Date: 02.11.2022

REVISED - I

#### **CENTRE FOR ACADEMIC COURSES**

**ANNA UNIVERSITY: : CHENNAI - 600 025** 

#### ACADEMIC SCHEDULE FOR NON-AUTONOMOUS AFFILIATED COLLEGES

August 2022 - December 2022 (Semester III)

UG (FT/PT) & PG (FT/PT) Degree Programmes

SI. No.	Programme	Semester	Commencement of Classes	Last wor	king day	Commencement of Practical Examinations		Commencement of English Semester Examination	
140.			OI Classes	Existing	Revised	Existing	Revised	Existing	Revised
1.	B.E. / B.Tech. (Full-Time)	III	22.08.2022	08.12.2022	27.12.2022	10.12.2022	18.01.2023	21.12.2022	29.12.2022
2.	B.Arch. (Full-Time)	III		08.12.2022			18.01.2023	21.12.2022	
3.	B.E. / B.Tech (Part-Time)	III ·	22.08.2022		-	10.12.2022			29.12.2022
4.	M.B.A. (5 Yrs-Integrated)	III							
5.	M.B.A. (Full-Time & Part-Time)	III	01.09.2022	19.12.2022	-	21.12.2022	18.01.2023	02.01.2023	29.12.2022

RE - OPENING DAY FOR THE NEXT SEMESTER: 01.02.2023 (Wednesday)

#### NOTE:

- 1. The Theory and Practical Examination schedules will be published in due course (Practical Examinations will be conducted before the theory examinations).
- 2. If necessary, loss of classes due to various curricular / co-curricular activities of the department / college may be compensated by conducting classes on Saturdays.

DIRECTOR ACADEMIC COURSES ANNA UNIVERSITY:: CHENNAI - 600 025

#### **AFFILIATED INSTITUTIONS**

# REGULATIONS 2021 CHOICE BASED CREDIT SYSTEM

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

(For the students admitted to B. E./B. Tech. Programme at various Non-Autonomous Affiliated Institutions)

#### **DEGREE OF BACHELOR OF ENGINEERING / BACHELOR OF TECHNOLOGY**

This Regulation is applicable to the students admitted to B.E/B.Tech. Programmes at all Engineering Colleges affiliated to Anna University, Chennai (other than Autonomous Colleges) and to all the University Colleges of Engineering of Anna University, Chennai from the academic year 2021-2022 onwards.

#### 1. PRELIMINARY DEFINITIONS AND NOMENCLATURE

In these Regulations, unless the context otherwise requires:

- I) "Programme" means Degree Programme, that is B.E./B.Tech. Degree Programme.
- II) "**Discipline**" means specialization or branch of B.E./B.Tech. Degree Programme, like Civil Engineering, Textile Technology, etc.
- III) "Course" means a theory or practical subject that is normally studied in a semester, like Mathematics, Physics, etc.
- IV) "Director, Centre for Academic Courses" means the authority of the University who is responsible for all academic activities of the Academic Programmes for implementation of relevant rules of this Regulations pertaining to the Academic Programmes.
- V) "Chairperson" means the Head of the Faculty.
- VI) "Head of the Institution" means the Principal of the College.
- VII) "Head of the Department (HOD)" means the Head of the Department concerned.
- VIII) "Controller of Examinations (COE)" means the authority of the University who is responsible for all activities of the University Examinations.
- IX) "University" means ANNA UNIVERSITY, CHENNAI.

#### 2. ADMISSION

2.1 Candidates seeking admission to the first semester of the eight semesters B.E./ B.Tech. Degree Programme:

Should have passed the Higher Secondary Examinations of (10+2) Curriculum (Academic Stream) prescribed by the Government of Tamil Nadu with Mathematics, Physics and Chemistry as three of the four subjects of study under Part-III or any examination of any other University or authority accepted by the Syndicate of Anna University as equivalent thereto.

(OR)

Should have passed the Higher Secondary Examination of Vocational stream (Vocational groups in Engineering / Technology) as prescribed by the Government of Tamil Nadu.

#### 2.2 Lateral entry admission

(i) The candidates 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., as per the rules fixed by Government of Tamil Nadu.

(OR)

(ii) 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 University.

#### 3. PROGRAMMES OFFERED

B.E. / B.Tech. Programmes under the Faculty of Civil Engineering, Faculty of Mechanical Engineering, Faculty of Electrical Engineering, Faculty of Information and Communication Engineering and Faculty of Technology.

#### 4. STRUCTURE OF PROGRAMMES

#### 4.1 Categorization of Courses

Every B.E. / B. Tech. Programme will have a curriculum with syllabi consisting of theory and practical courses that shall be categorized as follows:

- i. **Humanities, Social Sciences and Management Courses (HSMC)** include Professional English, Communication skills etc.
- ii. **Basic Sciences Courses (BSC)** include Mathematics, Physics, Chemistry, Biology, Environmental Science etc.
- iii. **Engineering Sciences Courses (ESC)** include Engineering Practices, Engineering Graphics, Basics of Civil / Mechanical / Electrical / Electronics / Instrumentation, Computer Engineering, etc.
- iv. **Professional Core Courses (PCC)** include the core courses relevant to the chosen specialization/branch.

- v. **Professional Elective Courses (PEC)** include the elective courses relevant to the chosen specialization/ branch.
- vi. **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.
- vii. **Employability Enhancement Courses (EEC)** include Project Work, Internship, Seminar, Professional Practices, Case Study and Industrial/Practical Training etc.
- viii. **Audit courses (AC)** include the courses such as Constitution of India, Sangam literature etc.

#### 4.2 Personality and Character Development

All students shall enroll, on admission, in any one of the personality and character development programmes NCC/NSS/NSO/YRC and undergo training / conduct activities 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. Alternately, activities of science, literature and arts also help for personality and character development. So, students shall conduct and participate actively in Science club/Literary Forum/Fine Arts activities for 80 hours and participate in at least ONE event.

National Cadet Corps (NCC) will have about 20 parades.

**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/Institution.

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

**Science club** shall organise activities of popularisation of science and scientific temper through activities related to 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 at least one 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.

#### 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 Period	1
1 Laboratory Period (also for EEC courses like Seminar / Project Work /Case study / etc.)	0.5

#### 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 a period of at least two weeks in an 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 mentioning the period of Industrial Training / Internship and signed by the competent authority of the industry, as per the format provided by the Centre for Academic Courses shall be submitted to the Head of the Institution. The attendance certificate shall be forwarded to the COE, Anna University by the Head of the Institution for processing results.

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 Grade 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 week from one/two organizations. However, if the number of credits earned is 1 or 2, then these credits shall not be considered for classification of the degree. Students shall get permission from the Head of the Institution for taking Industrial Training/Internship and the Certificate of completion of Industrial Training / Internship shall be forwarded to the COE.

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

<sup>\*1</sup> Week = 40 Internship Hours

#### 4.6 Industrial Visit

Every student is required to go for at least one Industrial Visit every semester starting from the second year of the Programme. The Heads of Departments shall ensure that necessary arrangements are made in this regard.

#### 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 requirements 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.

#### 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 the Head of the Institution and the 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 the student, HOD of any other branch of the Institution to ensure that the student has not studied such courses and would not repeat it again as Professional Core/Professional Elective/Open Elective courses. Suitable online courses shall be chosen from the SWAYAM platform.

#### 4.9 Audit courses

The student may optionally study audit courses prescribed by the University and it will be mentioned in the Grade Sheet. However, it will not be considered for computation of CGPA.

#### 4.10 Advancement of Courses:

The students who completed their final semester courses (except project work) in advance, shall be permitted to carry out their final semester Project Work for six months in an industry/research organization.

These students shall undergo the eighth semester courses other than the Project Work in the sixth and seventh semesters, provided they do not have current arrears and have a CGPA of 7.50 and above at the end of Semester IV. 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.

#### 4.11 Medium of Instruction

The medium of instruction is English for all courses, examinations, Seminar presentations and Project Work reports except for the programmes offered in Tamil Medium.

#### 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) students and not more than 12 semesters for Lateral Entry students.
- 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) students.
- 5.2 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.
- 5.3 The Head of the Institution may conduct additional classes for improvement, special coaching, conduct of model test etc., over and above the specified periods. But for the purpose of calculation of attendance requirement for writing the end semester examinations (as per clause 6) by the students, following method shall be used.

Percentage of Total no. of periods attended in all the courses per semester

Attendance = X 100

(No. of periods / week as prescribed in the curriculum) x 15

taken together for all courses of the semester

The University Examination will normally follow immediately after the last working day of the semester as per the academic schedule prescribed from time to time.

5.4 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 5.1 irrespective of the period of break of study (vide clause 18) in order that he/she may be eligible for the award of the degree (vide clause 16).

#### 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 student shall 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 and
- iii. Courses advanced to Semester VI and VII from Semester VIII (as per clause 4.10).

The maximum number of credits that can be 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.

#### 6.2 Flexibility to Drop courses

- 6.2.1 A student has to earn the total number of credits specified in the curriculum of the respective Programme of study in order to be eligible to obtain the degree.
- 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.

#### 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 at least 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** 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.

#### 8. CLASS ADVISOR

There shall be a class advisor for each class. The class advisor will be one among the course-instructors of the class. He / She will be appointed by the HOD of the department concerned. The class advisor is the ex-officio member and the Convener of the class committee. The responsibilities for the class advisor shall be:

- To act as the channel of communication between the HOD and the students of the respective class.
- To collect and maintain various statistical details of students.
- To help the chairperson of the class committee in planning and conduct of the class committee meetings.

- To monitor the academic performance of the students including attendance and to inform the class committee.
- To attend to the students' welfare activities like awards, medals, scholarships and industrial visits.

#### 9. CLASS COMMITTEE

- 9.1. 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 7).
  - 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 slow-learners, if any, and requesting the teachers concerned to provide some additional help or guidance or coaching to such students.
- 9.2 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 Head of the Institution.
- 9.3 The class committee shall be constituted within the first week of each semester.
- 9.4 At least 4 student representatives (usually 2 boys and 2 girls) shall be included in the class committee, covering all the elective courses.
- 9.5 The chairperson of the class committee may invite the class adviser(s) and the Head of the Department to the class committee meeting.
- 9.6 The Head of the Institution may participate in any class committee meeting of the institution.
- 9.7 The chairperson is required to prepare the minutes of every meeting, submit the same to the Head of the Institution 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.
- 9.8 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 Chairperson shall display the cumulative attendance particulars of each student on the Notice Board at the end of every such meeting to enable the students to know their attendance details to satisfy the clause 6 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.

#### 10. COURSE COMMITTEE FOR COMMON COURSES

Each common theory course offered to more than one discipline or group, shall have a "Course Committee" comprising all the teachers teaching the common course with one of them nominated as the course coordinator. The nomination of the course coordinator shall be made by the Head of the Department / Head of the Institution depending upon whether all the teachers teaching the common course belong to a single department or to several departments. The 'Course Committee' 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 internal assessment test(s).

#### 11. SYSTEM OF EXAMINATION

- 11.1 Performance in each course of study shall be evaluated based on (i) continuous internal assessment throughout the semester and (ii) University examination at the end of the semester.
- 11.2 Each course, both theory and practical (including project work & viva voce examinations) shall be evaluated for a maximum of 100 marks.
- 11.2.1 For all theory courses, the continuous internal assessment will carry **40 marks** while the End Semester University examination will carry **60 marks**.
- 11.2.2 For all theory courses with laboratory component, the continuous internal assessment will carry **50 marks** while the End Semester University examination will carry **50 marks**.
- 11.2.3 For all laboratory courses, the continuous internal assessment will carry **60 marks** while the End Semester University examination will carry **40 marks**.
- 11.2.4 The continuous internal assessment for the project work will carry 40 **marks** while the End Semester University examination will carry 60 **marks**.
- 11.3 Industrial Training and Seminar shall carry 100 marks and shall be evaluated through internal assessment only.
- 11.4 The University examination (theory and practical) of 3 hours duration shall ordinarily be conducted between October and December during the odd semesters and between April and June during the even semesters.
- 11.5 The University examination for Project Work shall consist of evaluation of the final report submitted by the student or students of the project group (of not exceeding 4 students) by an external examiner and an internal examiner, followed by a viva-voce examination conducted separately for each student by a committee consisting of the external examiner, the supervisor of the project group and an internal examiner.

11.6 For the University examination of practical courses including P roject W ork, the internal and external examiners shall be appointed by the Controller of Examinations.

#### 12. PROCEDURE FOR AWARDING MARKS FOR INTERNAL ASSESSMENT

For all theory, laboratory courses, theory courses with laboratory component and project work the continuous assessment shall be awarded as per the procedure given below:

#### 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 Ma	arks)	Assessment II (100 M	arks)	Total
Individual Assignment /	Written	Individual Assignment /	Written	Internal
Case Study / Seminar /	Test	Case Study /	Test	Assessment
Mini Project		Seminar / Mini Project		
40	60	40	60	200*

<sup>\*</sup>The weighted average shall be converted into 40 marks for internal Assessment.

Two internal assessments will be conducted as a part of continuous assessment. Each internal assessment is to be conducted for 100 marks and will have to be distributed in two parts viz., Individual Assignment/Case study/Seminar/Mini project and Test with each having a weightage of 40% and 60% respectively. The tests shall be in written mode. The total internal assessment marks of 200 shall be converted into a maximum of 40 marks and rounded to the nearest integer.

#### 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

<sup>\*</sup> Internal assessment marks shall be converted into 60 marks

#### 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% weig	htage)	Assessment II (60% weig	htage)	
(Theory Component)		(Laboratory Component)		Total
Individual Assignment /	Written	Evaluation of Laboratory	Test	Internal
Case Study /	Test	Evaluation of Laboratory Observation, Record	1681	Assessment
Seminar / Mini Project		Observation, Record		
40	60	75	25	200*

<sup>\*</sup>The weighted average shall be converted into 50 marks for internal Assessment.

#### 12.4 **PROJECT WORK**

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 a 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.

- 12.4.1 Project Work shall be carried out under the supervision of a "qualified teacher" in the Department concerned. In this context "qualified teacher" means the faculty member possessing (i) PG degree or (ii) Ph.D. degree.
- 12.4.2 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-II 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.
- 12.4.3 The Head of the Institutions shall constitute a review committee for Project Work for each programme. The review committee consists of supervisor, an expert from the Department and a project coordinator from the Department. If the project coordinator/expert member happens to be the supervisor, then an alternate member shall be nominated. In the case of Industrial Project, the review committee shall have the supervisor, the coordinator from industry and the project coordinator from the Department.

There shall be three reviews during the semesters 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).

12.4.4 The project report shall carry a maximum of 20 marks. The project report shall be submitted as per the approved guidelines as given by the Director, Centre for Academic Courses. Same marks shall be awarded to every student within the project group for the project report. The viva-voce examination shall carry 40 marks. Marks are awarded to each student of the project group is based on the individual performance in the viva-voce examination.

Review	Review	Review		End Se	mester Ex	camination	S
I	II	III		ject port	Viva-Voce Examination		
10	15	15	Internal	External	Internal	External	Supervisor
10	15	15	10	10	10	20	10

12.4.5 The last date for submission of the project report is on the last working day of the semester. If a student fails to submit the project report on or before the specified deadline or the student has submitted the project report but did not appear for the viva-voce examination, it will be considered as fail in the Project Work and the student shall re-register for the same in the subsequent semester.

#### 12.5 OTHER EMPLOYABILITY ENHANCEMENT COURSES

- (a) The Seminar / Case Study / Mini Project course is to be considered as purely INTERNAL (with 100% internal marks 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. The three member committee appointed by the Head of the Institution, consisting of the course coordinator and two experts from the Department, will evaluate the seminar and at the end of the semester, the marks shall be consolidated and taken as the final mark. The evaluation shall be based on the seminar paper (40%), presentation (40%) and response to the questions asked during presentation (20%).
- (b) The Industrial / Practical Training, Summer Project, Internship, shall carry 100 marks and shall be evaluated through internal assessment only. At the end of Industrial / Practical Training / Internship / Summer Project, the student shall submit an attendance certificate from the organization where he / she has undergone training and a brief report. 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 Institution consisting of the course coordinator and two experts from the Department. The certificates (issued by the organization) submitted by the students shall be attached to the mark list sent by the Head of the Institution to the Controller of Examinations.
- (c) For all the courses under Employability Enhancement Courses Category, except the Project Work, the evaluation shall be done with 100% internal marks and as per the procedure described in clause 12.5 (a) / (b).

#### 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 as per the clause 12.1 or 12.2 shall be conducted 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 do the evaluation process. The list of students along with the marks and the grades earned shall 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.

#### 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.

# 12.8. Internal marks approved by the Head of the Institution shall be displayed by the respective HODs within 5 days from the last working day.

#### 12.9 Attendance Record

Every teacher is required to maintain an 'ATTENDANCE AND ASSESSMENT RECORD', which consists of attendance marked in each lecture or practical or project work class, the test marks and the record of class work (topic covered), separately for each course. This should be submitted to the Head of the Department periodically (at least three times in a semester) for checking the syllabus coverage and the records of test marks and attendance. The Head of the Department will put his/her signature and date after due verification. At the end of the semester, the record should be verified by the Head of the Institution who will keep this document in safe custody (for five years). The University or any inspection team appointed by the University may verify the records of attendance and assessment of both current and previous semesters.

#### 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.

The Head of the Institution shall arrange to conduct the Academic Audit for every course in a semester by forming the respective committees with an external course expert as one of the members drawn from a Technical institution of repute near the institute.

The University or any inspection team appointed by the University may verify the records of Academic Audit report of the courses of both current and previous semesters, as and when required.

#### 13. REQUIREMENTS FOR APPEARING FOR UNIVERSITY EXAMINATIONS

A student shall normally be permitted to appear for the University Examinations for all the courses registered in the current semester (vide clause 6) if he/she has satisfied the semester completion requirements (as per clause 7).

Further, examination registration by a student is mandatory for all the courses in the current semester and all arrear(s) course(s) for the University examinations failing which, the student will not be permitted to move to the higher semester.

A student who has already appeared for any course in a semester and passed the examination is not entitled to reappear in the same subject for improvement of grades.

#### 14. PASSING REQUIREMENTS

- 14.1 A student 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 laboratory courses (including project work).
- 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 student in the first appearance shall be retained and considered valid for all subsequent attempts till the student secures a pass. However, from the third attempt onwards if a student fails to obtain pass marks (IA + End Semester Examination) as per clause 14.1, then the student 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.
- 14.3 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 and laboratory), is 50% of the internal assessment (continuous assessment) marks only.
- 14.6 A student can apply for revaluation of the student's semester examination answer paper in a theory course, as per the guidelines of the COE on payment of a prescribed fee along with prescribed application to the COE through the Head of the Institution. The COE will arrange for the revaluation and the results will be intimated to the student concerned through the Head of the Institution. Revaluation is not permitted for laboratory course and EEC courses.

#### 15. AWARD OF LETTER GRADES

15.1 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 Grade	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 (Withdrawal)	0

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

'SA' denotes shortage of attendance (as per clause 7.3) and hence prevented from writing the end semester examinations. 'SA' will appear only in the result sheet.

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

If the grade RA is given to **Theory Courses**/ **Laboratory Courses it is not required to satisfy the** attendance requirements (vide clause 7), but has to appear for the end semester examination and fulfil the norms specified in clause 14 to earn a pass in the respective courses.

If the grade RA is given to **EEC course (except Project Work), which are evaluated only through internal assessment**, the student shall register for the course again in the subsequent semester, fulfil the norms as specified in clause 14 to earn pass in the course. However, attendance requirement need not be satisfied.

- 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.
- 15.3 The grades O, A+, A, B+, B, C obtained for the one/two credit course (not the part of curriculum) shall figure in the Grade Sheet under the title 'Value Added Courses/Internship/Industrial training'. The courses for which the grades obtained are RA, SA will not figure in the Grade Sheet.
- 15.4 For the students who complete the Audit Course satisfying attendance requirement, the title of the Audit Course will be mentioned in the Grade Sheet. If the attendance requirement is not satisfied, it will not be shown in the **Grade Sheet.**

#### 15.5 **GRADE SHEET**

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

- The college in which the student has studied
- The list of courses registered during the semester and the grade scored.
- The Grade Point Average (GPA) for the semester and
- The Cumulative Grade Point Average (CGPA) of all courses enrolled from first semester onwards.

GPA for a semester is the ratio of the sum of the products of the number of credits acquired for courses and the corresponding points to the sum of the number of credits acquired for the courses in the semester. CGPA will be calculated in a similar manner, considering all the courses registered from first semester. RA grades will be excluded for calculating GPA and CGPA.

where Ci is the number of Credits assigned to the course

**GPi** is the point corresponding to the 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.

#### 16 ELIGIBILITY FOR THE AWARD OF THE DEGREE

- **16.1** A student shall be declared to be eligible for the award of the B.E. / B.Tech. Degree provided the student has
  - i. Successfully gained the required number of total credits as specified in the curriculum corresponding to the student's programme within the stipulated time.
  - ii. Successfully completed the course requirements, appeared for the End Semester examinations and passed all the subjects within the period as prescribed in clause 5.1 and 5.1.1.
  - iii. Successfully passed any additional courses prescribed by the Director, Centre for Academic Courses whenever the student is readmitted under Regulations R-2021 from the earlier Regulations.
  - iv. Successfully completed the NCC / NSS / NSO / YRC / Science Club / Literature Club / Fine Arts Club requirements.
  - v. No disciplinary action pending against the student.
  - vi. The award of Degree must have been approved by the Syndicate of the University.

#### 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.

#### 16.2.3 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**.

**16.3** A student 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 17).

#### 16.4 Photocopy / Revaluation

A student can apply for photocopy of his/her semester examination answer paper in a theory course, as per the guidelines of the COE, on payment of a prescribed fee through proper application to the Controller of Examinations through the Head of the Institutions. The answer script is to be valued and justified by a faculty member, who has handled the subject and recommend for revaluation with the breakup of marks for each question. Based on the recommendation, the student can register for the revaluation through proper application to the Controller of Examinations. The Controller of Examinations will arrange for the revaluation and the results will be intimated to the student concerned through the Head of the Institutions. Revaluation is not permitted for practical courses and EEC courses.

A student can apply for revaluation of answer scripts for not exceeding 5 subjects at a time.

#### 16.5 Review

Students not satisfied with Revaluation 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 the Controller of Examinations through the Head of the Institution.

Students applying for Revaluation only are eligible to apply for Review.

#### 17. PROVISION FOR WITHDRAWAL FROM END-SEMESTER EXAMINATION

- 17.1 A student may, for valid reasons, (medically unfit / unexpected family situations / sports approved by the Chairman, Sports Board and the HOD) 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 the COE through the Head of the Institutions with required documents.
- 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.
- 17.2.1 Notwithstanding the requirement of mandatory 10 days, applications for withdrawal for special cases under extraordinary conditions will be considered on the merit of the case.
- 17.3 In case of withdrawal from a course / courses, the courses will figure both in the Grade Sheet as well as in the Result Sheet. However, withdrawal shall not be considered as an appearance for the eligibility of a student for First Class with Distinction.
- 17.4 If a student withdraws from writing end semester examinations for a course or courses, he/she shall register for the same in the subsequent semester and write the end semester examination(s).
- 17.5 If a student 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 student may appear for the viva voce examination within 30/60 days after the declaration of results for Project Work I and II respectively and the same shall not be considered as reappearance.
- 17.6 Withdrawal is permitted for the end semester examinations in the final semester, as per clause 16.2.1.

#### 18. PROVISION FOR AUTHORISED BREAK OF STUDY

- 18.1 A student is permitted to go on authorised break of study for a maximum period of one year as a single spell.
- 18.2 Break of Study shall be granted only once for valid reasons for a maximum of one year during the entire period of study of the degree programme. However, in extraordinary situation the student may apply for additional break of study not exceeding another one year. If a student intends to temporarily discontinue the programme in the middle of the semester for valid reasons, and to re-join the programme in a subsequent year, permission may be granted based on the merits of the case provided he / she applies to the Director, Student Affairs in advance, but not later than the last date for registering for the end semester examination of the semester in question, through the Head of the Institution stating the reasons therefore and the probable date of re-joining the programme.

- 18.3 The student permitted to re-join 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 re-joining. The students re-joining in new Regulations shall register for additional courses, if any, as notified by the Centre for Academic Courses under change of Regulations. These courses may be from any of the semesters of the curriculum in force, so as to bridge the curriculum in force and the old curriculum. In such cases, the total number of credits to be earned by the student may be more than or equal to the total number of credits prescribed in the curriculum in force.
- 18.4 The authorized break of study is included in the duration specified for passing all the courses for the purpose of classification (vide Clause 16.2).
- 18.5 The total period for completion of the Programme reckoned from, the commencement of the first semester to which the candidate was admitted shall not exceed the maximum period specified in clause 5.1 irrespective of the period of break of study in order that he/she may be eligible for the award of the degree.
- 18.6 If any student is prevented for want of required attendance, the period of prevention shall not be considered as authorized 'Break of Study' (Clause 18.1).
- 18.7 If a student in Full Time mode wants to take up a job / start-up / entrepreneurship during the period of study he/she shall apply for authorised break of study for one year. The student shall join the job / start-up / entrepreneurship only after getting approval of the same by the Director, Centre for Academic Courses with due proof to that effect.
- 18.8 No fee is applicable to students during the Break of Study period.

#### 19. DISCIPLINE

- 19.1 Every student is required to observe disciplined and decorous behaviour both inside and outside the college and not to indulge in any activity which will tend to bring down the prestige of the University / College. The Head of the Institution shall constitute a disciplinary committee consisting of the Head of the Institution, Two Heads of Department of which one should be from the faculty of the student, to enquire into acts of indiscipline and notify the University about the disciplinary action recommended for approval. In case of any serious disciplinary action which leads to suspension or dismissal, then a committee shall be constituted including one representative from Anna University, Chennai. In this regard, the member will be nominated by the University on getting information from the Head of the Institution.
- 19.2 If a student indulges in malpractice in any of the University / internal examination he / she shall be liable for punitive action as prescribed by the University from time to time.

#### 20. REVISION OF REGULATIONS, CURRICULUM AND SYLLABI

The University may from time to time revise, amend or change the Regulations, curriculum, syllabus and scheme of examinations through the Academic Council with the approval of the Syndicate.

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# PERI INSTITUTE OF TECHNOLOGY IQAC ACADEMIC CALENDER 2022-23 ODD SEMESTER

		JULY				AUGUST	
			Academic				Academic
Date	Day	Activity	Day	Date	Day	Activity	Day
1	Fri			1	Mon	IQAC Academic Verification	
2	Sat			2	Tue	Common Mentor Meeting -1	
3	Sun			3	Wed	SWA/ IE - Meeting -1	
4	Mon			4	Thu	Sports - Committee Meeting	
5	Tue			5	Fri	R&D Common Meeting -2	
6	Wed			6	Sat		
7	Thu	4		7	Sun		
8	Fri			8	Mon		
9	Sat	11,00		9	Tue	Holiday - Moharam	
		- 1				Reopening For III,V and VII th	
10	Sun			10	Wed	Sem	1
		4					
11	Mon	End Semester feed back week		11	Thu	Class Committee Week	2
						EDC Meeting -2/CHS Meeting	
12	Tue	Skill development Meeting -1		12	Fri	2	3
13	Wed			13	Sat	IIC Meeting - 2	4
14	Thu			14	Sun		
15	Fri			15	Mon	Holiday - Independence day	
16	Sat			16	Tue	IQAC Meeting	5
17	Sun		7	17	Wed	Zeroth Review report	6
18	Mon	CHS - Meeting 1	92	18	Thu	ECE Association inagural	7
19	Tue			19	Fri	Holiday - Gokulastami	8
20	Wed			20	Sat		9
21	Thu	IQAC Meeting -1		21	Sun		
				118			
22	Fri	R&D Common Meeting -1		22	Mon	Skill development Meeting -3	10
		C				Mechanical Association	
23	Sat			23	Tue	inagural	11
24	Sun			24	Wed		12
		Governing Council					
25	Mon	meeting/IQAC Audit week		25	Thu		13
		5 2				<b>CSE Association Inagural/EDC</b>	
26	Tue	Skill development Meeting -2		26	Fri	Meeting - 2	14
27	Wed	IIC Meeting - 1		27	Sat	R&D Common Meeting -3	15
28	Thu	9		28	Sun		-
						Class Committee Week/CAT	
29	Fri	EDC Meeting -1		29	Mon	Control workship or an a state of the property of the state of the sta	16
30	Sat	. 0		30	Tue	EEE Association inagural	17
	0.00.00.00			31	Wed		

		SEPTEMBER				OCTOBER	
			Academic				Academic
Date	Day	Activity	Day	Date	Day	Activity	Day
1	Thu	CHS - Meeting 3	18	1	Sat		42
2	Fri	Civil Association inagural	19	2	Sun		
		Teachers Day					
		Celebration/Mentor Meeting -					
3	Sat	2		3	Mon		
4	Sun		* 8	4	Tue	Holiday - Saraswathi pooja	
5	Mon		20	5	Wed	Hoiday - Vijaya Dhasami	
6	Tue	IIC Meeting - 3	21	6	Thu		43
7	Wed	First Review report	22	7	Fri		44
8	Thu	Skill development Meeting -4	23	8	Sat	Second Review report	45
9	Fri	ED© Meeting -3	24	9	Sun	1	
10	Sat	R&D Common Meeting -4	25	10	Mon		46
11	Sun			11	Tue		47
		Commencement of CAT 1					
12	Mon	Exam-2nd,3rd&4th year	26	12	Wed		48
13	Tue	J	27	13	Thu		49
14	Wed		28	14	Fri		50
15	Thu		29	15	Sat	R&D Common Meeting -6	51
16	Fri		30	16	Sun		
17	Sat	Mid- Sem feed back week		17	Mon	Class Committee Week	52
18	Sun			18	Tue	IIC Meeting - 5	53
19	Mon		31	19	Wed		54
20	Tue		32	20	Thu		55
21	Wed		33	21	Fri	ă,	56
22	Thu		34	22	Sat	<b>Mentor Meeting -3</b>	
23	Fri		35	23	Sun		
24	Sat	R&D Common Meeting -5	36	24	Mon	Holiday - Deepavali	
25	Sun	<i>2</i>		25	Tue	Holiday - Deepavali	
26	Mon	Class Committee Week	37	26	Wed		57
27	Tue		38	27	Thu		58
28	Wed		39	28	Fri	Caralle de Arie de la company	59
29	Thu		40	29	Sat		60
30	Fri	IIC Meeting - 4	41	30	Sun		
				31	Mon	gar and the boundary	61

		NOVEMBER				DECEMBER	
			Academic				Academic
Date	Day	Activity	Day	Date	Day	Activity	Day
1	Tue		62	1	Thu		
2	Wed		63	2	Fri	-	
3	Thu		64	3	Sat		
4	Fri		65	4	Sun		
5	Sat	<b>R&amp;D</b> Common Meeting -7	66	5	Mon		
6	Sun	72		6	Tue		1 8
		<b>Commencement of CAT 2</b>					
7	Mon	Exam-3rd&4th year	67	7	Wed	1	
						<b>Commencement of Coaching</b>	
8	Tue		68	8	Thu	and Model-Second year	
9	Wed		69	9	Fri	* -	
10	Thu	-1	70	10	Sat		
11	Fri		71	11	Sun		
12	Sat	4	72	12	Mon		
13	Sun			13	Tue		
14	Mon		73	14	Wed		
			200			Commencement of CAT 1	
15	Tue		74	15	Thu	Exam-First year	
16	Wed		75	16	Fri	,	
17	Thu		76	17	Sat		
18	Fri	CAT Coordinator Meeting	77	18	Sun		
19	Sat			19	Mon		
20	Sun			20	Tue		
		<b>Commencement of CAT 2</b>			AT 25 - 17		
21	Mon	Exam-First year	78	21	Wed		
22	Tue		79	22	Thu		
23	Wed		80	23	Fri		
24	Thu			24	Sat		
25	Fri			25	Sun		
26	Sat			26	Mon		
27	Sun			27	Tue	Third Review report	
		Commencement of Model		• •		Commencement of Coaching	
28	Mon	Exam -3rd&4th year		28	Wed	and Model-First year	
29	Tue			29	Thu		
30	Wed			30	Fri		
		h		31	sat		

Dr. R. PALSON KENNEDY, M.E., Ph.D.,
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Lickum, Chennai - 600 048.

# PERI INSTITUTE OF TECHNOLOGY DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING COURSE ALLOTMENT-ODD SEM(2022-23)

S.N	Name of the staff	Theory /Lab handling	Year/Sem	No.Of Courses	Sign
	Dr.T.Sarayanan	CP4154/Principles of Programming Language	I/I/ME		100
1	Di. I. Saravanan	CS8792/Cryptography and Network Security	IV/VII/B	2 -	Flin
2	Dr.C.Suresh Kumar	CS8501/Theory of Computation	III/V/A	1	1511
	Br.e.Suresii Kuillai	CP4152/Database Practices	I/I/ME	1+1	But
3	Dr.S.Prabhakaran	RM4151/Research Methodologies and IPR	I/I/ME		1.10
_	- West Automation	CP4391/Security Practices	I/III/ME	2+1	Doline
		CS8792/Cryptography and Network Security	IV/VII/A		1
	Da Barahanah	CP4151/Advanced Datastructures CP4161/Advanced Data Structures and	I/I/ME		11/1
4	Dr.Prashanth	Algorithms Laboratory	1/1/1/19		K.M.
			I/I/ME		H: N
		CS8582/OOAD Lab CP4153/Network Technologies	III/V/A	2+1	50
5	Dr.Gajendran	CS8592/Object Oriented Analysis and Design	I/I/ME	_ '	4X-X
		CS8592/Object Offerfied Analysis and Design	III/V/B	-l <sub>2</sub>	MUS
_		CS3391/Object Oriented Programming	II/III/A	2	The same of the sa
		CS3391/Object Oriented Programming	II/III/B		W.
5	Ms.K. Varalakshmi	CS3381/Object Oriented Programming Lab	II/III/A	-	Z V
	4.5	Project	II/III/ME		()
_		CS8501/Theory of Computation	III/V/B	2+2	Y
	Mr.A. Vijayanarayanan	CS8079/Human Computer Interaction	IV/VII/A	⊣ 1	MILLA
		CS8581/OOAD Lab	III/V/B	$\dashv_{2+1}$	AL III
_		OBM752/Hospital Management	IV/VII/B	12.1	A 4 1/4
3	Mr.S.S.Vasantharaja	OBA433/Intellectual Property Rights	II/III/ME	ا, ن ⊢	, DV 1
ė.	Z	CS8581/Networks Lab	III/V/A	- <sub>2+1</sub>	2
	The same of the sa	CS8592/Object Oriented Analysis and Design	III/V/A	. 11/4	/ <del>W`</del>
	Mrs.J.Jayaprabha	CS8591/Computer Networks	III/V/B	<b>│</b>	
		CS8581/Networks Lab	III/V/B	- <sub>2+1</sub> $Z$	M
_		CS8591/Computer Networks	III/V/A	1	) Naw 1
0	Mrs.Renuka	MG8591/Principles of management	IV/VII/B	$\dashv$	M. Por
		CS3381/Object Oriented Programming Lab	II/III/B	2+1	1/.
		CS3352/Foundations of Data Science	II/III/A		
	MC D C Allinoi	CS3361/Data Science lab	II/III/A	-	now
1	MS.R.S.Abbirami	MP4094/Web Services and API Design	I/III/ME	7 (1	750.
		IT8761/Security Lab	IV/VII/B	2+2	VE .
_	M. M.D.	MG8591/Principles of management	IV/VII/A	9	111
2	Ms.M.Divya	MP4292/Mobile Application Development	II/III/ME	2	1-1.20
		CS3301/Data Structures	II/III/A		(Z)=~
13	Ms.S.Jonisha	CS3311/Data Structures Lab	II/III/A		B
	IVIS.S.JOIIISIIA	GE8151/Problem Solving and Python Programming	I/I/CSE A		(/)50
	1	GE8161/Problem Solving and Python Programming Lab	I/I/CSE A	2+2	<u></u>
		OCE552/Geographical Information Systems	III/V/B	<b>⊣</b>	1 2 m
4	Mr.Karthikeyan	OBM752/Hospital Management	IV/VII/A	_	Xor
		IT8711/ Security Lab	IV/VII/A	2+1	•
		CS8791/Cloud Computing	IV/VII/A		Assessment of the second
		CS8711/Cloud Computing Lab	IV/VII/A		n.
5	Ms. Savithri	CS3301/Data Structures	II/III/B	<b>⊣</b>	1 lle
				<b>⊣</b>	<b>X</b> 91
		CS3361/Data Structures Lab	II/III/B	2+2	<del>                                      </del>
1		CS8079/ Human Computer Interaction	IV/VII/B	100	11
	•	CS3353/C programming and Data Structures	II/III/EEE	- 200	1 1
5	Mr.Noble Lourdhu Raj	1 0 0			\
		CS3362/C programming and Data Structures Lab	II/III/EEE		$\mathcal{N}^{\mathcal{V}}$
		CS8711/Cloud Computing Lab	IV/VII/B	2+2	VV
7		CS3353/C programming and Data Structures	II/III/ECE		10
		CS3362/C programming and Data Structures Lab		$\neg$	MAL
	Ms.Deepika		II/III/ECE	$\dashv$ $\lor$	XV
		CS8392/Object Oriented Programming	III/V/EEE	-	$\times$ //
		CS8383/Object Oriented Programing Lab	III/V/EEE	2+2	/
+		CS3352/Foundations of Data Science	II/III/B	I P	
				<b>⊣</b> ''	Hund
3	Ms.P.Lekha	CS3361/Data Science lab	II/III/B	-	Xu ,
		GE8151/Problem Solving and Python Programming	I/I/ECE	2+1	<u> </u>
H		CS8711/Cloud Computing	IV/VII/B	_	1
		GE8151/Problem Solving and Python Programming	I/I/MECH/CIVIL	- I	I I
9	Ms. Vimala Devi	GE8151/Problem Solving and Python Programming Lab	I/I/MECH/CIVIL		معريا ا
		GE8161/Problem Solving and Python Programming Lab	I/I/ECE	2+2	VIP /
_			I/I/CSE B		0
		GE8151/Problem Solving and Python Programming	_	<b>⊣</b> .	1
20	Ms. T.Bersikin Libina	GE8161/Problem Solving and Python Programming Lab	I/I/CSE B	-	B W
U	IVIS. 1.BEISIKIN LIDINA	GE8151/Problem Solving and Python Programming	I/I EEE/AI&DS	_	14
		GE8161/Problem Solving and Python Programming Lab	I/I EEE/AI&DS	2+2	.1.
_			IV/EEE		1
	Mrs.Arul Sandana Rani	OCS752/Introduction to C Programming	III/V/A	- <sub>2</sub>	LIM
	Mis.Aiui Saildalia Kalii	OCE552/ Geographical Information Systems			

# PERI INSTITUTE OF TECHNOLOGY DEL TIMENT OF COMPUTER SCIENCE AND EXTINEERING TIME TABLE ACADEMIC YEAR 2022–2023 (ODD SEMESTER) Section: A Room No:BT-9

Year / Sem: II / III

W.E. F:10/8/2022

Days / Hour	1 8:30-9:15	2 9:15-10:00		3 10:15-11:00	4 11:00-11:45		5 12:30-1:15	6 1:15-2:00		7 2:10-2:55	8 2:55-3:40		
Monday	CS3301/DS	CS3301/DS	0.15)	MA3354/DM	CS3351/DPCO	2.30)	LAB->		:10)	<-CS3361 FDS/CS3311 DS LAB->			
Tuesday	MA3354/DM	MA3354/DM	10.00 - 1	CS3351/DPCO	CS3301/DS	11.45 – 1	<-CS3381 OOPS/ CS3361 FDS LAB→		(2.00 – 2	CS3381 OOPS/ CS3361 FDS LAB —			
Wednesday	CS3352/FDS	CS3391/OOPS	AK (	<-CS3311 DS/CS3	381 OOPS LAB→	AK (1	MA3354/DM CS3301/DS		EAK	CS3352/FDS	Skill/Mentor /Library		
Thursday	CS3391/OOPS	CS3352/FDS	BRE	CS3301/DS	CS3352/FDS	BRE	CS3351/DPCO	CS3391/ OOPS	BR	MA3354/DM	Objective Test		
Friday	CS3351/DPCO	CS3391/OOPS		<- Professional	Development ->		CS3351/DPCO CS3301/DS			<-CS3311 DS/CS338 OOPS LAB→			

S. No.	Subject Code	Subject Name	Name of the Faculty	Dept.	No. of Hours
1.	MA3354	Discrete Mathematics	Ms.Lakshmi Priya	S & H	5
2.	CS3351	Digital Principles and Computer Organization	Mr. Dinesh Kumar	ECE	5
3.	CS3352	Foundations of Data Science	Ms. R.S.Abbirami	CSE	4
4.	CS3301	Data Structures	Ms. Jonisha	CSE	6
5.	CS3391	Object Oriented Programming	Ms. Varalakshmi	CSE	4
aboratories			<b>经制度的</b> 经产品的		
6.	CS3311	Data Structures Lab	Ms. Jonisha	CSE	3
7.	CS3381	OOPS Lab	Ms. Varalakshmi	CSE	3
8.	CS3361	Data Science Lab	Ms. R.S.Abbirami	CSE .	3
9.	GE3361	Professional Development	Ms.Pooja	ENGLISH	2
10.		Skill Development/Mentor/Library	Department Faculties	CSE	1
11.		Objective type test	Department Faculties	CSE	1

Class Incharge: Ms. Jonisha

Goordinator

## PERI Institute of Technology Mannivakkam, Chennai 600048

## Department of Computer Science and Engineering

Degree and Programme			B.E/ CSE			
Semester			III			
Course Code and Course:		CS3352/ Foundations of Data Science				
Core / Elective:		Core Core				
LTPC	3003	No. of Credits:	3			
Date of commencement:		≥.08.2022				
Faculty Incharge:		Mrs.R.S.Abbirami				

#### Definition:

Foundations Of Data science is an interdisciplinary field focused on extracting knowledge from typically large data sets and applying the knowledge and insights from that data to solve problems in a wide range of application domains.

#### Course objective:

- · To understand the data science fundamentals and process.
- · To learn to describe the data for the data science process.
- · To learn to describe the relationship between data.
- · To utilize the Python libraries for Data Wrangling.
- · To present and interpret data using visualization libraries in Python

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#### **SYLLABUS**

#### CS3352 FOUNDATIONS OF DATA SCIENCE

LTPC3003

#### UNIT I INTRODUCTION.

9

Data Science: Benefits and uses – facets of data - Data Science Process: Overview – Defining research goals – Retrieving data – Data preparation - Exploratory Data analysis – build the model – presenting findings and building applications - Data Mining - Data Warehousing – Basic Statistical descriptions of Data

#### UNIT II DESCRIBING DATA

9

Types of Data - Types of Variables -Describing Data with Tables and Graphs -Describing Data with Averages - Describing Variability - Normal Distributions and Standard (z) Scores

#### UNIT III DESCRIBING RELATIONSHIPS

9

Correlation -Scatter plots -correlation coefficient for quantitative data -computational formula for correlation coefficient - Regression -regression line -least squares regression line - Standard error of estimate - interpretation of R1 -multiple regression equations -regression towards the mean

## UNIT IV PYTHON LIBRARIES FOR DATA WRANGLING

9

Basics of Numpy arrays –aggregations –computations on arrays –comparisons, masks, boolean logic – fancy indexing – structured arrays – Data manipulation with Pandas – data indexing and selection – operating on data – missing data – Hierarchical indexing – combining datasets – aggregation and grouping – pivot tables

#### UNIT V DATA VISUALIZATION

9

Importing Matplotlib – Line plots – Scatter plots – visualizing errors – density and contour plots – Histograms – legends – colors – subplots – text and annotation – customization – three dimensional plotting - Geographic Data with Basemap - Visualization with Seaborn.

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#### TEXT BOOKS

- 1. David Cielen, Arno D. B. Meysman, and Mohamed Ali, "Introducing Data Science", Manning Publications, 2016. (Unit I)
- 2. Robert S. Witte and John S. Witte, "Statistics", Eleventh Edition, Wiley Publications, 2017. (Units II and III)
- 3. Jake VanderPlas, "Python Data Science Handbook", O'Reilly, 2016. (Units IV and V)

#### REFERENCES:

1. Allen B. Downey, "Think Stats: Exploratory Data Analysis in Python", Green Tea Press, 2014.

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S. No	Topic to be Covered	Proposed Date	Actual Date	Cognitive Level	Use Of Teáching Tool	Teaching Methodology	Reference Material	Remarks
	L		UNIT:	I- INTRODUC	TION			
	Data Science- Benefits and uses	10.08.22	10/8/22	Understand	ВВ	Lecturer	T1,R1	
2.	Facets of data	11.08.22	11 8 22	Remember	Visual Aids	Lecturer with Demonstration	T1,R1	OSI
3.	Data Science Process: Overview – Defining research goals	12.08.22	12/8/22	Understand	Visual Aids	Lecturer with Demonstration	T1,R1	Guest Lecture
4.	Retrieving data	13.08.22	13/8/22	Apply	BB	Lecture	T1,R1	
5.	Data preparation	16.08.22	16/8/22	Remember	BB	Lecture	T1,R1	
6.	Exploratory Data analysis	17.08.22	17/8/22	Analysis	ВВ	Lecture	T1,R1	
7.	Build the model— presenting findings and building applications	18.08.22	18 8 22	Apply	Visual Aids	Lecturer with Demonstration	T1,R1	Explained using ppt
8.	Data Mining - Data Warehousing	20.08.22	22 8 22	Understand	Visual Aids	Youtube Videos	T1,R1	OS2
9.	Basic Statistical descriptions of Data	22.08.22	23 8 22	Apply	BB/PPT	Tutorial	T1,R1	

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8. No	Topic to be Covered	Proposed Date	Actual Date	Cognitive Level	Use Of Teaching Tool	Teaching Methodology	Reference Material	Remarks
			UNIT: 2	- DESCRIBIN	G DATA			
10	Types of Data	23.08.22	24 8 22	Knowledge	Visual Aids	Lecturer with Demonstration	T2	
11	Types of Variables	24.08.22	25 8 22	Remember	BB	Tutorial	RI	
12	Frequency Distributions	25.08.22	26/8/22	Apply	BB	Lecture	TI,RI	
13	Describing Data with Tables and Graphs	26.08.22	27 8 22	Apply	Visual Aids	Lecturer with Demonstration	R1 Explair	
14	Describing Data with Tables and Graphs-Quantitative Data	27.08.22	29/8/22	Apply	Visual Aids	Lecturer with Demonstration	T2,R1	Explained using ppt
15.	Describing Data with Tables and Graphs-Qualitative Data	29.08.22	30/8/22	Apply	BB	Lecture	TI,RI	Anna Anna Anna Anna Anna Anna Anna Anna
16.	Describing Data with Averages	30.08.22	01922	Apply	BB	Tutorial	R1	
17.	Describing Variability	01.09.22	02/09/22	Analyse	ВВ	Lecture	T2,R1	
18.	Normal Distributions and Standard (z) Scores		07/09/22	Apply	ВВ	Tutorial	T1,R1	Explained using ppt

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S. No	Topic to be Covered	Proposed Date	Actual Date	Cognitive Level	Use Of Teaching Tool	Teaching Methodology	Reference Material	Remarks
	3	U	NIT: 3- DES	CRIBING REL	ATIONSHIP	S		
19.	Correlation	03.09.22	08/9/22	Understand	Visual Aids	Lecturer with Demonstration	T2,R1	
20.	Scatter plots correlation coefficient for quantitative data	05.09.22	10/9/22	Understand	Visual Aids	Lecturer with Demonstration	T2,R1	OS3
21.	Computational formula for correlation coefficient	07.09.22	20 9/22	Apply	BB	Lecture	T2,R1	Assignment
22.	Computational formula for correlation coefficient - Problems	08.09.22	21 9 22	Apply	BB	Lecture	T2,R1	
23.	Regression regression line	08.09.22	23 9 22	Understand	ВВ	Lecture	T2,R1	
24.	Least squares regression line	10.09.22	23 9 22	Understand	BB	Lecture	T2,R1	
25.	Standard error of estimate	12.09.22	24 9 22	Apply	Visual Aids	Lecturer with Demonstration	1	Explained using ppt
26.	Interpretation of R1	13.09.22	28 9 22	Analyse	ВВ	Lecture	T2,R1	
27.	Multiple regression equations — Regression towards the mean	14.09.22	29/9/22	Understand	BB/PPT	Tutorial	T2,R1	PERI INSTITUTE

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S. No	Topic to be Covered	Proposed Date	Actual Date	Cognitive Level	Use Of Teaching Tool	Teaching Methodology	Reference Material	Remarks
		UNITI	V PYTHON I	IBRARIES F	OR DATA W	RANGLING		
28.	Basics of Numpy arrays	15.09.22	30 90 22	Knowledge	BB	Lecturer	Т3	
29.	Computations on arrays Universal functions, Aggregations	17.09.22	6/10/22	Remember	ВВ	Lecturer	Т3	
30.	Computations on arrays	20.09.22	7 10/22	Apply	PPT	Lecturer with Demonstration	Т3	Assignment
31.	Comparisons, masks, boolean logic	21.09.22	8 10 22	Apply	BB	Peer discussions	Т3	
32.	Fancy indexing – Structured arrays	23.09.22	10 10 22	Apply	BB	Lecturer	Т3	
33.	Data manipulation with Pandas, Data indexing and selection operating on data	23.08.22	11 10 22	Apply	ВВ	Lecturer	Т3	
34.	Missing data – Hierarchical indexing	24.08.22	12/10/22	Apply	BB	Lecturer	Т3	
35.	Combining datasets  -aggregation and grouping	28.09.22	13/10/22	Apply	Visual Aids	Lecturer with Demonstration	T3,R1	OS2
36.	Pivot tables	29.09.22	14/10/22	Apply	BB	Lecturer	T2,R1	n. Op

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S. No	Topic to be Covered	Proposed Date	Actual Date	Cognitive Level	Use Of Teaching Tool	Teaching Methodology	Referenc e Material	Remarks
	4		UNIT V	DATA VISUAI	IZATION			
37.	Importing Matplotlib	03.10.22	19/10/22	Understand	Visual Aids	Lecture with demonstration	Т3	Guest Lecture
38.	Line plots – Scatter plots	06.10.22	20/1922	Understand	Visual Aids	Lecture with demonstration	Т3	OS3
39.	Visualizing errors	07.10.22	2-1/10/2	Analyse	BB	Lecture	Т3	
40.	Density and contour plots	08.10.22	27/10/22	Apply	BB Lecture		Т3	
41.	Histograms – legends – colors – subplots		28/10/2	Understand	PPT	Tutorial	T3,R1	
42.	Text and annotation – customization	11.10.22	31/10/2	Analyse	ВВ	BB Lecture		
43.	Three dimensional plotting	12.10.22	01/1/2	Apply	ВВ	Lecture	ТЗ	
44	Geographic Data with Basemap	13.10.22	02 11	Apply	Visual Aids	Lecture with demonstration	Т3	OS4
45	Visualization with Seaborn.	14.10.22	08/11/80	Apply	BB	Lecture	Т3	Dr. R. P/

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#### Guest Lecture:

Date	Topics	Resource Person with Designation	Mapped with PO's and PSO's
02/09/2022	Data Science Using Python	G. Mohan Shankar Project Engineer Pantech Solutions Chennai	PO3, PO5

## Content Beyond Syllabus:

S. No	Unit	Topic to be Covered	Mapped with PO's and PSO's
1	IV	R Tool	PO5,PSO1
2	V	WEKA Tool	PO5,PSO1

Open Source:

OS1- https://youtu.be/omwtLyaJIW4

OS2-https://youtu.be/txMdrV1Ut64

OS3- https://youtu.be/tmrXuom85TY

OS4-https://youtu.be/goFY\_W7T0z4

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## Mapping of Course Outcomes with Program Outcomes

	Course C	Outco	mes /	Prog	gram	Outco	mes						
***************************************				université de l'establique de comme		Pi	rogran	n Out	come	S			
Course	e Code & Name:	1 2 3 4 5 6 7 8 9 10			11	12							
CO1:	Define the data science process	1	2	2	1	2	1	1	-	1	1	1	
CO2:	Understand different types of data description for data science process	1	1	2	1	2	1	•	1	2	1	1	
CO3:	Gain knowledge on relationships between data	1	2	1	1	2	2	1	2	-	1	1	
CO4:	Use the Python Libraries for Data Wrangling	2	2	1	2	2	2	l		2	1	1	
CO5:	Apply visualization Libraries in  Python to interpret and explore data	2	2	1	2	2	2	1	-	ecc	1		1

Program Outcomes:	
PO1: Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex engineering problems	
PO2:Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences	
PO3: Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.	
PO4: Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid	Leaven
conclusions.	D. R. PAISON MENNEDY, M.E., Ph PRINCIPAL PERI INSTITUTE OF TECHNOLOG Mannivakkam, Chennai - 600 04

3: Strongly agree	2: Agree	1: Weakly agree	0 : Do not agree	**************************************
ic-long learning in the bi	roadest context of technology	and have the preparation a ological change.	nd ability to engage in independent and	
ma multidisciplinary el	nvironments.		,	
nanagement principles ar	id apply these to one's o	own work, as a member and	leader in a team, to manage projects	
OTEProject managemen	t and finance: Demonst	rate knowledge and unders	tanding of the engineering and	MC-CARACTER AND
ocumentation, make effe	ective presentations, and	give and receive clear inst	ructions	
community and with socio	ety at large, such as, bei	ng able to comprehend and	Write effective reports and design	
Olu: Communication: (	Communicate effectively	on complex engineering a	ctivities with the engineering	
ind in munualscipilnary s	ettings.			
PO9: Individual and team	work: Function effective	velv as an individual, and a	s a member or leader in diverse teams,	
engineering practice.	ar principles and commi	t to professional ethics and	responsibilities and norms of the	
PO8: Ethics; Apply ethics	al principles and commi	knowledge of, and need fo	or sustainable development.	
and environmental contact	staniability: Understand	d the impact of the professi	onal engineering solutions in societal	
PO7: Environment and a	issues and the conseque	nt responsibilities relevant	to the professional engineering practice.	A Constitution of the Cons
safety local and sales to	ociety: Apply reasoning	informed by the contextua	I knowledge to assess societal, health,	
ilmitations.				
in wors including predic	tion and modeling to co	mplex engineering activitie	resources, and modern engineering and es with an understanding of the	

HOD/CSE

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#### **Course Outcomes**

At the end of this course, the students will be able to:

CO1: Define the data science process

CO2: Understand different types of data description for data science process

CO3: Gain knowledge on relationships between data

CO4: Use the Python Libraries for Data Wrangling

CO5: Apply visualization Libraries in Python to interpret and explore data

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#### DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING Class Committee Meeting

#### ODD SEMESTER 2022 – 2023 Class Committee Meeting Circular

Date: 19.10.2022

Batch: B.E CSE (2021 – 2025) Chairperson: Mrs.G.S.Gayathri Year/Sem/Sec: II/ III / 'A'

H.O.D - Mrs.K. Varalakshmi

The Second class committee meeting for II year CSE 'A' for the academic year 2022-2023 (Odd semester) will be held on 20.10.22 at 11.00 pm in Lab 3 in the presence of HOD of CSE, subject handling faculty members and selected students. All the members are requested to attend the meeting to improve the effectiveness of teaching-learning process.

#### **Subject Handling Faculty Members:**

Sl.No	Subject Code	Subject Name	Staff Name	Signature
1	MA3354	Discrete Mathematic	Ms.Lakshmi Priya	m. 1 1/2/22
2	CS3352	Digital Principles and Computer Organization	1 Dr R Dinech Kumar	
3	CS3353	Foundations of Data Science	Ms. R.S Abbirami	Selouine.
4	CS3351	Data Structures	Ms.S. Jonisha	Le John
5	CS3391	Object Oriented Programming	Ms. K.Varalakshmi	Julio
6	CS3353	Foundations of Data Science Lab	Mrs. R.S.Abbirami	Colles
7	CS3311	Data Structures Lab	Mrs. S. Jonisha	
8	CS3381	Object Oriented Programming Lab	Mr. V.Dharma Prakash	V. Din 100 2

#### **Student Members**

S.No	Student Name	Signature
1	Karthiga.E	E. Kortnika
2	Keerthika.M	M. keerthika eiliol
3	Gowsalya.D	D. Sty , 2010) 22
4	Karthikeyan.N	Last - 2/11/0/2
5	Jitto.M	M. 2140 21/10/02
6	Adnan Mohammed	Adva0

Chairperson

Hop-este



#### DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING Class Committee Meeting

Batch: B.E CSE (2021 – 2025) Chairperson: Mrs.G.S.Gayathri

Year/Sem/Sec: II/ III / 'A' H.O.D – Mrs.K.Varalakshmi

Attendance sheet for the Class committee meeting held on 20.10.2022 at 2pm Staff Members:

Sl.No	Staff Name	Signature
1	Ms.Lakshmi Priya	m. 1 1/10/22
2	Dr.R.Dinesh Kumar	Q1. R. Drest & 21/10/22
3	Ms R.S.Abbirami	1100
4	Ms.S.Jonisha	Le John
5	Ms. K.Varalakshmi	De 27/10

#### **Student Members**

S.No	Student Name	· Signature
1	Karthiga.E	S 10 100
2	Keerthika.M	E. Korthika M. Keerthika 21/10/21
3	Gowsalya.D	D. Got. 2/10/22
4	Karthikeyan.N	Karef-2/10/24
5	Jitto.M	M. 7:40 2:10/22
6	Adnan Mohammed	Admin 2/1/10/22

Chairperson

Hopecsio



#### DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING Class Committee Meeting

Batch: B.E CSE (2021 – 2025) Chairperson: Mrs.G.S.Gayathri Year/Sem/Sec: II/ III / 'A' H.O.D – Mrs.K.Varalakshmi

#### **Syllabus Completion**

Sl.No	Subject Code	Subject Name	Completion Status
1	MA3354	Discrete Mathematic	Completed 1- 3 Units Completed 90% of Unit 4
2	CS3352	Digital Principles and Computer Organization	Completed 1- 3 Units Completed 50% of Unit 4
3	CS3353	Foundations of Data Science	Completed 1- 3 Units Completed 50% of Unit 4
4	CS3351	Data Structures	Completed 1- 4 Units
5	CS3391	Object Oriented Programming	Completed 1- 3 Units Completed 50% of Unit 4



## DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING Class Committee Meeting

## The following points were discussed during the Class Committee Meeting for II CSE A Held on 20.10.2022 at 12.50 pm

S.No	Points Discussed	Action Taken				
	Subjects					
1	Discrete Mathematic - Students requested to explain the Math Problems in the board.	Has been conveyed to the HOD Will be assigned.				
2	Digital Principles and Computer Organization	Satisfied with the teaching methods and staff.				
3	Foundations of Data Science	Satisfied with the teaching methods and staff. Conveyed to staff				
5	Data Structures - Student requested for revision.	Conveyed to staff. Time table scheduled for the revision classes				
6	Object Oriented Programming - Student requested for revision.	Conveyed to staff. Time table scheduled for the revision classes				
	General					
7	Discussed regarding marks obtained in the CAT 1 exam ar assignments.	nd the importance of writing				
8	Increasing class Attendance percentage. Advised to attendance percentage and also not to come late	classes regularly and improve				
9	Discipline - Advised students to maintain discipline inside and to avoid creating unwanted problems.	college campus and classrooms				
10	Dress code - Advised students to follow proper dress code.					
11	Advised students to utilize the lab hours properly in upgrad knowledge.	ling their programming				
12	Discussed about Nan Mudhalvan Scheme and the courses p	provided				
13	Students requested to repair the rooftop water leakage problem and provide drinking water in the 3 <sup>rd</sup> floor.					
	Students requested to cover the window to avoid the sun shade and washroom issues of					

Chairperson

# DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING CAT – I Time Table – September 2022

CA1 - 1 Time Table - September 2022						
Date	II YEAR CSE A	II YEAR CSE B	III YEAR CSE A	III YEAR CSE B	IV YEAR CSE A	IV YEAR CSE B
12.09.2022 (Monday)	MA3354 – Discrete Mathematics	CS3301 – Data Structures	OCE552– Geographic Information System	CS8592 – Object Oriented Analysis and Design	CS8079 – Human computer Interaction	OBM752 – Hospital Management
13.09.2022 CS3301 – Object Oriented Programming A		CS8592 – Object Oriented Analysis and Design	EC8691 – Microprocessors and Microcontrollers	OBM752 – Hospital Management	CS8792 – Cryptography and Network Security	
14.09.2022 (Wednesday)	CS3352 – Foundations of Data Science	MA3354 – Discrete Mathematics	EC8691 – Microprocessors and Microcontrollers	CS8501 – Theory of Computation	CS8792 – Cryptography and Network Security	MG8591 Principles of Management
15.09.2022 (Thursday)	CS3351– Digital Principles and Computer Organization	CS3352 – Foundations of Data Science	CS8501 – Theory of Computation	CS8591 – Computer Networks	MG8591- Principles of Management	CS8791 Cloud Computing
16.09.2022 (Friday)	CS3391 – Object Oriented Programming	CS3351– Digital Principles and Computer Organization	MA8551 – Algebra and Number Theory	OCE552– Geographic Information System	CS8791 Cloud Computing	CS8079 – Human computer Interaction
17.09.2022 (Saturday)		-	CS8591 – Computer Networks	MA8551 – Algebra and Number Theory		-



## DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING Time Table – NOVEMBER 2022

	CAT-II EXAM				
Date	II YEAR CSE A	II YEAR CSE B			
28.11.22 (Monday)	MA3354 – Discrete Mathematics	CS3391 – Object Oriented Programming			
29.11.22 (Tuesday)	CS3301 – Data Structures	MA3354 – Discrete Mathematics			
30.11.22 (Wednesday)	CS3352 – Foundations of Data Science	CS3351- Digital Principles and Computer Organization			
1.12.22 (Thursday)	CS3351– Digital Principles and Computer Organization	CS3352 – Foundations of Data Science			
2.12.22 (Friday)	CS3391 – Object Oriented Programming	CS3301 – Data Structures			

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### DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING MODEL EXAM Time Table – DECEMBER 2022

DATE	II YEAR CSE A	II YEAR CSE B		
08.12.22 (Thursday)	CS3301 – Data Structures	CS3351– Digital Principles and Computer Organization		
14.12.22 (Wednesday)	CS3352 – Foundations of Data Science	CS3391 – Object Oriented Programming		
17.12.22 (Saturday)	MA3354 – Discrete Mathematics	CS3301 — Data Structures		
21.12.22 (Wednesday)	CS3351–  Digital Principles and Computer Organization	MA3354 — Discrete Mathematics		
24.12.22 (Saturday)	CS3391 – Object Oriented Programming	CS3352 – Foundations of Data Science		





Date: 30.03.2023

#### **CENTRE FOR ACADEMIC COURSES**

**ANNA UNIVERSITY: : CHENNAI - 600 025** 

REVISED

### ACADEMIC SCHEDULE FOR NON-AUTONOMOUS AFFILIATED COLLEGES

February 2023 – June 2023 (Even Semester – Except Semester II)

UG / PG (FT/PT) Degree Programmes

SI.	Programme	Semester	Commence Last wo		king day Commenc			Commencement of End Semester Examinations	
No.	3		Classes	Existing	Revised	Existing	Revised*	Existing	Revised*
1.	B.E. / B.Tech.(Full-Time)	IV,VI	06.02.2023	12.05.2023	24.05.2023***	15.05.2023	26.05.2023	26.05.2023	05.06.2023
2.	B.E. / B.Tech.(Full-Time)	VIII							
3.	B.Arch. (Full-Time)	IV,VI,VIII,X						,	
4.	B.E. / B.Tech. (Part-Time)	IV,VI	06.02.2023	12.05.2023**	-	15.05.2023	-	26.05.2023	-
5.	M.B.A.(Full-Time & Part-Time)	ĮV							
6.	M.B.A. (5 Yrs-Integrated)	IV,VI,VIII,X	1						

#### RE - OPENING DAY FOR THE NEXT SEMESTER: 07.08.2023 (Monday)

\* To provide additional classes for Skill Based Courses.

#### NOTE:

- 1. The Theory and Practical Examination schedules will be published in due course (Practical Examinations will be conducted before the theory examinations).
- 2. If necessary, loss of classes due to various curricular / co-curricular activities of the department / college may be compensated by conducting classes on Saturdays.

"In order to ensure minimum no. of working days, the following Saturdays are declared as working days.

SI. No.	Working Days (Saturdays)	Time Table of the Week Day to be Followed
1.	11.02.2023	Monday
2.	18.02.2023	Tuesday
3.	25.02.2023	Wednesday
4.	04.03.2023	Thursday
5.	11.03.2023	Friday
6.	18.03.2023	Monday

SI. No.	Working Days (Saturdays)	Time Table of the Week Day to be Followed
7.	25.03.2023	Tuesday
8.	01.04.2023	Wednesday
9.	29.04.2023	Thursday
10.	06.05.2023	Friday
11.	13.05.2023	Monday***
12.	20.05.2023	Tuesday***

DIRECTOR ACADEMIC COURSES ANNA UNIVERSITY:: CHENNAI - 600 025

#### **AFFILIATED INSTITUTIONS**

## REGULATIONS 2021 CHOICE BASED CREDIT SYSTEM

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

(For the students admitted to B. E./B. Tech. Programme at various Non-Autonomous Affiliated Institutions)

#### **DEGREE OF BACHELOR OF ENGINEERING / BACHELOR OF TECHNOLOGY**

This Regulation is applicable to the students admitted to B.E/B.Tech. Programmes at all Engineering Colleges affiliated to Anna University, Chennai (other than Autonomous Colleges) and to all the University Colleges of Engineering of Anna University, Chennai from the academic year 2021-2022 onwards.

#### 1. PRELIMINARY DEFINITIONS AND NOMENCLATURE

In these Regulations, unless the context otherwise requires:

- I) "Programme" means Degree Programme, that is B.E./B.Tech. Degree Programme.
- II) "**Discipline**" means specialization or branch of B.E./B.Tech. Degree Programme, like Civil Engineering, Textile Technology, etc.
- III) "Course" means a theory or practical subject that is normally studied in a semester, like Mathematics, Physics, etc.
- IV) "Director, Centre for Academic Courses" means the authority of the University who is responsible for all academic activities of the Academic Programmes for implementation of relevant rules of this Regulations pertaining to the Academic Programmes.
- V) "Chairperson" means the Head of the Faculty.
- VI) "Head of the Institution" means the Principal of the College.
- VII) "Head of the Department (HOD)" means the Head of the Department concerned.
- VIII) "Controller of Examinations (COE)" means the authority of the University who is responsible for all activities of the University Examinations.
- IX) "University" means ANNA UNIVERSITY, CHENNAI.

#### 2. ADMISSION

2.1 Candidates seeking admission to the first semester of the eight semesters B.E./ B.Tech. Degree Programme:

Should have passed the Higher Secondary Examinations of (10+2) Curriculum (Academic Stream) prescribed by the Government of Tamil Nadu with Mathematics, Physics and Chemistry as three of the four subjects of study under Part-III or any examination of any other University or authority accepted by the Syndicate of Anna University as equivalent thereto.

(OR)

Should have passed the Higher Secondary Examination of Vocational stream (Vocational groups in Engineering / Technology) as prescribed by the Government of Tamil Nadu.

#### 2.2 Lateral entry admission

(i) The candidates 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., as per the rules fixed by Government of Tamil Nadu.

(OR)

(ii) 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 University.

#### 3. PROGRAMMES OFFERED

B.E. / B.Tech. Programmes under the Faculty of Civil Engineering, Faculty of Mechanical Engineering, Faculty of Electrical Engineering, Faculty of Information and Communication Engineering and Faculty of Technology.

#### 4. STRUCTURE OF PROGRAMMES

#### 4.1 Categorization of Courses

Every B.E. / B. Tech. Programme will have a curriculum with syllabi consisting of theory and practical courses that shall be categorized as follows:

- i. **Humanities, Social Sciences and Management Courses (HSMC)** include Professional English, Communication skills etc.
- ii. **Basic Sciences Courses (BSC)** include Mathematics, Physics, Chemistry, Biology, Environmental Science etc.
- iii. **Engineering Sciences Courses (ESC)** include Engineering Practices, Engineering Graphics, Basics of Civil / Mechanical / Electrical / Electronics / Instrumentation, Computer Engineering, etc.
- iv. **Professional Core Courses (PCC)** include the core courses relevant to the chosen specialization/branch.

- v. **Professional Elective Courses (PEC)** include the elective courses relevant to the chosen specialization/ branch.
- vi. **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.
- vii. **Employability Enhancement Courses (EEC)** include Project Work, Internship, Seminar, Professional Practices, Case Study and Industrial/Practical Training etc.
- viii. **Audit courses (AC)** include the courses such as Constitution of India, Sangam literature etc.

#### 4.2 Personality and Character Development

All students shall enroll, on admission, in any one of the personality and character development programmes NCC/NSS/NSO/YRC and undergo training / conduct activities 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. Alternately, activities of science, literature and arts also help for personality and character development. So, students shall conduct and participate actively in Science club/Literary Forum/Fine Arts activities for 80 hours and participate in at least ONE event.

National Cadet Corps (NCC) will have about 20 parades.

**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/Institution.

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

**Science club** shall organise activities of popularisation of science and scientific temper through activities related to 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 at least one 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.

#### 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 Period	1
1 Laboratory Period (also for EEC courses like Seminar / Project Work /Case study / etc.)	0.5

#### 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 a period of at least two weeks in an 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 mentioning the period of Industrial Training / Internship and signed by the competent authority of the industry, as per the format provided by the Centre for Academic Courses shall be submitted to the Head of the Institution. The attendance certificate shall be forwarded to the COE, Anna University by the Head of the Institution for processing results.

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 Grade 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 week from one/two organizations. However, if the number of credits earned is 1 or 2, then these credits shall not be considered for classification of the degree. Students shall get permission from the Head of the Institution for taking Industrial Training/Internship and the Certificate of completion of Industrial Training / Internship shall be forwarded to the COE.

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

<sup>\*1</sup> Week = 40 Internship Hours

#### 4.6 Industrial Visit

Every student is required to go for at least one Industrial Visit every semester starting from the second year of the Programme. The Heads of Departments shall ensure that necessary arrangements are made in this regard.

#### 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 requirements 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.

#### 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 the Head of the Institution and the 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 the student, HOD of any other branch of the Institution to ensure that the student has not studied such courses and would not repeat it again as Professional Core/Professional Elective/Open Elective courses. Suitable online courses shall be chosen from the SWAYAM platform.

#### 4.9 Audit courses

The student may optionally study audit courses prescribed by the University and it will be mentioned in the Grade Sheet. However, it will not be considered for computation of CGPA.

#### 4.10 Advancement of Courses:

The students who completed their final semester courses (except project work) in advance, shall be permitted to carry out their final semester Project Work for six months in an industry/research organization.

These students shall undergo the eighth semester courses other than the Project Work in the sixth and seventh semesters, provided they do not have current arrears and have a CGPA of 7.50 and above at the end of Semester IV. 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.

#### 4.11 Medium of Instruction

The medium of instruction is English for all courses, examinations, Seminar presentations and Project Work reports except for the programmes offered in Tamil Medium.

#### 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) students and not more than 12 semesters for Lateral Entry students.
- 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) students.
- 5.2 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.
- 5.3 The Head of the Institution may conduct additional classes for improvement, special coaching, conduct of model test etc., over and above the specified periods. But for the purpose of calculation of attendance requirement for writing the end semester examinations (as per clause 6) by the students, following method shall be used.

Percentage of Total no. of periods attended in all the courses per semester

Attendance = X 100

(No. of periods / week as prescribed in the curriculum) x 15

taken together for all courses of the semester

The University Examination will normally follow immediately after the last working day of the semester as per the academic schedule prescribed from time to time.

5.4 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 5.1 irrespective of the period of break of study (vide clause 18) in order that he/she may be eligible for the award of the degree (vide clause 16).

#### 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 student shall 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 and
- iii. Courses advanced to Semester VI and VII from Semester VIII (as per clause 4.10).

The maximum number of credits that can be 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.

#### 6.2 Flexibility to Drop courses

- 6.2.1 A student has to earn the total number of credits specified in the curriculum of the respective Programme of study in order to be eligible to obtain the degree.
- 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.

#### 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 at least 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** 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.

#### 8. CLASS ADVISOR

There shall be a class advisor for each class. The class advisor will be one among the course-instructors of the class. He / She will be appointed by the HOD of the department concerned. The class advisor is the ex-officio member and the Convener of the class committee. The responsibilities for the class advisor shall be:

- To act as the channel of communication between the HOD and the students of the respective class.
- To collect and maintain various statistical details of students.
- To help the chairperson of the class committee in planning and conduct of the class committee meetings.

- To monitor the academic performance of the students including attendance and to inform the class committee.
- To attend to the students' welfare activities like awards, medals, scholarships and industrial visits.

#### 9. CLASS COMMITTEE

- 9.1. 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 7).
  - 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 slow-learners, if any, and requesting the teachers concerned to provide some additional help or guidance or coaching to such students.
- 9.2 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 Head of the Institution.
- 9.3 The class committee shall be constituted within the first week of each semester.
- 9.4 At least 4 student representatives (usually 2 boys and 2 girls) shall be included in the class committee, covering all the elective courses.
- 9.5 The chairperson of the class committee may invite the class adviser(s) and the Head of the Department to the class committee meeting.
- 9.6 The Head of the Institution may participate in any class committee meeting of the institution.
- 9.7 The chairperson is required to prepare the minutes of every meeting, submit the same to the Head of the Institution 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.
- 9.8 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 Chairperson shall display the cumulative attendance particulars of each student on the Notice Board at the end of every such meeting to enable the students to know their attendance details to satisfy the clause 6 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.

#### 10. COURSE COMMITTEE FOR COMMON COURSES

Each common theory course offered to more than one discipline or group, shall have a "Course Committee" comprising all the teachers teaching the common course with one of them nominated as the course coordinator. The nomination of the course coordinator shall be made by the Head of the Department / Head of the Institution depending upon whether all the teachers teaching the common course belong to a single department or to several departments. The 'Course Committee' 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 internal assessment test(s).

#### 11. SYSTEM OF EXAMINATION

- 11.1 Performance in each course of study shall be evaluated based on (i) continuous internal assessment throughout the semester and (ii) University examination at the end of the semester.
- 11.2 Each course, both theory and practical (including project work & viva voce examinations) shall be evaluated for a maximum of 100 marks.
- 11.2.1 For all theory courses, the continuous internal assessment will carry **40 marks** while the End Semester University examination will carry **60 marks**.
- 11.2.2 For all theory courses with laboratory component, the continuous internal assessment will carry **50 marks** while the End Semester University examination will carry **50 marks**.
- 11.2.3 For all laboratory courses, the continuous internal assessment will carry **60 marks** while the End Semester University examination will carry **40 marks**.
- 11.2.4 The continuous internal assessment for the project work will carry 40 **marks** while the End Semester University examination will carry 60 **marks**.
- 11.3 Industrial Training and Seminar shall carry 100 marks and shall be evaluated through internal assessment only.
- 11.4 The University examination (theory and practical) of 3 hours duration shall ordinarily be conducted between October and December during the odd semesters and between April and June during the even semesters.
- 11.5 The University examination for Project Work shall consist of evaluation of the final report submitted by the student or students of the project group (of not exceeding 4 students) by an external examiner and an internal examiner, followed by a viva-voce examination conducted separately for each student by a committee consisting of the external examiner, the supervisor of the project group and an internal examiner.

11.6 For the University examination of practical courses including P roject W ork, the internal and external examiners shall be appointed by the Controller of Examinations.

#### 12. PROCEDURE FOR AWARDING MARKS FOR INTERNAL ASSESSMENT

For all theory, laboratory courses, theory courses with laboratory component and project work the continuous assessment shall be awarded as per the procedure given below:

#### 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 Ma	arks)	Assessment II (100 M	Total	
Individual Assignment /	Written	Individual Assignment /	Written	Internal
Case Study / Seminar /	Test	Case Study /	Test	Assessment
Mini Project	lini Project			
40 60		40	60	200*

<sup>\*</sup>The weighted average shall be converted into 40 marks for internal Assessment.

Two internal assessments will be conducted as a part of continuous assessment. Each internal assessment is to be conducted for 100 marks and will have to be distributed in two parts viz., Individual Assignment/Case study/Seminar/Mini project and Test with each having a weightage of 40% and 60% respectively. The tests shall be in written mode. The total internal assessment marks of 200 shall be converted into a maximum of 40 marks and rounded to the nearest integer.

#### 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					

<sup>\*</sup> Internal assessment marks shall be converted into 60 marks

#### 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% weig	htage)	Assessment II (60% weig		
(Theory Component)		(Laboratory Component)		Total
Individual Assignment / Written		Evaluation of Laboratory	Test	Internal
Case Study /	Test	Evaluation of Laboratory Observation, Record	1681	Assessment
Seminar / Mini Project		Observation, Record		
40	60	75	25	200*

<sup>\*</sup>The weighted average shall be converted into 50 marks for internal Assessment.

#### 12.4 **PROJECT WORK**

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 a 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.

- 12.4.1 Project Work shall be carried out under the supervision of a "qualified teacher" in the Department concerned. In this context "qualified teacher" means the faculty member possessing (i) PG degree or (ii) Ph.D. degree.
- 12.4.2 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-II 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.
- 12.4.3 The Head of the Institutions shall constitute a review committee for Project Work for each programme. The review committee consists of supervisor, an expert from the Department and a project coordinator from the Department. If the project coordinator/expert member happens to be the supervisor, then an alternate member shall be nominated. In the case of Industrial Project, the review committee shall have the supervisor, the coordinator from industry and the project coordinator from the Department.

There shall be three reviews during the semesters 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).

12.4.4 The project report shall carry a maximum of 20 marks. The project report shall be submitted as per the approved guidelines as given by the Director, Centre for Academic Courses. Same marks shall be awarded to every student within the project group for the project report. The viva-voce examination shall carry 40 marks. Marks are awarded to each student of the project group is based on the individual performance in the viva-voce examination.

Review	Review	Review		End Se	mester Ex	camination	S
I	II	III		Project Report		-Voce Exa	mination
10	10 15 15		Internal	External	Internal	External	Supervisor
10	15	15 15		10	10	20	10

12.4.5 The last date for submission of the project report is on the last working day of the semester. If a student fails to submit the project report on or before the specified deadline or the student has submitted the project report but did not appear for the viva-voce examination, it will be considered as fail in the Project Work and the student shall re-register for the same in the subsequent semester.

#### 12.5 OTHER EMPLOYABILITY ENHANCEMENT COURSES

- (a) The Seminar / Case Study / Mini Project course is to be considered as purely INTERNAL (with 100% internal marks 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. The three member committee appointed by the Head of the Institution, consisting of the course coordinator and two experts from the Department, will evaluate the seminar and at the end of the semester, the marks shall be consolidated and taken as the final mark. The evaluation shall be based on the seminar paper (40%), presentation (40%) and response to the questions asked during presentation (20%).
- (b) The Industrial / Practical Training, Summer Project, Internship, shall carry 100 marks and shall be evaluated through internal assessment only. At the end of Industrial / Practical Training / Internship / Summer Project, the student shall submit an attendance certificate from the organization where he / she has undergone training and a brief report. 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 Institution consisting of the course coordinator and two experts from the Department. The certificates (issued by the organization) submitted by the students shall be attached to the mark list sent by the Head of the Institution to the Controller of Examinations.
- (c) For all the courses under Employability Enhancement Courses Category, except the Project Work, the evaluation shall be done with 100% internal marks and as per the procedure described in clause 12.5 (a) / (b).

#### 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 as per the clause 12.1 or 12.2 shall be conducted 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 do the evaluation process. The list of students along with the marks and the grades earned shall 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.

#### 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.

## 12.8. Internal marks approved by the Head of the Institution shall be displayed by the respective HODs within 5 days from the last working day.

#### 12.9 Attendance Record

Every teacher is required to maintain an 'ATTENDANCE AND ASSESSMENT RECORD', which consists of attendance marked in each lecture or practical or project work class, the test marks and the record of class work (topic covered), separately for each course. This should be submitted to the Head of the Department periodically (at least three times in a semester) for checking the syllabus coverage and the records of test marks and attendance. The Head of the Department will put his/her signature and date after due verification. At the end of the semester, the record should be verified by the Head of the Institution who will keep this document in safe custody (for five years). The University or any inspection team appointed by the University may verify the records of attendance and assessment of both current and previous semesters.

#### 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.

The Head of the Institution shall arrange to conduct the Academic Audit for every course in a semester by forming the respective committees with an external course expert as one of the members drawn from a Technical institution of repute near the institute.

The University or any inspection team appointed by the University may verify the records of Academic Audit report of the courses of both current and previous semesters, as and when required.

#### 13. REQUIREMENTS FOR APPEARING FOR UNIVERSITY EXAMINATIONS

A student shall normally be permitted to appear for the University Examinations for all the courses registered in the current semester (vide clause 6) if he/she has satisfied the semester completion requirements (as per clause 7).

Further, examination registration by a student is mandatory for all the courses in the current semester and all arrear(s) course(s) for the University examinations failing which, the student will not be permitted to move to the higher semester.

A student who has already appeared for any course in a semester and passed the examination is not entitled to reappear in the same subject for improvement of grades.

#### 14. PASSING REQUIREMENTS

- 14.1 A student 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 laboratory courses (including project work).
- 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 student in the first appearance shall be retained and considered valid for all subsequent attempts till the student secures a pass. However, from the third attempt onwards if a student fails to obtain pass marks (IA + End Semester Examination) as per clause 14.1, then the student 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.
- 14.3 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 and laboratory), is 50% of the internal assessment (continuous assessment) marks only.
- 14.6 A student can apply for revaluation of the student's semester examination answer paper in a theory course, as per the guidelines of the COE on payment of a prescribed fee along with prescribed application to the COE through the Head of the Institution. The COE will arrange for the revaluation and the results will be intimated to the student concerned through the Head of the Institution. Revaluation is not permitted for laboratory course and EEC courses.

#### 15. AWARD OF LETTER GRADES

15.1 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 Grade	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 (Withdrawal)	0

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

'SA' denotes shortage of attendance (as per clause 7.3) and hence prevented from writing the end semester examinations. 'SA' will appear only in the result sheet.

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

If the grade RA is given to **Theory Courses**/ **Laboratory Courses it is not required to satisfy the** attendance requirements (vide clause 7), but has to appear for the end semester examination and fulfil the norms specified in clause 14 to earn a pass in the respective courses.

If the grade RA is given to **EEC course (except Project Work), which are evaluated only through internal assessment**, the student shall register for the course again in the subsequent semester, fulfil the norms as specified in clause 14 to earn pass in the course. However, attendance requirement need not be satisfied.

- 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.
- 15.3 The grades O, A+, A, B+, B, C obtained for the one/two credit course (not the part of curriculum) shall figure in the Grade Sheet under the title 'Value Added Courses/Internship/Industrial training'. The courses for which the grades obtained are RA, SA will not figure in the Grade Sheet.
- 15.4 For the students who complete the Audit Course satisfying attendance requirement, the title of the Audit Course will be mentioned in the Grade Sheet. If the attendance requirement is not satisfied, it will not be shown in the **Grade Sheet.**

#### 15.5 **GRADE SHEET**

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

- The college in which the student has studied
- The list of courses registered during the semester and the grade scored.
- The Grade Point Average (GPA) for the semester and
- The Cumulative Grade Point Average (CGPA) of all courses enrolled from first semester onwards.

GPA for a semester is the ratio of the sum of the products of the number of credits acquired for courses and the corresponding points to the sum of the number of credits acquired for the courses in the semester. CGPA will be calculated in a similar manner, considering all the courses registered from first semester. RA grades will be excluded for calculating GPA and CGPA.

where Ci is the number of Credits assigned to the course

**GPi** is the point corresponding to the 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.

#### 16 ELIGIBILITY FOR THE AWARD OF THE DEGREE

- **16.1** A student shall be declared to be eligible for the award of the B.E. / B.Tech. Degree provided the student has
  - i. Successfully gained the required number of total credits as specified in the curriculum corresponding to the student's programme within the stipulated time.
  - ii. Successfully completed the course requirements, appeared for the End Semester examinations and passed all the subjects within the period as prescribed in clause 5.1 and 5.1.1.
  - iii. Successfully passed any additional courses prescribed by the Director, Centre for Academic Courses whenever the student is readmitted under Regulations R-2021 from the earlier Regulations.
  - iv. Successfully completed the NCC / NSS / NSO / YRC / Science Club / Literature Club / Fine Arts Club requirements.
  - v. No disciplinary action pending against the student.
  - vi. The award of Degree must have been approved by the Syndicate of the University.

#### 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.

#### 16.2.3 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**.

**16.3** A student 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 17).

#### 16.4 Photocopy / Revaluation

A student can apply for photocopy of his/her semester examination answer paper in a theory course, as per the guidelines of the COE, on payment of a prescribed fee through proper application to the Controller of Examinations through the Head of the Institutions. The answer script is to be valued and justified by a faculty member, who has handled the subject and recommend for revaluation with the breakup of marks for each question. Based on the recommendation, the student can register for the revaluation through proper application to the Controller of Examinations. The Controller of Examinations will arrange for the revaluation and the results will be intimated to the student concerned through the Head of the Institutions. Revaluation is not permitted for practical courses and EEC courses.

A student can apply for revaluation of answer scripts for not exceeding 5 subjects at a time.

#### 16.5 Review

Students not satisfied with Revaluation 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 the Controller of Examinations through the Head of the Institution.

Students applying for Revaluation only are eligible to apply for Review.

#### 17. PROVISION FOR WITHDRAWAL FROM END-SEMESTER EXAMINATION

- 17.1 A student may, for valid reasons, (medically unfit / unexpected family situations / sports approved by the Chairman, Sports Board and the HOD) 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 the COE through the Head of the Institutions with required documents.
- 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.
- 17.2.1 Notwithstanding the requirement of mandatory 10 days, applications for withdrawal for special cases under extraordinary conditions will be considered on the merit of the case.
- 17.3 In case of withdrawal from a course / courses, the courses will figure both in the Grade Sheet as well as in the Result Sheet. However, withdrawal shall not be considered as an appearance for the eligibility of a student for First Class with Distinction.
- 17.4 If a student withdraws from writing end semester examinations for a course or courses, he/she shall register for the same in the subsequent semester and write the end semester examination(s).
- 17.5 If a student 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 student may appear for the viva voce examination within 30/60 days after the declaration of results for Project Work I and II respectively and the same shall not be considered as reappearance.
- 17.6 Withdrawal is permitted for the end semester examinations in the final semester, as per clause 16.2.1.

#### 18. PROVISION FOR AUTHORISED BREAK OF STUDY

- 18.1 A student is permitted to go on authorised break of study for a maximum period of one year as a single spell.
- 18.2 Break of Study shall be granted only once for valid reasons for a maximum of one year during the entire period of study of the degree programme. However, in extraordinary situation the student may apply for additional break of study not exceeding another one year. If a student intends to temporarily discontinue the programme in the middle of the semester for valid reasons, and to re-join the programme in a subsequent year, permission may be granted based on the merits of the case provided he / she applies to the Director, Student Affairs in advance, but not later than the last date for registering for the end semester examination of the semester in question, through the Head of the Institution stating the reasons therefore and the probable date of re-joining the programme.

- 18.3 The student permitted to re-join 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 re-joining. The students re-joining in new Regulations shall register for additional courses, if any, as notified by the Centre for Academic Courses under change of Regulations. These courses may be from any of the semesters of the curriculum in force, so as to bridge the curriculum in force and the old curriculum. In such cases, the total number of credits to be earned by the student may be more than or equal to the total number of credits prescribed in the curriculum in force.
- 18.4 The authorized break of study is included in the duration specified for passing all the courses for the purpose of classification (vide Clause 16.2).
- 18.5 The total period for completion of the Programme reckoned from, the commencement of the first semester to which the candidate was admitted shall not exceed the maximum period specified in clause 5.1 irrespective of the period of break of study in order that he/she may be eligible for the award of the degree.
- 18.6 If any student is prevented for want of required attendance, the period of prevention shall not be considered as authorized 'Break of Study' (Clause 18.1).
- 18.7 If a student in Full Time mode wants to take up a job / start-up / entrepreneurship during the period of study he/she shall apply for authorised break of study for one year. The student shall join the job / start-up / entrepreneurship only after getting approval of the same by the Director, Centre for Academic Courses with due proof to that effect.
- 18.8 No fee is applicable to students during the Break of Study period.

#### 19. DISCIPLINE

- 19.1 Every student is required to observe disciplined and decorous behaviour both inside and outside the college and not to indulge in any activity which will tend to bring down the prestige of the University / College. The Head of the Institution shall constitute a disciplinary committee consisting of the Head of the Institution, Two Heads of Department of which one should be from the faculty of the student, to enquire into acts of indiscipline and notify the University about the disciplinary action recommended for approval. In case of any serious disciplinary action which leads to suspension or dismissal, then a committee shall be constituted including one representative from Anna University, Chennai. In this regard, the member will be nominated by the University on getting information from the Head of the Institution.
- 19.2 If a student indulges in malpractice in any of the University / internal examination he / she shall be liable for punitive action as prescribed by the University from time to time.

#### 20. REVISION OF REGULATIONS, CURRICULUM AND SYLLABI

The University may from time to time revise, amend or change the Regulations, curriculum, syllabus and scheme of examinations through the Academic Council with the approval of the Syndicate.

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## PERI INSTITUTE OF TECHNOLOGY IQAC ACADEMIC CALENDER 2022-23 EVEN SEMESTER (II YEAR)

		JANUARY		FEBRUARY				
Date	Day	Activity	Academic Day	Date	Day	Activity	Academic Day	
1	Sun			1	Wed	Reopening for IV, VI and VIII Sem	1	
2	Mon			2	Thu	Class Committee week	2	
3	Tue			3	Fri		3	
4	Wed	Governing Council meeting		4	Sat			
5	Thu	2	7.16	5	Sun	9		
6	Fri			6	Mon	Commencement of Aptitutde Training 6th sem	6	
7	Sat	IQAC Academic Verification End Sem		7	Tue		7	
8	Sun	4		8	Wed	Zeroth -Review Report	8	
9	Mon			9	Thu		9	
10	Tue	IQAC Meeting		10	Fri		10	
11	Wed			11	Sat		11	
12	Thu	National -Youth Day		12	Sun			
13	Fri			13	Mon		12	
14	Sat	Pongal Holidays		14	Tue		13	
15	Sun	Pongal Holidays		15	Wed		14	
16	Mon	Pongal Holidays		16	Thu		15	
17	Tue	Pongal Holidays		17	Fri	<b>Annual Sports Meet</b>	16	
18	Wed			18	Sat			
19	Thu			19	Sun			
20	Fri		14.1	20	Mon	Class Committee Meeting week	17	
21	Sat			21	Tue		18	
22	Sun			22	Wed		19	
23	Mon	Placement Meeting -1		23	Thu	National - Science Day	20	
24	Tue			24	Fri		21	
25	Wed	National - Voters Day		25	Sat	First review Report Submission		
26	Thu	Holiday - Republic Day	14	26	Sun		18. 11	
27	Fri	IQAC Academic Verification -Starts		27	Mon		22	
28	Sat			28	Tue		23	
29	Sun							
30	Mon			The second		Ligantina de la compansión de la compans		
31	Tue				1			
		MARCH				APRIL		

MARCH

		MARCH		APRIL				
Date	Day	Activity	Academic Day	Date	Day	Activity	Academic Day	
1	Wed		24	1	Sat	Annual Appraisal Window starts		
2	Thu		25	2	Sun			
3	Fri		26	3	Mon		50	
4	Sat		27	4	Tue		51	
5	Sun			5	Wed		52	
6	Mon	Laboratory Model Examination 1	28	6	Thu	- 4	53	
7	Tue	Commencement of CAT 1- 2nd,3rd&4th year	29	7	Fri	Holiday - Good Friday	8	
8	Wed	International Womens Day	30	8	Sat			
9	Thu		31	9	Sun			
10	Fri	0-1	32	10	Mon		54	
11	Sat	Annual - Culturals	33	11	Tue	Commencement of CAT 2- 2nd,3rd&4th year	55	
12	Sun			12	Wed		56	
13	Mon		34	13	Thu		57	
14	Tue		35	14	Fri		58	
15	Wed		36	15	Sat	·		
16	Thu		37	16	Sun			
17	Fri		38	17	Mon	Class Committee Meeting week	59	
18	Sat			18	Tue		60	
19	Sun			19	Wed	International Conference -ICCCI	61	
20	Mon		39	20	Thu		62	
21	Tue		40	21	Fri	Third Review report	63	
22	Wed	World Water Day	41	22	Sat	Holiday - Ramzan/World Earth Day		
23	Thu		42	23	Sun	•		
24	Fri	Idea Fest	43	24	Mon		64	
25	Sat		44	25	Tue		65	
26	Sun			26	Wed		66	
27	Mon	Class Committee meeting week	45	27	Thu		67	
28	Tue	Second Review Report Submission	46	28	Fri	International Conference ICRCT	68	
29	Wed	Mid semester Feed back	47	29	Sat		69	
30	Thu		48	30	Sun			
31	Fri		49					

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Date		Activity	Academic Day	Date		Activity	Academic Day
1	Mon	Holiday - May day	70	1	Thu		
2	Tue	Commencement of Model Examaination-Second year	71	2	Fri		
3	Wed		72	3	Sat		
4	Thu	International Conference on ICCET	73	4	Sun		
5	Fri		74	5	Mon		
6	Sat	Commencement of Model Examaination-Third year	75	6	Tue		
7	Sun			7	Wed		
8	Mon	7	76	8	Thu		
9	Tue		77	9	Fri		1/.
10	Wed	*	78	10	Sat		
11	Thu		79	11	Sun		
12	Fri	Commencement of Model Examaination-Final year	80	12	Mon	Commencement of CAT 1-First year	
13	Sat			13	Tue		
14	Sun			14	Wed		
15	Mon			15	Thu		
16	Tue			16	Fri		
17	Wed			17	Sat		
18	Thu		i	18	Sun		
19	Fri			19	Mon		
20	Sat			20	Tue	•	
21	Sun		1	21	Wed		10 10 10 10 10 10 10 10 10 10 10 10 10 1
22	Mon	Laboratory Model Examination 2		22	Thu		V V
23	Tue	End - Semester Feed back		23	Fri		4
24	Wed			24	Sat		
25	Thu	Semester Examination Begins- Second year		25	Sun		
26	Fri			26	Mon		
27	Sat			27	Tue		
28	Sun			28	Wed		
29	Mon			29	Thu		
30	Tue	IQAC Meeting		30	Fri		70 T
30	Wed	Marka jarra a		30	Sat		
		2/15/2/199	7				
	et 4 ( + ( + )	PAT SEC SELECTION					Z.

		JULY		Part Share		AUGUST	
Date	Day	Activity	Academic Day	Date	Day	Activity	Academic Day
1	Sun		10.1	1	Tue		
2	Mon			2	Wed		
3	Tue			3	Thu		
4	Wed			4	Fri		
5	Thu			5	Sat		
6	Fri			6	Sun		
7	Sat			7	Mon	Laboratory Model Examination 1- First year	
8	Sun			8	Tue	pro 8	
9	Mon			9	Wed		
10	Tue			10	Thu		
11	Wed	Commencement of CAT 2- First year		11	Fri		
12	Thu	ď		12	Sat		
13	Fri			13	Sun		
14	Sat			14	Mon		
15	Sun			15	Tue	Semester Examination Begins- First year	
16	Mon			16	Wed		
17	Tue			17	Thu		
18	Wed	-		18	Fri		
19	Thu			19	Sat		
20	Fri			20	Sun		
21	Sat			21	Mon		
22	Sun			22	Tue		
23	Mon			23	Wed		
24	Tue			24	Thu		
25	Wed			25	Fri		
26	Thu			26	Sat		
27	Fri	Commencement of Model exam-First year		27	Sun		e i
28	Sat			28	Mon		
29	Sun			29			
31	Mon			31		2	

PRINCIPAL

Dr. R. PALSON KENNEDY, M.E., Ph.D., PRINCIPAL PERI INSTITUTE OF TECHNOLOGY Mannivakkam, Chennai - 600 048.

#### PERI INSTITUTE OF TECHNOLOGY DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING COURSE ALLOTMENT-EVEN SEM(2022-23)

5.IV(	Name of the staff	Theory /Lab handling	Year/Sem	No.Of Courses	Sig
1	Dr. S.KARPAGASELVI	CP4096 Software Quality Assurance	I/II/ME	Courses	
2	Dr. S.NAGARAJ	CP4291/Internet of Things	I/II/ME	1	
3	Dr T CAD AMANIANI	CP5411/Project Phase Work II	II/IV/ME	1+1	
		CP4292/Multicore Architecture and Programing	I/II/ME	1	
4	Dr.S.AMBAREESH	CS8075/Data Warehousing and Data Mining CS8811/Project	III/VI/A		
		MP4092/Human Computer Interaction	IV/VIII/A I/II/ME	1+1	
5	DR.BALU S	CS8691/Artificial Intelligence			
	12, 12, 11, 17, 12	CP4211/Term Paper Writing and Seminar	III/VI/A	0.14	
	DR.PRIYA V	CS3452/Theory of Computation	I/II/ME II/IV/A	2+1	
U	DR.FRITA V	- Joseph Marien	11/1 V/A	1.1	
		CS8602/Compiler Design	III/VI/A	1+1	
7	MRS. VARALAKSHMI K	CS8602/Compiler Design	III/VI/B		
_	7.66	CS8811/Project	IV/VIII/B	2+1	
	MRS. ARUL SANDANA	CS8601/Mobile Computing	III/VI/B	211	
-	RANI A	CS8662/Mobile Application Development Laboratory	III/VI/B	1+1	
)	MRS. RENUKA M	CS8603/Distributed Systems	III/VI/B	111	
-	TOTAL IVI	CS3401/Algorithms	II/IV/B	2+1	
		CS3492/Database Management Systems	II/IV/B	- ·	
0	MRS. LEKHA P	CS8075/DataWarehousing and Data Mining	III/VI/B		
		CS3481/Database Management Systems Laboratory			
	ACC TIVING	CP4252/Machine Learning	II/IV/B	2+1	
1 M	IRS. JAYAPRABHA J	CS8611/Mini Project	I/II/ME		
2 341	D. KADTINKTY (24)	CP4212/Software Engineering Laboratory	III/VI/B	1+1	
2 N	AR. KARTHIKEYAN M	SE4151/Advanced Software Engineering	I/II/ME		
1	MR. VASANTHA RAJA SS	CS8601/Mobile Computing	I/II/ME III/VI/A	1+1	
		CS8080/Information Retrieval Techniques	IV/VIII/B		
		CS8662/Mobile Application Development Laboratory	III/VI/A	2+1	
	MR. VIJAYANARAYANAN A	CS3452/Theory of Computation	II/IV/B	2+1	
		CS8651/Internet Programming	III/VI/B	-	
		CS8661/Internet Programming Laboratory	III/VI/B	2+1	
	MRS. DIVYA M	CS8611/Mini Project		211	
N		288491/Artificial Intelligence and Machine Learning III/IV/B		-	
1					
+		GE8076/Professional Ethics in Engineering	IV/VIII/A	2+1	
N	MRS. ABBIRAMI RS	CS3491/Artificial Intelligence and Machine Learning	II/IV/A		
		GE8076/Professional Ethics in Engineering	IV/VIII/B	1+1	
		CS3251/Programming in C		1+1	
M	IRS. JONISHA P		I/II/CSE B		
+		CS346/Operating Systems Laboratory	II/IV/B	1+1	
	RS. SAVITHIRI R	CS3492/Database Management Systems	II/IV/A		
MR RA.		CS3451/Introduction to Operating System	II/IV/B		
		CS34817Database Management Systems Laboratory		-	
	R. NOBLE LOURDHU	CS8651/Internet Programming	II/IV/B	2+1	
		CS3451/Introduction to Operating System	III/VI/A II/IV/A	-	
	NO W	CS8661/Internet Programming Laboratory	III/VI/A	2+1	
	DEEDINA	CS3401/Algorithms		Z+1	
	RS. DEEPIKA H	CS8080/Information Retrieval Techniques	II/IV/A		
			IV/VIII/A	2	
MI	RS. VIMALA DEVI A	CS3251/Programming in C	I/II/CSE B		
		CS8691/Artificial Intelligence	III/VI/B	STATE OF STA	
		CS3271/Programming in C Laboratory	I/II/CSE B	2 +1	
		CS8603/Distributed System	III/VI/A		
	RS. BERSIKIN LIBINA T	CS3271/Programming in C Laboratory AD3271/Data Structures Design Laboratory	I/II/CSE B		
		CS8691/Artificial Intelligence	I/II/AI	1+2	
MF	RS.ARUNA JASMINE	CS9661/Internet Programme CS9661/Internet Pr	III/VI/A		
		CS8661/Internet Programming Laboratory AD3251/Data Structures Design	III/VI/A	1+1	
MR	RS.VIDHYA	CS3271/Programming in C Laboratory	I/II/AI		
		CS3271/Programming in C Laboratory	I/II/CSE A		
		Laudiatory	I/II/CSE B	1+2	

HON 88 1/23

Principal

## PERI INSTITUTE OF TECHNOLOG DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING TIME TABLE ACADEMIC YEAR 2022-2023 (EVEN SEMESTER)

Year / Sem: II / IV

Section: A

Room No:BT-9

W.E. F:01/02/2023

Days / Hour	1 8:30-9:15	9:15- 10:00	5)	3 10:15-11:00	4 11:00- 11:45	0)	5 12:30-1:15	6 1:15- 2:00		7 2:10-2:55	8 2:55-3:40
Monday	CS3451/OS	CS3401/AL	- 10.1	GE3451/EVS	CS3491/ AIML	12.30	CS3492/ DBMS	NPTEL / Library	2:10)	CS3452/TOC	CS3451/OS
Tuesday	CS3491/AIML	CS3492/ DBMS	0.00	CS3451/OS	CS3452/ TOC	1.45	← CS3461/ OSL		-00	CS3461/ OSL CS3481/DBMSL →	Mentor
Wednesday	CS3452/TOC	GE3451/ EVS	AK (1	CS3491/AIML	CS3401/AL	1K (1	CS3452/TOC	<b>←</b>	AK (2.	CS3461/ OSL CS3481/ DBMSL->	
Thursday	CS3492/DBMS	CS3452/ TOC	BRE.	CS3401/AL	CS3491/AI ML	BRE	CS3401/AL	CS3492/ DBMS	BRE	GE3451/EVS	CS3491/AI ML
Friday	CS3401/AL	CS3492/ DBMS	\$,1/6)	CS3452/ TOC	CS3451/OS	A V	CS3451/OS	CS3401/ AL		GE3451/EVS	Objective type test

S. No.	Subject Code	Subject Name	Name of the Faculty	Dow	37 07
1.	CS3452	Theory of Computation	Dr.V.Priya	Dept.	No. of Hours
2.	CS8491	Artificial Intelligence and Machine Learning	CSE CSE	6	
3.	CS3492	Database Management Systems	Mrs.R.Savithiri		5
4.	CS3401	Algorithms Mrs. H .Deepika		CSE	5
5	CS3451	Wils. II .Deepika		CSE	6
		Environmental Sciences and	Mr.S.RNoble Lourdhuraj	CSE	5
6	GE3451	Sustainability	Ms.Prasanna Devi	CSE	4
Laborator	ies		LONG THE RESERVE OF THE PROPERTY OF THE PROPER		
7.	CS3461	Operating Systems Laboratory	Mrs.S.Jonisha	COP	
Q	CS3481	Database Management	THIS.O.JOHISHA	CSE	6
8.		Systems Laboratory	Mrs.R.Savithri	CSE	6
9.	Mentor	Skill Development/Mentor	Department Faculties	CGE	
10.	OT	Objective type test		CSE	1
11	NPTEL/LH		Department Faculties	CSE	1_
		NPTEL/Library	Mrs. H .Deepika	CSE	1
Class Inch	arge: Mrs.R.Savit	hiri			1

Time Table Coordinator

Principal

## PERI Institute of Technology

# Mannivakkam, Chennai 609048 Department of Computer Science and Engineering

Department	of	Computer	Science	and	Engineering
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Degree and Programme Semester Course Code and Name: Core / Elective:		B.E/ CSE  V1  CS8651 Internet Programming  Core						
					LTPC	3003	No. of Credits:	3
					Date of commenc	ement:	01.02.2023	
					Faculty Incharge:		Mr.A.Vijayanarayanan	

#### Definition:

Web programming refers to the writing, markup and coding involved in Web development, which includes Web content. Web client and server scripting and network security. The most common languages used for Web programming are XML, HTML, JavaScript, Perl 5 and PHP. Web programming is different from just programming, which requires interdisciplinary knowledge on the application area, client and server scripting, and database technology...

### Courseobjective:

- \* To understand different Internet Technologies
- To learn java-specific web services architecture.

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### Course Outcomes:

At the end of this course, the students will be able to:

- CO1: Construct a basic website using HTML and Cascading Style Sheets
- CO2: Build dynamic web page with validation using Java Script objects and by applying different event handling mechanisms.
- CO3: Develop server side programs using Servlets and JSP
- CO4: Construct simple web pages in PHP and to represent data in XML format
- CO5: Use AJAX and web services to develop interactive web applications

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#### **SYLLABUS**

# UNIT I WEBSITE BASICS, HTML 5, CSS 3, WEB 2.0

Web Essentials: Clients, Servers and Communication - The Internet - Basic Internet protocols - World wide web - HTTP Request Message - HTTP Response Message - Web Clients - Web Servers - HTML5 - Tables - Lists - Image - HTML5 control elements -Semantic elements - Drag and Drop - Audio - Video controls - CSS3 - Inline, embedded and external style sheets - Rule cascading - $Inheritance-Backgrounds-Border\ Images-Colors-Shadows-Text-Transformations-Transitions-Animations.$ 

## UNIT II CLIENT SIDE PROGRAMMING

Java Script: An introduction to JavaScript-JavaScript DOM Model-Date and Objects,- Regular Expressions- Exception Handling-Validation-Built-in objects-Event Handling- DHTML with JavaScript- JSON introduction - Syntax - Function Files - Http Request

## UNIT III SERVER SIDE PROGRAMMING

Servlets: Java Servlet Architecture- Servlet Life Cycle- Form GET and POST actions- Session Handling- Understanding Cookies-Installing and Configuring Apache Tomcat Web Server- DATABASE CONNECTIVITY: JDBC perspectives, JDBC program example - JSP: Understanding Java Server Pages-JSP Standard Tag Library (JSTL)-Creating HTML forms by embedding JSP code.

### UNIT IV PHP and XML

An introduction to PHP: PHP- Using PHP- Variables- Program control- Built-in functions- Form Validation- Regular Expressions -File handling - Cookies - Connecting to Database. XML: Basic XML- Document Type Definition- XML-Schema DOM and Presenting XML, XML Parsers and Validation, XSL and XSLT Transformation, News Feed (RSS and ATOM).

# UNIT V INTRODUCTION TO AJAX and WEB SERVICES

AJAX: Ajax Client Server Architecture-XML Http Request Object-Call Back Methods; Web Services: Introduction- Java web services Basics - Creating, Publishing, Testing and Describing a Web services (WSDL)-Consuming a web service, Database Driven web service from an application -SOAP.

### **TOTAL 45 PERIODS**

#### TEXT BOOK:

- 1. Deitel and Deitel and Nieto, "Internet and World Wide Web How to Program", Prentice Hall, 5th Edition, 2011. REFERENCES:
- 1. Stephen Wynkoop and John Burke "Running a Perfect Website", QUE, 2ndEdition,1999.
- 2. Chris Bates, Web Programming Building Intranet Applications, 3rd Edition, Wiley Publications, 2009.

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- 3. Jeffrey C and Jackson, "Web Technologies A Computer Science Perspective", Pearson Education, 2011.
- 4. Gopalan N.P. and Akilandeswari J., "Web Technology", Prentice Hall of India, 2011.
- 5. UttamK.Roy, "Web Technologies", Oxford University Press, 2011.

### ONLINE SOURCE

- OS1-https://www.youtube.com/watch?v=2rsI05vBsD4
- OS2-https://www.youtube.com/watch?v=hExRDVZHhig
- OS3-https://www.youtube.com/watch?v=qz0aGYrrlhU
- OS4- https://www.youtube.com/watch?v=W6NZfCO5S!k
- OS5-https://www.youtube.com/watch?v=7TOmdDJc14s
- OS6-https://www.youtube.com/watch?v=3OrEsC-QjUA
- OS7-https://www.youtube.com/watch?v=KBT2gmAfav4
- OS8-https://www.youtube.com/watch?v=E-NciVkZFVs
- OS9-https://www.youtube.com/watch?v=tNKD0kfcl6o
- OS10-: https://nptel.ac.in

# COURSE DELIVERY PLAN

S. No	Topic to be Covered	Proposed Date	Actual Date	Cognitive Level	Use Of Teaching Tool	Teaching	Reference	Remar
		UNIT	FLAUTOMATA	AND REGULAR	EVEDESSIONS	Methodolgy	Material	ks
genous	Web Essentials: Clients, Servers and Communication	01.02.23	01.02.23	Understand	Chalk & Board	Lecture	T1,R1	
2	Introduction to Basic Internet protocols	02.02.23	02.02-23	Remember	Visual Aids,	lecture	T1.RI	OS1
3	HTTP Request Message  - HTTP Response  Message	02.02.23	02-02-23	Understand	Chalk & Board	Lecture	TI,RI \	
4	WebClients – Web Servers	04.02.23	07.02.23	Understand	Chalk & Board	Lecture	T1,R2	Corport
5	Introduction to HTML5 Tables	07.02.23	08.02.13	Understand	Chalk & Board	Lecture with	T1,R2	Cory
6	Semantic elements	08.02.23	09.02.63	Understand	Chalk & Board	demonstration		
7	Drag and Drop – Audio – Video controls - CSS3 – Inline, embedded and external style sheets	09.02.23	11.02.23	Understand	Visual Aids,	Lecture with demonstration	TI,R3	OS2
8	Rule cascading – Inheritance – Backgrounds	11.02.23	11.02.23	Apply	Chalk & Board	Lecture	TI,RI	
9	Transformations – Transitions – Animations	11.02.23		Apply	Chalk & Board	Activity Based Learning	TI.RI	0S3
		UNIT I	I REGULAR EX	PRESSIONS AND	LANGUACES			THON.
111	An introduction to JavaScript	14.02.23	15-02-23	Remember	Chalk & Board	Lecture	TLRI	OS3
	JavaScript DOM Model	15.02.23	20.02.23	Understand	visual Alus.	Lécture with demonstration	Dr. R. PAL	SON KENNEDY, M.E., F

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			-	Understand	Chalk & Board	Lecture	TI,RI	
12	Date and Objects	16.02.23	di 102.23	Understand	Chalk & Board			
13	Regular Expressions- Exception Handling- Validation	18.02.23	21.02.23	Understand		Lecture	T1,R2	
14	Event Handling DHTML with JavaScript	18.02.23	22.02-23	Understand	Visual Aids, PPT	Lecture with demonstration	T1,R2	
15	Java Sccript Validation	20.02.23	25.02.23	Understand	Chalk & Board	Buddy Learning	T1,R2	Conguel
16	Built-in objects	21.02.23	03.03.23	Understand	Visual Aids, PPT	Lecture	T1,R1	Const
17	DHTML with JavaScript	22.02.23	04.03.23	Remember	Visual Aids, PPT	Lecture with demonstration	TI,R1	OS4
ALT I	JSON introduction	23.02.23	06.03-2023	Remember	Chalk & Board	Lecture with demonstration	TI,RI	OS5
		UNIT III CON	TEXT FREE GR	AMMAR AND P	USH DOWN AUTO	)MATA		
19	Servlets: Java Servlet Architecture	24.02.23	2/3/2023	Remember	Visual Aids, PPT	Lecturer	TI,RI(	
20	Servlet Life Cycle	26.02.23	8/3/2023	Understand	Chalk & Board	Tutorial	TI,RI	
21	Session Handling	07.03.23	09/0/23.	Understand	Chalk & Board	Lecture	TI.R1	
23	Understanding Cookies	08.03.23	11/3/23.	Understand	Chalk & Board	Lecture with demonstration	T1,R2	OS6
24	Installing and Configuring Apache Tomcat Web	09.03.23	13/3/23	Understand	Chalk & Board	Activity Based Learning	T1,R2	Corrace Parace
25	Server DATABASE CONNECTIVITY	11.03.23	14/3/23	Apply	Chalk & Board	Lecture	T1,R3 \	
26	Understanding Java	11.03.23	18/3/23	Apply	Chalk & Board	Lecture	TI,RI	1
27	Cessing HTML forms	13.03.23	12/3/23	Apply	Visual Aids, PPT	Flipped . Classroom	TI.RI	- CX

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		UNII	IV NORMAL I	FORMS AND TUR	ING MACHINES			
28	An introduction to PHP	14.03.23	18/3/23	Remember	Chalk & Board	Lecturer	T1,R1	
29	PHP- Variables	15.03.23	0/3/13	Understand	Chalk & Board	Tutorial	T1,R1	
30	Built-in functions	16.03.23	20/3/23	Understand	Chalk & Board	Lecture	T1,R1 /	lon
3 1	Understanding Cookies	18.03.23	29/3/23	Understand	Chalk & Board	Lecture	T1,R2	TAN
32	File handling	18.03.23	25/3/23	Understand	Chalk & Board	Lecture	T1,R2	OS8
33	Connecting to Database	20.03.23	28/3/23	Apply	Chalk & Board	Activity Based	T1,R2	SEMI
34	XML: Basic XML- Document Type Definition	21.03.23	30/3/23	Apply	Chaik & Board	Learning Tutorial	TI,RI /	NAR OS9
5	XML Schema DOM and Presenting XML	22.03.23	3/4/23	Understand	Visual Aids, PPT	Lecture	TI,RI	SEMI
36	News Feed (RSS and ATOM).	23.03.23	4/4/23	Apply	Visual Aids,	Tutorial	T1,R1	NAR SEMI
			UNITV	UNDECIDABILE			The second contract of the second	NAR
7	AJAX: Ajax Client Server Architecture	26.03.23	579(2)	Remember	Visual Aids,	Lecturer	TI.RV	1
₹	XML Http Request Object-Call Back Methods	26.03.23	6/4/23	Understand	Chalk & Board	Tutoria!	T1,R1	SEMI NAR
)	Web Services: Introduction- Java web services	29.03.23	6/9/23	Understand	Chalk & Board	Lecture	T1.R1	SEMI NAR
0	Web Services: Introduction- Java web services	29.03.23	2/4/23.	Apply	Chalk & Board	Lecture	T1,R2	tons
	Creating, Publishing, Testing and Describing a Web services (WSDL)	30.03.23	8/4/23	Apply	Chalk & Board	Lecture with demonstration	T1.R2 Dr. R. PAI	00

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42	Creating, Publishing, Testing and Describing a Web	30.03.23	19/4/23	Apply	Chalk & Board	Activity Based Learning	T1,R2 \( \)	SEMI NAR	
43	services (WSDL)  Consuming a web service, Database Driven web service from an application	04.04.23	23/9/23	Apply	Chalk & Board	Tutorial	T1,R1	Con	pur
44	Consuming a web service, Database Driven web service from an application	05.04.23	26/4/25.	Apply	Visual Aids, PPT	Lecture	TI,RI	OS10	
45	SOAP	06.04.23	29/9/23.	Apply	Visual Aids, PPT	Tutorial	T1,RÌ		
			Content	Beyond the Syll	abus				
46	XML DATA BASE CONNECTIVITY	08.04.23	29/4/23	Understand	Visual Aids, PPT	Lecture	Online source		
47	JQuery	12.04.23	29 Sy 125	Apply	Visual Aids, PPT	Lecture	Online source	mal	

Apal(IQAC Coordinator)

Dr. R. PALSON KENNEDY, M.E., Ph.D., PRINCIPAL PERI INSTITUTE OF TECHNOLOGY Mannyokkam, Chennai - 600 048.



## EVEN SEMESTER 2022 – 2023 Class Committee Meeting Circular

Date: 15.05.2023

Batch: B.E CSE (2021 – 2025)

Year/Sem/Sec: II/ IV / 'A'

Chairperson: Mr. Vijayanarayanan

H.O.D - Mrs.K. Varalakshmi

The third class committee meeting for II year CSE 'A' for the academic year 2022-2023 (Even semester) will be held on 18.05.2023 at 2pm in IQAC room in the presence of HOD of CSE,IQAC coordinator, subject handling faculty members and selected students. All the members are requested to attend the meeting to improve the effectiveness of teaching-learning process.

Subject Handling FacultyMembers:

	3	mg racuity wiembers.		
Sl.No	Subject Code	Subject Name	Staff Name	Signature
1	CS3452	Theory of Computation	Mrs.G.S.Gayathri	Believent
2	CS8491	Artificial Intelligence and Machine Learning	New Faculty	75 / 0 //8/
3	CS3492	Database Management Systems	Mrs.R.Savithiri	Roger
4	CS3401	Algorithms	Mrs.H .Deepika	Danile
5	CS3451	Introduction to Operating Systems	Mr.S.RNobleLourdhu Raj	skar
6	GE3451	Environmental Sciences and Sustainability	Mrs. P. Prasanna Devi	Pen Di
7	CS3461	Operating Systems Laboratory	Mrs.G.S.Gayathri	G.S. Garran
8	CS3481	Database Management Systems Laboratory	Mrs.R.Savithri	Row

### **Student Members**

Chairperson

S.No	Student Name	Signature
1	B.Gayathri	gay.
2	P.Ishasri	Weld
3	D.Gokul	D. Gotten
4	R.Gokul	Rigokul
5	P.Arul Pandian	Coff
6	M.Dayana	Quark



Batch: B.E CSE (2021 – 2025)

Year/Sem/Sec: II/ IV / 'A'
H.O.D – Mrs.K.Varalakshmi

Chairperson: Mr. Vijayanarayanan

Attendance sheet for the Class committee meeting held on 18.05.2023 at 2pm

## **Staff Members:**

Sl.No	Staff Name	Signature
1	Mrs.G.S.Gayathri	ezselayathis
2	Mrs. P. Prasanna Devi	Plan Deir
3	Mrs.R.Savithiri	Pour
4	Mrs.H .Deepika	Landes
5	Mr.S.RNobleLourdhu Raj	Sign

### **Student Members**

S.No	Student Name	Signature
1	B.Gayathri	gay.
2	P.Ishasri	De hope
3	D.Gokul	Shokul.
4	R.Gokul	Ro Gonkul.
5	P.Arul Pandian	Soft.
6	M.Dayana	Dana

Chairperson

HOD-CSE



Batch: B.E CSE (2021 – 2025)

Chairperson: Mr. Vijayanarayanan

Year/Sem/Sec: II/ IV / 'A'

H.O.D - Mrs.K.Varalakshmi

## **Syllabus Completion**

Sl.No	Subject Code	Subject Name	Completion Status
1	CS3452	Theory of Computation	Completed 5 units
2	CS8491	Artificial Intelligence and Machine Learning	Completed 5 units
3	CS3492	Database Management Systems	Completed 5 units
4	CS3401	Algorithms	Completed 5 units
5	CS3451	Introduction to Operating Systems	Completed 5 units
6	GE3451	Environmental Sciences and Sustainability	Completed 5 units



# The following points were discussed during the Class Committee Meeting for II CSE A Held on 18.05.2023 at 2pm

S.No	Points Discussed	Action Taken				
1	Individual staff -portion completion	The Syllabus completion copy has been attached. – all 5 units				
2	TOC	The staff provided PPT &hand written Notes of all units				
3	Artificial Intelligence and Machine Learning	Satisfied with the teaching methods, All units revision scheduled as the students requested				
4	DBMS – Notes not given and need more explanation about diagrams	Satisfied with the teaching methods. Notes material given				
5	Algorithms	Satisfied with the teaching methods, All unit revision scheduled as the students requested				
6	Operating System	Satisfied with the teaching methods.				
7	EVS	Requested for extra classes. Conveyed to staff and has been followed				
	Gener	ral				
8	Discussed regarding importance of model university result improvement	examinations. and also discussed about their				
9	Increasing class Attendance percentage. A improve attendance percentage and also no					
10	Timing not Sufficient for writing Revision day for 2 Units. Students requested for mo	Test and Can be combined as 1 exam per ore time to study				
11	Lab Experiments. Students were asked to complete all the lab experiments with in the time period and attend their university lab within their commencement time. without any mall practice and come with lab observation and record					
12	Discussed regarding the importance of attending revision classes and unit wise test.  Students must not take leave during revision classes, Unit wise test and model exam. (Will be useful for University Exams)					

Chairperson



#### DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

CAT I Examination - Time Table - March 2023 IV YEAR CSE A IV YEAR CSE B III YEAR CSE B III YEAR CSE A HYEAR CSE A H YEAR CSE B Date GE3451-CS8080 -CS3451-CS8603 -GE8076 - Professional 7.03.2023 Environmental CS8651 -Information Retrieval Introduction to Distributed System Ethics in Engineering Internet Programming (Tuesday) Sciences and Techniques Operating Systems Sustainability CS8080 -CS8651 -CS3451-GE8076 - Professional CS3401-CS8601 -Information Retrieval 8.03.2023 Introduction to Internet Ethics in Engineering Mobile Computing Algorithms Techniques Programming Operating Systems (Wednesday) GE3451-CS8601 -CS3401-Environmental CS8603 -9.03.2023 Sciences and Distributed System Mobile Computing Algorithms (Thursday) Sustainability CS3492 -CS8491-CS8075 -Artificial CS8691 -Database Data Warehousing 10 03 2023 Intelligence and Artificial Intelligence Management and Data Mining (Friday) Machine Learning Systems CS3492 -CS3452-CS8602 -CS8691 -Database 14.03.2023 Theory of Management Compiler Design Artificial Intelligence Computation (Tuesday) Systems CS8491-CS8075 -CS3452-CS8602 -Artificial 15.03.2023 Data Warehousing and Theory of Compiler Design Intelligence and (Wednesday) Data Mining Computation Machine Learning

HOD-CSE

Vice Principal

Principal

# PERIOR INSTITUTE OF TECHNOLOGY

# DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING CAT – II Time Table – April 2023 (Revised)

CAT - II Time Table - April 2023 (Revised)										
Date	II YEAR CSE A	II YEAR CSE B	III YEAR CSE A	III YEAR CSE B	IV YEAR CSE A	IV YEAR CSE B				
11.04.2023 (Tuesday)	CS3451- Introduction to Operating Systems	CS8491- Artificial Intelligence and Machine Learning	CS8601 – Mobile Computing	CS8603 – Distributed System	CS8080 — Information Retrieval Techniques	CS8080 – Information Retrieval Techniques				
12.04.2023 (Wednesday)	CS3401- Algorithms	CS3451- Introduction to Operating Systems	CS8603 – Distributed System	CS8651 – Internet Programming						
13.04.2023 (Thursday)	CS3492 – Database Management Systems	CS3401- Algorithms	CS8651 – Internet Programming	CS8075 – Data Warehousing and Data Minin						
15.04.2023 (Saturday)	CS3452- Theory of Computation	CS3492 – Database Management Systems	CS8075 – Data Warehousing and Data Mining	CS8601 – Mobile Computing						
18.04.2023 (Tuesday)	GE3451- Environmental Sciences and Sustainability	CS3452- Theory of Computation	CS8602 – Compiler Design	CS8691 — Artificial Intelligence	GE8076 – Professional Ethics in Engineering	GE8076 – Professional Ethics in Engineering				
19.04.2023 (Wednesday)	CS8491- Artificial Intelligence and Machine Learning	GE3451- Environmental Sciences and Sustainability	CS8691 – Artificial Intelligence	CS8602 – Compiler Design	* s ×					

CAT COORDINATOR

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## PERI INSTITUTE OF TECHNOLOGY

COACHING CLASS PLAN (2022-203 EVEN SEM)

Date/Hours				LASS PLAN	2022-202		T	Acceptance and a second a second and a second a second and a second and a second and a second and a second an	Ι	
Date/Hours	II A		II B		III A		III B		IV A&B	
2-May-23	AIML	DBMS	AL	AIML	AI	DS	DWDM	IP		
3-May-23	DBMS	AIML	AIML	AL	DS	AI	IP	DWDM		
5-May-23	AIML	DBMS	AL	AIML	AI	DS	DWDM	IP		
6-May-23	DBMS	DBMS Model	AIML	AIML Model	DS	DS Model	IP	IP Model		
8-May-23	AIML	AIML Model	AL	AL Model	AI	AI Model	DWDM	DWDM Model		
9-May-23	OS	TOC	TOC	DBMS	MC	DWDM	CD	MC	IRT	PE
10-May-23	TOC .	OS	DBMS	TOC	DWDM	MC	MC	CD	PE	IRT
11-May-23	OS	TOC	TOC	DBMS	MC	DWDM	CD	MC	IRT	PE
12-May-23	OS	OS Model	TOC	TOC Model	DWDM	DWDM Model	MC	MC Model	PE	PE MODEL
13-May-23	TOC	TOC Model	DBMS	DBMS Model	MC	MC Model	CD	CD Model	IRT	IRT MODEL
16-May-23	ESS	AL	OS	ESS	IP	CD	DS	AI		
17-May-23	AL	ESS	ESS	OSM	CD	IP	AI	DS		
18-May-23	ESS	ESS Model	os	OS Model	IP	IP Model	DS	DS Model		
19-May-23	AL	AL Model	ESS	ESS Model	CD	CD Model	AI	AI Model		



