NALLA MALLA REDDY ENGINEERING COLLEGE

Autonomous Institution

DIVYANAGAR, Ghatkesar Mandal, Medchal - Malkajgiri District,
Telangana, India - 500 088

Examination Reforms

Nalla Malla Reddy Engineering College offers a 4-year (8 semesters) **Bachelor of Technology** (B.Tech.) degree programme, under Choice Based Credit System (CBCS) with effect from the academic year 2020-21. Some of the examination reforms introduced in the academic regulations newly formulated by the institution after obtaining autonomy includes the following.

1. The performance of a student in every subject/course (including practicals and Project Stage – I & II) will be evaluated for 100 marks each, with 30 marks allotted for CIE (Continuous InternalEvaluation) and 70 marks for SEE (Semester End-Examination).

2. For theory subjects, during a semester, there shall be two mid-term examinations: with each mid-term exam carrying 30 marks. Final Internal marks shall be evaluated by calculating the average of the two mid-term examinations marks.

    2.1. While the first mid-term examination shall be conducted on 50% of the syllabus, the second mid-term examination shall be conducted on the remaining 50% of the syllabus. Assignments and Activity evaluation should be completed before the corresponding internal assessment (for both the mid-term examinations)

    2.2. The total marks secured by the student in each mid-term examination are evaluated for 30 marks, and the average of the two mid-term examinations shall be taken as the final marks secured by each student in Continuous Internal Evaluation. If any student is absent from any subject of a mid-term examination, a special committee formed by the Principal with the Head of the Department as chair, two faculty who taught the student, and one member from the exam committee, shall verify the genuineness of absence of the student and shall decide if the candidate can take the Remedial Test for Midterm Exams

    2.3. For ONE of the courses from the list of courses registered by the student in a semester (starting from the second year), Course Level Project can be taken up as internal assessment instead of mid-term exams.

3. The end semester examinations (SEE) will be conducted for 70 marks for theory subjects as per the pattern proposed by the Exams Committee and approved by the Academic Council.

    a. Part A consists of 10 questions. The questions shall be from each unit and shall carry

2 marks each.

b. Part B consists of 5 questions and shall carry 10 marks each. Each of these questions is from one unit and may contain sub questions. For each question there will be an internal choice of answering one question out of the given two.

4. For practical subjects there shall be a continuous internal evaluation during the semester for 30 marks and 70 marks for semester end examination. Out of the 30 marks for internal evaluation, day-to-day work in the laboratory shall be evaluated for 15 marks and internal practical examination shall be evaluated for 15 marks conducted by the laboratory teacher concerned. The end semester examination shall be conducted with an external examiner and the internal examiner (Lab faculty). The external examiner shall be appointed from the list of examiners proposed by the department, and selected by the College Academic Committee. The laboratory records and internal test papers shall be preserved by the examination branch to be produced as and when required.

5. Mid-**term Exams Pattern:**

Each mid-term examination consists of one written test, one online quiz, one assignment, and one activity carrying 20 marks for the written test and online quiz, 5 marks for assignment, and 5 marks for activity.

A. The Written test shall be conducted for 20 marks with a total duration of 1 hour 30 minutes. The question paper shall have descriptive questions evaluated for 20 Marks (4 Questions carrying 5 Marks each). The marks shall be scaled to 10 after evaluation.
B. The Online Quiz shall carry 20 marks with 20 questions (of the types as decided by the Internal Quality Assurance Cell). These marks shall be scaled to 10 after evaluation.
C. The Assignment shall be of the following types:
    - Preparation of a graphic organizer or a chart,
    - A write up of two pages,
    - Preparation of questions and their solutions from the unit with at least 5 descriptive questions & 20 objective questions at higher levels of Bloom's Taxonomy
    - Conducting quiz for the class in the unit
    - Working Model Demonstration
D. E-Bridge / Employability Bridge Activity Shall carry 5 Marks. The activity shall be conducted and evaluated as per the given guidelines.

6. Assessment **for Mandatory Courses**

Mandatory courses, Environmental Science, Constitution of India, Intellectual Property Rights, and Gender Sensitization lab, shall have internal assessments consisting of objective

A student has to secure 40 marks out of 100 marks (i.e. 40% of the marks allotted) in the continuous internal evaluation

For the mandatory course Digital Wellbeing, internal assessments shall be based on the activities participated by the students - for participating in community activities, and conducting awareness sessions along with a Seminar presentation.

7. Course **Level Projects**

For ONE of the courses from the list of courses registered by the student in a semester (starting from the second year), Course Level Project can be taken up as internal assessment instead of mid-term exams. Assessment of the Course Level Projects shall be done as below.

A. Faculty shall propose to the projects committee the option of Course Level Projects (CLP) for a subject they would be teaching under the professional core subjects, and the number of projects that could be taken up under that subject for approval. A student shall choose to do the course level project for a particular subject after applying for it and getting permission from the faculty. Those who choose to do Course Level Projects shall be exempted from taking up mid-term exams for that subject.
B. Course Level-Projects shall be evaluated by the respective faculty based on the regular progress and the final outcome of the project. There shall be 3 evaluations for the CLPs with no marks for the first, and 30 marks for the remaining two evaluations. Final internal marks shall be an average of the two evaluations The evaluations shall be as below.
    i. Evaluation 1 Shall be after 2 weeks of starting of the semester. This evaluation involves Evaluation of the Idea and feasibility of the project. This does not carry any marks.
    ii. Evaluation 2 shall be in the week before mid-1 of the theory subjects. Regular progress of the project shall be evaluated through interim report submission and presentation.
    iii. Evaluation 3 shall be in the week before mid-2 of the theory subjects. Final project Outcome shall be evaluated through final report submission and presentation.
C. Evaluation Marks shall be submitted to the department projects committee after each evaluation for verification.

8. The **End Semester question paper pattern shall be as follows.**

The semester end examinations (SEE) will be conducted for 70 marks consisting of two parts viz. i) **Part- A** for 20 marks, ii) **Part - B** for 50 marks.

i. Part-A is a compulsory question consisting of ten sub-questions. The sub-questions must be from each unit and carry 2 marks each.
ii. Part-B consists of five questions (numbered from 2 to 6) carrying 10 marks each. Each of these questions is from one unit and may contain sub-questions. For each question there will be an “either” “or” choice, which means that there will be two questions from each unit and the student should answer either of the two questions.

9. Assessment **of Projects, Seminars and Internships**

9.1. Seminars (2 credits)

Seminars shall be evaluated for 100 marks. There shall be a seminars and internships evaluation committee (with at least 4 faculty) in the department to evaluate the seminar activities of students.

Social Outreach Survey - II-1 - Evaluated for 100 Marks - 1 Credit

Survey on Social issues - To be done during First year summer and evaluated in Second Year first Semester.

As part of this activity, the students are expected to carry out a survey on a social issue during First year summer and present the survey report for evaluation in Second year First Semester.

- Students are expected to form groups of a maximum of 3 students for this activity.
- Students are expected to consult the first year seminars committee for topics and guidance during the survey.
- *Evaluation shall be done by the parent department seminars and internships evaluation committee.*
- 50 marks shall be for evaluation of the survey questionnaire prepared, number of samples surveyed, quality of inputs from the survey, and individual participation of the students in the survey. The analysis and presentation of the survey results shall carry 50 marks (presentation shall be involving all the group members).

Research papers analysis Report presentation - III-1 - Evaluated for 100 Marks - 1 Credit

Each student is expected to select with the help of their faculty, a scholarly research publication on a technical topic of interest in the specific branch of study, and study that including referred research for a thorough understanding of the research work, and present a technical report of a maximum of 4 pages on the research work, and present the same to the department seminars and internships evaluation committee.

- This has to be taken up by the students individually.
- Students shall be assigned a faculty mentor from the department (teaching this particular class of students) for this activity. One faculty mentor shall have a maximum of 10 students as mentees for this activity.
- *Evaluation shall be done by the parent department seminars and internships evaluation committee.*
- Evaluation of the activity shall be based on the 4 page Technical report and the presentation of the report. The technical report shall be evaluated for 70 marks taking into consideration the understanding of the research studied, the depth of study, clarity in presentation, style and presentation of the content - including the language component. 30 marks shall be awarded for individual presentation of the report.

9.2. Internships (3 Credits)

The department seminars and internships evaluation committee shall conduct evaluation of internships.

Internships shall be done individually. Internships shall be evaluated based on the genuineness of internship, proof of participating in the internship, number of hours spent in the internship, and the report submitted by the student on the work done during internship.

Summer Internship - III-1- evaluated for 100 Marks - 1 Credit

- Summer Internship has to be done in Second year Summer to be evaluated in Third year semester 1.
- The number of hours to be spent for Summer Internship are at least 60 (or 10 working days)
- Alternately credit for summer internship can be gained by participating in innovation/ entrepreneurship activities which needs to be certified by the innovation and incubation cell of the college. Prior permission needs to be obtained from the department.
- A report has to be submitted after completion of the internship.

Industry Internship - IV-1 - Evaluated for 100 Marks - 2 Credits

- Industry Internship has to be done in Third year Summer, preferably, in an industry. Approval has to be taken from the seminars and internships evaluation committee before choosing an internship.
- Industry internship shall be evaluated in Fourth year semester 1.
- The number of hours to be spent for Industry Internship are at least 100. (Or 20 working days)
- A report has to be submitted after completion of the internship.

9.3. Projects (11 Credits)

All projects of the students shall be evaluated by the projects committee of the department except for the Major Project-Stage2 which will be evaluated by an external examiner to be selected by the Principal from the panel of examiners proposed by the departments.

Mini Project - III-2 - evaluated for 100 Marks - 2 Credits

Mini Project can be a Social Outreach Project or a project based on an industry requirement.

- Mini Project shall be evaluated for 100 Marks.
- Students need to do the project in teams having a maximum of 4 students.***
- Each student is expected to work for at least 30 hours towards the project.
- A project report needs to be submitted with complete details of the project.
- Evaluation shall be in two parts - once at the middle of the semester for 50 marks and the next at the end of the semester for 50 marks.
- Mid semester evaluation shall be done for the presentation about the chosen project idea, the need for that project, the methodology being planned, and the participation hours put in by each member.
- End semester evaluation shall include the quality of the work done, submission of the project report, and level of completion of the expected work.

UG project / Major Project

Major Project shall be chosen by the student in the final year first semester forming teams with a maximum number of 04 students in a team.

The project shall be evaluated in two stages: Major Project -Stage1 and Major Project - Stage2

(i) Major project - Stage I - IV-1 - evaluated for 100 marks - 2 credits

- Major Project - Stage1 shall be done in IV-1 and evaluated for 100 marks. Students have to submit a report of the project work done for evaluation of Major Project - Stage1.
- For Major Project -Stage1, the departmental project evaluation committee consisting of Head of the Department, project supervisor and a senior faculty member shall evaluate the project work for 70 marks and project supervisor shall evaluate for 30 marks. The student is deemed to have failed, if he (i) does not submit a report on Project - Stage1 or does not make a presentation of the same before the evaluation committee as per schedule, or secures less than 40% in the evaluation.
- A student who has failed may reappear once for the above evaluation as and when it is scheduled during the final year second semester.

(ii) Major project - Stage II/ Final Evaluation - IV-2 - evaluated for 100 marks - 7 credits

- Major Project - Stage2 shall be done in IV-2 and evaluated for 100 marks. Students have to submit a project work report for the project done during Stage1 and Stage2 .

- For Major Project -Stage2, the external examiner shall evaluate the project work for 70 marks and the project supervisor shall evaluate it for 30 marks.
- The student is deemed to have failed, if he (i) does not submit a report on Major Project - Stage2, or does not make a presentation of the same before the external examiner as per schedule, or (ii) secures less than 40% marks in the sum total of the evaluation marks (for 100).
- For conducting viva-voce of Major Project - Stage2, the Principal of the college selects an external examiner from the list of experts in the relevant branch submitted by the Department.
- A student who has failed may reappear once for the above evaluation, when it is scheduled again; if student fails in such 'one reappearance' evaluation also, he has to reappear for the same in the subsequent semester, as and when it is scheduled.

10. The performance of a student in every subject/course (including practicals and Project Stage – I & II) will be evaluated for 100 marks each, with 30 marks allotted for CIE (Continuous InternalEvaluation) and 70 marks for SEE (Semester End-Examination).

11. For theory subjects, during a semester, there shall be two mid-term examinations: with each mid-term exam carrying 30 marks. Final Internal marks shall be evaluated by calculating the average of the two mid-term examinations marks.

    11.1. While the first mid-term examination shall be conducted on 50% of the syllabus, the second mid-term examination shall be conducted on the remaining 50% of the syllabus. Assignments and Activity evaluation should be completed before the corresponding internal assessment (for both the mid-term examinations)

    11.2. The total marks secured by the student in each mid-term examination are evaluated for 30 marks, and the average of the two mid-term examinations shall be taken as the final marks secured by each student in Continuous Internal Evaluation. If any student is absent from any subject of a mid-term examination, a special committee formed by the Principal with the Head of the Department as chair, two faculty who taught the student, and one member from the exam committee, shall verify the genuineness of absence of the student and shall decide if the candidate can take the Remedial Test for Midterm Exams

    11.3. For ONE of the courses from the list of courses registered by the student in a semester (starting from the second year), Course Level Project can be taken up as internal assessment instead of mid-term exams.

12. The end semester examinations (SEE) will be conducted for 70 marks for theory subjects as per the pattern proposed by the Exams Committee and approved by the Academic Council.

    a. Part A consists of 10 questions. The questions shall be from each unit and shall carry 2 marks each.
    b. Part B consists of 5 questions and shall carry 10 marks each. Each of these questions is from one unit and may contain sub questions. For each question there will be an internal choice of answering one question out of the given two.

13. For practical subjects there shall be a continuous internal evaluation during the semester

for 30 marks and 70 marks for semester end examination. Out of the 30 marks for internal evaluation, day-to-day work in the laboratory shall be evaluated for 15 marks and internal practical examination shall be evaluated for 15 marks conducted by the laboratory teacher concerned. The end semester examination shall be conducted with an external examiner and the internal examiner (Lab faculty). The external examiner shall be appointed from the list of examiners proposed by the department, and selected by the College Academic Committee. The laboratory records and internal test papers shall be preserved by the examination branch to be produced as and when required.

14. Assessments for Mandatory Courses

14.1. For the Mandatory Language courses - English for Professional Communication in II-1, Interpersonal Communication and Softskills in II-2, Language Course - Technical Report Writing in III-1/2 , the evaluation shall be for continuous internal assessment. A student has to secure 40 marks out of 100 marks (i.e. 40% of the marks allotted) in the continuous internal evaluation for passing the subject/course.

14.2. For mandatory courses Environmental Science, Constitution of India, Intellectual Property Rights, Digital Wellbeing and Gender Sensitization lab, a student has to secure 40 marks out of 100 marks (i.e. 40% of the marks allotted) in the continuous internal evaluation for passing the subject/course.

15. Preparation of Question Papers

- While preparing the question paper, an examiner needs to consider the following points.
- Bloom’s taxonomy framework needs to be used in planning and designing of assessment of student learning.
- The examiner is expected to have a clear understanding of the Bloom’s Taxonomy levels
- Each question in the paper must be marked with the Bloom’s taxonomy level it maps to. (L1,l2,L3,L4,L5,L6)
- To maintain the question paper quality, the question paper needs to have questions at higher levels of Bloom’s Taxonomy. At least 60% of the questions MUST be at Level 3 and above in Bloom’s Taxonomy in each section.
- In Part A of the question paper, there shall be at least 15 marks allocated for questions at level 3 and above of the Bloom’s Taxonomy.
- In Part B of the question paper, there shall be at least 30 marks for questions at level 3 and above of the Bloom's Taxonomy.

6. Projects, Seminars and Internships

There shall be no semester end examination for the Seminars/Projects/Internships. Evaluation is done for 100 marks for each of the Seminars / Internships / Projects. There shall be a seminars and internships evaluation committee in the department to evaluate the seminar and internship activities of students. All projects except the major project stage 2 are evaluated by the department level project committee. Major Project-Stage2 which will be evaluated by an external examiner to be selected by the Principal from the panel of examiners proposed by the departments.

- Seminars: There shall be two Seminars - Social Outreach Survey in II-1 and Research papers analysis Report presentation in III-1
- Internships: Students have to do two internships -Summer Internship after II-2, to be evaluated in III-1, and Industry Internship after III-2 to be evaluated in IV-1. Internships shall be done individually.
- Students can gain a maximum of One credit of Seminars and One credit of Internships alternately by completing Courses that are recognised by college level committee (Internal BOS from time to time) to be equivalent of gaining 1 credit (courses for improving the employability levels of students and having an end course evaluation). The student must get the approval from the department at the beginning of the semester to do a particular course instead of a one credit seminar or summer internship.
- Projects: Mini Project to be done in III-2, and UG project / Major Project to be carried out in two stages. (i) Major project - Stage I in IV-1 and (ii) Major project - Stage II/ Final Evaluation in IV-2.

Examination Marks Weightages:

Total Marks: 100 (30 Marks Internal +70 Marks External)

Internal Exams

- Total Marks - 30 Marks
- 20 Marks for Test
    - 10 Marks for Objective and 10 Marks for Descriptive.
- 10 Marks for Assignment.
- Two mid term examinations shall be conducted.
- Syllabus for the first mid-term examination is the first two and a half units.
- Syllabus for the second Mid term examination is the last two and a half units.
- ***Procedure:***
    - Exam branch issues the time table for I & II mid-term examination as per the academic calendar.
    - Two sets of question papers are collected from the concerned subject faculty for both objective as well as descriptive papers.
    - A set number is chosen for the objective and descriptive papers and announced 15 minutes before the scheduled time of exam.
    - Internal marks statement shall be collected within two days after the completion of the last exam.
    - Average of the scores of the two mid-term examinations is considered for final grading.