# PROPOSAL FOR ESTABLISHING A COMPUTER ENGINEERING COLLEGE

#### SUBMITTED TO

### **Nepal Government**

#### SUBMITTED BY

Jiwan Kathiwada [067bct517]	Krishna Parajuli [067bct521]
Kishan KC [067bct518]	Midhusha Shrestha [067bct522]
Khemraj Pokharel [067bct519]	Dipendra Shrestha [067bct523]
Komal Kadmiya [067bct520]	Navin Khadka [067bct524]

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#### **ABSTRACT**

There are a number of engineering colleges which are conducted by government and some of others are conducted by the private sectors. Here, we are presenting a proposal for opening a private Computer Engineering College under the affiliation of TU. Unlike other colleges, there will be only 200 seats every year but only for the computer faculty.

The education structure will be the semester system. We will mainly focus on the computer and the IT related subject in the starting semester, that means in first year and second year, and after that we will focus in the research and projects in real time. There will be also the opportunity for the students to work with the well-known companies in the final year. This college will have the facilities of well-equipped practical labs, library with all the reading materials available, research rooms, presentation halls, etc. which will enhance the education system of the college.

### Introduction

In the present day, information technology has revolutionized the life of human beings and has made the lives easier by various kinds of discoveries. In the light of rapid changes with the use of IT, many tools, technologies and systems have been produced and invented. The development of technologies is related and depends upon the establishment of the related institution and production of the skilled manpower.

This project is concerned with establishment of engineering college in the Nepal. Although there is a number of the engineering college in the Nepal, there is also large demand of technical manpower in many IT related field. With the hope of helping the government to fulfill the requirement of the technical manpower, the project will be conducted at the Chitwan district of Nepal. It will be the separate computer engineering college. Every year, there will be limited number of seats and the course structure will be as similar as that of the standard Tribhuvan University.

### Statement of Problem

Computers have revolutionized the life of human beings and made the lives easier by its various kinds of applications in almost all the fields. Computer hardware and software are widely used and have dominated the present world. In the light of the rapid changes with the use of IT, there are many tools, technologies and systems that have been produced and invented. Therefore, computer engineering is an equally important profession like other major professions. Computer engineers have a large scope in this modern world than other engineers and there is a high demand of computer engineers in the market. So there is a huge need of computer engineering colleges in Nepal.

In the present context, there are six universities in Nepal: Tribhuwan University, Kathmandu University, Pokhara University, Purbanchal University, Nepal Sanskrit University and Lumbini Baudhdha University. Tribhuvan University is the most popular and oldest University of Nepal and it is also recognized in other countries. So, it is well known that most of the students prefer to study in Tribhuvan University rather than other universities. Under this university, there are only a few governmental Engineering colleges and others are private colleges. Even the number of private colleges is not sufficient considering the present demand of engineers. Almost all of these engineering colleges are general ones and provide different engineering courses like mechanical, civil, computer, etc. They have limited number of seats which are again divided into different engineering courses. So, in this context, it is better to have an Engineering college entirely focused on the Computer Engineering course.

A separate Computer Engineering College can be advantageous in many ways. As it is entirely for computer engineers, there will be more number of seats for students than other colleges. The entire college studying the same course will reduce the variety of equipment and lab materials required. So focus can be given on course related facilities and this will also reduce the cost of the course. Better education can be provided at a cheaper price. Students will also have a better environment to study without any distraction.

### Objectives

#### GENERAL OBJECTIVE:

The general objective of this proposal is to establish a separate Computer Engineering College in Nepal.

#### SPECIFIC OBJECTIVES:

- To establish an individual Computer Engineering College affiliated to Tribhuvan University.
- To increase the number of IT colleges in Nepal
- To produce a large number of highly skilled, flexible and world class labor force of Computer Engineers for the highly renowned IT companies.
- To provide the facilities of all types of computer labs and necessary equipment required for other practicals included in the curriculum in the same college so that students would not have to go to other colleges for practicals.
- To have strong research programs for the faculty as well as interested students to expand the research enterprise, research applications.
- To increase the digital literacy rate of Nepal.
- To provide employment facilities to professors, lecturers, teaching staffs, librarians, accountants, administrators, etc.
- To have separate departments for software and hardware engineering
- To include more programming languages as per students' interests
- To offer more choices in the elective courses for 4<sup>th</sup> year students.
- To provide quality education at a cheaper price than other private colleges.

#### Plan of Action

This is our plan for obtaining the objectives discussed before in previous section. There has been increase in interest of the students in computer engineering fields. There are number of engineering colleges providing the platform for the students to develop as the engineers. Number of articles and reports have been published describing the role of engineers in the development of the country. So, we are hoping to establish the engineering college.

Our first objective is to establish the facilitated computer engineering college to develop the students as a qualified computer engineers. To achieve this goal, we will be first focused on the infrastructural development of the college. This will include the building of the classroom which will have the digital teaching system. We are planning to provide each classrooms with the projector, television, well-ventilated rooms, labs and presentation halls for extra activities etc.

Our second goal is to produce qualified computer engineers. To accomplish this goal, we will rely on some different fields and platform for the development of the engineers. We are planning to provide students with idea room to demonstrate and implement their new ideas. We will also be having a library with digital managements system with course books as well as many IT related books, magazines, research reports, etc. There will be book bank system for providing semester-wise course books and card system for issuing other books. Highly qualified and educated professors and lecturers will be appointed for each subject. People with computer knowledge will be hired for the college administration and accounting system so that they can deal with digital database management.

Should I require the additional sources other than I have, we will try to accomplish the goal. Should I not be able to accomplish that goal, we will try to modify the approach of goal and try to accomplish it.

# Budget

We are pleased to offer quality education with implementation. We have all the sources required to establish engineering college. But to accomplish the objectives, we have to plan the number of actions. To implement the plan, we need to have large sources of money. The budget required for the establishment of the computer engineering college can be tabled as:

S.N.	Particulars	Cost estimation in lakhs
1	Building Construction	250
2	Furniture	25
3	Lab Equipment	30
4	Computers	50
5	Electricity	1
6	Library	25
	Total	381

## Time Management

We expect the project to be completed within 2 years. At first the business partners will be giving their decisions on expenditure and budget shall be carried out. The decision of budget is expected to be made within a month and the further processing will be focused on plan of budget manipulation which shall take around two months and the plan shall thoroughly be cited by business partners and carried out accordingly. The employees and other workers shall be hired and they all will be carrying out their part of mechanisms accordingly to complete the project within the scheduled period of time.

# Summary

### Conclusions

Hence we are presenting this proposal of constructing a separate Computer Engineering College in Nepal to produce highly skilled Computer Engineers for the renowned IT companies and also for research works. This college will be affiliated to TU and will run on private sectors. This college will offer quality education at a cheaper price than other private colleges with all the facilities required for the curriculum. As this college is offering only computer engineering course, there will be more number of seats and every year more Computer Engineers will be graduating from Nepal. We hope our proposal will be accepted and we expect approval and support from the government so that we can soon start working on our project. The plan will be implemented by first developing the infrastructures required for the college and then appointing teaching and other staff as described above.