

Nepal College of Information Technology

Balkumari, Lalitpur

Academic Project Guidelines

2019

Introduction

This guideline applies to all BE CE, Elx, IT and SE students, who are required to take project works in different semesters. The project works are, as named by Pokhara University, Project I (a.k.a. One Project), Project II (a.k.a. Minor Project) and Project III (a.k.a. Major Project) and they carry 1, 3 and 4 / 5 credits respectively.

Being a partial requirement of the fulfillment of the degree to be awarded by the university, this course called Project Work requires students to work in a team and defend proposal, work progress and final outcome in the team. The project may be carried out using any hardware and software tools relevant to their study and practically useful in daily life e.g. robotics, mobile computing, programming, scientific application, information system, games, simulations etc. Students are required to do thorough analysis, design, coding, testing of the system/work they develop/do. The project work must comply with the syllabus provided by the university.

Project Activities and Timing

Students have to make their proposal presentation, mid-term progress presentation and final presentation in defenses organized by the college and must duly pass. These activities are in sequence and students failing to accomplish one activity cannot proceed to another. In case of Project I, the midterm presentation is not mandatory but the project progress can be monitored and reviewed either by the Project Co-ordinator and/or expert(s) / teacher(s) assigned by the Project Review Committee.

The timing of various project work activities is given by the following table: -

S. No.	Activities	Normal Timings
1	Project Proposal Defense	Beginning of semester
2	Mid Term Progress	Middle of semester (at least 4 weeks after the Proposal Defense)
3	Final Project Defense + Report Submission	End of semester (at least 4 weeks after the Mid-term Defense)

However, taking into the account the efforts required for a project or with the intent of adding value and imparting quality to the project, the Proposal Defense may be organized before the semester starts or even in the previous semester also. A minimum gap between two

successive defenses is 4 (four) weeks, and this doesn't apply for a re-defense.

Team Formation and Registration

Academic projects are required to conduct in a team. The number of team members should be justifiable to the credit hours carried by the project, and as instructed by the Syllabus provided by the university.

The following table is to be referenced while forming a project team:-

Types of Project	Credits	Range of team members allowed	Recommended no. in a team
Project I	1	2 to 3	2
Project II (Minor Project)	2	2 to 3	3
Project III (Major Project)	4 / 5	3 to 4	4

After the formation of a team by students, it has to be registered to the Project Office along with an abstract of the project. This is usually an A4 sized page containing two sections - (1) Team members' detail e.g. Name, Roll, Program, Batch, Email, Mobile etc.; and (2) Abstract with Keywords.

Once the project team has been registered, team members cannot leave the team or move to another project at any phase of the project work duration. Should they do in any case, the leaving members will have to start a new project and should duly undergo all necessary phases of project works. As soon as a member leaves the team, all marks and grades earned so far by her/him will be seized to be zero. However, if any two or more projects are of similar natures and their Supervisors formally agree to adjust the work divisions, team members may move in between these projects with the permission of the Project Review Committee (PRC), and in such case, moving members' evaluation remains intact.

Supervisor Assignment

A Supervisor will be assigned for every team formed and registered officially. In case of Project I, the Project Co-ordinator and/or expert(s) / teacher(s) assigned by the Project Review Committee will guide throughout the project process. Under special circumstances, more than one supervisor may be assigned if the need is approved by the Project Review Committee. From this point onward, the project team should work under the guidance of the supervisor. Supervisor's consent is needed for Proposal defense, for Mid-term progress presentation and for the final defense.

There will be a Roster of Supervisors that has to be formed ahead of the time of supervisor assignment. In normal case, the PRC will select a person from the existing roster. An expert from the Roster of Supervisors can be assigned to any project that is appropriate and justifiable to her/him. While assigning supervisors to projects, the principle of load balancing (of the experts in the roster) will be taken into account.

Qualification of Supervisors

Supervisor can be a teacher, an expert from industry or a professional in the relevant field.

The minimum eligibility of a supervisor for Project I and Project II is a Bachelor's degree in equivalent field; a Master's degree is expected for Project III. However, under certain circumstances (e.g. unavailability of an expert in the domain of the project), the Project Review Committee can assign an expert from the domain who has an equivalent status of a Bachelor in the relevant field.

Roles and Responsibilities of Supervisor

Project supervisors will have, but not limited to, the following roles and responsibilities:

- 1) To impart students with her/his guidance on development and refinement of the research project, in conducting literature review and formulating methodology, in getting standards, criteria, skills and resources needed for the project, in understanding ethical, legal, professional and safety issues, if any, associated with the project, etc.
- 2) To track and evaluating the progress by providing students with feedbacks and suggestions so as to make sure that the project will be finished on time, etc.
- 3) To approve projects for proposal, mid-term and final defense, and also to evaluate at each of these stages of the project work.

Project Proposal

The students are required to come up with a conceptual framework for their project work which must be documented in the form of a Proposal and must duly signed by the supervisor. Besides the supervisors' approval, project teams should submit the proof of guidance taken from the supervisor (e.g. Meeting Log). *{See Appendix B of this guideline for the sample}*. The proposal must be presented in a presentation and get approved from the panel of the examiners. The presentation for proposal defense will be of 10 (Ten) minutes.

The Project proposal should contain the following sections (not exceeding 8-10 pages): -

- Title page
- Abstract (with keywords) – 250 words
- Problem Statement
- Project Objectives
- Significance of the study
- Scope and Limitations
- Literature Study/Review (present if any)
- Proposed Methodology/ Technical description of the Project
- Proposed Performance Analysis Methodology and Validation Scheme
- Proposed Deliverable/Output
- Project Task and Time schedule
- Bibliography/References

Project Mid-term Progress

Students are required to come up with design documents which shall comprise of architectural design of the proposed system. The mid-term report should be built on the

proposal document with adding sections of your work. An Appendix section may be included at the end of the document if you decide to include documents (like source codes of program, installation and operation procedure of the experiment, or details of results or anything that is related to their project work). The work done so far must be justifiable and approved by the Supervisor. Apart from the Supervisors approval, project teams should submit the proof of guidance taken by the Supervisor, as in the proposal defense, along with the mid-term progress report. Project teams must present their progress in the mid-term defense and get approval to go ahead from the panel of examiners. The presentation will be of 15 minutes only.

The mid-term report shall contain the following sections: -

- Title page
- Abstract (with keywords) – 250 words
- Problem Statement
- Project Objectives
- Significance of the study
- Scope and Limitations
- Literature Study/Review
- Methodology
- Tasks Done so far // new section //
- Results and Discussion // new section //
- Performance Analysis and Validation
- Tasks Remaining // new section //
- Deliverable/Output
- Task and Time schedule
- Bibliography/References

Project Final Defense

The final project report is prepared by completing the section of the work detail and adding some more sections like – conclusion and further works. Like in the Mid-term defense, project team must get supervisor's approval in order to appear in the final defense and proof of meeting with the Supervisor. The final defense will comprise of 15 minutes oral presentation and a separate 5 minutes for demonstrating the project output.

The final draft document should contain the following sections: -

- Title page
- Acknowledgment
- Abstract (with keywords) – 1 page (max 250 words)
- Table of Contents
- List of Figures
- List of Tables

- Introduction
 - Problem Statement
 - Objectives
 - Significance of the study
- Literature Study/Review
- Methodology
- ***(Sections of your work details go here)***
- Conclusion
- Further Works / Recommendations
- Bibliography / References
- Appendix (if any)

Hard Bound Copy of the Project Document

Projects accepted in the final defense shall make a bound hard copy of the project report by adding official and formal pages as mentioned below.

- Hard Cover Page
- Declaration of Originality
- Supervisor's Approval
- Acceptance from the Panel of Examiners
- Certificate from the Department

The hard cover page should contain the same contents as that of the title page. Moreover, it shall contain the title of the project and the year printed on the side pane.

The remaining pages (are printed on Letterheads normally) can be obtained from the concerned departments and/or the college administration. *{Sample of the pages are attached in Appendix F, Appendix G, Appendix H and Appendix I.}*

Soft Final Copy of the Project Document

A digital copy of the final project document (ready for hard copy binding) must also be submitted either online or through email or through a convenient way set by the PRC.

Contents of Project I (First Project)

Proposal document of First Project (which is undertaken by 4th semester engineering students) may be squeezed to have the following contents only: -

- Title page
- Abstract with keywords – 250 words max
- Introduction
- Motivation / Problem statement
- Project Objective

- Scope and Importance of the Project
- Literature Review (present if any)
- Methodology/ Technical description of the Project
- Deliverables / Expected Outcomes
- Task and Time schedule
- Bibliography/Sources

Note: Format of the final report of the Project 1 is the same as that of Major / Minor projects.

The Title Page

The title page must comply with the standard provided by the college. Size of the text on the cover page should be 14 pt and the report title should be 16 pt – both in Times New Roman font. The college logo should be present at the bottom left corner as shown in the sample. The college name should be 20 pt in size of Arial Black font. The sample of the title page is shown in the Appendix A.

Detailed Format of the Project Report

Paper size:	A4 Plain white
Print at:	Single side (odd pages) only
Page Layout:	
Orientation:	Portrait
Margin:	1” each of Left, Right, Top and Bottom
Binding Offset:	0.5” at the left (i.e. gutter margin)
Spaces between lines:	1.5 lines
Paragraph spacing:	6 pt. before and after
Page numbers:	At the bottom centre showing total no. of pages e.g. [15/58]
Headers:	Title of the Project
Document contents:	
Normal text:	Font name: Times New Roman Font size: 12 pt. Font style: Regular
Headings:	Stepwise increment from the normal text, but should not exceed the size of the report title. Font style may be Italic and/or Bold faces

Figures and Tables:	Should be centre aligned, have captions with figure numbering
Equations and Formulae:	Should be centre aligned and have equation nos at the right margin
Document organization:	Section should start on a new page Section headings should be numbered in Legal style

Note:- Page numbers from **Acknowledgement** section to **List of Table** section should be in **Roman (I,II,III.....)** and from **Introduction** section should be in **Hindu Arabic (1,2,3.....)**.

Evaluation System

Evaluation is done at each stage of defense. Evaluation is done separately by the Project Supervisors and the panels of Examiners assigned for defense. The distribution of the marks is given by the table as shown below. The pane of Examiners for defense will consist of Experts from the industries, researchers/academicians and senior faculties as well as concerned authorities of the college.

Marks Distribution and Evaluation Criteria

Evaluation Type	Weight-age	Evaluation by/from
Proposal evaluation	30%	Supervisors and Panel of Examiners
Mid-Term evaluation	30%	Supervisors and Panel of Examiners
Final evaluation	40%	Supervisors and Panel of Examiners

The criteria for evaluation is based on the syllabus. {Evaluation sheets of Proposal, Mid-term and Final defenses are given in Appendix C, Appendix D and Appendix E respectively}.

Project Review Committee

For overall decision making and operational purposes of project management and administration, a Project Review Committee (PRC) will be formed. The PRC will have the following structure: -

1. All concerned HoDs, Members
2. Invited Experts and/or academicians (2 or 3, if necessary), Members
3. Project Co-ordinator, Member Secretary

In case of any exception to the above rule, the Project Review Committee (PRC) will have the final authority to take an appropriate decision.

Last updated on 24. May. 2019

Appendix A : Project Report Cover Page

A {Major/Minor/First} Project {Proposal/Mid-term/Final} Report on
{Title}

Submitted in Partial Fulfillment of the Requirements for
the Degree of **{Name of Degree}**
under Pokhara University

Submitted by:
{Student's Name, Roll No.}
{Student's Name, Roll No.}

Under the supervision of
{Name of Supervisor}

Date:
{dd mmm yyyy}



Department of { Name of your Department }

**NEPAL COLLEGE OF
INFORMATION TECHNOLOGY**

Balkumari, Lalitpur, Nepal.

Appendix B : Supervisor-Student Meeting Log Sheet

Nepal College of Information Technology
Balkumari, Lalitpur
Student-Supervisor Meeting Log Sheet

{The tabular section of this sheet shall be filled by the project supervisor at every time (s)he consults with the team. The second section is the supervisor's approval, which allows the team to appear in a defense.}

Project Code:	
Project Title:	
Student's Roll No, Name:	Supervisor's Name:
	Designation:
	Institution:
Program and Batch:	

S.N.	Date	Discussion	Signature
1.			
2.			
3.			
4.			
5.			

Allowed by me to participate in:

Proposal Defense: ☐

Mid-Term Defense: ☐

Final Defense: ☐

(Signature of Supervisor)

(Signature of Supervisor)

(Signature of Supervisor)

Appendix C : Proposal Evaluation Sheet

Nepal College of Information Technology
Balkumari, Lalitpur.

Project Proposal Evaluation Sheet

Project code:

Date: / /

Title of the project:

Project Type:

	Marks Distribution
Program: Batch:	Performance at Presentation (10%)
<Students' Roll, Name>	

How is the Project Title and Abstract? (10%)	
How is the Project ? (40%)	
Objective (5%)	
Team work (10%)	
Documentation (25%)	Plagiarism = %

Judgement of Examiner (Please tick ✓)

Accepted	<input type="checkbox"/>
Accepted conditionally / Need improvements	<input type="checkbox"/>
Re-defense required	<input type="checkbox"/>
Rejected (concept / idea not acceptable)	<input type="checkbox"/>
Any other (Please write down)	

Signature of the examiner

Full Name:

Designation:

Appendix D : Mid-term Evaluation Sheet

Nepal College of Information Technology
Balkumari, Lalitpur.

Project Mid-Term Evaluation Sheet

Date: / /

Project Type:

Project code and Title:

Supervisor:

Supervisor's Approval: (Tick one)	Granted	Not Granted
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Program, Batch:	Individual Presentation (Tick one)				
<Students' Roll, Name>	1	2	3	4	5

Feedback from the Previous defense:-

<u>Remarks:-</u>					
Level of Feedbacks incorporated (Tick one)	1	2	3	4	5

Mid-term Evaluation:-

Level of Work progress (Tick one)	1	2	3	4	5
Level of Documentation (Tick one)	1	2	3	4	5

Comments of Examiner : -

<u>Examiner's</u> Full Name: Designation: Institution: Signature:
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Appendix E : Project Final Evaluation Sheet

Nepal College of Information Technology
Balkumari, Lalitpur.

Project Final-defense Evaluation

Date: / /

Project code:

Project name:

Supervisor:

Program: Batch:	Marks Distribution	
	Performance at presentation (10%)	Contribution in the entire work (10%)
<Students' Roll, Name>		
<u>Comments from previous defense: -</u>	Project Title (5%)	
	Objective (5%)	
	Volume of project (5%)	
	Creativity / Innovation (5%)	
	Analysis and Design (10%)	
	Tools and Techniques (10%)	
	Documentation (10%)	
	Work accomplished (10%)	
	Project demonstration (20%)	

Judgement of Examiner (Please tick ✓)

Accepted as it is / with minor changes.	<input type="checkbox"/>
Accepted but need more time to improve documentation.	<input type="checkbox"/>
Need more works to do. Demonstrate again.	<input type="checkbox"/>
Too few works done. Re-defend.	<input type="checkbox"/>
Any other (Please write down)	

Signature of the examiner

Full Name:

Designation:

Appendix F: Supervisor's Approval



**NEPAL COLLEGE OF
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(AFFILIATED TO POKHARA UNIVERSITY)

SUPERVISOR'S APPROVAL

This is to certify that the major project entitled “<<Title of the Project>>” undertaken and demonstrated by <<Team member 1>>, , <<Team member N>> has been successfully completed under my supervision as a partial fulfilment of the requirements for the degree of <<Program Name>> under Pokhara University. I, henceforth, approve this project to be awarded the certificate by the concerned authority.

During supervision, I found students hardworking, skilled and ready to undertake any professional work related to this field in future.

<<Supervisor's Signature>>

(<<Supervisor's Name>>)

Supervisor

Date: <<Date on which Supervisor signed>>

Appendix G: Acceptance from the Panel of Examiners



**NEPAL COLLEGE OF
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(AFFILIATED TO POKHARA UNIVERSITY)

EXAMINERS' ACCEPTANCE

This is to certify that the major project entitled "<<Title of the Project>>" presented by <<Team member 1>>, , <<Team member N>> as a partial fulfilment of the requirements for the degree of <<Program Name>> under Pokhara University has been examined and accepted by the following panel of experts. We, henceforth, recommend this project to be awarded by the certificate from the concerned authority.

We extend all the best wishes to the students for their future careers.

<<Examiner1's Signature>>

<<Examiner2's Signature>>

(<<Examiner1's Name>>)

<<Examiner2's Name>>

Examiner

Examiner

Date: <<Date on which Examiner1 signed>>

Date: <<Date on which Examiner2 signed>>

Appendix H: Certificate from the Department



**NEPAL COLLEGE OF
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(AFFILIATED TO POKHARA UNIVERSITY)

CERTIFICATE

Following the Supervisor's Approval and Examiners' Acceptance, the major project entitled "<<Title of the Project>>" submitted by <<Team member 1>>, , <<Team member N>> as a partial fulfilment of the requirements for the degree of <<Program Name>> under Pokhara University, has been officially awarded by this certificate.

I wish the students all the best for their future endeavours.

<<HoD's Signature>>

(<<HoD's Name>>)

Head, Department of <<Dept. Name>>

Date: <<Date on which HoD signed>>

Appendix I: Declaration of Originality



**NEPAL COLLEGE OF
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(AFFILIATED TO POKHARA UNIVERSITY)

DECLARATION

We, <<Team member 1>>, , <<Team member N>>, students of <<Program Name>>, Nepal College of Information Technology affiliated to Pokhara University, hereby declare that the work undertaken in this major project entitled “<<Title of the Project>>” is the outcome of our own effort and is correct to the best of our knowledge. This work has been accomplished by obeying the engineering ethics; and it contains neither materials published earlier or written by another person/people nor materials which has been accepted for the award of any other degree or diploma of the university or other institution, except where due acknowledgement has been made in the document.

<<Student1's Signature>>

<<Student2's Signature>>

(<<Student1's Name>>)

(<<Student2's Name>>)

Student

Student

Date: <<Date on which Student1 signed>>

Date: <<Date on which Student2 signed>>

<<Student3's Signature>>

<<Student4's Signature>>

(<<Student3's Name>>)

(<<Student4's Name>>)

Student

Student

Date: <<Date on which Student3 signed>>

Date: <<Date on which Student4 signed>>