

## **PRJ 401.5 Project-III (0-0-5)**

### **Evaluation:**

	Theory	Practical	Total
Sessional	-	100	100
Final	-	-	-
Total	-	100	100

### **Objectives:**

1. To assist students in getting well accustomed with the tools and technologies currently used in the market for carrying out a project work and to make them aware of the current trends of the industry
2. To provide the practical knowledge of project undertaking by focusing on the development process that concerns Planning, Requirements Elicitation, Design, Development, Deployment and Validation of a project work.
3. To teach students to work and solve problem in a collaborative team environment.
4. To provide the knowledge to formulate project documentation and oral presentation for their project.

### **Procedures:**

For carrying out the Final Project work, students may give a continuation to the ideas or concepts that they formed while doing their project works in the earlier semester or they may come up with fresh new ideas or concepts. The project course requires students to get themselves involved in a group consisting of 3-4 members and work jointly in a team, on a proposed task under the direct supervision of the Project Supervisor assigned by their department.

The students are required to perform a thorough feasibility analysis of the software and or electronic hardware based project that they want to accomplish and select it in consultation with the industry experts and the concerned department of the college

The Final year project may be carried out using any programming language or any platform and it may be any type of application e.g. Scientific Applications, Information Systems, Mobile, Web Applications, Systems Programming, Games, Simulations, etc but it must find its practical usage in daily life and it should be relevant to the local industry environment and its demands.

The project must be started at the beginning of the semester, span throughout the semester and finished by the end of that very semester. The project should be undertaken preferably by group of 3-4 students who will jointly work and implement the project. The output of the Final Project will be jointly assessed by a panel of examiners as appointed by the concerned department in consultation with the university. Oral examination will be conducted by the internal and external examiners as appointed by the college.

### **Project Work Phases :**

The entire project work shall be divided in to three phases and evaluation shall be done accordingly:

**First Phase :**

Each college or the concerned department must organize a Project Orientation program in the beginning of the semester for its Final semester students in order to make them aware of the potential areas in which the project work can be carried out, the current trends of the industry, the contemporary technologies that are prevalent and the past reviews of the type of project works that have been carried out so far by the students of the college. In order to make it more effective , the resource persons or experts from the industry can be invited for sharing their views and ideas in the program

The college or the concerned department is required to form a Project Review Committee comprising of at least one external (preferably from the industry), one internal (from the concerned department) and one Project Coordinator for reviewing and evaluating the Project Proposals for either accepting or rejecting them and for monitoring the overall progress of the project works.

The concerned department must announce the date for the Final Year Project Proposal Defense in the form of a notice to all of the students within two weeks from the date the Project Orientation program is held. All teams must come up with a conceptual framework for their project work which must be documented in the form of a Proposal Report (in a proper format as prescribed by the concerned department) and present it in front of an examiner in a formal presentation lasting for about 10 minutes, on the date prescribed by the college or the department.

30% of the total marks for assessing the Project Proposal shall be based on the following criteria:

**Evaluation Criteria for assessing the Project Proposal:****Task Accomplished (20%)**

- Feasibility Study
- Requirements Analysis and Specification
- Project plan
- Creativity, Innovativeness
- Uniqueness and Usefulness of the Idea

**Documentation (10%)**

- Proposal Report
- Estimations
- Time Line

**Second Phase :**

Each college or the concerned department should encourage its students to work in a collaborative team environment, so that the deliverables of their work can be properly traced and maintained. For this the department should organize short introductory programs to acquaint the students with a Version Control System (VCS) e.g. git, SVN, Bazaar.

The concerned department must keep track of the progress of the project works being undertaken by different teams. The students must show the progress of their work and the work done so far must be justifiable. This may be done by holding at least five review meetings with the teams. The department may design and issue a Project Supervisor Feedback form to the teams , the form may include criteria like work progress, supervisor feedback and supervisor's signature etc. In the review meetings with the teams, the students must submit this form as a proof or evidence that they are in contact with their supervisor and that the project is in progress. Marks may be assigned

to each review meeting and reflected in their grades for evaluating the progress of their Project work.

They must have finished the design phase including the overall system/architectural design and validation scheme by the end of the Second Phase.

The concerned department must announce the date for the Midterm Defense (some time during the middle of the semester) in the form of a notice to all of the students. All teams must submit a Midterm Progress Report (in a proper format as prescribed by the concerned department) and present it in front of an examiner in a formal presentation lasting for about 15 minutes, on the date prescribed by the college or the department.

30% of total mark for evaluating the Midterm Progress shall be based on the following criteria:

**Evaluation Criteria for assessing the Midterm Progress:**

**Task Accomplished (20 %)**

- System/Architectural Design
- Depth of Project work
- Progress (from Review Meetings)
- Level of achievement
- Group/Team Effort
- Ability to propose solutions

**Documentation (10%)**

- Report organization
- Completeness and consistency of the report
- Validation Criteria

**Third Phase:**

All students must have finished all phases of their project work including requirements analysis, design, coding, testing on time when they come for the Final Defense of their Project.

The concerned department must appoint an external examiner for the Final Project defense in consultation with the Controller of Examinations of Pokhara University

Students must come up with a visible output of the product that they have developed and perform an oral defense of their work in the presence of an external examiner (external to the department or from industries)

The concerned department must announce the date for the Final Project Defense (some time during the last week of the final semester as far as practicable) in the form of a notice to all of the students. All teams must submit a Final Project Report (in a proper format as prescribed by the concerned department) and present it in front of an examiner in a formal presentation lasting for about 15 minutes and demonstrate the output to the examiner lasting for about 5 minutes, on the date prescribed by the college or the department.

40% of total mark for evaluating the Final Project Presentation and Project Demo shall be based on the following criteria:

**Evaluation Criteria for assessing the Final Project Presentation and Demo:**

**Final Project Evaluation (20%):**

- Presentation
- Completeness
- Viva
- Final Project Report
- Organization and analysis of data and results

**Final Project Output Evaluation (10%):**

- Project Demonstration

**External Evaluation (10%):**

- Evaluation by the External Evaluation

<b>Proposal Defense (30%)</b>	<b>Midterm Defense (30%)</b>	<b>Final Defense (40%)</b>		
<b>Task Accomplished (20%)</b> -Feasibility Study -Requirements Analysis and Specification -Project plan -Creativity -Innovativeness -Uniqueness and Usefulness of Idea  <b>Documentation (10%)</b> -Proposal Report -Estimations -Time Line	<b>Task Accomplished (20 %)</b> -System/Architectural Design -Depth of Project work - Progress (traced from Review Meetings) -Level of achievement -Group/Team Effort -Ability to propose solutions  <b>Documentation (10%)</b> -Report organization -Completeness and consistency of the report -Validation Criteria	<b>Final Project Evaluation (20%):</b> -Presentation -Completeness -Viva -Organization and analysis of data and results -Final Project Report	<b>Final Output Evaluation (10%):</b> -Project Demonstration	<b>External Evaluation (10%):</b> -Evaluation by External