shall ensure a uniform evaluation of the tests. Wherever feasible, the course committee may also prepare a common question paper for the continuous assessment test(s).

### 24 REVISION OF REGULATIONS, CURRICULUM AND SYLLABI

- 24.1 The standing committee/Academic Council of the College reserves the right to revise or change or amend the regulations, the scheme of examinations, the curriculum and the syllabi from time to time if found necessary.
- 24.2 SPECIAL CASES: In the event of any clarification in the interpretation of the above rules and regulations, they shall be referred to the Standing Committee. The Standing Committee will offer suitable interpretations/ clarifications /amendments required for special case on such references and get them ratified in the next meeting of the Academic Council. The decision of the Academic Council is final.

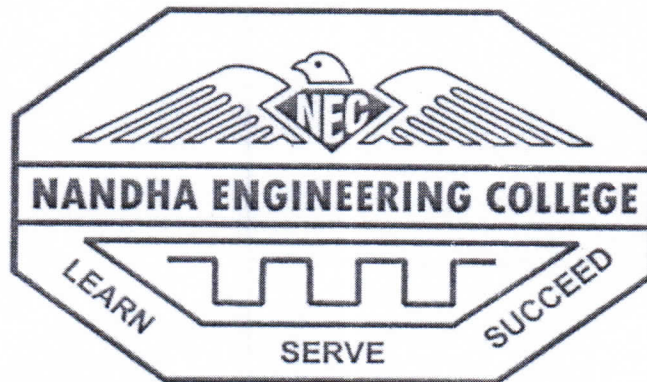
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# NANDHA ENGINEERING COLLEGE

(AUTONOMOUS)

(Affiliated to Anna University, Chennai and approved by AICTE New Delhi with NBA & NAAC accreditation)

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## Amendments in RULES AND REGULATIONS – 2017 [R17] CBCS for UG Programmes

(Applicable to the Students admitted to B.E. / B.Tech. Programme from the academic year 2017-2018 onwards)

Approved by 6<sup>th</sup> Governing Council\_10.08.2018

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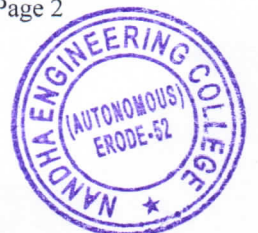
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**AMENDMENTS IN RULES AND REGULATIONS [R17] CBCS**  
**FOR B.E./ B.TECH. DEGREE PROGRAMME**

Existing			Revised			
			<b>New Clause:</b> <u>Provision for supplementary examinations</u> In case, a student fails to clear the courses in the end semester examinations after the announcement of end semester results, the student shall be allowed to take up supplementary examinations for specific courses based on the results and recommendations of the result passing board.			
Clause 10.0 Procedures for Assessment and Awarding Marks			<b>Additional guidelines in Clause 10.1:</b> <u>Resubmission of project:</u> 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 the 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 remains 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 9.2, S. No. b Evaluation scheme for Embedded course						
Continuous assessment (CA) marks	End semester exam, (ES) marks	Total marks	Continuous assessment (CA) marks	End semester exam, (ES) marks	Total marks	
45	55	100	40	60	100	
Clause 10.1 (b) Embedded course (Theory and Laboratory) Refer Regulations R17 page 13						
			Continuous Assessment - 40 Marks		End semester exam. - 60 Marks	
			Theory – 15 Marks	Lab. – 25 Marks	60 Marks (Only for Theory component)	
			CAT – 3 Nos. Marks obtained in the best two CAT will be converted into 15 Marks	All experiment + record		5 Marks
				Final exam.		20 Marks
			Passing requirement: A student who secures not less than 50% of total marks (including continuous assessment and end semester examination) prescribed for the course with a minimum of 45% of the marks prescribed for the end semester examination shall be declared to have passed the examination.			

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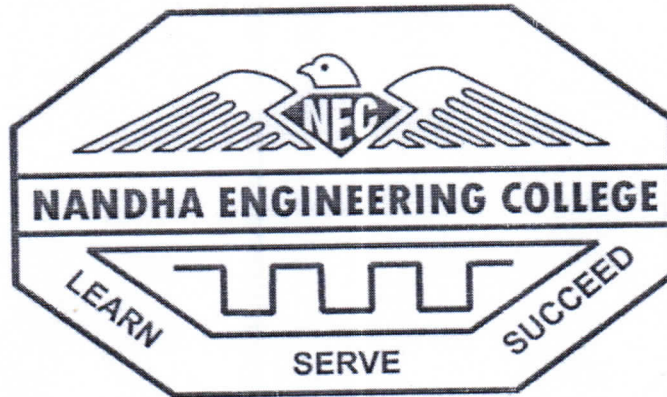


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(AUTONOMOUS)

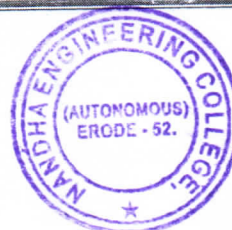
(Affiliated to Anna University, Chennai and approved by AICTE New Delhi with NBA & NAAC accreditation)

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



## Amendments [2] in RULES AND REGULATIONS – 2017 [R17] for UG Programmes

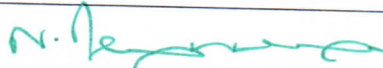
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**AMENDMENTS IN RULES AND REGULATIONS [Amendments-2 R17]  
FOR B.E./ B.TECH. DEGREE PROGRAMME**

Existing	Revised
<p><b>Clause 4.0 Programme of Study:</b> <b>B.E., Degree</b> Agriculture Engineering (AG) Civil Engineering (CE) Computer Science and Engineering (CS) Electronics and Communication Engineering (EC) Electrical and Electrical Engineering (EE) Electronics and Instrumentation Engineering (EI) Mechanical Engineering (ME)</p> <p><b>B.Tech. Degree</b> Chemical Engineering (CH) Information Technology (IT)</p>	<p><b>Clause 4.0 Programme of Study:</b> <b>B.E., Degree</b> Agriculture Engineering (AG) <u>Biomedical Engineering (BM)</u> Civil Engineering (CE) Computer Science and Engineering (CS) Electronics and Communication Engineering (EC) Electrical and Electrical Engineering (EE) Electronics and Instrumentation Engineering (EI) Mechanical Engineering (ME)</p> <p><b>B.Tech. Degree</b> Chemical Engineering (CH) Information Technology (IT)</p>
<p><b>Clause 5.10 Online Courses:</b></p> <ul style="list-style-type: none"> <li>• Students will be permitted to register for the online courses (which are provided with certificate) offered by SWAYAM/reputed institutions like IITs, NITs and other Universities with prior approval of Head of the Department and Head of the Institution.</li> <li>• If a student wishes to avail exemption for online courses, he/she can do so by exercising his/her option in writing to the respective HoD the beginning of the semester subject to a maximum of three credits. Decision on exemption of courses (PSE/OE) will be taken by the committee constituted by the Chairman, Academic council by following the equivalence norm (contact hours, credits &amp; Grade). Grades earned by the students for the online courses which are not claimed for exemption, will not be included in the computation of GCPA.</li> </ul>	<p><b>Clause 5.10 Online Courses:</b></p> <ul style="list-style-type: none"> <li>• With the prior approval of Head of the Department and Principal, Students will be permitted to register for the online courses (which are provided with certificate) offered by SWAYAM/NPTEL/reputed institutions like IITs, NITs, other leading Universities, <u>Professional Bodies/Societies &amp; other online courses recommended by BoS</u> time to time.</li> <li>• <u>Students may be permitted to earn credits up to 40% of total courses offered in a program in a semester through online as per UGC guidelines.</u></li> <li>• <u>This online course of 3 credits can be considered instead of one elective course (PSE/OE).</u></li> <li>• If a student wishes to avail exemption of courses (PSE/OE) for the credits earned through online courses, he/she can do so by exercising his/her option in writing to the respective HoD. Decision on exemption of courses (PSE/OE) will be taken after considering equivalence norm (course content, contact hours, credits &amp; Grade) and recommendations of DCAA and approval of Principal. Grades earned by the students for the online courses which are not claimed for exemption, will not be included in the computation of GCPA.</li> </ul>

  
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**Clause 5.11 One-Credit Courses:**

- Students can opt for one credit courses from 3<sup>rd</sup> semester onwards as and when offered by different departments of 15 hours duration. These courses will be offered & assessed by experts from industry/ other institutions on specialized topics. Students will be permitted to register for the one credit courses offered by other departments also with the recommendation of DCAA & approval of the committee constituted by the Chairman Academic council provided the student has fulfilled the necessary pre-requisites of the course. There is no limit on the number of one credit courses a student can register.
- If a student wishes to avail exemption of elective subjects in the 7<sup>th</sup> or 8<sup>th</sup> semesters, he/she can do so by exercising his/her option in writing to the respective Head of the Department during the beginning of the semester by following the equivalence norm that one elective course in the 7<sup>th</sup> or 8<sup>th</sup> semester is equivalent to three one credit courses completed by the student. Decision on exemption of courses will be taken by the committee constituted by the Chairman, Academic Council. The grades earned by the students for the one-credit courses which are not claimed for exemption of an elective course, will not be included in the computation of CGPA.

- If a student who registers for one-credit courses does not successfully complete the course, the registration of that course will be considered as cancelled. Further, it will not be treated as arrear and no supplementary examination will be conducted; alternatively, if he/she wishes, he/she can re-register for the same course in the ensuing semesters and successfully complete it as and when it is offered subsequently.

**Clause 5.11 One-Credit Courses:**

- Students can opt for one credit courses from 3<sup>rd</sup> semester onwards as and when offered by different departments of 15 hours duration. These courses will be offered on specialized topics with the recommendations of HoD and prior approval of Principal. These courses shall be conducted and assessed by the experts from industry/ other institutions. Students will be permitted to register for the one credit courses offered by other departments also after fulfilling the necessary pre-requisites of the course. There is no limit on the number of one credit courses a student can register.

- If a student wishes to avail exemption of elective courses (PSE/OE) in the 7<sup>th</sup> or 8<sup>th</sup> semesters, he/she can do so by exercising his/her option in writing to the respective Head of the Department during the beginning of the semester by following the equivalence norm as given below.

✓ Three one credit earned through one-credit courses.

✓ Three one credit earned through online courses

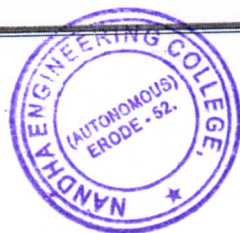
✓ Credits earned through combination of both one credit & Online courses

- One or two credit(s) earned through one-credit courses & two or one credit (s) earned through online

by the student may be considered equivalent to a course of 3 credits.


Decision on exemption of courses will be taken based on the recommendations of DCAA and approval of Principal. The grades earned by the students for the one-credit courses which are not claimed for exemption of an elective course, will not be included in the computation of CGPA.

- If a student who registers for one-credit courses does not successfully complete the course, the registration of that course will be considered as cancelled. Further, it will not be treated as arrear and no supplementary examination will be conducted; alternatively, if he/she wishes, he/she can re-register for the same course in the ensuing semesters and successfully complete it as and when it is offered subsequently.





<b>Clause 7.0, 7.4.2 Course registration</b> Student has the option of registering for additional courses or dropping existing courses from III to VIII semesters. Total number of credits of such courses cannot exceed 6. However, the maximum number of credits the student can register in a particular semester shall be 30 credits.		Student has the option of registering for additional courses or dropping existing courses from III to VIII semesters. Total number of credits of such courses cannot exceed 6. However, Student has the option of registering <i>minimum of 8 credits (only in 8<sup>th</sup> semester) and maximum of 30 credits</i> in a particular semester.	
<b>Clause 7.5.1: Summer Track:</b>		Clause 7.5.1: Summer Track: No change <i>New clause 7.5.1a: Winter Track: A winter track is conducted between odd and even semesters of winter period for about 28 working days. The typical structure of the winter track will be similar to summer track as specified in the clause 7.5.1. Student has the option of registering Max.6 credits in the winter track.</i>	
<b>Clause 10.1 Procedure for Assessment &amp; Awarding Marks – Theory course</b>		<b>Clause 10.1 Procedure for Assessment &amp; Awarding Marks for Theory courses.</b>	
NB: Continuous Assessment Scheme for Practical Courses remains same			
<b>Theory Course</b>		<b>Theory Course</b>	
Continuous Assessment	40 Marks	Continuous Assessment	40 Marks
End Semester Examination	60 Marks	End Semester Examination	60 Marks
Total	100 Marks	Total	100 Marks
<b>Continuous Assessment Scheme for Theory Course</b>		<b>Continuous Assessment Scheme for Theory Course</b>	
Component	Marks	Component	Marks
Three CAT exams. (Duration 1 hour, 30 minutes & Best two will be considered)	Written test: 2 x 15      30	Two CAT exams. (Duration 2 hours)	Written test: 2 x 15      30
Online: 3 tests (Best two)	2 x 2.5      5	Online: 2 tests	2 x 2.5      5
Assignments/Tutorials/Quiz/ - 2	2 x 2.5      5	Assignments/Tutorials/Quiz/ - 2 Nos.	2 x 2.5      5
Continuous Assessment Marks	-      40	Continuous Assessment Marks	-      40
		One Reassessment test (Re-CAT) at the end of the semester for the students who were absent for CAT due to medical reasons like hospitalization for accident/ illness or participation in the college/ University/ State/ national/ International level sports events/other genuine reasons/improvement with prior permission from Principal.	
<b>End Semester Examination Scheme for Theory Course</b>		<b>End Semester Examination Scheme for Theory Course</b>	
Examination duration: 3 hours Max. marks: 100 → Reduced to 60 marks		Examination duration: 3 hours Max. marks: 100 → Converted to 60 marks	

  
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<p><b>Clause 10.1 Procedure for Assessment &amp; Awarding Marks</b>  (a) Components of Embedded Course:  Theory + Project  [Refer Regulations R17 page 13]</p>	<p>One CAT exam., Duration 2 hours.  1 x 15 = 15 marks  Other assessment procedures remain same.</p>
<p>(b) Components of Embedded Course:  Theory + Laboratory [Refer Regulations R17 Amendment-1]  CAT - 3 Nos. Marks obtained in the best two CAT will be converted into 15 Marks.</p>	<p>CAT - 2 Nos. Marks obtained in the CAT will be converted into 15 Marks.  Other assessment procedures remain same.</p>
<p><b>Clause 10.5 Assessment for Online Course:</b>  Students may be permitted to register for online courses (which are provided with certificate) with the recommendations of DCAA &amp; approval of a committee constituted by the Principal subject to a max. of three credits. Online course of 3 credits can be considered instead of one elective course. After successful completion of online courses, students have to register for end semester examinations with the recommendations of DCAA and same shall be evaluated through end semester examination only.</p>	<p><b>Clause 10.5 Assessment for Online Course:</b>  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, 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 retaining the credits specified 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.</p>

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*N. Devaran*  
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