

Regulations 2021

(UG and PG Programmes)

Anna University

15.11.2021

Salient points of Regulations 2021

**Non-Autonomous Colleges
Affiliated to Anna University**

4. Structure of Programme

Categorization of Courses

- 1. Humanities and Social Sciences Courses (HSMC)** include Technical English, Engineering Ethics and Human Values, Communication skills, Law and Engineering, Film Appreciation, etc
- 2. Basic Sciences Courses (BS)** include Mathematics, Physics, Chemistry, Biology, Environmental Science , etc.
- 3. Engineering Sciences Courses (ES)** include Engineering practices, Engineering Graphics, Basics of Electrical / Electronics / Mechanical / Computer Engineering, Instrumentation etc.
- 4. Professional Core Courses (PC)** include the core courses relevant to the chosen specialization/branch.

4. Structure of Programme

Categorization of Courses

5. **Professional Elective Courses (PEC)** include the elective courses relevant to the chosen specialization/ branch.
6. **Open Elective Courses (OEC)** include the courses offered by a branch to other branches, from the list specified in the respective curriculum of the B.E. / B. Tech. / B. Arch. Programmes.
7. **Employability Enhancement Courses (EEC)** include Project Work and/or Internship, Seminar, Professional Practices, Case Study and Industrial/Practical Training.
8. **Audit Courses (AC)** include the courses such as Constitution of India, Sangam literature etc.

4.2 Personality and Character Development

Alternately, activities of science, literature and arts also helps for personality and character development. So, students shall conduct and participate actively in Science club/Literary Forum/Fine Arts for 80 hours and participate atleast 1 event/programme.

- **Science club** shall organise activities of popularisation of science and scientific temper through astronomy, works of great scientists from India and abroad, observing National Science Day, etc.

- **Literary Club** like 'Tamil Ilakkiya Mandram' shall be formed which shall organise colourful literary events to propagate good humanist values, morals and ethics reflected in the literature.

- **Fine Arts Club** like music, painting and documentary films with social themes shall be encouraged.

Students who enroll and take active participation in anyone of the above activities for 80 hours and participate **atleast 1 event/programme** will be given a certificate by the Head of the Institution and the copy of the same shall be forwarded to the Controller of Examinations for the purpose of record and scrutiny.

No fee shall be charged for all these activities.

15. Personality and Character Development

15.2 For the Co-curricular activities such as National Cadet Corps (NCC)/ National Service Scheme (NSS) / NSO / YRC / Science club / Literary Club/ Fine Arts Club, a 'completed' remark will appear in the Grade Sheet on successful completion of the same. Every student shall put in a minimum of 75% attendance in the training and attend the camp or events of the clubs compulsorily. The training and camp or club events shall be completed during the first year of the programme. However, for valid reasons, the Head of the Institution may permit a student to complete this requirement in the subsequent years.

Successful completion of any one of the above co-curricular activities is compulsory for the award of degree.

4.3 Number of courses per semester

Each semester curriculum shall normally have a blend of lecture courses **not exceeding 7 Theory courses and Laboratory integrated theory courses and 4 Employability Enhancement Course(s) and Laboratory Courses.** However, the total number of courses per semester shall not exceed 10. Each Course shall have credits assigned as per clause 4.4.

4.4. Credit Assignment

Each course is assigned certain number of credits based on the following:

Contact period per week	Credits*
1 Lecture Period	1
1 Tutorial Periods	1
1 Laboratory Periods (also for EEC courses like / Seminar / Project Work / Case study / etc.)	0.5

The Contact Periods per week for Laboratory courses shall be 2/3/4. * Total credit must be a whole number.

4.5. Industrial Training/ Internship

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

The students may undergo Internship at a Research organization / University/ industry (after due approval from the Head of the Institution for the period prescribed in the curriculum during the summer / winter vacation, in lieu of Industrial training. Attendance Certificate from the industry is mandatory mentioning the period of Industrial Training / Internship signed by an authorized signatory, as per the format provided by Centre for Academic Courses and the same shall be submitted to the Head of the Institution.

4.5. Industrial Training/ Internship

4.5.2 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 Professional Elective (only one professional elective can be dropped). In such cases, **Industrial Training / Internship need to be undergone continuously from one organization or with a combination one two week and one four weeks programme, from one/two organizations.** However, if the number of credits earned is 1 or 2, these credits shall not be considered for classification of the degree. Students shall get approval from the Head of the Institution and the Certificate of completion of Industrial Training / Internship shall be forwarded to CoE.

DURATION OF TRAINING/INTERNSHIP	CREDITS
2 Weeks	1
4 Weeks	2
6 Weeks	3

4.7 Value Added Courses

The Students may optionally undergo Value Added Courses (VAC) over and above the topics covered in the curriculum to obtain practical and industry specific knowledge. The credits earned through the Value Added Courses shall be over and above the total credit requirement prescribed in the curriculum for the award of the degree. One / Two credit courses shall be offered by a Department of an institution with the prior approval from the Head of the Institution and the Centre for Academic courses without any additional fee charged from the students. The details of the syllabus, time table and course coordinator may be sent to the Centre for Academic Courses at least one month before the course is offered for approval. Students can take a maximum of two one credit courses / one two credit course during the entire duration of the Programme.

12.6 ASSESSMENT FOR VALUE ADDED COURSES

The one / two credit course shall carry 100 marks and shall be evaluated through **continuous assessments only**. Two Assessments shall be conducted as per the clause 12.1 or 12.2 or 12.3, as applicable, by the Department concerned. The total marks obtained in the assessments shall be reduced to 100 marks and rounded to the nearest integer. A committee consisting of the Head of the Department, staff handling the course and a senior Faculty member nominated by the Head of the Institution shall monitor the evaluation process. The list of students along with the marks and the grades earned may be forwarded to the Controller of Examinations for appropriate action at least one month before the commencement of End Semester Examinations. **The grades earned by the students for value added courses will be recorded in the Grade Sheet, however the same shall not be considered for the computation of CGPA.**

4.8 Online Courses

Students may be permitted to credit a maximum of two online courses subject to a maximum of six credits, with the approval of Head of the Institution and Centre for Academic Courses, in lieu of open elective / professional elective courses. The Head of the Institution shall form a three member committee with members as HOD and a faculty member from the Department of student, HOD of any other branch of the Institution to ensure that the student has not studied such course and would not repeat it again as Professional core/professional elective/open elective. Suitable online courses shall be chosen from the SWAYAM platform.

12.7 Assessment for Online Courses

Students may be permitted to credit two online courses (which are provided with certificate), subject to a maximum of six credits. The online course of 3 credits can be considered instead of one elective course. These online courses shall be chosen from the SWAYAM platform, provided the offering organisation conducts regular examination and provides marks. The credits earned shall be transferred and the marks earned shall be converted into grades and transferred, provided the student has passed in the examination as per the norms of the offering organisation. The details regarding online courses taken up by the student and marks/credits earned and the approval for the course from Centre for Academic Courses shall be sent to the Controller of Examinations, Anna University in the subsequent semester(s) along with the details of the elective(s) to be dropped.

4.9 Advancement of Courses

The students satisfying the following conditions shall be permitted to carry out their final semester Project work for six months in industry/research organizations.

The student should **not have current arrears** and shall have **CGPA of 7.50 and above at the end of Semester IV.**

The student shall undergo the eighth semester courses other than the project work in the sixth and seventh semesters. The Head of Department, in consultation with the faculty handling the said courses shall forward the proposal recommended by the Head of Institution to the Controller of Examinations through the Director, Centre for Academic courses for approval at least 4 weeks before the commencement of the sixth semester of the programme for approval.

5. DURATION OF THE PROGRAMME

5.1 A student is ordinarily expected to complete the B.E./B.Tech. Programme in 8 semesters (for HSC students) and six semesters (for Lateral Entry students) but in any case not more than 14 Semesters for HSC (or equivalent) candidates and not more than 12 semesters for Lateral Entry Candidates.

5.1.1 A student is ordinarily expected to complete the B.E. Mechanical Engineering (Sandwich) Programme in 10 semesters (five academic years) but in any case not more than 18 Semesters for HSC (or equivalent) candidates.

6.2 Flexibility to Drop courses

6.2.2 From the **Second to final semesters**, the student has the option of dropping existing courses in a semester during registration. Total number of credits of such courses **shall not exceed 6 per semester**. The student is permitted to drop the course(s) within 30 days of the commencement of the academic schedule.

6. COURSE REGISTRATION

6.1 The Institution is responsible for registering the courses that each student is proposing to undergo in the ensuing semester. Each student has to register for all courses to be undergone in the curriculum of a particular semester (with the facility to drop courses to a maximum of 6 credits (vide clause 6.2)). **The courses dropped in earlier semesters can be registered in the subsequent semesters when offered.**

The registration details of the candidates may be approved by the Head of the Institution and forwarded to the Controller of Examinations. This registration is for undergoing the course as well as for writing the End Semester Examinations.

The courses that a student registers in a particular semester may include

- i. Courses of the current semester.
- ii. Courses dropped in the lower semesters.
- iii. Courses advanced to Semester VI and VII from Semester VIII (as per clause 4.10).

The maximum number of credits registered in a semester is 36. However, this does not include the number of Re-appearance (RA) and Withdrawal (W) courses registered by the student for the appearance of Examination.

7. ATTENDANCE REQUIREMENTS FOR COMPLETION OF THE SEMESTER

7.1 A student who has fulfilled the following conditions shall be deemed to have satisfied the requirements for completion of a semester.

Ideally every student is expected to attend all classes of all the courses and secure 100% attendance. However, in order to give provision for certain unavoidable reasons such as Medical / participation in sports, the student is expected to attend atleast 75% of the classes.

Therefore, he/she shall **secure not less than 75%** (after rounding off to the nearest integer) of overall attendance as calculated as per clause 5.3.

7.2 However, a student who secures overall attendance between 65% and 74% in the current semester due to medical reasons (prolonged hospitalization / accident / specific illness) / Participation in Sports events may be permitted to appear for the current semester examinations subject to the condition that the student shall submit the medical certificate / sports participation certificate attested by the Head of the Institution. The same shall be forwarded to the Controller of Examinations for record purposes.

7.3 Students who **secure less than 65% overall attendance and candidates who do not satisfy the clause 7.1 and 7.2** shall not be permitted to write the University examination at the end of the semester and not permitted to move to the next semester. They are required to repeat the incomplete semester in the next academic year, as per the norms prescribed.

12. PROCEDURE FOR AWARDING MARKS FOR INTERNAL ASSESSMENT

12.1 THEORY COURSES

Two assessments each carrying 100 marks shall be conducted during the semester by the Department / College concerned. The total marks obtained in all assessments put together out of 200, shall be proportionately reduced for 40 marks and rounded to the nearest integer (This also implies equal weightage to the two assessments).

Assessment I (100 Marks)		Assessment II (100 Marks)		Total Internal Assessment
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Individual Assignment / Case Study / Seminar / Mini Project	Written Test	
40	60	40	60	200*

*The weighted average shall be converted into 40 marks for internal Assessment.

12. PROCEDURE FOR AWARDING MARKS FOR INTERNAL ASSESSMENT

12.2 LABORATORY COURSES

The maximum marks for Internal Assessment shall be 60 marks in case of practical courses. Every practical exercise / experiment shall be evaluated based on conduct of experiment / exercise and records to be maintained. There shall be at least one test. The criteria for arriving at the Internal Assessment marks of 60 is as follows: 75 marks shall be awarded for successful completion of all the prescribed experiments done in the Laboratory and 25 marks for the test. The total mark shall be converted into a maximum of 60 marks and rounded to the nearest integer.

Internal Assessment (100 Marks)*	
Evaluation of Laboratory Observation, Record	Test
75	25

*Internal assessment marks shall be converted into 60 marks

12. PROCEDURE FOR AWARDING MARKS FOR INTERNAL ASSESSMENT

12.3 THEORY COURSES WITH LABORATORY COMPONENT

If there is a theory course with laboratory component, there shall be two assessments: the first assessment (maximum mark is 100) will be similar to assessment of theory course and the second assessment (maximum mark is 100) will be similar to assessment of laboratory course respectively. The weightage of first assessment shall be 40 % and the second assessment be 60 %. The weighted average of these two assessments shall be converted into 50 marks and rounded to the nearest integer.

Assessment I (40 % Weightage) (Theory Component)		Assessment II (60% Weightage) (Laboratory Component)		Total Internal Assessment
Individual Assignment / Case Study / Seminar / Mini Project	Written Test	Evaluation of Laboratory, Observation, Record	Test	
40	60	75	25	200*

*The weighted average shall be converted into 50 marks for internal Assessment.

12. PROCEDURE FOR AWARDING MARKS FOR INTERNAL ASSESSMENT

12.4 PROJECT WORK

The student shall register for Project-1 in Semester VII and Project-2 in Semester VIII. Project work may be allotted to a single student or to a group of students not exceeding 4 per group.

The Head of the Institutions shall constitute a review committee for project work for each branch of study. There shall be three reviews during the Semester VII and VIII by the review committee. The student shall make presentation on the progress made by him / her before the committee. **The total marks obtained in the three reviews shall be reduced for 40 marks and rounded to the nearest integer** (as per the scheme given in 12.4.4).

12. PROCEDURE FOR AWARDING MARKS FOR INTERNAL ASSESSMENT

12.4 PROJECT WORK

12.4.4 The project report shall carry a maximum of 40 marks. The project report shall be submitted as per the approved guidelines as given by Director, Academic Courses. Same mark shall be awarded to every student within the project group for the project report. The viva-voce examination shall carry 60 marks. Marks are awarded to each student of the project group based on the individual performance in the viva-voce examination.

Internal Assessment (40)			End Semester Examinations (60)				
Review I	Review II	Review III	Project Report		Viva-Voce Examination		
			Internal	External	Internal	External	Supervisor
10	15	15	10	15	10	15	10

Project Work - UG

The student shall register for Project Work-I in pre-final Semester and Project Work-II in final Semester. Project work may be allotted to a single student or to a group of students not exceeding 4 per group. Project Work-II may/may not be continuation of Project Work-I. If Project Work II is not a continuation of Project Work I then the topic and constitution of the project team members need not be the same.

Project Work - PG

The Project Work-II carried out in industry/academic/research institutions need not be a continuation of Project Work - I. In such cases, the Project Work shall be jointly supervised by a supervisor of the department and an expert as a joint supervisor from the organization and the student shall be instructed to meet the supervisor periodically and to attend the review committee meetings for evaluating the progress. The review meetings, if necessary, may also be arranged in online mode with prior approval from the Head of the Institution and suitable record of the meetings shall be maintained.

12.10 Conduct of Academic Audit by every Institution

Every educational institution shall strive for a better performance of the students by conducting the internal assessments as mentioned in Clause 12.

In order to ensure the above, Academic Audit is to be done for every course taught during the semester. For the internal assessments conducted for each course as per details provided in Clause 12, the academic records shall be maintained in the form of documentation for the individual assignments / case study report / report of mini project submitted by each student and assessment test question paper and answer script. Report of industrial training / internship shall also be maintained, if applicable. For laboratory courses students' record shall be maintained. Further, the attendance of all students shall be maintained as a record.

14. PASSING REQUIREMENTS

14.1 A candidate who secures not less than 50% of total marks prescribed for the course [Internal Assessment + End semester University Examinations] with a minimum of 45% of the marks prescribed for the end-semester University Examination, shall be declared to have passed the course and acquired the relevant number of credits. This is applicable for both theory and practical courses (including project work).

14. PASSING REQUIREMENTS

14.2 If a student fails to secure a pass in a theory course / laboratory course (except electives), the student shall register and appear only for the end semester examination in the subsequent semester. In such case, the internal assessment marks obtained by the candidate in the first appearance shall be retained and considered valid for all subsequent attempts till the candidate secures a pass. However, from the third attempt onwards if a candidate fails to obtain pass marks (IA + End Semester Examination) as per clause 14.1, then the candidate shall be declared to have passed the examination if he/she secures a minimum of 50% marks prescribed for the university end semester examinations alone.

14. PASSING REQUIREMENTS

14.3 If the course, in which the student has failed, is a Professional Elective or an Open Elective course, the student may be permitted to complete the same course. In such case, the internal assessment marks obtained by the student in the first appearance shall be retained and considered valid for all subsequent attempts till the candidate secures a pass. However, from the third attempt onwards if a candidate fails to obtain pass marks (IA + End Semester Examination) as per clause 14.1, then the candidate shall be declared to have passed the examination if he/she secures a minimum of 50% marks prescribed for the University end semester examinations alone.

If any other Professional Elective or Open Elective course is opted by the student, the previous registration is cancelled and henceforth it is to be considered as a new Professional Elective or Open Elective course. The student has to register and attend the classes, earn the continuous assessment marks, fulfil the attendance requirements as per clause 7 and appear for the end semester examination.

14.4 If a student is absent during the viva - voce examination, it would be considered as fail. If a student fails to secure a pass in Project Work-I, **the student shall register** for the course again in the subsequent semester and can do Project Work-I and II together.

14.5 The passing requirement for the courses which are assessed only through purely internal assessments (EEC courses except project work), is 50% of the internal assessment (continuous assessment) marks only.

15. AWARD OF LETTER GRADES

The award of letter grades will be decided using relative grading principle. The performance of a student will be reported using letter grades, each carrying certain points as detailed below:

Letter Grades	Grade Points
O (Outstanding)	10
A + (Excellent)	9
A (Very Good)	8
B + (Good)	7
B (Average)	6
C (Satisfactory)	5
RA (Re-appearance)	0
SA (Shortage of Attendance)	0
W	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".

16.2 CLASSIFICATION OF THE DEGREE AWARDED

16.2.1 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 (10 Semesters in case of Mechanical (Sandwich) and 6 semesters in the case of Lateral Entry) in the student's **First Appearance within five years (Six years in the case of Mechanical (Sandwich) and Four years in the case of Lateral Entry)**. Withdrawal from examination (vide Clause 17) 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 (Six years in the case of Mechanical (Sandwich) and 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.

16.2.2 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 (10 Semesters in case of Mechanical (Sandwich) and 6 semesters in the case of Lateral Entry) within five years. (Six years in case of Mechanical (Sandwich) and Four years in the 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 five years (Six years in case of Mechanical (Sandwich) and four years in the case of lateral entry) for award of First class
- **Should have secured a CGPA of not less than 6.50.**

16.2 CLASSIFICATION OF THE DEGREE AWARDED

CLAUSE 16.2.3 SECOND CLASS:

All other students (not covered in clauses 16.2.1 and 16.2.2) who qualify for the award of the degree (vide Clause 16.1) shall be declared to have passed the examination in **Second Class**.

17. PROVISION FOR WITHDRAWAL FROM END-SEMESTER EXAMINATION

17.2 Withdrawal application is valid if the student is otherwise eligible to write the examination (Clause 7) and if it is made within TEN days after the date of the examination(s) in that course or courses and recommended by the Head of the Institution and approved by the Controller of Examinations. For a student to withdraw from a course / courses, he/she should have registered for the course, fulfilled the attendance requirements (vide clause 7) and earned continuous assessment marks.

17.5 If a candidate applies for withdrawal from Project work, he/she will be permitted for the withdrawal only after the submission of project report before the deadline. However, the candidate may appear for the viva voce examination within 30/60 days after the declaration of results for

18. PROVISION FOR AUTHORISED BREAK OF STUDY

- 18.1 A student is permitted to go on break of study for a maximum period of one year as a single spell.
- 18.7 If a student in Full Time mode wants to take up job / start-up / entrepreneurship during the period of study he/she shall apply for authorised break of study for one year. The candidate shall join the job / start-up / entrepreneurship only after getting approval of the same by the Head of the Institutions with due proof to that effect.
- 18.8 No fee is applicable to students during the Break of Study period.

Thank you