

IV Year II Semester**Code: 17EE871****L T P C****0 0 1 1****PROJECT WORK**

As part of Raghu Engineering College (A) curriculum, a student is normally required to undertake a research-oriented project in their final year second semester of his/her study.

Aim & Objectives of the Project:

1. To provides the students with an opportunity to design undertake or conduct an independent research or study related to their degree course.
2. To improve the skill of the student in modern tools usage/methodology in solving the complex EEEresearch problems and succeed in obtaining acceptable results, in order to produce competent and sound engineers.
3. To identify outstanding student project works, and encourage students to publish the results as a technical paper either in National/International Journals or Conferences proceedings which are approved by UGC/SCOPUS/SCI.

Project Outcome:

- Upon completion of Final year project, student should be able to Identify and describe the problem and scope of project clearly, collect, analyze and present data into meaningful information using relevant tools, select, plan and execute a proper methodology in problem solving, work independently and ethically, present the results in written and oral format effectively and identify basic entrepreneurship skills in project management.

Accepted Types of Projects to fulfilment the B.Tech (EEE) degree:

- Projects may be either one or a combination of the following categories: Experimental Research, Case study, Industrial applications, Analytical and Simulation, and also may be of Interdisciplinary.
- The work must be either development of the innovative & latest methodology for the simplification of complex research-oriented problem/ the work must have social utility/ useful for the institute/have an industry-oriented application.

Guidelines for Formation of Project Batches and Allocation of Supervisors:

1. Each B. Tech Project has to be carried by a group of students of at least 4 EEE students. Formation of project groups should be done such that each group has the representation of students with varying academic merit from best to average. In view of this following practice may be followed:
 - Decide the total number of feasible groups. Any left-out student(s) should be randomly attached to any group.
 - Enlist the students in the order of their CGPA merit

- Depending upon number of groups to be formed, identify the group members in order of merit.
- 2. Supervisors may be assigned to each project group by the lottery system. A faculty member with a minimum of technical Master's Degree in the respective discipline may supervise B.Tech projects.
- 3. Every project batch need to submit the consent letter & the project plan attested by the project guide to the project coordinator. The formats are provided in the below link:
- 4. [https://docs.google.com/document/d/1FVCjnJI6df6hKThLQ57vsZLEMT9cK8yv/edit?usp=sharing &ouid=106499826314010268186&rtpof=true&sd=true](https://docs.google.com/document/d/1FVCjnJI6df6hKThLQ57vsZLEMT9cK8yv/edit?usp=sharing&ouid=106499826314010268186&rtpof=true&sd=true)
- 5. The supervisor is the only responsible person in monitoring the progress of their respective batch project work on regular basis. In case it is found that progress is unsatisfactory he/she should be properly mentored. Otherwise, report to the respective project coordinator for necessary action.

Guidelines for Assessment and Evaluation of the Project Work:

1. The Internal Evaluation of the Project is done by a committee which is termed as Department Evaluation Committee (DEC). DEC will comprise the Head of the Department as the Convener along with Two/Three senior faculty members of the department.
2. This committee will be responsible for evaluating the timely progress of the projects and communicating the progress report to the students.
3. To ensure proper conduction of each project, progress of each project should be monitored on a continuous basis first by the supervisor and then by the Department Evaluation Committee. In order to do so, it is planned to hold 4-Power Point presentations to be made by each project group each semester, as listed in below table:

S.no	Project Assessment	Tentative weeks	Examiners	Remarks
Project Internal Assessment				
1	Basic review: on abstract	2 nd week of 8 th Semester	<ul style="list-style-type: none"> ➤ Department Evaluation Committee (DEC). ➤ Project Supervisor. 	<p>In this review,</p> <ol style="list-style-type: none"> 1) Students are supposed to submit the Consent Letter from your guide and the base paper of the project chosen. 2) The PPT presentation must be for 15 minutes, should cover the following: Project Objective and scope, literature review, and also to state the agenda for the next review in the presentation. 3) The Progress of project report dually signed by project guide.
2	Review on 50% of their work completion	6 th week of 8 th Semester	<ul style="list-style-type: none"> ➤ Department Evaluation Committee (DEC). ➤ Project Supervisor. 	<p>In this review,</p> <ol style="list-style-type: none"> 1) The Progress of project report dually signed by project guide. 2) The PPT presentation must be for 15 minutes, which includes Objective of the project, Insight of methodology using in the project, Partial output of the project. and also to state the agenda for the next review in the presentation.

				3) The Progress of project report dually signed by project guide.
3	Review of 75% of their work completion	10th week of 8th semester	<ul style="list-style-type: none"> ➤ Department Evaluation Committee (DEC). ➤ Project Supervisor. 	<p>In this review,</p> <ol style="list-style-type: none"> 1) The Progress of project report dually signed by project guide. 2) The PPT presentation must be for 15 minutes, which includes Objective of the project, methodology, simulation results, conclusion and also to state the agenda for the External Viva-Voce Examination. 3) The Progress of project report dually signed by project guide.
Project External Assessment				
4	External Viva-Voce Examination on 100 % Completion of Project work	14th week of 8th semester	<ul style="list-style-type: none"> ➤ Department Evaluation Committee (DEC). ➤ Project Supervisor. ➤ External Examiner 	<ol style="list-style-type: none"> 1) The Project Base Paper, Project Book are need to be submitted in Soft and Hard Copy. 2) The PPT presentation for 15 minutes, which

				includes Objectives, Brief 3) External Viva-voce examination for 5 minutes.
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1. The Internal/External project review presentations of each student will be evaluated as below mentioned categories:

S.No	Registration Number	Attendance 10marks	PPT Preparation 10marks	Communication skills 10marks	Student contribution towards works 10 Marks	Viva-Voce 10marks

Marks Assigned for Project Assessment:

S.No	Examination	Assessment Criteria		Marks
1	Internal Project Assessment	Project supervisor Assessment	Attendance	10
			Student contribution towards the work	10
		Basic Review		10
		Review on 50% of project work completion		10
		Review on 75% of project work completion		10
2	External Project Viva-Voce Examination			150
3	Total Marks			200

Project Assessment Rubrics for Supervisors, DEC and External Examiners:

Rubric for Assessing Student Attendance	
Score	Description
5 (Very Good)	Have very frequent meetings with the supervisor.
4 (Good)	Meets with the supervisor regularly.
3 (Fair)	Meets with the supervisor once in a while, but not frequent enough.
2 (Poor)	Very seldom meets with the supervisor
1 (Very Poor)	Hardly ever meets with the supervisor.

Rubrics for Assessing PPT Preparation	
Score	Description
5 (Very Good)	Exceptionally well-prepared and attractive slides/poster that clearly covers the main aspects of the project.
4 (Good)	Well-prepared and attractive slides/poster that covers the main aspects of the project.
3 (Fair)	Adequately prepared slides/preparation of slides/poster with important aspects of the project being left out.
2 (Poor)	Very little thought given to the preparation of slides/poster with important aspects of the project being left out.
1 (Very Poor)	No thought given to the preparation of slides /poster with most aspects of the project being left out.

Rubrics for Assessing Project PPT Presentations/Communication	
Score	Description
5 (Very Good)	Flawless presentation, exhibiting highly commendable skills.
4 (Good)	Impressive presentation, exhibiting commendable skills.
3 (Fair)	Mediocre presentation. Skills require improvement.
2 (Poor)	Unimpressive presentation due to lack of skills.
1 (Very Poor)	Seriously flawed presentation due to little or no skills.
Rubrics for Assessing Student Contribution towards the project work	
Score	Description
5 (Very Good)	1) Shows a genuine interest in the project and is exceptionally hard working. Inquisitive and independent. 2) Project plan is exceptionally well prepared, systematic and appropriate. Conducts work according to plan and adapts well to changes.
4 (Good)	1) Shows an interest in the project and is hardworking, inquisitive and independent. 2) Project plan is well prepared, systematic and appropriate. 3) Most work is conducted according to plan and can adapt to changes.
3 (Fair)	1) Shows some interest in the project but is not fully committed. Moderately hardworking, lacks inquisitiveness and is dependent on the supervisor half of the time. 2) Project plan needs improvement and should be more systematic and

	<p>appropriate.</p> <p>3) Work is not completely conducted according to plan and has some difficulty adapting to changes.</p>
2 (Poor)	<p>1) Shows little interest in the project and lacks commitment. Has issues with completing tasks, lacks inquisitiveness and is dependent on the supervisor most of the time.</p> <p>2) Project plan is flawed and needs to be more systematic and appropriate.</p> <p>3) Work is not conducted according to plan and has major difficulty adapting to changes.</p>
1 (Very Poor)	<p>1) Shows no interest in the project has major issues with completing tasks, shows no signs of inquisitiveness and is highly dependent on the supervisor.</p> <p>2) Project plan is seriously flawed.</p> <p>3) Seldom does work and cannot adapt to changes.</p>

Rubrics for Assessing Project Viva-Voce	
Score	Description
5 (Very Good)	Questions answered exceptionally well and with ease.
4 (Good)	Questions answered well and rather convincingly.
3 (Fair)	Some questions could not be answered convincingly.
2 (Poor)	Failed to answer most of the questions convincingly.
1 (Very Poor)	Unable to answer the questions convincingly.

RESPONSIBILITIES

Responsibilities of the Student

- 1) The student should take responsibility for the design, methodology and presentation of the project.
- 2) It is the responsibility of the student to edit their work, and ensure all information is accurate and complete.
- 3) The student is responsible for presenting their research proposal to the Faculty for approval before embarking on the data collection.
- 4) Students are reminded that their research project must be their own work and all quotations from other sources, whether published or unpublished, must be properly acknowledged. Plagiarism is a very serious offence and, where proven against a student, may result in disqualification from the examination of the project.
- 5) The student should submit material in sufficient time to allow for comment and discussion before proceeding to the next stage.
- 6) The student takes responsibility for maintaining regular contact with the supervisor.
- 7) The student should participate in the progress reports to demonstrate their commitment to completing the project in time.
- 8) The student takes responsibility for incorporating supervisor's comments and feedback into their work, and seeking clarification where necessary.
- 9) Students should keep track of their project to ensure it progresses according to the

time frame. Where deviations are observed, they should be brought to the attention of the supervisor as soon as possible.

- 10) Any problems encountered in conducting the project should be brought to the attention of the supervisor as soon as possible after they occur so that remedial action can be taken immediately.
- 11) Any problem encountered by the student during the project should be discussed with the supervisor(s). If the matter cannot be resolved, it should be reported to the project Coordinator and eventually to Head of Department.

Final Project Report: Upon completing the project, a draft report should be submitted to the supervisor for evaluation. The report must contain an updated progress report, and all information as predetermined by the faculty. As such, instructions for completing the project final report are contained in Guidelines for Preparation of Final Year Project Report.

- Each Project batch must submit 3- Binded Project Books in Hard Copy to the project coordinator, in 7-days prior to the Final Viva-Voce examination date.
- The soft copy of project base paper and project book need to submit to the department library coordinator.
- Guidelines for preparation of Final Year Project Report: Refer to the link provided below-

<https://docs.google.com/document/d/1tQObSKF5njnBG9wpuWZWSj9Iqme7pOLw/edit?usp=sharing&ouid=106499826314010268186&rtpof=true&sd=true>