JERUSALEM COLLEGE OF ENGINEERING
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DEPARTMENT OF INFORMATION TECHNOLOGY

Step-1: constitution of review committee forming

The Head of Department identifies faculty members and assigns them as Project Coordinators at the beginning of the 8 semester. The Project Coordinators motivate the students to select their projects based on the latest trends in technologies and needs of the industry.

Step-2: Project identification & Evaluation:

The quality of the project is maintained throughout the processes involved in the project identification and its evaluation.

Step-3: Project Supervisor Allotment:

Based on the expertise of the faculty and students request, HoD will allocate the supervisor. The students are issued with the 'Project Book', which facilitates the continuous monitoring of their project by supervisor and project coordinator

Step-4 :The project groups are expected to

- ❖ Students can do individual projects or form groups consisting minimum two to maximum of four members.
- ❖ If the students are not able to form the group, then the project coordinators will help them to form the group.
- ❖ The students are instructed to submit their team members, area of interest and tentative topics to the Project Coordinators at the beginning of the semester
- ❖ Identify an existing real time problem or potential issues.
- ❖ Do an intensive literature survey to analyze the existing solution to the problem and similar issues addressed.
- ❖ Formulate a solution to the problem, and evaluate the effectiveness of the solution.
- ❖ Coordinate with the team members in executing the project and managing the time-line of the project to meet the deadlines.
- ❖ Present his work in the reviews and viva-voce along with demonstration.
- ❖ Report is prepared in the prescribed format with the obtained results.

Step-5: Zeroth Review:

Held at the commencement of the 8 semester. Usually this review does not hold any weightage in the marks. However following factors are checked by the committee before approving project title.

- ❖ Feasibility of the project.
- ❖ Non-repetition of work either full or partial between the batches.
- ❖ Availability of required hardware / software components.
- ❖ Usability of the project / Cost effectiveness.
- ❖ Degree of originality and Sufficient Literature review.
- ✓ If lapses are found in any of these factors the students are given opportunity and time to review, enhance, modify or identify a new project and present again for zeroth review.
- ✓ Necessary suggestions are provided to the students by the PRC at these reviews.
- ✓ Other than Review, the students are continuously monitored by the supervisor and project coordinator.

Project Report: The project report is prepared by each team in the strict format prescribed by the institution. It includes abstract, Table of Contents, Literature Review, Nature of the work done, detailed analysis of the results, conclusion and references.

Step 6: Periodic Reviews:

- ❖ Periodic reviews excluding zeroth review are conducted to evaluate the project.
- ❖ The constitution of Project Review Committee (PRC) and Evaluation tools for the periodic reviews are described here.
- ❖ **Project reviews:** Three project reviews are held during the semester spaced at equal intervals. In each review, each team is required to make presentation on their project work and the work completed.
- ❖ Marks are allotted for each review which will be the part of their internal marks, based on Sufficient understanding of the project by each member in the team. Progress in the work. Presentation skills of each team member

    Process of Monitoring

    - ✓ All project team should submit the final synopsis to the guide, the project guides gives suggestions towards the improvement of project.
    - ✓ The progress of a project is monitored by the guide on weekly basis and they have to report the updates to the respective guide every weekend.
    - ✓ The project guide and coordinator gives suggestions to students from time to time that they need to incorporate before the submission of final report.
    - ✓ The project guide, coordinator along with head of the department will evaluate the project work.
    - ✓ Monitoring of project work will be done for both ODD and Even semesters of final year.

ii) Process of Evaluation

a) Internal Evaluation:

The project work and the report will be evaluated by guide, coordinator and head of the department in both ODD and Even semesters of final year. The table 2.2.3(vi) gives the evaluation of project work

Table2.2.3(vi):Evaluation of Project Work

Review No	Agenda	Review Assessment Weightage (Marks)
1	Project Synopsis	-
2	Project Phase1-Zeroth review	10%(50)
	Project Phase1-First review	20%(50)
	Project Phase1-Second review	30%(50)
	Project Phase1-Third review	40%(50)
3	Project phase1-Final review	50%(50)
ODD Sem.-Total Internal Weightage (Marks)		100%(100)
4	Project Phase II-Zeroth review	10%(50)
	Project Phase II-First review	20%(50)
	Project Phase II-Second review	30%(50)
	Project Phase II-Third review	40%(50)
5	Project phase II-Final review	50%(50)
Even Sem.- Total Internal Weightage (Marks)		100%(100)

b) External Evaluation:

The Final Projects are evaluated by Internal and External examiners as appointed by the COE. The external examiner is from other affiliated college. The examiners conduct viva-voce examination for the students. The project teams will come forward and defend the carried out project work. Based on the performance in viva-voce examination, final marks are awarded to the students that are sent to university.

d) Process to assess individual and team performance

The Individual and team performance is assessed in the project work based on the following. Evaluation is carried out based on various criteria such as.

a. Problem Formulation

b. Planning

c. Technical skills

d. Communication

- Presentation

- Documentation

e. Teamwork

- Group participation

- Peer review

- Societal or environmental issues

- Individual Roles and Responsibilities

Evaluation is carried out on individual basis as well as on team performance. At the end of the academic year, students present and demonstrate their work to the external and internal examiners appointed from the university. The assessment will be done based on the below rubrics.

Table2.2.3(vii):Rubrics1forProjectPhase1firstAssessment

Agenda	Max. Marks	Rubric Parameter	Level of Marks				
			Excellent	VeryGood	Good	Average	Poor
Review-1							
Problem Statement	5	Identifyingthe Problems intheselected domain	Problem statement well defined 5 marks	Problem statement has slight	Problem statementhas few changes 3 marks	Problem statementhas major changes	Problem statement should be modified 1 mark

Criteria	Marks	Description					
				changes 4 marks		2 marks	
Scope&Objectives	5	The Scope and objectives to be identified	Scopes and objectives are identified correctly 5 marks	Scope and objectives are identified but objectives need few changes 4 marks	Scope and objectives are identified but require moderate changes 3 marks	Scope and objectives are identified but require lot of changes 2 marks	Scope &objectives are not defined 1 mark
Requirements	20	Gathering all the Hardware and Software requirements	Gathered Hardware & Software requirements are correct 20 marks	Hardware requirements are appropriate, where as Software requirements can be modified 18 marks	Hardware requirements & Software requirements need few changes 16 marks	Hardware requirements and software requirements are not well defined 14 marks	Hardware &oftware requirements are not welldefined 12 marks
Presentation	10	Preparation of Slides, Presentation Consistency	Relevant and consistent 10 marks	Relevant &partially consistent 8 marks	Partially relevant & consistent 6 marks	Partially relevant &partially consistent 4 marks	Partially relevant &inconsistent 3 marks
Viva	5	Handling Questions	Answered all questions with proper justification 5 marks	Answered80% questions 4 marks	Answered60% questions 3 marks	Answered 40% questions 2 marks	Answered 20% questions mark
Total Weightage(Marks)		**50**					

Table2.2.3(viii):

Agenda	Max. Marks	Rubric Parameter	Level of Marks				
			Excellent	VeryGood	Good	Average	Poor
Review-2							
Methodologies	15	The Particular Method/Technique involved been adopted	MethodologyProperly followed &justified 15 marks	Methodology Properly followed &Justified partly 12 marks	Methodology Properlyfollowed & Not Justified10 marks	Methodology Partially followedand Partially Justified 8 marks	Methodology Partially followed and Not justified 6 marks
UML Design	20	Conceptual design, Division of probleminto modules, Selectionof design framework.	ProperlyFollowed & Properly implemented 20 marks	Properly Followed &implemented partly 18 marks	Properlyfollowed & Not implemented16 marks	Partially Followedand Partially implemented 14 marks	Partially followed and Not implemented 12 marks
Presentation	10	Preparation of Slides, Presentation Consistency	Relevantand consistent 10 marks	Relevant &partially consistent 8 marks	Partiallyrelevant & consistent 6 marks	Partially relevant &partially consistent 4 marks	Partially relevant &inconsistent marks
Viva	5	Handling Questions	Answered all questionswithproper justification 5 marks	Answered 80% questions 4 marks	Answered40 % questions 2 marks	Answered40 % questions 2 marks	Answered 2 questions 1 mark

Total Weightage(Marks)	50

Table2.2.3(ix):Rubrics 3for Project Phase 2 first Assessment

Agenda	Max. Marks	Rubric Parameter	Level of Marks				
			Excellent	VeryGood	Good	Average	Poor
Review-3							
Implan tation	20	Executing projectasper work plan.	Project implementationi s complete 20 marks	Project implementatio n is complete with few bugs 16 marks	Project implementatio n iscompletewit h few issues 14 marks	Onemodul e features developedi s not complet e 12 marks	Mostofthe featuresar e not yet complete. 10 marks
Verificat ion &Valida tion	15	Software system satisfies specification s andstandard s as defined in requirement s phase.	Relevantan d consistent1 5 marks	Relevant &partiall y consistent 12 marks	Partiallyreleva nt & consistent 10 marks	Partially relevant &partiall y consisten t 8 marks	Partially relevant & validationi s inconsisten t 6 marks
Presenta tion	10	Preparationo f Slides, Presentation Consistency	Relevantan d consistent 10 marks	Relevant &partiall y consistent 8 marks	Partiallyrelevan t & consistent 6 marks	Partially relevant &partiall y consisten t 4 marks	Partially relevant& inconsisten t 3 marks
Viva	5	Handling Questions	Answered all questionswit h proper justificatio n 5 marks	Answered80 % questions 4 marks	Answered40% questions 2 marks	Answered 40% question s 2 marks	Answered 20% questions 1 mark
Total Weightage(Mark s)		50					

Table2.2.3(x):Rubrics 4 for Project Phase 2 final Assessment

Agenda	Max. Marks	Rubric Parameter	LevelofMarks				
			Excellent	VeryGood	Good	Average	Poor
Review-4							
Testing	10	Testinginvolves unit level, systemleveland integrationlevel	Relevantand consistent10 marks	Relevant &partially consistent 8 marks	Partially relevant &consistent 6 marks	Partially relevant &partially consistent 4 marks	Partiallyrelevant & validation isinconsistent 2 marks
Demonstration	10	Project Demonstration	Relevantand consistent10 marks	Relevant &partially consistent 8 marks	Partially relevant &consistent 6 marks	Partially relevant &partially consistent 4 marks	Partiallyrelevant& validation is inconsistent 2 marks
Presentation	5	Preparationof Slides, Presentation Consistency	Relevantand consistent 5 marks	Relevant &partially consistent 4 marks	Partially relevant &consistent 3 marks	Partially relevant &partially consistent 2 marks	Partiallyrelevant&inconsistent 1 mark

Viva	5	Handling questions	Answered all questionswith proper justification 5 marks	Answered80% questions 4 marks	Answered 40% questions 3 marks	Answered 40% questions 2 marks	Answered20% questions 1 mark
Project Report	20	Reportformat	Relevantand consistent20 marks	Relevant& partially consistent 18 marks	Partially relevant &consistent 16 marks	Partially relevant &partially consistent 14 marks	Partiallyrelevant&inconsistent 12 marks
TotalWeightage (Marks)	**50**						

<u>**D. Process to assess individual and team performance**</u>

- ❖ The three-member review committee is formed to evaluate the students' project. Based on their average marks of Review I, Review II, Review III, marks are awarded to the project teams.
- ❖ The project presentation should be given by all the project team members according to the division of project.
- ❖ Each student in the project team is assessed to their skill set to deliver the presentation, explain the concept.
- ❖ Each individual and team performance is evaluated based on assessment criteria during the project presentation in the review and the viva voice and progress work they show to their supervisor.
- ❖ A sample on the process to assess individual and team performance in the assessment year 2017-18 is shown in Table 2.2.3.7 below.

Table 2.2.3.7   Sample on the process to assess individual and team performance

E.Quality of completed projects / working Prototypes

Quality of the project is determined based on the outcome, follow of design constraints along with environment, safety, ethics, cost and sustainability consideration and standards. Quality projects are disseminated and published to the science and technology domains in the following aspects:

● Publishing papers in reputed National / International Conference proceedings.

● Filing patents for novel technical ideas.

● Forwarding the best project to the science competitions

● Sending the students projects proposal to the IEDC, TNSTC project competitions for fund approval etc.

All the projects will be examined by the project coordinator and project guide, and the team of internal and external experts will be formed by the Head of the department to ensure the quality of project in terms of IEEE standards, design constraints along with environment, safety, ethics, cost and sustainability consideration and outcomes.

FINAL : Project Viva-voce: The project viva-voce is held at the end of the semester. The project report is checked for similarity using plagiarism check software and the similarity index is enclosed in the project report. Evaluation is done by an external examiner, usually senior faculty from leading institutions who are specially invited for project viva-voce.

2.2.3

Step-1
- Constitution of Review Committe
- [Head of Department identifies faculty members and assigns them as Project Coordinators]-

Step-2
- Faculty competencies
- Information about competency

Step-3
- Project Work Area/Title Identification And Supervisor Allotment
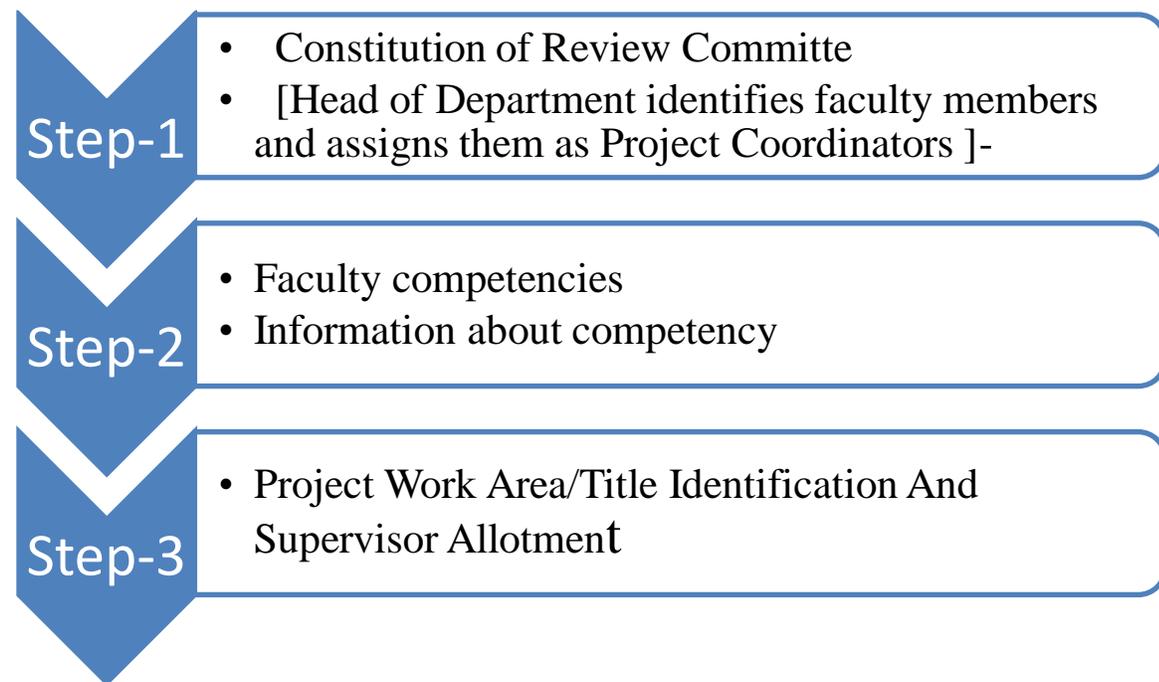
Step-4
- Periodic Reviews
- Review-0,1,2,3

Step-5
- Report Preparation

Step-6
- Final Viva-Voice
- [University Exam]