Pokhara University
Faculty of Science and Technology

Course Code.: **PRJ 360** (2 Credits) Full marks: **100**
Course title: **Project I** Pass marks: **45**
Nature of the course: **Practical** (0-0-2) Time per period: **1 hour**
Year, Semester: **Year 3, Semester 6** Total periods: **30**
Level: **Bachelor** Program: **BECE, BEIT, BESE**

1. Course Description

This course is project work that is about involving in a team to design and produce tangible computer hardware and/or software and/or embedded product which can be executable in order to solve a real-world problem. In the due course, students are required to apply. theoretical knowledge obtained so far, and they are equally encouraged to learn and apply the tools and techniques prevailing in the industry at the time. As this is teamwork, students also learn and exhibit team building exercises.

This project work is recommended, but not compulsory, to be carried out in association with Project II. A larger framework (incorporating both the project works) may be conceptualized, and the first part may be done in this subject so that it can be extended to Project II.

2. General Objectives

The general objectives of the course are: -

- To provide practical knowledge of project undertaking by focusing on planning, requirements elicitation, design, development and implementation of a project.
- To provide the knowledge of tools and techniques currently used in the industry while developing a project.
- To make students able to work in a team, which also includes team building exercises.
- To help students develop necessary skills required to prepare project reports and that needed for oral presentation of their projects.

3. Working Procedure

The project course requires students to get themselves involved in a group consisting of generally 3-4 members and work jointly in the team, on a proposed task under the direct supervision of the faculty members assigned by their respective departments. The project may be selected by the department or project committee in consultation with the industries, and they shall be software and or electronic hardware based. The project may be done using any programming language or platform and it may be any type of application e.g. Scientific Applications, Information Systems, Web Applications, Games, Simulations etc. but it must find its practical usage in daily life, and it should be relevant, as possible, to the local industry environment and its demands.

4. Project Working Phases

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 work will be continuously assessed by a panel of examiners appointed by the college. Additionally, oral examination / viva-voce will be conducted by internal and external examiners appointed by the college.

The entire process consists of three phases – (1) Proposal, (2) Mid-term and (3) Final. The proposal phase shall occur in the beginning of the semester; the mid-term defense shall be organized in the middle of semester (at least 4 weeks after the Proposal Defense); and the final presentation shall be held at the end of the semester (at least 4 weeks after the Mid-term Defense). The marks distribution for the phases are 30%, 30% and 40% simultaneously.

4.1 Proposal Phase

The students are required to form a team and come up with a conceptual and implementational framework for their project work which must be documented in the form of a proposal report and presented in front of a panel of examiners in a formal presentation organized by the department or the project committee.

Supervisor must be assigned after the acceptance of the proposal. Supervisor may also be assigned in the very beginning or after finalizing the title with the approval of the department or the project committee.

Evaluation Criteria:

30% of the marks shall be based on the following criteria:

Task accomplished • Feasibility study- nature of the project, title, abstract etc. • Objective • Requirements analysis and specification • Project plan - cost estimation, timeline • Creativity, innovation • Teamwork	20%
Documentation • Report format and layout (refer to the Project Guideline)	10%

4.2 Mid-term Phase

Students are required to present the progress of the project work, and the amount of progress should in general be 60% or more. Students must have finished the design phase including the overall system/architectural design and validation scheme. The project must also be in the implementational phase, and the preliminary results must have been seen during this phase of project progress.

A mid-term defense shall be organized by the department or the project committee, where a panel of examiners will evaluate the project. Students must have obtained written consent of their supervisor for appearing in the mid-term defense.

Evaluation Criteria:
30% of total mark shall be based on the following criteria:

Task accomplished • Level of proposal-feedback incorporated • System/architectural design • Progress/depth of project work • Validation criteria • Group/team effort	20%
Documentation • Report organization • Completeness and consistency of the report • Organization and analysis of data and results	10%

4.2 Final Phase
All students must have finished all phases of their project work including requirements analysis, design, coding, testing by the time of the final project presentation. Students must come up with a visible output of the product that they have developed, and they should demonstrate them during the oral defense. A panel of examiners (comprised of an expert from industry) shall examine the project work.

Students must have obtained written consent of their supervisor in order to appear in the final defense.

Evaluation:
40% of total mark shall be based on the following criteria:

Task accomplished • Performance during presentation • Contribution in the entire work • Completeness of the work, • Analysis and design, tools and techniques used Viva-voce Project demonstration	30%
Documentation • Final project report – layout and format (see the Project Guidelines)	10%

5. Reference / Project Guideline

Students must follow the Project Guidelines provided by the University / College.