



LALITPUR
ENGINEERING COLLEGE
(Affiliated to Tribhuvan University)
ISO 9001:2015 CERTIFIED



BCE

Bachelor in Civil Engineering

BCT

Bachelor in Computer Engineering

BCA

Bachelor in Computer Application

B. Arch

Bachelor in Architecture (Proposed)

PROSPECTUS

Table of Contents

1	Message from Chairman
2	Message from Principal
3	Introduction
4	Mission & Objectives
5	The Learning Environment & College Enrollment
6-8	Academic Performance & College Premises & Facilities
9	Application Checklist & Fees & Scholarship
10	Guidance & Counseling
11	Message from HoD (Department of Civil Engineering) & Course Structure of Civil Engineering
12	Career Options for Civil Engineering Students
13	Gallery
14	Message from HoD (Department of Computer Engineering) & Course Structure of Computer Engineering
15	Career Options for Computer Engineering Students
16	College Treasures





MESSAGE FROM CHAIRMAN

Dear Parents and Students,

Lalitpur Engineering College (LEC), based on a quality commitment to our students and guardians and constant sustainable innovation, enables us to report a significant evolution in performance.

LEC has defined its model, size and organization in order to manage its quality more efficiently in the new competitive context. The organization is aimed at growing and boosting quality education by using a more functional structure through greater integration of enthusiastic students, guardians and scholars. LEC, with modern infrastructure, well equipped library, laboratory and other

educational facilities, has a group of highly renowned scholars who have a co-operative spirit and strong commitment to impart quality education of international standard to our engineering students.

We, LEC family, feel highly honored to be part of the national process geared towards professional excellence of its associates. We hope that you will also make the rational and sapient decisions and grow together today for the betterment of tomorrow.

Thank you for your interest in LEC.

Ramkrishna Chitrakar



MESSAGE FROM PRINCIPAL

Dear Parents and Students,

A highly competitive educational establishment, Lalitpur Engineering College (LEC), which has been providing its services since 2010 A.D. , aims to enhance practical skills and theoretical knowledge essential for real life situations and for the global competitive market by providing well qualified and highly experienced teaching faculties, properly managed infrastructures, healthy environment, which collectively and ultimately work hard to achieve it accordingly.

The college is dedicated with the mission to be leading institution for quality and professional engineering education. We continue to incorporate improvements to the quality of our service provided to all the students as well as the staffs of LEC. I whole-heartedly invite you to achieve truly distinctive academic as well as social experience at LEC.

Thank you.

Lalan Kumar Tiwari



INTRODUCTION

We are delighted to introduce you to ISO 9001:2015 Certified Lalitpur Engineering College (LEC), an Engineering center, for Bachelor in Civil Engineering (BCE), Bachelor in Computer Engineering (BCT) and Bachelor in Computer Application (BCA), established at Lalitpur Metropolitan City, Ward No. 11, Chakupat with an aim to provide an outstanding engineering educational support to the aspirant candidates needed for meeting the national aspirations and goals by the team of young and enthusiastic academicians having a very long experience caring for students and offering professional advice. On wide range of educational choice millions of rupees are drained out from Nepal in search of quality education in India and overseas every year. That is a considerable loss of national resource. Now there are Nepalese who have capacity to run high quality educational institutes in Nepal itself.

To accomplish the aim of LEC and keeping for future growth, college is fully equipped with all dimensions which should be in a Quality Learning Center. For instance : central location of college near to Patandhoka – Chakupat, established by a group of visionary Nepalese eminent professionals, furnished with adequate lab(Prescribed by Nepal Engineering Council and Institute of Engineering, Tribhuvan University), peaceful academic environment , well established and renowned professional teachers, sufficient playgrounds (Volleyball, Basketball, Tabletennis, Badminton), adequate parking facility and other needy facilities are the key strength of the college by which parents and students get attracted and chose to shape their engineering dream.LEC has a focused vision towards quality teaching and practical implementation of knowledge gained by students. The college has brought up many strategic plans and students' evaluation schemes to meet its vision and make students competitive in the job market .LEC can assure all the concerned people that its management and academic team will never compromise when it comes to providing best possible quality engineering education.



Mission

- To become a leading engineering college in Nepal by providing tremendous engineering education in sound academic environment.
- To stress the need of job oriented education, to include self-reliance in young minds and to prepare the younger generation for a better future by stimulating their intellectual response to life's challenges.



Objectives

- To produce qualified engineering manpower needed for meeting the national aspirations and goals.
- To perform various research and development works on engineering science and technology.
- To offer various types of training relates to engineering field.
- To provide Engineering Consultancy services.
- To produce creative and innovative students who will be capable of generating various technical profession by using their own expertise.

Developing the Professional Graduate

Graduates today enter a highly competitive global marketplace and are expected to meet the demands of a continuously changing business environment. The programme offered at LEC is as per T.U. syllabus to equip students with the skills and the expertise required by technical professional employees and to give them the opportunity to develop their knowledge across a broad range of disciplines and build an in-depth knowledge of a specific sector. The faculty takes pride in its commitment to teaching and knowing students by name and preparing them to become responsible citizens of the global community.



College Enrollment

Admission Criteria

For Engineering

Admission for Bachelor's program in Engineering under TU normally opens in July/August. Students willing to join LEC must pass the entrance examination conducted by Institute of Engineering (IOE). Students with 10+2 in Science (Physical or Biological Group with Extra Math), Diploma in Engineering, A Level and scoring minimum C grade in each individual subject in respective examinations are eligible to apply for the entrance test conducted by Institute of Engineering (IOE), Pulchowk. IOE conducts entrance test in Physics, Chemistry, Mathematics, English. Those students interested to study at LEC must pass the entrance exam of IOE.

For BCA

For Admission in Bachelor's program in Computer Application under TU, students must pass the entrance examination conducted by Department of Humanities & Social Studies. Students with 10+2 in any stream and scoring minimum D+ grade in 10+2 examinations are eligible to apply for the entrance test conducted by Department of Humanities & Social Studies. Those students interested to study at LEC must pass the entrance exam.

The Learning Environment

Teaching is based on lectures, seminars and personal tutorials. In seminars, small groups of students evaluate case studies or discuss in detail the material covered in lectures. Personal tutorial sessions allow students to discuss any aspect of the course on a one-to-one basis with their tutor. Teaching takes place in fully equipped lecture rooms with the required support systems.

Salient Features of LEC

- Highly qualified, experienced and devoted teaching professionals.
- Well ventilated, lighted and well furnished standard sized classrooms with latest teaching facilities.
- Well-equipped laboratories and workshops.
- Periodical Assignment and class Tests.
- Scheduled internal assessment tests and also conduction of Practical, workshop related to professional field but not included in academic curriculum.
- Library with sufficient books and reference materials and provides reference books along with sufficient lending text books for whole semester.
- Other required facilities like internet, sports, canteen, transportation, etc. are available.
- Regular educational and career counseling.





Academic Performance

LEC offers following academic programs

S.N.	Program	Annual Intake Capacity	Total Semester	Duration
1.	BE Civil	48	8	4 yrs
2.	BE Computer	48	8	4 yrs
3.	BCA	35	8	4 yrs

College Hours

- Monday to Saturday
7:00 am to 3:00 pm
- Closed on
Sunday, Last Monday of the month and on special holidays as per LEC academic calendar.

College Premises & Facilities

Buildings

The college main building includes the academic and the administrative space, with well equipped laboratories in ground floor. The class rooms are spacious and create an atmosphere to specialize the students to acquire education through well-equipped class rooms and multi-media projector. Additionally the labs are accommodated in another block (Laboratory Block).



Canteen and Stationary

A fully hygienic canteen offers food at subsidized rates. The canteen is available on college offering snacks and cold drinks. A shop that stores different kinds of stationary including photocopy required by the students is made available for the benefit of the students.



Computer LAN

The college has very good support facilities in the form of a college- wide Local Area Network. The college has 25 Mbps Broad Band Leased line internet connectivity.

Internet

A 25 Mbps Leased line from World Link, broad band connection and provides 8 hrs internet facilities for the students and staffs. The Wi-Fi: college provides anywhere anytime internet, local area network access.

Medical Facility

A first aid kit is available to take care of minor ailments. An effective MoU with Norvic International Hospital is the way of caring the health of our students & personnel where they can be benefited in terms of subsidies in their hospital visits & services being associated with LEC. In addition, a vehicle is stationed to transport students to the nearest medical facility in case of emergencies.



Sports & Games

The college encourages both indoor and outdoor games, and provides a varied range of facilities to the students. The college has spacious play grounds and encourages sports such as basket ball,volley ball, throw ball and badminton. Students are encouraged to play sports of their interest under the expert guidance of qualified physical directors.



Application Checklist

For Engineering

- Mark sheets & Certificates of SLC, 10+2 / Diploma / A Level.
- 6 passport size of photo of student and 1 photo each of parents and guardian.
- A copy of Citizenship.
- Migration & Provision Certificate.
- 200 marks Mathematics certificate for Biological or Physical Group Applicant.
- Score card given by IOE, Pulchowk should be submitted at the time of admission.
- It is mandatory that the academic certificates submitted to the college at the time of admission should be attested copies.

For BCA

- Mark sheets & Certificates of SLC, 10+2/A Level.
- 6 passport size of photo of student and 1 photo each of parents and guardian.
- A copy of Citizenship.
- Migration & Provision Certificate.



Fees & Scholarship

For Engineering

To meet the demand of quality education in its broadest sense, the expenses for LEC students will be kept at a reasonable and affordable level. We acknowledge the importance of a quality education and understand the value of an education opportunity that potentially could bring about the change in the students' lives. LEC act as less commercial and more social services oriented, so it will provide 10% scholarship to the students according to the rules & regulation of TU as per the decision made by LEC management.





Power & Water Supply

The electrical supply by NEA provides ample power for the college needs. There is a 30 KVA and 1.5 KVA generators to generate the power supply in times of power cut. There are bore well on college that provide sufficient water to the college. Each floor is provided with a wash room.

Library

There are a vast number of collections of books available to branches of Engineering, Science, Arts & Humanities & General books. It includes more than 10474 volumes & 600 titles. The transaction is carried out using library card system. The leading newspapers of our country are regularly subscribed in library.



Laboratories

The laboratories in the college form an integral part of their respective subjects and feature advanced facilities on par with those in the premier institutions in the nation.

MOU (Memorandum of Understanding)

Recently, LEC has done a memorandum of Understanding (MOU) with Deerwalk Institute of Technology (DWIT) for following arrangements:

- Provide professional and practical training to LEC students.
- Provide internships to LEC students.
- Provide resource exchange program.
- Cooperation in conducting conferences, seminars & talk program.

Moreover, LEC has also done MOU with following organizations:

- Norvic International Hospital.
- Local Roads Bridge Support Unit.
- RR Shree School of Technology.



Guidance and Counseling

This unit looks after the welfare of the students, collective as well as individual. LEC believes that the students at this level go through a lot of stress, which requires correct guidance for overall efficiency on the part of the students. Thus, this unit is established to overcome such situations and help students concentrate on studies. Most students encounter challenges beyond the scope of teacher's awareness at some point during their study career. In experiencing such dilemmas, many students are equipped to provide peer guidance and counseling in the way that students adapt, change and grow through the process of learning from outcomes and mistakes, thus this unit assesses their outcomes in order to better guide their students.



Guidance and counseling holds a strong foothold in our day to day life

- It provides assistance to develop an insight, recognize his/her strength and weakness and direct them according to their interests.
- It makes the individuals capable of taking his/her own decisions keeping in mind his moral and societal roles.
- It helps the individual to understand himself and the world around him.
- It helps the individual to be self-directed person.
- It helps the individual to develop positive attitudes and values towards work and society at large.
- It helps in the total development of the individual in cognitive and effective way.





CIVIL ENGINEERING

Message from HOD (Department of Civil Engineering)

In a developing country like ours, civil engineering is the most preferred discipline for infrastructural and socio-economic development.

The Department of Civil Engineering at Lalitpur Engineering College aims to enhance the core theoretical knowledge and practical skills essential to becoming technically sound, professionally competent, and globally competitive civil engineers. Our department is committed not only to provide an academic environment for the prescribed courses but also for recent technologies integrated education system with an opportunity for research and development. Our college with our highly qualified, enthusiastic, and dedicated full-time teachers and as well as visiting faculties, excellent infrastructures, laboratories, and adequate learning materials provides you a healthy learning environment, and platforms to showcase your potential, to turn your dream into a reality.

I feel happy and delighted to welcome our incoming students and my best wishes for their brilliant academic career at LEC.

- Pukar Joshi

COURSE STRUCTURE

Year/Part : I/I

S. N.	Course Code	Course Title
1.	SH 401	Engineering Mathematics- I
2.	CT 401	Computer Programing
3.	ME 401	Engineering Drawing-I
4.	SH 403	Engineering Chemistry
5.	ME 402	Fundamental of Thermodynamics and Heat Transfer
6.	ME 403	Workshop Technology

Year/Part :I/II

S. N.	Course Code	Course Title
1.	SH 451	Engineering Mathematics – II
2.	ME 451	Engineering Drawing II
3.	EX 451	Basic Electronics Engineering
4.	SH 452	Engineering Physics
5.	EE 451	Basic Electrical Engineering

Year/Part : II/I

S. N.	Course Code	Course Title
1.	SH 501	Engineering Mathematics III
2.	CE 501	Applied Mechanics (Dynamics)
3.	CE 502	Strength of Materials
4.	CE 503	Engineering Geology I
5.	CE 505	Fluid Mechanics
6.	CE 504	Surveying I
7.	CE 506	Civil Engineering Materials

Year/ Part : II/II

S. N.	Course Code	Course Title
1.	SH 552	Probability and Statistics
2.	AR 556	Building Drawing
3.	CE 551	Theory of Structures –I
4.	CE 555	Hydraulics
5.	CE 554	Surveying II
6.	CE 552	Soil Mechanics
7.	CE 553	Engineering Geology II

Year/ Part : III/I

S. N.	Course Code	Course Title
1.	SH 603	Numerical Methods
2.	CE 601	Theory of Structures II
3.	CE 602	Foundation Engineering
4.	CE 604	Survey Camp
5.	CE 605	Water Supply Engineering
6.	CE 603	Concrete Technology and Masonry Structure
7.	CE 606	Engineering Hydrology

Year/ Part : III/II

S. N.	Course Code	Course Title
1.	SH 651	Communication English
2.	CE 651	Design of Steel & Timber Structure
3.	CE 652	Building Technology
4.	CE 655	Engineering Economics
5.	CE 656	Sanitary Engineering
6.	CE 653	Transportation Engineering I
7.	CE 654	Irrigation & Drainage Engineering

Year/ Part : IV/I

S. N.	Course Code	Course Title
1.	CE 701	Project Engineering
2.	CE 702	Design of RCC Structure
3.	CE 703	Transportation Engineering II
4.	CE 704	Hydropower Engineering
5.	CE 705	Estimating & Costing
6.	CE 725	Elective I
7.	CE 707	Project (part I)

Year/ Part :IV/II

S. N.	Course Code	Course Title
1.	CE 751	Computational Techniques in Civil Engineering
2.	CE 752	Engineering Professional Practice
3.	CE 753	Technology Environment & Society
4.	CE 754	Construction Management
5.	CE 755	Project (Part II)
6.	CE 765	Elective II
7.	CE 785	Elective III

Career Options

“ Civil Engineering is that field of engineering concerned with planning, design and construction for environmental Control, development of natural resources, buildings, transportation facilities and other structures required for health, welfare, safety, employment and pleasure of mankind.”

- Fredrick .S. Merritt

Civil engineering is the most preferred discipline for infrastructural and socio-economic development. After graduating, civil engineering career can be developed in various fields such as Building and bridge construction, Hydropower, Roads and Railways, Disaster Risk Management, Education and Research and in many other field. Career can be developed both in government and private sectors. One can open your construction or consulting services and provide services to others and the country.







COMPUTER ENGINEERING

Message from HOD (Department of Computer Engineering)

“Our Computer Engineering department is vibrant, due to our dynamic academic and technical staff members, as well as our bright students. The department has a team of highly experienced and motivated faculty members who are in process of tuning the young minds to make them globally competitive. The scope of computer engineering is endless. The students of the computer engineering are highly demanded by the recruiters of the top companies. Depending upon the interest of the student, he/she may choose to go for higher studies or if employed can choose to do research, development, design, production, application, testing or management in the Information Technology industry.

After four years of Study, Our Computer Engineering graduates can find work all over the world. We ensure that our graduates have the understanding necessary to maintain their skills and competencies throughout their professional career. Through innovative teaching-learning process a teamwork approach and leadership building experience, our students gain vital communication and critical-thinking skills. On behalf of the Computer Engineering department, I welcome our new students and visitors, and wish our current students and graduates well.”

COURSE STRUCTURE

Year/Part: I/I

S.N.	Course Code	Course Title
1.	SH 401	Engineering Mathematics I
2.	CT 401	Computer Programming
3.	ME 401	Engineering Drawing I
4.	SH 402	Engineering Physics
5.	CE 401	Applied Mechanics
6.	EE 401	Basic Electrical Engineering

Year/Part :I/II

S.N.	Course Code	Course Title
1.	SH 451	Engineering Mathematics II
2.	ME 451	Engineering Drawing II
3.	EX 451	Basic Electronics Engineering
4.	ME 452	Fundamental of Thermodynamics and Heat Transfer
5.	SH 453	Engineering Chemistry
6.	ME 453	Workshop Technology

Year/Part : II/I

S.N.	Course Code	Course Title
1.	SH 501	Engineering Mathematics III
2.	CT 501	Object Oriented Programming
3.	CT 502	Theory of Computation
4.	EE 501	Electric Circuit Theory
5.	EX 501	Electronic Devices & Circuit
6.	EX 502	Digital Logic
7.	EX 503	Electromagnetics

Year/Part: II/II

S.N.	Course Code	Course Title
1.	SH 551	Applied Mathematics
2.	SH 553	Numerical Methods
3.	EE 552	Instrumentation I
4.	EE 554	Electrical Machines
5.	CT 551	Discrete Structure
6.	CT 552	Data Structure & Algorithm
7.	EX 551	Microprocessor

Year/Part: III/I

S.N.	Course Code	Course Title
1.	SH 601	Communication English
2.	SH 602	Probability & Statistics
3.	CT 601	Software Engineering
4.	CT 602	Data Communication
5.	CT 603	Computer Organization & Architecture
6.	EX 602	Instrumentation II
7.	EX 603	Computer Graphics

Year/Part: III/II

S.N.	Course Code	Course Title
1.	CE 655	Engineering Economics
2.	CT 651	Object Oriented Analysis & Design
3.	CT 652	Database Management System
4.	CT 653	Artificial Intelligence
5.	CT 655	Embedded System
6.	CT 656	Operating System
7.	CT 654	Minor Project

Year/Part : IV/I

S.N.	Course Code	Course Title
1.	ME 708	Organization & Management
2.	EX 701	Energy Environment & Society
3.	CT 701	Project Management
4.	CT 702	Computer Network
5.	CT 703	Distributed System
6.	CT 704	Digital Signal Analysis
7.	CT 725	Elective I
8.	CT 707	Project (Part A)

Year/Part :IV/II

S.N.	Course Code	Course Title
1.	CE 752	Professional Practice
2.	CT 751	Information System
3.	CT 753	Simulation & Modelling
4.	CT 754	Internet & Intranet
5.	CT 765	Elective II
6.	CT 785	Elective III
7.	CT 755	Project (Part B)

Job Scope of Computer Engineers

This list is not exhaustive but it provides a solid idea of what fellow graduates have gone on to do and what potential careers a Computer Engineering degree can offer.

- AI designer/Developer
- Client Support Representative
- Database Developer
- Hardware Systems Designer
- Information Technologist
- National Security Consultant
- Product Developer
- Project Manager
- Software Engineer
- Systems Designer
- Technical Writer
- Web Designer
- Business Systems Analyst
- Computer Security Analyst
- Entrepreneur
- Industry Consultant
- Interface Designer
- Network Security Specialist
- Professor/Teacher
- Researcher
- Software Security Engineer
- Technical Support Representative
- Video Game Programmer



College Treasures



It has been a gratifying experience to study at Lalitpur Engineering College (LEC). The success that I have achieved today can only become possible with the combination of my hard work, determination, and most importantly the motivation, inspiration and the harmonious academic environment that I could get at this college. Presently, I am working in Nepal Electricity Authority. The skills and academic knowledge that I learned in LEC helping me a lot in my professional life. I strongly appreciate the faculty and staff of LEC for the wonderful job of providing students with the knowledge and practical skills to build a strong career.

Er. Prayag Mehar Kayastha.
2067 Batch Civil



I am Sitasma Basnet second batch (2068-2072) of Lalitpur Engineering College, currently working as Water supply design engineer at Allied Engineering Consultancy Pvt. Ltd. I am also a part time lecturer at Valley college of Engineering. My four years at LEC made me stronger and took me a step ahead for being an independent woman. The collage provide homely and caring environment with co-operative staffs. Different professional and socio-culture programs organized by institute helped me to move out of my comfort zone and boost my confidence. Project works, survey, workshop and other practical activities increased my ability to work in a team. Knowledge gain in this institute made me capable to take part in international training events such as international urban flooding program. A Shy, introvert girl outgrew as a promising professional for which I shall remain forever grateful. I wish prosperity of this institute.

Er. Sitasma Basnet
2068 Batch Civil



I had a great time in LEC studying and learning. I expected a certain level of quality before joining LEC. What I did not expected and where the College has outdone my expectations (happily) is how well it is guided. The lectures are super interesting and leave plenty of space for questions and discussion. Yet even if questions arise or subsequent information is wished for when lectures have already passed then still your are more than welcome to join them in office which might lead to some interesting insights to your inquiry. In addition, there's excellent guiding to help you into the world of Engineering and sharpen your skills in both technical skills and critical thinking. Something you take with you for all your life!

Er. Sudip Kunwar
2070 Batch Civil



Everyone experience their college life differently, to me it was the initial step in finding my future career. Being a student of Lalitpur Engineering College, I feel very grateful that it has tutored me the true path of knowledge and discipline. It has also provided numerous of opportunities to strengthen my personal integrity and stay true to my values. The things I learn through college go far beyond what I'll find in a textbook. Not only the education, all those invaluable experiences and lots of life lessons that I had got during my college that will support me to leverage my years to come.

Er. Anita Shrestha
2072 Batch Civil



Congratulations and also a very warm welcome to Lalitpur Engineering College! I recall being a part of LEC as a nervous feeling as well as an excited one. That was the first time I had stayed away from home. At first, because everything sounds (and possibly is) new to you, this adjustment process can feel intimidating and overwhelming. We are all very well educated of how engineering itself is a very challenging topic. And I'm very grateful to LEC for making this challenging topic and atmosphere simple and enjoyable for me as well as any other student. I am very grateful to the caring members of the LEC faculty who have played a very important role in developing my creativity and abilities. I am grateful to LEC for providing me with opportunities for additional curriculum activities, including intra-college and intercollege competition, which revamped me and made me the person I am today. In this next step in your life, remain true to yourself and your beliefs and let them be your anchor.

Puspa Raj Baral
2073 Batch Civil



Computer Engineering is my ideal course of interest but my fear was landing into a programme that wouldn't get me where I wanted to go. So, pursuing my studies with LEC is one of the wisest decisions I have ever made when it came to my chosen career path. The love, support and motivation from the teachers, faculty members and staffs played an important role to enhance my capabilities. One day, the relevant knowledge, exposure and skills I have obtained would definitely help me to excel in this industry.

Ujan Shakya
2074 Batch Computer

COLLEGE TEAM





LALITPUR
ENGINEERING COLLEGE
(Affiliated to Tribhuvan University)

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