INSTITUTE OF AERONAUTICAL ENGINEERING
(Autonomous)
Dundigal, Hyderabad - 500043

IMPLEMENTATION PROCEDURE FOR
CONDUCTING M.TECH III & IV SEMESTER PROJECT WORK

Project work is an important component and provides the students with the opportunity to design undertake or conduct an independent research or study related to their degree course.

Upon completion of the 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.

Normally, the project work should be carried out at Host Institute (Institute of Aeronautical Engineering). However, it can also be carried out in any of the recognized Educational Institutions, National Laboratories, Research Institutions, Industrial Organizations, Service Organizations or Government Organizations with the prior permission from the guide and concerned Head of the Department. A student shall submit the outcome of the project work in the form of a dissertation.

1. PROJECT WORK COURSE OBJECTIVES:

This course will expose students to:
  I. Identify the problem in the area of interest through a thorough literature survey.
  II. Foster innovation in the design of products, processes, or systems based on the identified problem.
  III. Conduct a feasibility study through creative thinking and requirement analysis to find viable solutions to respective domain specific engineering problems.

2. PROJECT WORK COURSE OUTCOMES:

By the end of the course, students are able to show competence in the following areas:

CO1	**:**	Identify and define a relevant and significant problem or challenge in the relevant field.
CO2	**:**	Formulate research methodologies for the innovative and creative solutions.
CO3	**:**	Analyze data to generate valuable insights and derive conclusions through systematic deduction.
CO4	**:**	Plan and execute tasks utilizing available resources within timelines, following ethical professional and financial norms.
CO5	**:**	Organize and communicate technical and scientific findings effectively in written reports, oral presentation, and visual aids.
CO6	**:**	Evaluate an extensive independent investigation culminating in the creation of a research thesis on contemporary challenges.

3. TYPES OF PROJECTS
Projects may be either one or a combination of the following categories of projects Experimental Research, Case study, Industrial applications, Analytical and Simulation.

The project may be from any one of the following types and preferably from area of specialization
  • Comprehensive case study (covering single organization / multifunctional area problem, formulation, analysis and recommendation)

- Inter-organizational study aimed at inter-organizational comparison / validation of theory / survey of various practices.
- Field study (empirical study).

3.1. GUIDELINES TO REGISTRATION AND MAINTANCE OF PROJECT WORK REPORT

1. It is mandatory to register the course from the Samvidha Login.

2. Each student is allocated a single project only.

3. Students should fill and submit the form for the allotted project (which can the downloaded from college website - Downloads and Forms) to the Dean of PMCS with the concurrence of supervisor and forwarded by head of the department.

4. Interdisciplinary project works are encouraged, but requires Co-Supervisor from the major branch / department of study.

5. The students must submit their project work report to their supervisor whenever schedule has published and update the progress of their work.

6. If a student wishes to change his supervisor or topic of the project, he can do so with the approval of the PRC. However, the PRC shall examine whether or not the change of topic / supervisor.

7. Leads to a major change of his initial plans of project proposal. If yes, his date of registration for the project work starts from the date of change of supervisor or topic as the case may be.

8. The student must maintain a record of his / her review meetings along with remarks of their discussion and signature of their supervisor.

9. As and when the topic is chosen, the student shall submit a duly filled in registration proforma for project work to the supervisor for comments and finally be approved by the supervisor.

10. Students shall have regular interaction with their supervisors in order to have understanding of nature, scope, relevance, suitability, research objective and design, schedule and importance of research. Students need to substantiate these important components which normally decide the quality of project work.

11. The students shall submit the proforma for registration, synopsis and manuscripts of different chapters within the time schedule as instructed by the respective supervisor. The supervisor shall monitor the progress of his / her students in all respects like finalization of the project work proposal, typology, methodology, data analysis, inferences, discussions and report writing. The supervisor shall also necessarily approve the questionnaire / interview schedule.

12. The supervisor is authorized to reject the project work if it does not meet his / her expected standard quality or the guidelines.

4. EVALUATION GUIDELINES

The Continuous Internal Assessment (CIA) shall be for 30 marks and done by a Project Review Committee (PRC) comprising the supervisor, project coordinator, Head of the department, two senior professors of the respective department and any two deans from the administration. The PRC committee evaluates the students' progress during the project work that regularly submitting to the supervisor and the assessment is made by PRC as mentioned earlier.

The student shall submit the project work synopsis at the end of III semester for Phase-I of project evaluation. The Phase-I of project work shall be evaluated by Project Review Committee (PRC) at the end of the third semester for a maximum of 100 marks. Head of the Department (HOD) shall constitute a

PRC comprising the supervisor, project coordinator, Head of the department, two senior professors of the respective department and any two deans from the administration.

The second phase of project work is to be carried out in IV semester for Phase – II of Project work. The student will be allowed to appear for final viva-voce examination at the end of IV semester only if s/he has submitted s/he project work in the form of paper for presentation / publication in a conference / journal and produce the proof of acceptance of the paper from the organizers / publishers.

The student shall submit the project work in the form of dissertation at least four weeks ahead of the completion of the program. Head of the Department shall constitute an Internal Evaluation Committee (IEC) comprising of the Chairman BOS (PG), HOD and Guide. As per convenes of all meeting for open pre-submission seminar evaluation of the student. If the open pre-submission seminar by a student is not satisfactory, another seminar shall be scheduled within two weeks.

The examination control office shall schedule the semester end examination of dissertation soon after the completion of the study of program and a student can appear for the same provided s/he has earned successfully all the requisite credits. The student shall produce the dissertation duly certified by the supervisor and HOD during the semester end examination.

The project reports of M.Tech students who have completed their course work successfully will be evaluated in that semester itself and the result sent confidentially to the Controller of Examinations. The results of the project work evaluation will be declared by the Controller of Examinations only after the successful completion of the courses by those students.

A minimum of 50% of maximum marks shall be obtained to earn the corresponding credits.

5. Guidelines for successful completion of the M.Tech project work carried out by M.Tech students in III semester (Phase - I) and IV semester (Phase - II).

1. Project Review Committee (PRC) comprising the supervisor, project coordinator, Head of the department, two senior professors of the respective department and any two deans from the administration. The PRC committee is constituted at the beginning of academic year by the head of the department and is communicated to the head of institution.

2. The committee will be responsible for evaluating the timely progress of the project work carried out by the students and communicate the progress report to the students.

3. The Project Review Committee (PRC) is required to adhere to the project work evaluation rubrics provided by the institute during the evaluation process.

4. The allocation of guides should be completed by the second week of the commencement of the third semester.

5. A student has to submit, in consultation with his supervisor, the title, abstract and plan of action of his project work before PRC for approval. The student can initiate the project work, by obtaining the approval from the PRC. The project duration is for **two semesters.**

6. If a student wishes to change his supervisor or topic of the project, he can do so with the approval of the PRC. However, the PRC shall examine whether or not the change of topic / supervisor leads to a major change of his initial plans of project proposal. If yes, s/he date of registration for the project work starts from the date of change of supervisor or topic as the case may be.

7. A student shall submit his project work status report with 6 reviews (3 reviews per semester) conducted by the PRC.

8. The internal evaluation shall be made on the basis of reviews and on the progress of the work evaluated by PRC.

9. A student should publish / present the research findings of s/he project work in the form of research paper to a National or International Peer Reviewed Journal / International Conference with due permission from the supervisor after getting Plagiarism Check and need to be shown at the time of final internal project presentation.

10. Four copies of the Project Thesis certified by the supervisor and HOD shall be submitted to the Examination control office after getting plagiarism check (Similarity index should be less than 20%) and approved by Dean R&D.

11. The Head of the departments should submit PRC reports and panel of six examiners who are eminent in that particular field to office of PMCS at least 07 days before the submission of the thesis.

12. The external examiner shall be appointed by the Principal from a panel of examiners.

13. The semester end examination shall be based on the final report submitted and a viva-voce examination by a committee comprising the head of the department, the supervisor and an external examiner appointed by the Principal from panel of examiners given by the HOD. The project thesis is sent to the same examiner for the adjudication.

14. If the report of the examiner is favorable, viva–voce examination shall be conducted by the supervisor, HOD and external examiner who adjudicated the thesis

15. If the report of the examiner is unfavorable, the student shall revise and resubmit the Thesis, in the time frame as decided by the PRC. If the report of the examiner is unfavorable again, the thesis shall be summarily rejected. The student has to re-register for supplementary examination.

16. If a candidate fails to secure a pass in a particular course, it is mandatory that s/he shall register and reappear for the examination in that course during the next semester when examination is conducted in that course. It is mandatory that s/he should continue to register and reappear for the examination till s/he secures a pass.

*****