

# **ACADEMIC REGULATIONS - 2024**

**Version 2.0**  
(Revised on 28-06-2025)

**B. TECH.**

(Applicable for the batches admitted from A.Y 2024-25)



**ADITYA UNIVERSITY**

Aditya Nagar, ADB Road, Surampalem - 533 437

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## NOMENCLATURE

| <b>Abbreviation</b> | <b>Description</b>  |
|---------------------|---|
| B. Tech.            | Bachelor of Technology                                    |
| ASAT                | Aditya Scholastic Aptitude Test                           |
| CE                  | Civil Engineering   |
| EEE                 | Electrical and Electronics Engineering                    |
| ME                  | Mechanical Engineering                                    |
| ECE                 | Electronics and Communication Engineering                 |
| CSE                 | Computer Science and Engineering                          |
| IT                  | Information Technology                                    |
| AIML                | Artificial Intelligence and Machine Learning              |
| DS                  | Computer Science and Engineering (Data Science)           |
| PT                  | Petroleum Technology                                      |
| Min.E               | Mining Engineering  |
| Ag.E                | Agricultural Engineering                                  |
| MCC                 | Major Core Courses  |
| MSC                 | Minor Stream Courses                                      |
| UEC                 | University Open Elective Courses                          |
| MDC                 | Multidisciplinary Courses                                 |
| AEC                 | Ability Enhancement Courses                               |
| SEC                 | Skill Enhancement Courses                                 |
| VAC                 | Value Added Courses                                       |
| SI                  | Summer Internship/ In-plant Training/ Research internship |
| ST                  | Study Tour  |
| PROJ                | Full Semester Internship/ Research Project/ Dissertation  |
| MC                  | Mandatory Courses   |
| HoD                 | Head of the Department                                    |
| BoS                 | Board of Studies  |

| <b>Abbreviation</b> | <b>Description</b>                      |
|---------------------|---|
| PEOs                | Program Educational Objectives          |
| POs                 | Program Outcomes                        |
| COs                 | Course Outcomes                         |
| PSOs                | Program Specific Outcomes               |
| FC                  | Foundation courses                      |
| IC                  | Intermediate Level courses              |
| AC                  | Advanced courses                        |
| LTPC                | Lecture: Tutorial: Practical: Credits   |
| ICAR                | Indian Council of Agricultural Research |
| CBCS                | Choice Based Credit System              |
| HEI                 | Higher Educational Institutions         |
| CIE                 | Continuous Internal Evaluation          |
| SEE                 | Semester End Examinations               |
| IE                  | Internal Examinations                   |
| LA                  | Learning Activities                     |
| SGPA                | Semester Grade Point average            |
| CGPA                | Cumulative Grade Point Average          |
| PC                  | Provisional Certificate                 |
| CMM                 | Consolidated Marks Memo                 |
| OD                  | Original Degree                         |
| MEES                | Multiple Entry and Exit System          |

## **B. Tech. Academic Regulations**

### **1. Admission**

Admission to the B. Tech. Program shall be made subject to the eligibility, qualifications, and specialization prescribed by the A.P. State Government and Aditya University from time to time. Admissions shall be made either based on the merit rank obtained by the student in the common entrance examination conducted by the A.P. Government or Aditya Scholastic Aptitude Test (ASAT) conducted by the Aditya University or National level examination or marks obtained at 10+2 level, subject to reservations as prescribed by the Government/University from time to time.

### **2. Academic System**

#### **2.1 Program Duration**

A student is expected to complete the B. Tech. degree in a stipulated period of four years. If a student is unable to complete the program within the stipulated period, he/she will be allowed a maximum of eight years from the year of admission to complete the B. Tech. degree. For lateral entry students, the stipulated period to complete their B. Tech. degree is 3 years with a maximum of 6 years from the year of admission. A student has to register for 160 credits and secure all 160 credits to be awarded the B.Tech. degree and a lateral entry student has to register for 120 credits and secure all 120 credits to be awarded the B.Tech. degree. For B.Tech. in Agricultural Engineering the credit requirement is 174 as per the Indian Council of Agricultural Research (ICAR) to award the degree. The mode of instruction is English and minimum working days are 90 days per semester.

#### **2.2 Programs Offered**

The following B. Tech. programs are offered by the University:

| <b>Program Name</b>                             | <b>Acronym</b> |
|---|----------------|
| Civil Engineering                               | CE             |
| Electrical and Electronics Engineering          | EEE            |
| Mechanical Engineering                          | ME             |
| Electronics and Communication Engineering       | ECE            |
| Computer Science and Engineering                | CSE            |
| Information Technology                          | IT             |
| Artificial Intelligence and Machine Learning    | AIML           |
| Computer Science and Engineering (Data Science) | DS             |
| Petroleum Technology                            | PT             |
| Mining Engineering                              | Min.E          |
| Agricultural Engineering                        | Ag.E           |

## 2.3 Semester

B. Tech. program adopts semester system. There are two semesters in an academic year.

- Odd Semester (July–November)
- Even Semester (December –April)

In addition to the Odd and Even semesters, an optional Summer Semester (Typically in May & June) is planned for the students to complete courses in advance. However, the number of instructional hours needed to cover the syllabi shall be maintained (equivalent to that in the regular semester) with a greater number of instruction hours per week. Unless otherwise specified explicitly, all rules and regulations applicable to a course offered during a regular semester is applicable to the courses offered during summer semesters also. The maximum number of courses to be taken in the summer semester, eligibility criteria to register and related information shall be specified through Circulars issued by the University from time to time. The summer semesters are conducted for the students to register/re-register for courses and earn additional credits/improve the Grades of the courses. It is not binding on the University to offer all the courses during the summer semesters. The courses are offered subject to the availability of the resources.

## 2.4 Curriculum

B. Tech. program contains a prescribed list of courses in a specific format which is generally called “Curriculum”. Students admitted into a program shall adopt a curriculum specified by the Academic Council for that academic year. Unless otherwise stated explicitly by the Academic Council, any changes in curriculum will be applicable to the students admitted in the subsequent year and the existing batches continue to follow the curriculum prescribed at the time of their joining the program. Curriculum contains list of courses grouped under various heads, viz. Major Core Courses (MCC), Multidisciplinary Courses (MDC), Ability Enhancement Courses (AEC), Skill Enhancement Courses (SEC), Value Added Courses (VAC), Minor Stream Courses (MSC) or University Open Elective Courses (UEC), Technical Paper Publication (TPP), Student Activity Based Learning (SABL), Summer Internship/ In-plant Training/ Research internship (SI), Study Tour (for Ag.E), Full Semester Internship/ Research Project/ Dissertation (PROJ) and Mandatory Courses (MC). A student is considered to have completed the degree program, if and only if, he/she has successfully cleared/ completed all the necessary courses prescribed in the curriculum. The Head of the Department (HoD) of each program(s) is deemed to be responsible for the curriculum of that particular program. Any change in the Curriculum

should be recommended by the Board of Studies of the program concerned and submitted to the Academic Council by the Chairperson of the Board of Studies (BoS) for approval. The Program Educational Objectives (PEOs), Program Outcomes (POs), and Course Outcomes (COs) along with the Program Specific Outcomes (PSOs) should be clearly defined while framing the curriculum.

## **2.5 Course Levels**

All the Courses in the curriculum has been classified as Foundation Level courses (FC), Intermediate Level courses (IC) and Advanced Level courses (AC).

## **2.6 Curriculum Flow**

A curriculum describing how various courses are connected through prerequisites, if any, shall be shown and made part of the curriculum. Standard pictorial representations are adopted to indicate the basket, it belongs to and is grouped in such a way as to indicate the level of the course.

## **2.7 Syllabus**

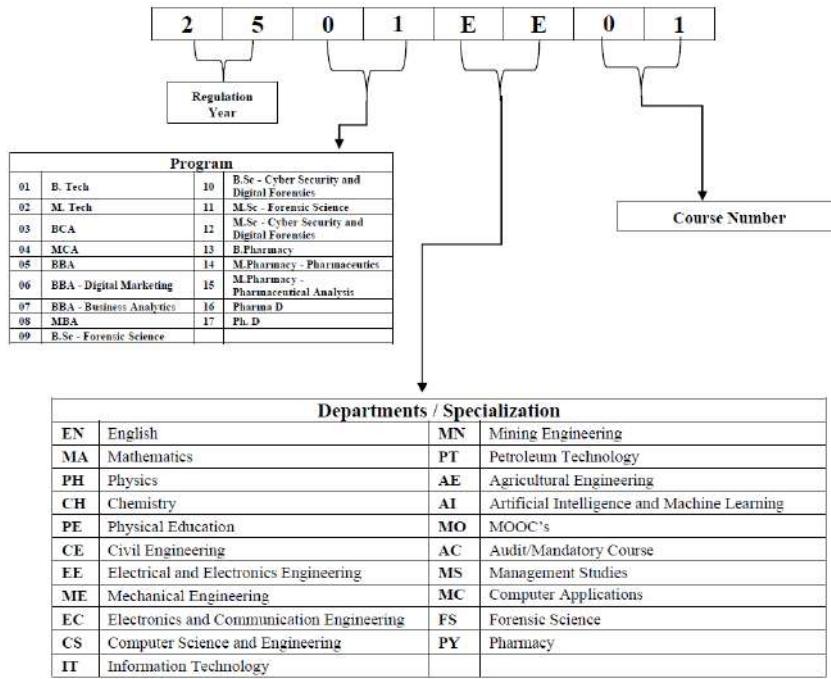
A course syllabus is a document that outlines all the essential information about a course. Each course shall have a course code, course title, LTPC (Lecture: Tutorial: Practice: Credits), course pre-requisites (if any), expected course outcomes, a brief description of the topics, suggested textbooks, reference books and other e-resources.

## **2.8 Course Plan**

A course plan consists of a list of lectures/ experiments carried out in each instructional class/lab by the course teacher during the semester as per the LTPC (Course components) of the course, with details like mode of delivery, reference material used, and others. For one course credit, 15 lecture hours for theory or 15 hours for tutorial or a minimum of 30 hours of laboratory work, or 60 hours of project work should be put in, within the regular semester period or in a summer semester, as specified in the Academic Calendar of the University.

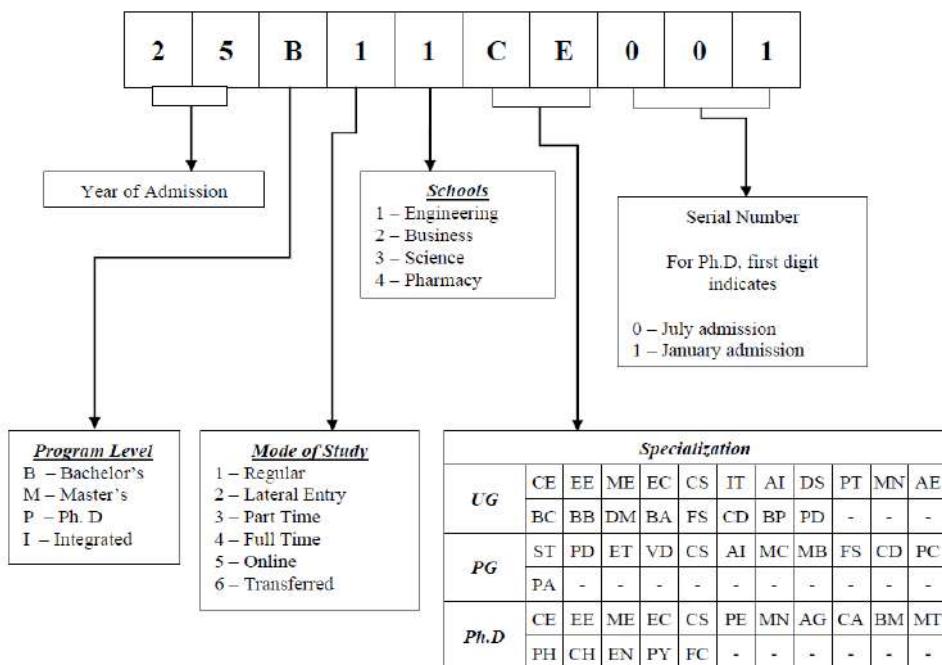
## **2.9 Course Code**

Each course is identified by a unique Course Code consisting of eight alphanumerical characters. The first two numerals indicate the regulation year, third numeral indicates the program, the next two alphabets reflect the course offering department, and the rest of the three numerals indicate a running course number.



## 2.10 Roll Number

A roll number is a unique identification number assigned to students, it's typically used for administrative purposes, including tracking academic performance, exam registration, and identification. A roll number consists of ten alphanumerical characters, the first two numerals indicate the year of admission, third alphabet indicates the Program level, the fourth numeral indicates the mode of study, fifth numeral indicates the school, the next two alphabets indicate the specialization, and the last three numerals indicate the serial number.



## **2.11 Bridge Courses**

Bridge courses are designed to bridge the gap between a student's current level of knowledge and the requirements of a specific academic program or field of study at the start of the program.

## **2.12 Multiple Entry and Exit System**

Multiple Entry and Exit System (MEES) refers to a flexible academic structure. This system offers greater flexibility to students in their higher education journey by allowing them to enter and exit a degree program at different stages, with appropriate certifications awarded at each stage. The process of MEES implementation will be intimated later.

## **2.13 Gap Year**

The concept of Student Entrepreneur in Residence shall be introduced and students who wish to pursue entrepreneurship are allowed to take a break of one year at any time after II semester to pursue entrepreneurship full time. This period shall be counted for the maximum time for graduation. An evaluation committee shall be constituted to evaluate the proposal submitted by the student and the committee shall decide on permitting the student for availing of the Gap Year.

## **3. Proctoring System**

Each admitted student is assigned under a Proctor by the School concerned. The proctor can refer to the student information system to get information on his / her academic performance. The Proctor shall discuss with the student periodically, and suggest the number and nature of courses to be registered in a semester, within the framework of that program curriculum. Students having backlogs or under detention may get advice for pacing the program accordingly. Apart from guiding in academics, the proctor shall also motivate/encourage the students in all other aspects for their holistic development.

## **4. CBCS and Course Registration**

The curriculum supports Choice Based Credit System (CBCS) and students have flexibility to choose the courses from the curriculum. All students must register for courses that he/she wishes to study in a semester through the Course Registration process. The Course Registration will be carried out on specific day(s) as declared by the University. Students having any outstanding dues to the University will not be permitted to register for the courses. For valid reasons, late registration for a maximum of 1 week from the commencement of the semester may be permitted only with the approval of the Head of the Department concerned and on payment of a late Registration fee as specified by the University. To register for a course, a student must undergo all necessary prerequisites.

Registration to add/drop a course shall be accepted only within a week after starting the classes. Students can register for a minimum of 15 credits and a maximum of 25 credits of their choice per semester. Students can register for a maximum of 12 credits in the summer semester. Students can register for a maximum of 40% (nominally 20%) of the Credits through MOOCs such as NPTEL, SWAYAM, etc with prior permission from HoD.

#### **4.1 Adding and Dropping courses**

The registration portal allows students who have enrolled for courses during the registration period to modify or remove those. Maximum of 2 courses can be added/dropped with late registration fee. The add/drop of Courses can be carried out on specific day(s) as declared by the University. If the number of students opting a course is less than 25% of the class strength, students may be encouraged to complete the course through MOOCs.

#### **4.2 Attendance and Course Detention**

- The student must maintain minimum attendance requirement in a course to appear for the Semester End Examinations (SEE).
- A student shall be eligible to appear for the Semester End Examinations in a course, if he/she acquires a minimum of 75% attendance in that course.
- Condonation for shortage of attendance up to 10% (65% and above and below 75%) on medical grounds may be granted.
- In case of medical exigencies, the student/parent should inform the Head of the Department within a week of exigencies by submitting necessary proofs.
- A stipulated fee shall be payable towards condonation for shortage of attendance.
- If a student has attendance below 65% in a course, he/she shall be detained in that course.

#### **4.3 Course Re-Registration**

- If a student has been detained in any course, he/she need to re-register for the course in the forthcoming semesters or summer semester.
- If a student wants to enhance the pass grade in a course, he/she may re-register the course in the summer semester, however previous grades will nullify.
- Students have to pay prescribed fee to Re-Register for a course.

#### **4.4 Pre-requisites**

A student can register for course only if he/she registers priorly for the pre-requisite courses mentioned in the syllabus and is eligible for writing the SEE.

## 5. Course and Credit requirements

This section explores the curriculum structure, courses, and the various prerequisites for program completion.

### 5.1 Course Credits

A course credit is a metric that quantifies the duration of a course provided to students as "instruction." Courses are offered throughout the entire semester, which consists of 16 instructional weeks. One credit is equivalent to one hour classroom Lecture (L) or one hour Tutorial (T), or two hours Practical (P).

### 5.2 Credit Distribution

- The programs provide students with ample opportunities to enhance their technical, soft, management, and communication skills.
- The programs also incorporate courses from other disciplines to offer students a multidisciplinary perspective.
- Courses are broadly classified as:

| S.No.   | Broad Category of Courses  | Credits    |
|---|--|------------|
| 1   | Major Core Courses (MCC)   | 80-81      |
| 2   | Minor Stream Courses (MSC) (or) University Open Elective Courses (UEC) | 32         |
| 3   | Multidisciplinary Courses (MDC)  | 9-11       |
| 4   | Ability Enhancement Courses (AEC)                                      | 7          |
| 5   | Skill Enhancement Courses (SEC)  | 6-10       |
| 6   | Value Added Courses (VAC)  | 5-8        |
| 7   | Summer Internships (SI)  | 4          |
| 8   | Full Semester Internship (PROJ)  | 12         |
| 9   | Mandatory Courses (MC)   | 0          |
| <b>Total Credits to be earned for B. Tech. Degree</b> |  | <b>160</b> |

Note: For B. Tech. Agricultural Engineering the total credits to be earned is as per ICAR is 174.

#### 5.2.1 Major Core Courses (MCC)

The Major Core Courses for B. Tech. programme typically depends on the specific engineering discipline.

#### 5.2.2 Minor Stream Courses (MSC)(or) University Open Elective Courses (UEC)

Minor Stream or University Open Elective Courses are courses that students can choose to broaden their knowledge and skills. These courses are designed to provide an in-depth knowledge in a specific minor stream.

### **5.2.3 Multidisciplinary Courses (MDC)**

Multidisciplinary Courses are designed to integrate knowledge from multiple disciplines, encouraging students to apply concepts and methodologies from various fields. These courses foster a holistic approach to learning and innovation.

### **5.2.4 Ability Enhancement Courses (AEC)**

Ability Enhancement Courses are designed to develop essential skills and competencies necessary for personal and professional growth. These courses focus on enhancing abilities such as communication, critical thinking, and practical skills.

### **5.2.5 Skill Enhancement Courses (SEC)**

Skill Enhancement Courses are designed to equip students with practical skills and competencies that are directly applicable to professional careers. These courses aim to enhance employability and provide hands-on experience in specific areas.

### **5.2.6 Value Added Courses (VAC)**

Value Added Courses are supplementary courses designed to provide students with additional knowledge and skills in their main field of study. These courses often focus on personal development, industry trends, and practical applications, helping students become more versatile and competitive in the job market.

### **5.2.7 Summer Internships (SI)**

Summer Internships provide students with an opportunity to gain practical experience in their field of study. Internships allow students to apply theoretical knowledge in real-world scenarios, develop professional skills, and build networks.

### **5.2.8 Full Semester Internship (PROJ)**

The Full Semester Internship is an extended internship program where students work full-time for an entire academic semester, usually in their final year of study. This internship provides in-depth exposure to professional environments, allowing students to work on significant projects, gain comprehensive industry experience, and enhance their employability.

### **5.2.9 Mandatory Courses (MC)**

Mandatory Courses are courses that students can take without the pressure of exams or grades. These courses allow students to explore subjects of interest outside their main field of study, fostering a love for learning and intellectual curiosity.

### 5.2.10 Credit Transfer/Equivalence

- Credit Transfer/Equivalence is a convenient way for students to transfer credits earned from courses completed through MOOCs, proctored exams, or courses completed at other Higher Educational Institutions (HEIs).
- Credit transfer through MOOCs allows students to earn academic credits from courses offered through online platforms like NPTEL/Swayam, etc.
- If a student has completed certification courses, such as in Foreign Languages, Advanced Cognitive English Skills for Engineers, or Proficiency in Hindi/Sanskrit Languages through a proctored exam, the corresponding credits can be assigned to the students as per the process.
- Any student interested to seek admission in Aditya University from other Higher Educational Institutions (HEIs), has to complete the courses and earn the credits as per the regulation that he/she is admitted. It is assumed that the student has earned the credits by credit transfer/equivalence. If the course(s) that are already completed earlier, equivalent or substitute courses can be given to a student by the BoS Chairperson.
- The approval of credit transfer has to be certified from BoS Chairperson.

## 6. Assessment and Evaluation

Student performance in coursework is assessed through examinations conducted during and at the conclusion of the semester. At the university, student knowledge, understanding, and competence in the courses studied are thoroughly assessed and certified. Assessment typically comprises two essential parts for evaluating student performance:

- Continuous Internal Evaluation (CIE)
- Semester End Examinations (SEE)

CIE consists of two Internal Examinations (IE1 & IE2) and Learning Activities (LA), conducted by the course instructor throughout the semester. Learning Activities may include mid-term tests, weekly or fortnightly class tests, assignments, problem-solving exercises, group discussions, quizzes, seminars, presentations, mini-projects, and other methods.

SEE is conducted at the end of the semester by the University Examination Center, on dates set at the university level. This includes a written examination for theory courses and a practical examination for laboratory courses.

## 6.1 Assessment pattern for theory and practical courses

Based on the type of course, CIE and SEE shall be conducted as follows.

| Type of Courses   | L& T | P   | C   | CIE (Marks) |     |    |     |    |     | SEE (Marks) |    |     | GT  |
|---|------|-----|-----|-------------|-----|----|-----|----|-----|-------------|----|-----|-----|
|   |      |     |     | IE1         | IE2 | LA | DDA | LT | TM  | TE          | PE | TM  |     |
| Theory  | 1-3  | 0   | 2-4 | 16          | 24  | 10 | -   | -  | 50  | 50          | -  | 50  | 100 |
| Lab   | 0    | 2   | 2   | -           | -   | -  | 25  | 25 | 50  | -           | 50 | 50  | 100 |
| IC  | 2-3  | 1   | 3-4 | 10          | 15  | -  | 15  | 10 | 50  | 50          | -  | 50  | 100 |
|   | 1    | 2   | 3   | -           | -   | -  | 25  | 25 | 50  | -           | 50 | 50  | 100 |
|   | 1-2  | 1-2 | 2-4 | 16          | 24  | 10 | 25  | 25 | 50* | 50          | 50 | 50# | 100 |
| SI  | 0    | 2   | 2   | -           | -   | -  | -   | -  | 100 | -           | -  | -   | 100 |
| SI/ ST (Ag.E)   | 0    | 0   | 0   | -           | -   | -  | -   | -  | 100 | -           | -  | -   | 100 |
| SI<br>(Ag. E)   | 0    | 8   | 8   | -           | -   | -  | -   | -  | 100 | -           | -  | -   | 100 |
| PROJ / FSI  | 0    | 10  | 10  | -           | -   | -  | -   | -  | 50  | -           | -  | 50  | 100 |
| PROJ I (Ag.E)   | 0    | 6   | 6   | -           | -   | -  | -   | -  | 100 | -           | -  | -   | 100 |
| PROJ II (Ag.E)  | 0    | 8   | 8   | -           | -   | -  | -   | -  | 50  | -           | -  | 50  | 100 |
| ECSE  | 0    | 1   | 1   | -           | -   | -  | -   | -  | -   | -           | -  | -   | 100 |
| DT,<br>EW,<br>ES, ST,<br>ICH&<br>FA,<br>SY<br>NCC<br>&<br>NSS | 0    | 1   | 1   | -           | -   | -  | -   | -  | -   | -           | -  | -   | 100 |
| UHV   | 2    | 0   | 2   | -           | -   | -  | -   | -  | -   | -           | -  | -   | 100 |

\* The average of Theory and Lab CIE marks

# The average of Theory and Lab SEE marks

|      |  |        |                                      |
|------|--|--------|--------------------------------------|
| DDA  | Day-to-Day Activity                      | LT     | Lab Test                             |
| TM   | Total Marks                              | TE     | Theory Examination                   |
| PE   | Practical Examination                    | IC     | Integrated Courses                   |
| GT   | Grand Total                              | DT     | Design Thinking                      |
| ECSE | Essential Cognitive skills for Engineers | ICH&FA | Indian Cultural Heritage & Fine Arts |
| ST   | Study Tour                               | ES     | Employability Skills                 |
| EW   | Engineering Workshop                     | SY     | Sports and Yoga                      |
| NCC  | National Cadet Corps                     | NSS    | National Service Scheme              |
| UHV  | Universal Human Values                   | L      | Lecture                              |
| T    | Tutorial                                 | P      | Practical                            |

- 6.1.1** If the course(s) consist only of Lecture (L) and Tutorial (T) components, the CIE is based on two IEs and one LA. IE-1 shall be conducted from Units I & II, and IE-2 shall be conducted from Units III, IV, and V. The total marks scored in the two IEs and LA shall be considered for the CIE.
- 6.1.2** If the Lecture (L) hours are less than the Practical (P) hours, the CIE shall be evaluated based on Day-to-Day Activities and internal lab tests.
- 6.1.3** If the Lecture (L) hours and Practical (P) hours are equal, the CIE shall be conducted separately for theory and lab components, as mentioned in sections 6.1.1 and 6.1.2, respectively. The average of the theory and lab marks shall be considered as the final CIE marks.
- 6.1.4** If the Lecture(L) hours are greater than the Practical(P) hours, the CIE shall be evaluated based on IEs and Lab internal test.
- 6.1.5** The SEE for theory courses shall be conducted for 100 marks with a duration of 180 minutes, consisting of 10 questions—two questions from each unit. Each question may have sub-questions. Students must answer one question from each unit, with each unit carrying equal marks. The total 100 marks shall be scaled down to 50.
- 6.1.6** The SEE for lab courses shall be conducted by the faculty concerned, and an examiner appointed by the Controller of Examinations.
- 6.1.7** If the Lecture (L) hours and Practical (P) hours are equal, the SEE shall be conducted separately for theory and lab components. The average of the theory and lab marks shall be considered the final SEE marks. A student must pass in both SEE of Theory and Lab separately.

#### **6.1.8 Summer Internships/ In-plant Training/ Research internship**

Two Summer Internships with a minimum duration of 8 weeks, completed at the end of the second and third years, respectively, are mandatory. Summer Internship-I is to be carried out as Community Service Project in summer gap after fourth semester. A group of students or even a single student can take up the Community Service Project. The students have to identify social problems existing in any geographical area/village and try to solve them technically or suggest to people the necessary solutions for solving these problems. After successful completion, students shall submit a detailed report to the department concerned. The Summer Internship-II shall be carried out in collaboration with local industries, government organizations, construction agencies, power projects, software MNCs, etc. with the prior permission from concerned HoD.

Summer Internship-I shall be evaluated in the V semester, and Summer Internship-II shall be evaluated in the VII semester. For the Summer Internship, there shall be a CIE for 100 marks evaluated through a review, where 40 marks are for the presentation, 30 marks for the report, and 30 marks for viva-voce.

#### **6.1.9 Full Semester Internship / Research Project / Dissertation (PROJ)**

**6.1.9.1** In the final (VIII) semester of the B.Tech program (except Ag.E), students are given the option to choose either an industry internship or a project work carried out at the University.

- **Option 1: Full Semester Internship at Industry**

Students opting for an internship (to be carried out in an industry, typically) must register and complete it during the VIII semester. At the end of the semester, the student must submit an Internship Completion Certificate issued by the organization and a report based on the internship work carried out.

- **Option 2: Project Work at the University**

Students who choose to undertake a project to be carried out in a University, Aditya or an Institution of repute, must work on a problem with clearly defined objectives under the guidance of a faculty member. A Project Report must be submitted at the end of the semester. Students are encouraged to publish their project outcomes in international conferences/journals indexed by Scopus, SCI, or WoS.

- **Evaluation Scheme**

Whether the student chooses an internship or a project, the evaluation will carry 200 marks, divided as follows:

- **Continuous Internal Evaluation (CIE): 100 marks**

- Two internal reviews: 40 marks each (30 marks for presentation, 10 marks for report)
- 20 marks by the project guide based on individual performance

- **Semester End Examination (SEE): 100 marks**

- Viva-voce conducted by an external examiner appointed by the Controller of Examinations

The total marks of 200 shall be scaled down to 100.

**Note:** A student may complete the internship or project individually or in a group, subject to approval from HoD.

### 6.1.9.2 Project Work Guidelines for B.Tech (Ag.E program)

- **Project Part – I**

In the VII semester, students of Ag.E are required to undertake Project Part – I, which must be carried out in a University (Aditya or an Institution of repute). Students must work on a problem with clearly defined objectives under the guidance of a faculty member. A project report must be submitted at the end of the semester.

- **Project Part – II**

In continuation with Project Part – I, in the VIII semester, students have to undergo Project Part - II. A Project Report must be submitted at the end of the semester. Students are encouraged to publish their project outcomes in international conferences/journals indexed by Scopus, SCI, or WoS or NAAS rated journals.

- **Evaluation Scheme**

#### **Project Part I**

- **Continuous Internal Evaluation (CIE): 100 marks**

- Two internal reviews: 40 marks each (30 marks for presentation, 10 marks for report)
    - 20 marks by the project guide based on individual performance.

#### **Project Part II**

- **Continuous Internal Evaluation (CIE): 100 marks**

- Two internal reviews: 40 marks each (30 marks for presentation, 10 marks for report)
    - 20 marks by the project guide based on individual performance.

- **Semester End Examination (SEE): 100 marks**

- Viva-voce conducted by an external examiner appointed by the Controller of Examinations

The total marks of 200 for Project Part – II (CIE + SEE) shall be scaled down to 100 marks.

**6.1.10** The Essential Cognitive skills for Engineers course have only internal evaluation for 100 marks. The pattern of evaluation shall be framed by course coordinator.

**6.1.11** Design Thinking, Engineering Workshop, Employability Skills-V, Seminar, Case Study, Indian Cultural Heritage & Fine arts, NCC/NSS, Sports and Yoga, and Universal Human Values courses have only internal evaluation. The pattern of evaluation shall be framed by the course coordinator.

**6.1.12** Advanced Cognitive Skills for Engineers/Proficiency in Foreign Languages (Japanese, German, Spanish and French)/Proficiency in Hindi/Sanskrit Languages, a student needs to complete one certification course. To earn the credit(s), a student has to submit the completion certificate.

**6.1.13** Technical Paper publication has only internal evaluation. A student has to earn a grade by publishing his/her paper. Grade shall be assigned as per the details given in section 7.3(Grading for Technical Paper Publication)

**6.1.14** Student Activity Based Learning (SABL) has only internal evaluation. A student has to earn a grade by getting merit or participation certificate for events listed as per the below table, he/she has to submit the certificate of participation / merit. Grade shall be assigned as per the details given in section 7.4 (Grading for Student Activity Based Learning).

| Student Activity based Learning |                             |  |                             |                          |          |                |                              |
|---------------------------------|-----------------------------|--|-----------------------------|--------------------------|----------|----------------|------------------------------|
| S.N<br>o                        | Category                    | Description  | Merit/<br>Participatio<br>n | Level & Points per event |          |                | Minimum<br>Points to<br>earn |
|                                 |                             |  |                             | Internati<br>onal        | National | Universit<br>y |                              |
| 1                               | Co-Curricular Activities    | Tech Quiz, Coding/Decoding/ poster/ events etc., in technical symposium/ Coding Competition/ SIH | Participation               | 20                       | 10       | 5              | 70                           |
|                                 |                             |  | Merit                       | 40                       | 20       | 10             |                              |
|                                 |                             | Projects Developed   | -                           | -                        | 20       | 10             |                              |
|                                 |                             | Attending Workshop   | Participation               | -                        | 10       | 5              |                              |
|                                 |                             | Industrial visits  | Participation               | -                        | -        | 5              |                              |
| 2                               | Extra-Curricular Activities | Cultural Activities Music/ Dance/ Essay Writing/ Painting/ Drawing / Literary Arts etc.          | Participation               | 20                       | 10       | 5              | 10                           |
|                                 |                             |  | Merit                       | 40                       | 20       | 10             |                              |
|                                 |                             | Sports/ Games  | Participation               | 20                       | 10       | 5              |                              |
|                                 |                             |  | Merit                       | 40                       | 20       | 10             |                              |
| 3                               | Outreach Activities         | NSS/ Leo Club/ NCC/ eco club / Republic Day/ Viksit Bharat etc.,                                 | Participation               | -                        | 10       | 5              | 5                            |
| 4                               |                             | Ideathons/ Hackathons  | Participation               | 20                       | 10       | 5              | 5                            |

|              |                                 |                               |       |    |    |            |    |
|--------------|---------------------------------|-------------------------------|-------|----|----|------------|----|
|              | Entrepreneurship and Innovation |                               | Merit | 40 | 20 | 10         |    |
| 5            | Leadership & Management         | Event Volunteer               | -     | -  | 10 | 5          | 10 |
|              |                                 | Member of the Organizing Team |       | -  | 20 | 10         |    |
|              |                                 | Coordinator for an Event      |       | -  | 30 | 20         |    |
| <b>Total</b> |                                 |                               |       |    |    | <b>100</b> |    |

**6.1.15** Mandatory courses are non-credit courses. A student must complete the mandatory courses from the curriculum and earn a satisfactory grade (S-Grade). If a student fails to earn the S-Grade, it shall be considered a non-satisfactory grade (N-Grade), in this case he/she has to reappear for the course and earn the S-Grade. The pattern of evaluation shall be framed by the course coordinator.

## 6.2 Eligibility for Examinations

A student who has registered for the courses is eligible to take the SEE. However, a student shall not be permitted to take the SEE if they are involved in any in-disciplinary issues or have a shortage of attendance.

## 6.3 Announcement of Results

The Controller of Examinations will announce the results within a week after the completion of the examinations. Students can view their results through their student login portal.

## 6.4 Script Viewing/Revaluation

- Students can view their answer scripts through their login portal by paying the prescribed fee.
- Students who are not satisfied with the grade obtained can apply for revaluation by paying the prescribed revaluation fee.

## 6.5 Withholding of Results

If a student has any dues to the university or is involved in any in-disciplinary activity, malpractice, or court case, his/her results shall be withheld.

## 6.6 Makeup Internal Examinations

If a student is absent during the internal examinations for a valid reason and with prior permission from the HoD, the student shall attend the Makeup Internal Examination. The schedule for the Makeup Internal Examination is provided in the academic calendar.

## 7. Grading

The following grading systems are adopted to assign the grades.

- Absolute grading
- Relative grading

### 7.1 Absolute grading

- Absolute grading shall be adopted if the Course strength is less than or equal to 30 students.
- Courses that are completed through MOOCs/courses completed through Industry certification shall use the absolute grading method irrespective of class strength.
- **Absolute Grading-Letter Grade and its range**

| Range of Marks | Description | Grade | Grade Point |
|----------------|-------------|-------|-------------|
| 90-100         | Outstanding | O     | 10          |
| 80-89          | Excellent   | A+    | 9           |
| 70-79          | Very Good   | A     | 8           |
| 60-69          | Good        | B+    | 7           |
| 50-59          | Average     | B     | 6           |
| 40-49          | Pass        | C     | 5           |
| 0-39           | Fail        | F     | 0           |
| -              | Absent      | Ab    | 0           |

### 7.2 Relative Grading

- Relative grading shall be adopted for theory and lab courses if the Course strength exceeds 30 students.
- The letter grade awarded to a student for his/her performance in a course shall be based on the relative grading system.

- Relative Grading - Letter Grade and its range**

| Range of Marks  | Letter | Grade point |
|---|--------|-------------|
| Marks Scored > Mean + $\alpha\sigma$ (=UL of Grade A+)                              | O      | 10          |
| Mean+( $\alpha-\gamma\sigma$ )<Marks Scored Mean + $\alpha\sigma$ (=UL of Grade A+) | A+     | 9           |
| Mean+( $\alpha-2\gamma\sigma$ )<Marks Scored Mean+( $\alpha-\gamma\sigma$ )         | A      | 8           |
| Mean+( $\alpha-3\gamma\sigma$ )<Marks Scored Mean+( $\alpha-2\gamma\sigma$ )        | B+     | 7           |
| Mean+( $\alpha-4\gamma\sigma$ )<Marks Scored Mean+( $\alpha-3\gamma\sigma$ )        | B      | 6           |
| Mean+( $\alpha-5\gamma\sigma$ )<Marks Scored Mean+( $\alpha-4\gamma\sigma$ )        | C      | 5           |
| Marks Scored < Mean+( $\alpha-5\gamma\sigma$ ) (=UL of grade F)                     | F      | 0           |

Where  $\alpha = (\text{UL Grade A}^+ - \text{Mean})/\sigma$ ,  $\beta = (\text{UL Grade F}-\text{Mean}) / \sigma$  and  $\gamma = (|\alpha| + |\beta|)/5$ .

For courses that include both Continuous Internal Evaluation (CIE) and Semester End Examination (SEE) marks, a student must obtain a minimum of 35% in SEE to apply absolute or relative grading.

### 7.3 Grading for Technical Paper Publications (Grading is Absolute)

| Publication   | Grade | Grade Point |
|---|-------|-------------|
| SCI Journal   | O     | 10          |
| Scopus Journal /Scopus Book Chapter/ NAAS Journals  | A+    | 9           |
| WoS Journal / Contribution to Open Source Libraries (with verifiable repository or acknowledgement)                                   | A     | 8           |
| National / International Conference -IEEE / ACM / Scopus Indexed Proceedings (Presentation Certificate Mandatory)                     | B+    | 7           |
| National / International Conference organized by NAAC A++ / NIRF Rank or QS Ranking institutions (Presentation Certificate Mandatory) | B     | 6           |
| Any other Journal publication / Conference (For Conference Presentation Certificate Mandatory)  | C     | 5           |
| Any Book Chapter  | C     | 5           |
| Fail to publish   | F     | 0           |

#### 7.4 Grading for Student Activity Based Learning (Grading is Absolute)

| Range of Points | Grade | Grade Point |
|-----------------|-------|-------------|
| >225            | O     | 10          |
| 201-225         | A+    | 9           |
| 176-200         | A     | 8           |
| 151-175         | B+    | 7           |
| 126-150         | B     | 6           |
| 100-125         | C     | 5           |
| <100            | F     | 0           |

#### 7.5 Computing Grade Point Averages (SGPA, CGPA)

- The Semester Grade Point average (SGPA) is the ratio of the sum of the product of the number of credits with the grade points scored by a student in all the courses taken by a student and the sum of the number of credits of the courses undergone by a student

$$SGPA = \frac{\sum(C_i \cdot G_i)}{\sum(C_i)}$$

Where  $C_i$  is the number of credits of  $i^{\text{th}}$  course and  $G_i$  is the grade point scored by the student in the  $i^{\text{th}}$  course.

- The Cumulative Grade Point Average (CGPA) is also calculated in the same manner taking into account all the courses undergone by a student over all the semesters of the programme.

$$CGPA = \frac{\sum(C_i \cdot S_i)}{\sum(C_i)}$$

Where  $S_i$  is the SGPA of the  $i^{\text{th}}$  semester and  $C_i$  is the total number of credits in that semester.

- The SGPA and CGPA shall be rounded off to two decimal points and reported in the transcripts.
- While computing the SGPA/CGPA, the courses in which the students is awarded zero grade points will also be included.

#### 7.6 Conversion from CGPA to Percentage:

Cumulative Grade Point Average can be converted into an equivalent percentage using the following,

$$\text{Percentage of Marks} = (\text{CGPA} - 0.5) \times 10$$

#### 7.7 Award of class

- The student is awarded a B. Tech. Degree if he/she acquires the minimum number of credits, as specified in the program structure.

- Student shall be placed in one of the following four classes.

| <b>Class Awarded</b>         | <b>CGPA Secured</b>          |
|------------------------------|------------------------------|
| First class with Distinction | $\geq 7.5$                   |
| First Class                  | $\geq 6.5 \text{ to } < 7.5$ |
| Second Class                 | $\geq 5.5 \text{ to } < 6.5$ |
| Pass Class                   | $\geq 4.5 \text{ to } < 5.5$ |

### **7.8 Minor Degree**

- A minor degree can be awarded if a student fulfills all the program requirements of their discipline and completes a specified set of courses from a minor with 20 credits, in addition to the 160 credits.
- A student is permitted to register for the minor program at the beginning of the IV semester with a minimum CGPA of 6.5 up to the end of the III semester, without any backlogs.
- Minor degree courses shall be completed within 4 years of program duration.

## **8. Academic Malpractice**

- The Controller of Examinations shall refer all instances of malpractice detected in Internal Evaluations and Semester End Examinations to an Enquiry Committee. The Committee shall submit a report on the malpractice allegedly committed by the student to the Controller of Examinations. The Controller of Examinations, along with the members of the Committee, is authorized to impose a suitable punishment as per the University malpractice rules.
- The committee consists of the HoD of the concerned department, a course expert, and an observer.

## **9. Issue of Certificates**

The Provisional Certificate (PC), Consolidated Marks Memo (CMM), and Original Degree (OD) will be issued by the University Examination Center, whereas grade sheets shall be obtained from DigiLocker.

## **10. Revision in Academic Regulations**

The Academic Council, chaired by the Vice-Chancellor of the University, reserves the right to add, delete, or modify these regulations at any time, notwithstanding any other provisions of this document. In the event of any dispute regarding the interpretation of the rules, only the interpretation provided by the Academic Council shall be considered final and binding.



## MALPRACTICE RULES

### Disciplinary Action for /Improper Conduct in Examinations

|      | <b>Nature of Malpractices /<br/>Improper conduct</b>   | <b>Punishment</b>  |
|------|--|--|
|      | <b>If the candidate</b>  |  |
| 1(a) | Possesses or keeps accessible in examination hall, any paper, note book, programmable calculators, Cell phones, pager, palm computers or any other form of material concerned with or related to the course of the examination (theory or practical) in which he is appearing but has not made use of (material shall include any marks on the body of the candidate which can be used as an aid in the course of the examination) | Expulsion from the examination hall and cancellation of the performance in that course only.   |
| (b)  | Gives assistance or guidance or receives it from any other candidate orally or by any other body language methods or communicates through cell phones with any candidate or persons in or outside the examination hall in respect of any matter.   | Expulsion from the examination hall and cancellation of the performance in that course only of all the candidates involved. In case of an outsider, he will be handed over to the police and a case is registered against him.   |
| 2    | Has copied in the examination hall from any paper, book, programmable calculators, palm computers or any other form of material relevant to the course of the examination (theory or practical) in which the candidate is appearing.   | Expulsion from the examination hall and cancellation of the performance in that course and all other courses the candidate has already appeared including practical examinations and project work and shall not be permitted to appear for the remaining examinations of the courses of that Semester. |
| 3    | Comes in a drunken condition to the examination hall.  | Expulsion from the examination hall and cancellation of the performance in that course and all other courses the candidate has already appeared including practical examinations and project work and shall not be permitted to appear for the remaining examinations of the courses of that Semester  |

|   |   |   |
|---|---|---|
| 4 | Smuggles in the Answer book or additional sheet or takes out or arranges to send out the question paper during the examination or answer book or additional sheet, during or after the examination. | Expulsion from the examination hall and cancellation of the performance in that course and all other courses the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the courses of that Semester. The candidate is also debarred for two consecutive semesters from class work and all End examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat. |
| 5 | Leaves the exam hall taking away answer script or intentionally tears of the script or any part thereof inside or outside the examination hall.   | Expulsion from the examination hall and cancellation of the performance in that course and all other courses the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the courses of that Semester. The candidate is also debarred for two consecutive semesters from class work and all End examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat. |
| 6 | Possess any lethal weapon or firearm in the examination hall.   | Expulsion from the examination hall and cancellation of the performance in that course and all other courses the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the courses of that Semester. The candidate is also debarred and forfeits of seat.   |
| 7 | Impersonates any other candidate in connection with the examination.  | The candidate who has impersonated shall be expelled from examination hall. The candidate is also debarred and forfeits the seat. The performance of the original candidate, who has been impersonated, shall be cancelled in all the courses of the examination (including practical and project work) already appeared and shall not be allowed to appear for examinations of the remaining courses of that semester/year. The candidate is also debarred for two consecutive semesters from class work                         |

|    |  |  |
|----|--|--|
|    |  | and all examinations. The continuation of the course by the candidate is subject to the academic regulations in connection with forfeiture of seat. If the impostor is an outsider, he will be handed over to the police and a case is registered against him.   |
| 8  | Refuses to obey the orders of the Controller of Examinations / Observer / any officer on duty or misbehaves or creates disturbance of any kind in and around the examination hall or organizes a walk out or instigates others to walk out, or threatens the officer-in-charge or any person on duty in or outside the examination hall of any injury to his person or to any of his relations whether by words, either spoken or written or by signs or by visible representation, assaults the officer-in charge, or any person on duty in or outside the examination hall or any of his relations, or indulges in any other act of misconduct or mischief which result in damage to or destruction or property in the examination hall or any part of the University campus or engages in any other act which in the opinion of the officer on duty amounts to use of unfair means or misconduct or has the tendency to disrupt the orderly conduct of the examination. | In case of students of the University, they shall be expelled from examination halls and cancellation of their performance in that course and all other courses the candidate(s) has (have) already appeared and shall not be permitted to appear for the remaining examinations of the courses of that semester. The candidates also are debarred and forfeit their seats. In case of outsiders, they will be handed over to the police and a police case is registered against them. |
| 9  | If student of the University, who is not a candidate for the particular examination or any person not connected with the University indulges in any malpractice or improper conduct mentioned in clause 6 to 8.  | Student of the University expulsion from the examination hall and cancellation of the performance in that course and all other courses the candidate has already appeared including practical examinations and project work and shall not be permitted for the remaining examinations of the courses of that semester/year. The candidate is also debarred and forfeits the seat.  |
| 10 | Uses objectionable, abusive or offensive language in the answer paper or in letters to the examiners or writes to the examiner requesting him to award pass  | Cancellation of the performance in that course.  |

|    | marks.  |  |
|----|---|--|
| 11 | Copying detected on the basis of internal evidence, such as, during valuation or during special scrutiny.   | Cancellation of the performance in that course and all other courses the candidate has appeared including practical examinations and project work of that End examination. |
| 12 | If any malpractice is detected which is not covered in the above clauses 1 to 11 shall be reported to the Controller of Examinations for further action to award suitable punishment. |  |

\*B.Tech. Academic Regulations 2024 as finalized on 28-06-2025.



Pro Vice-Chancellor  
Academics  
**ADITYA UNIVERSITY**