



An ISO 9001:2015 Certified College
Regd. No.: RQ 977/9978



National College of Engineering
AFFILIATED TO TRIBHUVAN UNIVERSITY

Quality for excellence



Creating Engineers
Since **2001**





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From the Desk of **Chairman**

Dear Parents and Prospective Students,

Welcome to the National College of Engineering Family. Choosing a college is one of the most important decisions that you make. It can be a key that opens the door to a lifetime of opportunities for growth and service. How well it turns out for you will depend primarily on the effort you invest in your own intellectual and professional development. Invest wisely and be assured that NCE faculty and staff pledge their best efforts in helping you attain your educational and professional goals.

The task of preparing efficient engineers in the complex and competitive environment of today presents an immense challenge. Even more daunting is the task of generating sensitivity among students that having good human values is essential to become a good engineer and manager. To this end, NCE has always focused on all-round personality development through a proper blending of curricular, co-curricular and extra-curricular activities so as to achieve the right mix of academic proficiency, professional skill and humanitarian values in NCE graduates.

What makes us different than any other engineering college is we cater the practical oriented, ethical based, professionally sound real life engineering projects. Students feel empowered during the interaction with the renowned Visiting Faculties from different Governmental, non governmental, International Development Organization. We also provide opportunities to the students to experience real life projects. Finally, I hope that you will take pride in our college. Members of our faculty are known for their energy and erudition, academic achievements and teaching abilities and devotion to duty. Our standards are challenging and we are dedicated to helping you to meet those standards. We will judge our success as an institution by how well you succeed in realizing your potential as a student and in your later professional career.

This multi-pronged approach towards studies and the molding of personality has made learning at NCE interesting, challenging and hopefully fun! I wish all NCEites all success during your stay with us and in life. Good Luck !

Cordially Yours,

Er. Saroj Kumar Upadhyay

M.Sc. in Civil Engineering (Hons.), MBA.



From the Desk of **CEO**

Dear Parents & Students,

I feel immense pleasure to inform you about **National College of Engineering (NCE)** which is running under the affiliation of Tribhuvan University since 2001 A.D. It was initiated with the objective of making itself a reputed institution to impart quality education in the field of Engineering in Nepal. At first, Electronics & Communication Engineering program was introduced with 48 intake capacity and then, Computer Engineering program with 48 intake capacity was added. After 7 years of its inception, the college has recently been taken over by a new management team. The team is a highly dedicated and experienced group of Engineers and Professors. The new management team introduced Civil Engineering and Electrical Engineering programs with the intake capacity of 96 & 48 respectively in 2010 A.D. At present, the college is running with intake capacity of 240 students per year in four programs Civil, Electrical, Computer and Electronics, Communication & Information Engineering. Now, the college is running in its own premises at Talchhikhel near Satdobato in Lalitpur district.

NCE is one of the highly reputed engineering colleges among the few engineering colleges in Kathmandu valley. Last year it was certified by ISO 9001:2015. We are committed to provide quality education to the students who are aspiring to take up the responsibility of driving new Nepal to her ultimate destination of national prosperity. Because of continued dedication of last 10 years, college has progressed in an unprecedented rapid pace in academic as well as infrastructural development. We are following the norms of Nepal Engineering Council and Institute of Engineering (T.U) strictly. As a result, the college is growing up day by day.

We believe that a better education system can enhance the social, scientific and technological advancement in a newly introduced Federal Democratic Republic of Nepal. We are committed to provide better engineering education that emphasizes not only on the subject matter but also on ethical values in engineering. To be a perfect engineer, concept of science must be clear and knowledge of mathematics must be strong. As Engineering is a dynamic field, to be a good engineer, innovative thinking and inquisitiveness are equally important apart from mere bookish knowledge.

At last, I request all the students and respected parents to visit the college and get all kinds of information about the college, judge it and choose it for a platform of yourself and your ward 's future career.

With best regards,

Dhan Prasad Poudyal
Associate Professor



From the Desk of **Principal**

Welcome to the National College of Engineering. I am delighted to invite you as a student to explore this remarkable college. A faculty and students with shared commitment to the power of education has gathered here for centuries to advance knowledge, to explore fundamental questions and above all to exchange ideas.

We have recently celebrated our 19th Anniversary and I feel enormously privileged to be leading this academic environment into future intellectual exploration. This is an exciting and important time and as we draw inspiration from past achievements. We are also embracing new challenges and realizing new opportunities.

Our continued success is dependent on the contribution of every member of this college. Among the most powerful of the assets we have at NCE is excellence of teaching and our diligent students and a deeply held belief in the transformative power of education. It is a place where the intellectual and personal potential of every member of our students and academics is fostered and encouraged at every turn.

Cordially Yours,

Er. Tak Bahadur Galami
Professor
August-2019



“A place where the intellectual and personal potential of every member of our students and academics is fostered and encouraged at every turn.”

Welcome to **NCE**

National College of Engineering (NCE) is affiliated to the Tribhuvan University and was established in 2058 B.S. (2001 A.D.) with the objective of developing a standard institution that offers courses in technical science and engineering. Its main purpose is to impart quality education in engineering, science and technology. To fulfill the country's needs for its development, NCE thrives to achieve academic excellence with high emphasis on the core values and ethics of life. The college has been speeding up rapidly in its progress both physically as well as academically.

NCE offers a unique learning experience across a spectrum of academic and social experiences. With a firm footing in truth and humanity, NCE provides an understanding of both technical developments and ethics that go with it.

Vision

National College of Engineering shall be a leading academic institution of science and technology producing excellent graduates capable of playing leadership role in national development.

Mission

This college seeks and nurtures students of extraordinary motivation and ability: in a world that is increasingly dependent on science and technology.



“This is where a Caterpillar
transforms into a Butterfly.”



Goal

- To prepare efficient engineers in the complex and competitive environment.
- To extend expertise towards improvement in the quality of engineering education.
- To provide innovation solutions through Research and Development and continuing education to achieve industrial and development needs.

Objectives

- To prepare engineers of diversified disciplines to meet the national aspiration and goals.
- To develop professional competence and capability in the student that will help to accelerate national development.
- To prepare creative engineers/entrepreneurs.
- To offer training, workshop, guest lectures, sponsored courses etc.
- To perform research and development works.

Salient Features

- Highly qualified, experienced and trained teaching faculties.
- Well setup library.
- Well equipped laboratories.
- Extra classes for needy students.
- Properly designed classrooms with proper sitting arrangement, enough light and ventilation.
- Free Wi-Fi in college premises.
- Regular extra-curricular activities.
- Visiting faculties from government, non-governmental and international development organizations.
- Hygienic canteen.

- Continuous electricity supply.
- Easily accessible through public transportation.
- An ISO 9001: 2015 certified college

Engineering Programs Offered

National College of Engineering offers the following four-year (eight semester) course in Bachelor of Engineering programs prescribed by the Institute of Engineering (IOE), Tribhuvan University.

Bachelor in Civil Engineering	96 seats
Bachelor in Computer Engineering	48 seats
Bachelor in Electrical Engineering	48 seats
Bachelor in Electronics, Communication & Information Engineering	48 seats

Eligibility for Admission

The academy follows admission criteria and procedures prescribed by Institute of Engineering (IOE), Tribhuvan University. Students applying for admission should have passed the entrance examination administered by IOE.

Selection of Engineering Branch

Enrollement in any programme demands greater commitment, hard work and continuity you will be stretched and challenged. When choosing your programme, you should think carefully about

- Program you have genuine passion on
- Program for careers you are willing to take
- Program that provides best result in the coming future

- Availability of post graduation opportunities

Application Checklist

Applicant must provide the following items:

- Mark-sheets, Character certificates and Transcripts of SLC/SEE, I.Sc./ 10+2/ IE/ A level
- 2 passport size photos of students and 1 photo each of parents and guardian
- A copy of citizenship certificate
- Migration certificate
- 200 marks Mathematics Ledger (for Biology group)
- Original score card issued by IOE

Scholarships

- Scholarships are awarded to 10% of the total enrolled students in each program as per IOE criteria:
- 5% for students from merit basis.
- 5 % for the students from government schools based on merit.

Dress Code

Students are prescribed to put on dress as follows:

- White-blue strip shirt
- Navy blue pants
- Tie (Prescribed by the college)
- Navy Blue Sweater/ Coat/ Jacket

Assessment

The college conducts two internal examinations in every semester for theory exam and one assessment for practical. The students must pass these examinations to qualify for the IOE final board examination. 75% class attendance is compulsory.



HoD Note



“Our practice allows us to launch new and exciting initiatives in teaching method across many fields and independent thinking to produce new knowledge”

Welcome to the Department of Applied Sciences, National College of Engineering!

I feel immensely proud to introduce you to the Department of Applied Sciences, which lays a strong foundation to produce promising engineers in the future. We believe that understanding is the first step to being able to solve the problems; thus, it is focused on inculcating basic knowledge of Science, Technology, Engineering and Mathematics (STEM) fields in the mind of the learners. It plays a fundamental role in carrying out the mission of enhancing educational experience for our students through various student-centered teaching & learning approaches. Our practice allows us to launch new and exciting initiatives in teaching method across many fields, thereby enabling our students to think independently, express ideas analytically and creatively, and reason critically. Our highly competent faculty members take exceptional pride in guiding our students in their journey of discovery and learning. Apart from subject matters and scientific knowledge, we also help develop strong discipline and personality that is demanded academically and later on, professionally from students. I'd like to assure everyone that we'll continue to play a leading role in our discipline at both national and international levels.

Finally, I'd like to conclude with the words, "To really understand something is to be liberated from it." I wish a very best of luck to the students.

Madhu Krishna Shrestha

Head of Department

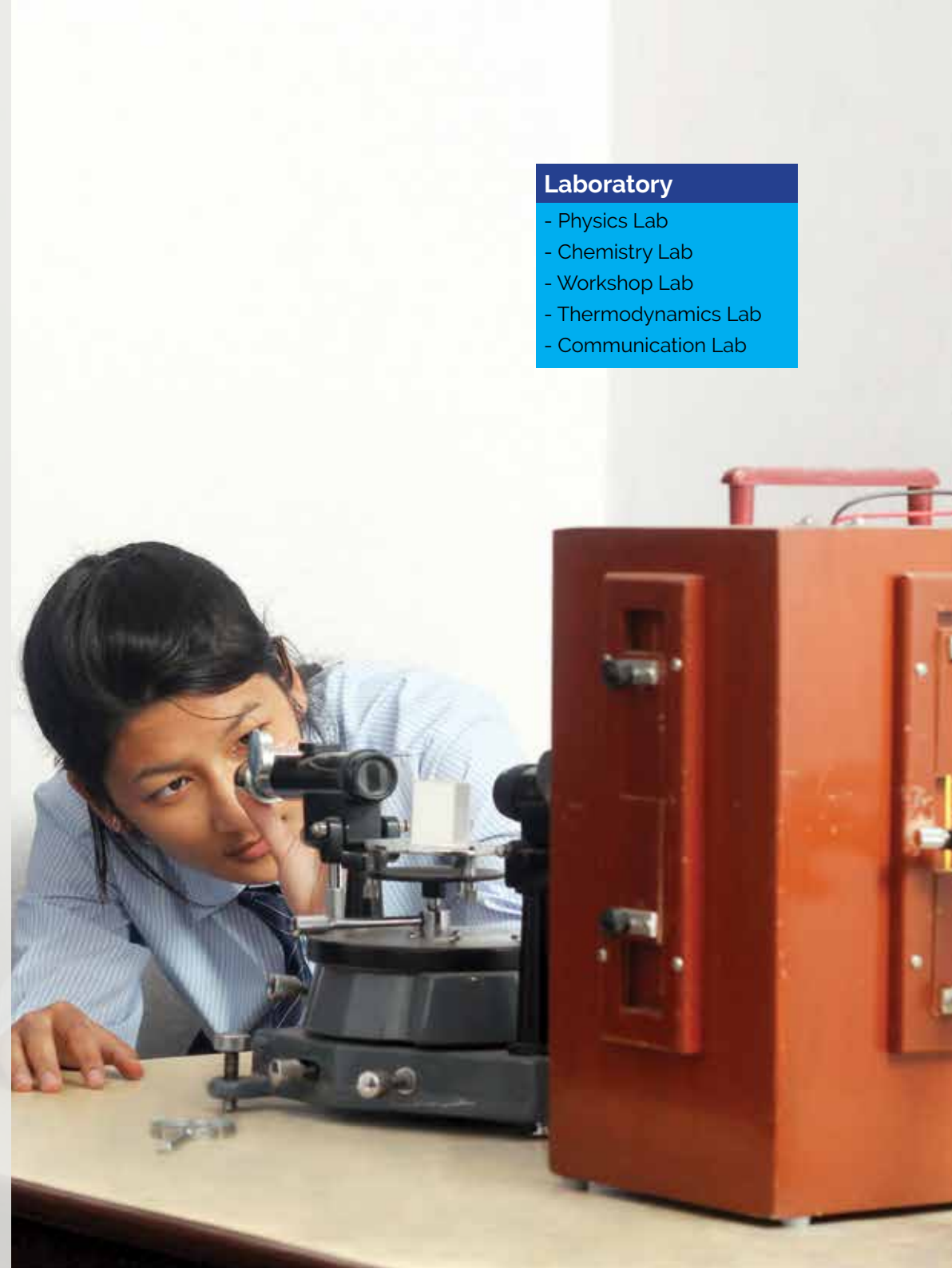
Department of Applied Sciences

Department of Applied Sciences

Formerly known as "Department of Science and Humanities", Department of Applied Sciences is mainly responsible for handling entire academic activities and issues of the first-year students in all engineering programs of this college. This department plays a significant role in catering for the students with the teaching of basic Sciences and Humanities courses, viz. Physics, Chemistry, Mathematics, Probability and Statistics, Workshop Technology, Fundamentals of Thermodynamics and Heat Transfer, Engineering Drawing I and II, Numerical Methods, Engineering Economics and Communication English as per the curriculum of Institute of Engineering, Tribhuvan University. These courses help prepare the first-year students beforehand to orient themselves into the core engineering courses conveniently, with underlying knowledge and practice of basic engineering skills. Our well-equipped laboratories enable the students to understand the theoretical knowledge of the subject through a practical approach. In short, this department is always committed to maintaining and delivering quality, efficiency and excellence with the integrated efforts of both faculty members and students.

Laboratory

- Physics Lab
- Chemistry Lab
- Workshop Lab
- Thermodynamics Lab
- Communication Lab



Civil Engineering



HoD Note

It is my immense pleasure to write here and inform you that NCE-Department of Civil Engineering is marching towards the goal to emerge as an academic excellence for the students in their career development from well experienced and professional faculty, committed to take up the task of imparting well designed teaching mechanism and innovative teaching practices. You will feel high standard learning environment, to discover the deeper meaning of your career development in future, a great place not only to enhance your technical knowledge but personality development through various activities and programs in NCE throughout the year. I therefore, heartily welcome you to be an "Alumni of NCE-Civil Engineers" !

Er. Amrit Man Tuladhar
Head of Department
Department of Civil Engineering



“ committed to take up the task of imparting well designed teaching mechanism and innovative teaching practices for academic activities ”

Civil Engineering

Civil engineering is arguably the enormous engineering discipline that deals with the design, construction, and maintenance of the physical and naturally built environment, including works like buildings, roads, highways, hydropower, bridges, canals, dams etc. These built environment encompasses much of what defines modern civilization. Civil engineers build the world's huge infrastructure. In doing so, they have shaped the histories and destinies of every nation. In fact, civil engineer's concepts make civilization truly possible.

Since time immemorial, human beings have been engaged in building all kinds of edifices. From huts made of mud to high raise buildings, we have definitely come a long way. As civilizations matured, it simultaneously led to the development of bigger, better and diverse structures.

Some significant structures from the past include the Bruz Tower of Dubai, the tallest building in the world, Bird-nest stadium of China, Stonehenge in Britain, the Great Wall of China and Huge marine dams of Holland, the magnificent Eiffel tower of Paris etc. These are just but a mere glimpse of the examples set by one of the important branches of engineering, that is, Civil Engineering.



Career

Amongst all the branches of engineering, specially the range and application of civil engineering is the broadest and the most visible. In fact, the entire infrastructural framework of a modern nation is the creation of civil engineers. The credit of building mighty power plants, dams, airports, highways, hydropower, inland waterways and industrial plants goes to civil engineers. These professionals are also engaged in building an unending array of urban structures such as commercial complexes, skyscrapers, tunnels, bridges, roads, urban rapid transport systems, sports stadia and so on.

The opportunity of working in government sectors, semi-government sectors as well as in educational sectors, private sectors, consultancies, construction companies depends on individual's field of interest and capability and these doors are always open for civil engineers.

Is it the Right Career for Me ?

As a civil engineer, you will have to plan out, design and supervise the construction of different types of buildings. You need to possess good knowledge of mathematics and science. Also, you must also have good supervisory and administrative skills along with the creativity.



Why NCE for Civil Engineering?

With qualified and enough full-time faculty members as well as highly experienced part-time faculties, the Department of Civil Engineering at National College of Engineering (NCE) is working energetically to provide and enhance all academic activities for excellence. This department is running successfully at NCE since 2066 and there is Civil Engineering Student's Society-National College of Engineering (CESS-NCE) for pursuing academic activities of the students.

All the academic buildings and laboratories are located at student friendly and peaceful environment which is within the walk able distance from the main street road (ring-road). Students are provided with ideal study environments. Several academic field visits like Geology site visits, Hydrology field work, Irrigation tour, Transportation and Construction site visit, Survey Camp etc. are arranged by the Department as per IOE curriculum. Additional activities such as guest lectures, workshops, seminars, exhibitions, educational participants / visits, etc are conducted for the growth of students and to enhance the learning process among them.

The modern teaching - learning technology is adopted for the excellent academic quality. This is made possible with Qualified and experienced academicians, Use of Projector and Multimedia, Well equipped laboratories, Well stored text books, reference books, journals etc. in the library, Modern practical equipments etc.

Memorandum of Understanding (MoU)

The department of civil engineering has signed the memorandum of understanding (MoU) with International Urban Training Center, Ganwong Province, South Korea in order to facilitate / train the teachers and students. Besides these, 6 departmental faculties have already received training in South Korea. The department has also signed a MoU with Picasso Consultant Pvt. Ltd. And Safe and Sustainable Travel Nepal (SSTN), according to which the organizations provide financial and technical support in research activities and conduction of workshops, presentations, talk programs, etc. Also, Picasso Consultant Pvt. Ltd. Provides On the Job training and placement for selected students of NCE.

ACHIEVEMENTS

"Civil Engineering Exhibition cum Competition-2072"

- Winner (1st. Position) : Quiz Contest
- Winner (1st. Position) : Technical Presentation
- 1st Runner up (2nd Position) : Model Competition (Retrofitting Technique)
- 1st Runner up (2nd Position) : Photography Competition

Organized by CESS-Nepal, Pulchowk Campus

"Inter College Model Competition cum Exhibition"

- 2nd Runner up (3rd Position) : Model Competition (Domestic Rain Water Harvesting)



Organized by Advance College of Engineering

- Winner - "Model Competition"
 - 1st National Civil - Mechanical Engineering Exhibition - 2071
- Organized by Pulchowk Campus

3rd Pulchowk Inter Technical Football Cup - 2072

- Runner Up

The focus of an academic institution should primarily be educational excellence along with personal development. NCE is a great platform to enhance engineering passion as well as to explore innovative ideas. With provision of affluent infrastructural facilities, NCE also includes peaceful environment, qualified faculty members, easily accessible library, and well equipped labs. I am delighted to be a part of such reputable college which has not only helped me to shape my career but also to flourish as a responsible individual. A great learning experience, kind staffs, supportive classmates and tons of cheerful memories is what I am grateful for.

Aditi Baniya

073/BCE/417



Qualified lecturers, easily accessible library and friendly environment are some of the key traits of our college. Actually, colleges are meant to be; not only academically sound but also need to provide students with verities of opportunity to enhance their pro-existing skills. In NCE, I got the opportunity to grow both academically and professionally, as a whole. So I would like to pay my utmost gratitude to the college and its faculty for providing me with such diverse environment.

Avash Sapkota

072/BCE



Civil Engineering Curriculum

1st Semester

- Engineering Mathematics I
- Computer Programming
- Engineering Drawing I
- Engineering Chemistry
- Fundamentals of Thermodynamics & Heat Transfer
- Workshop Technology

2nd Semester

- Engineering Mathematics II
- Engineering Drawing II
- Basic Electronics Engineering
- Engineering Physics
- Applied Mechanics
- Basic Electrical Engineering

3rd Semester

- Engineering Mathematics III
- Applied Mechanics (Dynamics)
- Strength of Materials
- Engineering Geology I
- Fluid Mechanics
- Surveying I
- Civil Engineering Materials

4th Semester

- Hydraulics
- Surveying II
- Soil Mechanics
- Probability and Statistics

- Building Drawing
- Engineering Geology II
- Theory of Structure I

5th Semester

- Numerical Methods
- Theory of Structure II
- Foundation Engineering
- Survey Camp
- Engineering Hydrology
- Water Supply Engineering
- Concert Technology and Masonry Structures

6th Semester

- Design of Steel and Timber Structure
- Communication English
- Building Technology
- Engineering Economics
- Sanitary Engineering
- Transportation Engineering I
- Irrigation and Drainage Engineering

7th Semester

- Project Engineering
- Design Of RCC Structure
- Transportation Engineering II
- Hydropower Engineering
- Estimating and Costing
- Elective I
- Project (Part I)

8th Semester

- Computational Techniques in Civil Engineering
- Engineering Professional Practice
- Technology Environment and Society
- Construction Management
- Project (Part II)
- Elective II
- Elective III

Elective Courses

- Structure Dynamics
- Seismic Resistant Design of Masonry Structure
- Earthquake Resistance Design of Structure
- Vulnerability Assessment and Retrofitting Techniques
- Seismic Risk Assessment
- GIS & Remote Sensing
- Construction Safety Management
- Procurement Management
- Environment Impact Assessment
- Disaster Risk Management
- Bio-Engineering
- Rock Engineering
- Transportation Planning & Engineering
- Community Development and PRA

- Traffic Transport Modeling
- Advanced Geo-Technical Engineering
- Traffic Engineering & Management
- Hill Irrigation Engineering
- Introduction to Prestressed Concrete Analysis and Design of Suspension Bridge

Practical

- Surveying
- Fluid Mechanics
- Strength of Material
- Engineering Materials
- Hydraulics
- Concrete Technology
- Theory of Structure
- Soil Mechanics
- Engineering Geology
- Hydropower Engineering
- Transportation Engineering
- RCC structures

Field Visits

- Engineering Geology (3 days)
- Foundation Engineering (1 days)
- Surveying (10 days Closed Camp)
- Hydrology (1 day)
- Irrigation and Drainage Structure (3 days)
- Hydropower Engineering (1 day)
- Construction Management (2 days)

Electrical Engineering



HoD Note

Welcome to the Department of Electrical engineering of NCE our undergraduate program has always been known to be one of the best engineering undergraduate program of the country. We strives to provide our students with appropriate knowledge and practical skills in electrical engineering so that they become well rounded engineering student, who will not only be technically adept but also disciplined and morally up-standing. The four year bachelor in electrical engineering course includes a critical component of industrial attachment, field visit in different semester and project works for the students at the end of their fourth year of study to better prepare them for the industry. All these ensure that our students are most competitive in job market. Furthermore, we also take a good care of our student's extra activity and provide platform to introduce their creativity by involving them in a Robotics Club and Electrical Club under the electrical department. By IOE standards our department is quite large with upgraded laboratory and allows close interaction between highly qualified teaching faculty and students. The department is an active participant in the Institute of Electrical and Electronic Engineering (IEEE) through its academic staff to add the value of international standard and get synchronism with the world. And for all these, we are always here to welcome focused and self-motivated students interested in furthering their understanding and skills in Electrical Engineering to join us and realize their dreams.

Er. Basuki Nath Jha



We strives to provide our students with appropriate knowledge and practical skills in electrical engineering so that they become well rounded engineering student



Electrical Engineering

Electrical engineering is concerned with the basic forms of energy that run our world. Whether it's gas, hydro, turbine, fuel cell, solar, geothermal, or wind energy, electrical engineers deal with distributing these energies from their sources to our homes, factories, offices, hospitals, and schools. You have seen various kinds of electrical devices and systems around you. Do you know how it operates? Electrical engineering deals with design, research, development, planning, manufacturing of various electrical instruments and devices. Electrical engineering also involves the exciting field of electronics and information technology. Do you have a cellular phone or a computer? Wireless communication and the Internet are just a few areas electrical engineering has helped flourish, by developing better phones, more powerful computers, and high-speed modems. As we enter the 21st century, the technology that surrounds us will continue to expand and electrical engineers are leading the way.

Electrical engineering itself is one of the exciting courses of study. We feel proud to involve such course in our program here at NCE. This department is running successfully at NCE since 2066. It has the accumulated experiences and physical resources of more than 5 years now, for providing quality engineering education and performing applied engineering research. It has a strong group of faculties with diverse experiences. It is continu-

ously evolving and continuously seeking its faculty and infrastructure development. It takes the followings as its prime objectives:

- To produce highly qualified, objective, confident, and creative graduates with entrepreneurial attitude, and attain excellence in engineering education and applied research

- To become a center of excellence in electrical & electronics engineering research

- To collaborate with various organizations in making the engineering education more relevant to the domestic context and in obtaining in-country applied research solutions to the domestic technical problems



Why NCE for Electrical Engineering?

Making a difference, career-building and giving back to society, these are some of the ways our graduating seniors describe their electrical engineering experience at NCE. We know that electrical engineers at NCE are, and always will be, at the forefront of technological innovation in any related fields. From designing operating room equipment, to creating faster ways for generating work in the area of power systems, renewable energy and technology NCE is creating various opportunities. Besides, an excellent faculty and staff, the department has well-equipped laboratories to train students in these areas.

If you want to make a difference, if you want to use your creativity to solve the latest challenges confronting mankind, be at the pinnacle of the best thinkers in the nation, and truly change the engineering concept, then your choice is obvious – earn the degree of Electrical Engineer from NCE.

Resources

The department is fully equipped with all the resources and materials it needs to impart quality education. This department has all materials required for proper and regular functioning of the laboratories. Course materials and books relating to subject matters are provided by the library. The department also provides various other resources required for academic enhancements.

Participation

Field visits to power stations, manufacturing, and other industries are conducted by the department as prescribed by IOE curriculum. Students are encouraged to participate in the semester projects and are obligated to report

their work at the end of their project, which enhances presentation skills of student and makes them socially involved in extra-curricular activities. Direct participation in such works help students to develop their self-confidence which is required to compete with other students of similar fields.

Laboratory Works

Basic Electrical Lab
Electric Circuit Lab
Electric Machine Lab
Instrumentation and Control Systems
Switchgear and Protection Lab
Hydropower Lab
Industrial Power Distribution & Illumination Lab
Power Electronics Lab
Utilization of Electrical Energy Lab
Power Plant Equipments Lab

Choose Electrical Engineering if ?

- Machine and control systems excite you
- Power generation, transmission and distribution is an area of your interest
- Power industry, manufacturing industry, renewable energy sector and communication sectors are your career options

After being the part of NCE, I feel secure for my future because it acts as a bridge between me and my career. These days every college is trying to admit themselves to a better for student's career but after being a part of NCE, I felt NCE actually mean it. While talking about the teachers and infrastructures, with high skilled, friendly, dedicated teachers and full featured infrastructure for engineering students; NCE provides zeal for innovative and creative mind. For a student to achieve his/her goals in life it needs motivation and proper guidelines regarding their aim and that is well provided by NCE. I must say, joining this college is the best turning point in my life and I am sure I won't regret for it.. "After all college matters for our bright and secured future."



Bishnu Prasad Neupane
072/BEL

When I joined NCE, I wasn't sure of the decision I had made. Today however I am glad that I am part of NCE. NCE has proven to be an ideal platform to pursue my engineering career. The homely environment, dedicated teacher, well equipped laboratory, good administrative facilities should very well assure you that NCE is one of the best engineering college in Nepal I think +2/Diploma graduated shouldn't miss the chance of being part of NCE.



Madan Neupane
071/BEL

Electrical Engineering Curriculum

1st Semester

- Engineering Mathematics I
- Computer Programming
- Engineering Drawing I
- Engineering Physics
- Applied Mechanics
- Basic Electrical Engineering

2nd Semester

- Engineering Mathematics II
- Engineering Drawing II
- Basic Electronics Engineering
- Engineering Chemistry
- Fundamental of Thermodynamics & Heat Transfer
- Workshop Technology

3rd Semester

- Engineering Mathematics III
- Object Oriented Programming
- Electric Circuit Theory
- Electrical Engineering Material
- Electronics Devices and Circuits
- Digital Logic
- Electromagnetics

4th Semester

- Electrical Machine I
- Numerical Methods
- Applied Mathematics

- Instrumentation I
- Power System Analysis I
- Microprocessor

5th Semester

- Communication English
- Probability and Statistics
- Control System
- Instrumentation II
- Power System Analysis II
- Electrical Machine Design
- Electrical Machine II

6th Semester

- Engineering Economics
- Digital Control System
- Signal Analysis
- Switchgear and Protection
- Industrial Power Distribution and Illumination
- Hydro Power

7th Semester

- Project Engineering
- Organization and Management
- Technology Environment and Society
- Power Electronics
- Utilization of Electrical Energy
- Elective I

- Power Plant Equipment
- Project (Part A)

8th Semester

- Engineering Professional Practice
- High Voltage Engineering
- Power Plant Design
- Transmission and Distribution System Design
- Elective II
- Elective III
- Project (Part B)

Elective Courses

- Reliability Engineering
- Energy Management System
- Rural Electrification
- Micro Hydro Power
- Advance Power System Analysis
- Applied Photovoltaic Engineering
- Bio-Medical Instrumentation
- Wind Energy Conversation System
- Artificial Neural Network

Field Visits

- Electrical Machine Design (3 day)
- Hydropower Engineering (3 day)
- Rural Electrification (1 days)
- Micro Hydro (2 days)

Electronics & Computer Engineering



HoD Note

The Department of Electronics and Computer Engineering is established from the very first academic year of National College of Engineering. The department has been imparting high quality education to the young budding engineers with the support of excellent infrastructures, well-equipped laboratories and valuable resources. A team of dedicated, highly qualified and experienced faculty members is always keen to share their knowledge and expertise with the students.

The department also arranges various value-added courses for the students according to the trending global markets. Besides, the department also conducts regular seminars, workshops and lectures by eminent experts from various renowned organizations. The students are encouraged to organize and participate in various local and national level technical events through Robotics Club and IT Club.

Er. Pradip Adhikaree
Head of Department
Department of Electronics and Computer Engineering



“ Besides, the department also conducts regular seminars, workshops and lectures by eminent experts from various renowned organizations ”

Electronics, Communication Information Engineering

Electronics, Communication & Information Engineering (BECIE), the upgraded course of electronics and computer engineering, is four year Bachelor program in engineering offered by IOE, Tribhuvan University, based on two main branches: Electronics and Communication Engineering (BEX) and Information Technology (IT). The course deals recent global market trend on electronics, computer and information technology. Through the electronics communication and information engineering program, students gain basic knowledge of electronics, understand computer software and information network system.

Career

Electronics, communication and information engineer go on to successful careers in a wide range of organizations working locally as well as globally in the field of communication, software, mobile applications, electronics applications, networking, innovation and research. Electronics communication and information engineer can as:

- Telecom Engineer in Telecommunication companies like NTC, NCELL, Smart Cell, Hello Nepal etc.
- Software Engineer in Various Software Companies
- Electronics and communication Engineer/ IT Officer in Government Offices and Local Bodies
- Communication Engineer/Network Engineer in Internet Service Provider (ISP)
- Communication Engineer in Television, FM and Radio Broadcaster
- Avionics Engineer in Civil Aviation and Airlines
- Electronics and Communication Engineer in Nepal Police and Nepal Army
- Network Engineer/ IT Engineer in Banking Sector (eBanking, Mobile Banking)
- Biomedical Engineer in Hospital and Biomedical Institutions
- Electronics Engineer in Electronics Equipment/Households Manufacturing Companies
- Instructor/Trainer/Lecturer in Academic Institution
- Researcher in Innovation and Research Center
- Entrepreneur in your own Company

Electronics, communication and information engineering has wide scope in the fields of electronics engineering, communication engineering and information technology. More specifically, it covers the various fields such as electronics applications, computer hardware, software, telecommunication, wireless communication, digital and analog communication, artificial intelligence, robotics and automation, avionics, network engineering, embedded system, FPGA and IC Technology etc.



Choose Electronics Communication & Information Engineering if:

- You want to change the world with revolutionary technology in the field of electronics and information Technology
- You want to be a part of brain behind gadgets
- You want to make your career in IT
- Want to be an astronaut / You love robotics
- You want to be Computer Programmer
- You are fond of telecommunication and wireless technologies, artificial intelligence, machine learning etc.
- You think you have innovative and creative mind
- You accept the challenge of technology change

Why NCE for Electronics Communication & Information Engineering?

Electronics engineering is one of the pioneer fields of today's technology. We feel proud to say that it is the first course introduced at NCE. This Department is running successfully at NCE since its establishment. It has accumulated experiences and physical resources of more than 10 years, for providing quality engineering education and performing applied engineering research. We have very qualified and experienced faculty for this program. Our long experience and dedication has been able to setup all the requirements for a student. Studying electronics and information engineering here will not only boost up your knowledge but also will make you a complete professional.

It takes the followings as its prime objectives:

- To produce highly qualified, motivated, confident graduates with entrepreneurial attitude and innovative mind to fulfill the demand of today's world.
- To become a center of excellence in electronics & Information engineering research
- To collaborate with various organizations in making the engineering education more relevant to the domestic context and in obtaining in-country applied research solutions to the domestic technical problems.
- To enhance students with updated hands on skills needed by industry.

Resources

Department of electronics and computer engineering has a complete set of infrastructures needed for a person to be a good electronics and information engineer. We have fully equipped laboratories of basic electronics, digital logic, communication system, microprocessor, instrumentation, antenna, project and so on.

A highly experienced full time and visiting faculty is dedicated to provide high quality education in a very convincing way. Professors and lecturers here not only teach the course but also make you understand the practical applications so that your knowledge horizon enlarges.

The textbooks and other manuals necessary for the curriculum is provided by the library. Besides that, the department also provides necessary facilities and aids for participating in several kind of hardware and software competitions.

Achievements:

Winner – Dronacharya, 2019 (Organized by LOCUS, Pulchowk Campus)

Winner - UNDP SDG, 2018 (Organized by RAN)

Runner up- Kuruksheetra, 2017 (Organized by SOMES- IoE)

Winner - NASA International Space App Challenge, Kathmandu 2016 (Organized by ICIMOD)

Second Runner Up and Best Design Award - Yantra 1.0, 2013 (Organized by RAN)

Winner and Grand Prix Award - Robo Soccer, 2004 (Organized by Robotics Club- Pulchowk Campus)
And Many More...



By chains on the road by electron, I move.
I move so that the world moves
I am an engineer none other
I believe so thus, the progress moves

Engineering; an art, the science of building things. "Whatever is not created by God is built by engineers"- unknown; the applied knowledge of science, that knowledge is not asked but is achieved with hardship and dedication. Engineers; they build things to help the global society-making it a global village and NCE is one of such institutions that helps dedicators to excel their growth; grow their mind; share their knowledge and implement them. Whatever you learn depends on the environment you are; thus, you can promote yourself and broaden your view and expertise.

Diwas Khadka
072/BEX

Electronics, Communication and Information Engineering Curriculum

1st Semester

Engineering Mathematics I
Engineering Drawing I
Basic Electrical Engineering
Computer Programming
Engineering Physics
Digital Logic

2nd Semester

Engineering Mathematics II
Microprocessor
Engineering Chemistry
Object Oriented Programming
Workshop Technology
Electric Circuits and Machines

3rd Semester

Engineering Mathematics III
Electronics Devices and Circuits
Control Systems
Probability and statistics
Electromagnetics
Instrumentation

4th Semester

Applied Mathematics
Discrete Structure
Data Structure and Algorithms

Advanced Electronics
Computer Graphics
Numerical Methods

5th Semester

Engineering Economics
Database Management Systems
Computer Organization and Architecture
Object Oriented Software Engineering
Operating Systems
Filter Design

6th Semester

Communication English
Energy, Environment and Society
Propagation and Antenna
Communication Systems
Computer Networks
Embedded Systems
Minor Project

7th Semester

Project Management
Artificial Intelligence
Organization and Management
Digital Signal Analysis and Processing
Wireless Communication
Elective I
Project Part A

8th Semester

Telecommunications
Engineering Professional Practice
Information Systems
Elective II
Elective III
Project Part B

Elective Courses

- Satellite Communication
- Data Mining
- RADAR
- Biomedical Engineering
- Broadcast Engineering
- Avionics
- Optical Fiber
- IPV6
- Remote Sensing
- Agile Software Development
- Advanced JAVA
- Image Processing
- Enterprise Application Design

Field Visit

- NTV/Radio Nepal
- Nepal Telecom
- Sagarmatha Earth Station
- Pokhara (Hydropower, Cable car)



***Robotics
Competition at
NCE YATRA 3.0***

Computer Engineering



Computer Engineering

Computer engineers work on components, devices, programs, algorithms and systems that are used in computers, and on techniques of computation, analysis and implementation that are applicable to single computers or to systems of computers.

In the past, work in this area used to be compartmentalized between hardware and software, but the boundaries between these two categories have become less distinct. Many computer engineers (and electronics engineers) are well versed in both hardware and software, and provide "hybrid" solutions on a regular basis.

Due to the wide use of computers across industries and applications, we find computer engineers in many diverse areas. For example, computer engineers design application-specific integrated circuits (ASICs) for use in cellular phones; they devise and program field-programmable gate arrays (FPGAs) for control systems in manufacturing plants and power stations; they develop microprocessors for personal computers; they introduce embedded systems into diverse applications such as digital watches, portable music players, traffic control systems, and systems that control nuclear power plants. Many computer engineers work on the design of very large systems that integrate many components and many computers. One example is computational grids, which harvest the resources of hundreds, even thousands of computers for performing intensive computations that are beyond the capability of a single computer. Another example is data grids which allow sharing and management of large amounts of distributed data (such as health information of patients in a country by hospitals, or meteorological and other environmental information collected by thousands of sensors in the ocean). Many computer engineers are involved with communication networks that connect multiple computers, sensors, actuators, and special-purpose devices.

Computer engineering thus provides society with many critical utilities. Computers and computer engineers have impact on public welfare and safety, as well as on health and healthcare, the environment, quality of life, transportation, the food supply, computing, and leisure.

Career

A computer engineer, also called a software engineer, is responsible for developing, testing and evaluating the software that make our computers work. They may help in the development of new computer games, business applications or even in the design of entirely new operating systems. A computer engineer may also be responsible for constructing and managing an organization's computer system and supplying technical support. A computer engineer typically works in an office or laboratory environment as part of a team and enjoys a traditional work schedule.

In Nepal the software market is blooming in an exponential way. This brings a lot of job opportunities to the computer engineers. Various software giants like Microsoft, Google have also recruited Nepalese developers in their company.

Choose Computer Engineering if:

Not everybody who dives into computer engineering manages to become a successful professional. So, before deciding to study computer engineering, a student must think deeply about his/her interests and aptitude.

Do you have a passion for computers and technology as a whole?
Would you be willing to work 8 hours a day in front of a computer screen?
Have you learned any type of programming language? If so, do you like programming and see yourself as a computer programmer in the future?

If your answer to these questions was a resounding "yes", then come aboard! The amazing world of software awaits you.

Why NCE for Computer Engineering?

Bringing a change is what our graduates are doing in the society. Our graduates are involved in various multi-national software companies, have received scholarships in various reputed universities around the globe and the best thing is, many of them are entrepreneurs in Nepal with their own software company and are serving country for making a prosperous Nepal. Students here not only learn theoretical knowledge but also are trained to work in a team. The teamwork by NCEans are always praised in various software fields. From basic web designing to advanced level cloud processing, NCEans are no lesser than any international professional. This is what we deliver to our students. Excellence is what we target and we do everything to get it. We have special shell known as department of research and development which is typically set to incubate students the research methodology so that they can make a great impact in industries.

So for your bright future, we never compromise. We'll deliver everything we can to make you a good professional. So, for your bright future, enroll into computer engineering at NCE.

Resources

Department of electronics and computer engineering has a complete set of infrastructures needed for a person to be a good electronics and computer engineer. We have fully equipped laboratories of computer with high speed internet facilities.

A highly experienced full time and part time faculty is dedicated to provide high quality education in a very convincing way. Professors and lecturers here not only teach the course but also make you understand the practical applications so that your knowledge horizon enlarges. The textbooks and other manuals necessary for the curriculum is provided by the library. Besides that, the department also provides necessary facilities and aids for participating in several kind of hardware and software competitions.

Participation and Achievements

The department is always focused on providing handy practical experiences to the students and for that frequent field visits to various software companies, internet service providers is provided. Beside this Students are encouraged to participate in the semester projects and are obligated to report their work at the end of their project, which enhances presentation skills of student and makes them socially involved in extra-curricular activities.

Yearly, various groups of students are sent to various software competitions. The achievements made in these competitions have also shown the quality of our students to the industries. Direct participation in such works help students develop their self-confidence which is required to compete with other students of similar fields.

ACHIEVEMENTS

2nd Position Child App Nepal - 2014

2nd Position 11th National Technical Festival LOCUS – Software Competition - 2014

3rd Position 10th National Technical Festival LOCUS – Software Competition - 2013

1st Position 9th National Technical Festival LOCUS – Software Competition - 2012

3rd Position Locus Code Camp – 2011



Engineering is such a crucial field for the development of society and nation. And for those who wants to develop their future career in this field, they should be very careful while choosing the right academic institution or engineering studies. National College of Engineering is one of such institution which provides you with best faculty members, flexible and friendly learning environment. Being a student of NCE I felt that the teachers and seniors are helpful to a greater extent. As you all know this is one of the most important turning point in your life so make your decision worthy.

Bibek Shrestha
071 BCT

Computer Engineering Curriculum

1st Semester

- Engineering Mathematics I
- Computer Programming
- Engineering Drawing I
- Engineering Physics
- Applied Mechanics
- Basic Electrical Engineering

2nd Semester

- Engineering Mathematics II
- Engineering Drawing II
- Basic Electronics Engineering
- Engineering Chemistry
- Fundamental of Thermodynamics & Heat Transfer
- Workshop Technology

3rd Semester

- Engineering Mathematics III
- Object Oriented Programming
- Electric Circuit Theory
- Theory of Computation
- Electronics Devices and Circuits
- Digital Logic
- Electromagnetics

4th Semester

- Electrical Machines
- Numerical Methods
- Applied Mathematics
- Instrumentation I

- Data Structure and Algorithm
- Microprocessor
- Discrete Structure

5th Semester

- Communication English
- Probability and Statistics
- Control System
- Instrumentation II
- Computer Organization and Architecture
- Advanced Electronics
- Computer Graphics

6th Semester

- Engineering Economics
- Artificial Intelligence
- Object Oriented Analysis and Design
- Embedded Systems
- Operating System
- Database Management System
- Minor Project

7th Semester

- Project Management
- Organization and Management
- Energy Environment and Society
- Computer Network
- Distributed System
- Digital Signal Analysis and Processing
- Elective I

- Project (Part A)

8th Semester

- Engineering Professional Practice
- Internet and Intranet
- Information System
- Simulation and Modeling
- Elective II
- Elective III
- Project (Part B)

Elective Courses

- Satellite Communication
- Data-Mining
- RADAR Technology
- Biomedical Engineering
- Broadcast Engineering
- Avionics
- Optical Fibre Technology
- IPV6
- Remote Sensing
- Telecommunication
- Agile Software Development
- Enterprise Application Design
- Advanced JAVA
- Image Processing

Facilities



Library

NCE provides highly equipped library to the students. College provides one set of semester wise books to the students, which they have to return to the library at the end of the semester. Various reference books and extra-curricular books are available to the students as per their interest.

Canteen

Affordable and hygienic canteen facility is available to the students in the college vicinity. Canteen of NCE is a completely separate body which operates independently but is under continuous supervision of the college.

Stationery/Photocopy Center

Stationery is available inside the college premises, which supplies materials for studies and practical courses. It has facilities like photocopy, printing, lamination, binding, etc.

Internet Facilities

NCEans are provided with WIFI facilities within the college premises. Students can surf the internet all the time as per their requirements. Student also gets access to online browsing at the college internet labs.



Assessments/Examinations

NCE conducts one hour assessment every Monday, in the first hour before the beginning of the classes. The test of all subjects is conducted on a regular basis as per the academic calendar prepared at the beginning of the semester. In this way, two assessments are taken internally before the end of semester for each subject. This makes students familiar with the IOE question patterns and develops the habit of studying. Students must appear for all of these tests because final evaluation of internal marks is done on the basis of these tests. Viva of practical labs are also regularly conducted for internal evaluation of practical subjects.

Progress Reports

NCE continuously monitors the performance and growth of its students. Assignments, attendance, class performance, moral behaviors and social involvements are some of the ways of evaluating progress of a student. If necessary, parents of certain students are called for the counselling.

Sports

NCE also believes that extra-curricular activities are necessary for overall development of a student. Hence, various indoor and outdoor sporting options are provided to the students. Sport weeks are also conducted on a yearly basis to encourage students in sporting field. Our students also compete with students of other colleges in inter-sporting tournaments.



Achievement is the succession of team work and participatory approach that eventually is reflected in the celebrating and cheerful moments with NCE achievers.



Faculty Members & Resource Persons

Department of Civil Engineering		Department of Electrical Engineering		Department of Electronics & Computer Engineering	
Amrit Man Tuladhar	Associate Professor (HoD)	Basuki Nath Jha	Lecturer (HoD)	Pradip Adhikaree	Senior Lecturer (HoD)
Hemant Tiwari	Senior Lecturer (D.HoD)	Prabin Gautam	Lecturer (D.HoD)	Mohan Maharjan	Senior Lecturer (D.HoD)
Satish Paudel	Lecturer (Coordinator)	Navaraj Shrestha	Assistant Lecturer	Raju Shrestha	Senior Lecturer (R&D Unit Chief)
Nila Bade Shrestha	Lecturer	Suman Timilsina	Assistant Lecturer	Anup Shrestha	Senior Lecturer (Coordinator)
Binita Kunwar	Lecturer	Sangit Poudel	Assistant Lecturer	Suroj Burlakoti	Lecturer
Bikram Bhusal	Lecturer	Arun Koirala	Assistant Instructor	Subash Panday	Lecturer
Ritesh Upadhaya	Lecturer	Bodh Nath Neupane (V)	Senior Lecturer	Sharmila Bista	Lecturer
Milan Shrestha	Assistant Lecturer	Sochindra Ray (V)	Senior Lecturer	Chaita Shova Shakya	Lecturer
Kishor Timilsina	Assistant Lecturer	Gopal Chandra Joshi (V)	Senior Lecturer	Rubin Awale	Assistant Lecturer
Aabiskar Timilsina	Assistant Lecturer	Ram Dayal Yadav (V)	Senior Lecturer	Ananda Kumar Sah (V)	Lecturer
Madhav Pokhrel	Assistant Instructor	Ram Prasad Pandey (V)	Lecturer	Bibek Rupakheti (V)	Lecturer
Nausad Ansari	Technician	Ashok Aryal (V)	Lecturer	Bikash Shrestha (V)	Lecturer
Dr. Rekha Shrestha (V)	Senior Lecturer	Hari Rimal (V)	Lecturer	Salik Ram Subedi (V)	Lecturer
Basanta Devkota (V)	Lecturer	Arvind Maharjan (V)	Lecturer	Anil Verma (V)	Lecturer
Subash Kumar Bhattarai (V)	Lecturer	Sushant Thakur (V)	Assistant Lecturer	Rabin Kashula (V)	Lecturer
Binod Bhattarai (V)	Lecturer	Bikram Bhandari (V)	Assistant Lecturer	Rajan Pokhrel (V)	Lecturer
Mausham Bhandari (V)	Lecturer	Bishwas Baral (V)	Assistant Lecturer	Birodh Rijal (V)	Lecturer
Rajesh Shakya (V)	Lecturer	Bijaya Puri (V)	Assistant Lecturer	Saroj Sharma (V)	Lecturer
Prabesh Adahikari (V)	Lecturer	Bharat Pokharel (V)	Assistant Lecturer	Narayan Adhikari Chetri (V)	Lecturer
Sajan Shakya (V)	Lecturer	Khagendra Bohara (V)	Teaching Assistant	Manish Mallik (V)	Lecturer
Vimesh Paudel (V)	Lecturer	Chitra Bahadur Khadka (V)	Chief Instructor	Pratap Sapkota (V)	Lecturer
V-Visiting Faculty		Ganesh Datta Sharma (V)	Chief Instructor	Roshan Pandey (V)	Lecturer
				Lokesh Gupta (V)	Lecturer
				Gyaneshower Bohara (V)	Lecturer

Department of Applied Sciences**Administrative Staff**

Dhan Prasad Poudyal	Associate Professor (CEO)	Bharat Bahadur Bhandari	Senior Library Officer	Sajan Bhatta	Security Guard
Madhu Krishna Shrestha	Senior Lecturer (HoD)	Uma Devi Shrestha	Senior Library Officer	Sidhi Bahadur Mali	Driver
Gunanidhi Lamsal	Senior Lecturer (Exam Chief)	Ajaya Khanal	Exam Officer	Kaji Ram Paudel	Office Assistant
Rajan Nepal	Senior Lecturer (Coordinator)	Goma Kunwar	Admin Officer	Nirmala Karki	Office Assistant
Sameer Pandit	Lecturer (Coordinator)	Gita Upadhya	Library Officer	Gopi Lama	Office Assistant
Lasta Maharjan	Senior Lecturer	Shikha Galami	Account Officer	Bishnu Tamang	Office Assistant
Suman Acharya	Lecturer	Rebanta Aryal	IT Officer	Laxmi K.C.	Office Assistant
Biswash Shrestha	Lecturer	Sarita Vaidhya	Assistant Officer		
Shree Prakash Shrestha (V)	Professor	Sarita Rajbhandari	Assistant Officer		
Bimaleshwori Karmacharya (V)	Associate Professor	Pratikchhya Pokhrel	Head Assistant		
Chini Kaji Bajracharya (V)	Associate Professor	Madhu Maya Poudel	Head Assistant		
Ramesh Ranavat	Lecturer	Bhimlal Maharjan	Store Keeper		
Sudip Gaire	Lecturer	Keshu Bhattarai	Technician		
Prawin Awasthi	Lecturer	Suraj Maharjan	Technician		
Mohan Singh Maharjan (V)	Chief Instructor	Jayandra Bahadur Khadka	Technician		
		Mohan Bhandari	Jr. Technician		
		Moti Narayan Koju	Jr. Technician		
		Ravi Shrestha	Lab Assistant		
		Krishna Bhattarai	Lab Assistant		
		Rupesh Shrestha	Lab Assistant		
		Dhan Bahadur Adhikari	Security Guard		



Yatra 1.0



Yatra 1.0



Yatra 3.0



Clubs & Societies



Electrical Club:

Electrical Club-NCE was formed in 2074 BS with the motto "We Power, We Transform". The main aim of this club is to encourage and support the electrical engineering students in the field of engineering and technology.

Objectives:

- To provide a platform for Electrical Engineering students to socialise with their peers and to encourage a feeling of community in the electrical engineering stream
- To form a group who can be responsible for liaising with department staff and future students regarding student concerns and subject advice
- To improve the image of electrical engineering to a more socially diverse group, with a view to attracting future students and promoting equal gender representation in the stream.
- To encourage the students to participate in different competitions, seminars and also provide trainings in Electrical stream.



Civil Engineering Students' Society - National College of Engineering (CESS-NCE)

CESS-NCE stands for Civil Engineering Students' Society-National College of Engineering, a society for all the civil engineering students of NCE as well as for the welfare of graduated civil engineers from NCE. Its one of the main objectives is to establish a mutually beneficial relationship between NCE civil students and its alumni.

It was established in 2069 BS with its own "ACT (Bidhan)" to facilitate the students in various Civil Engineering activities through their skills and knowledge with a slogan "LEARN APPLY CREATE" !

Since its establishment, the society has organized various activities and participated in many national competitions. Recently, CESS-NCE participated in the "6th. National Civil Engineering Exhibition cum Competition" by Civil Engineering Students' Society Nepal (CESS-NEPAL), Pulchowk Campus, and won 2nd Runner up position in "Model Competition" as well as in the "Painting Competition"; These achievements have made the college very proud ! By this, the students had opened new opportunity and challenges to prove their hidden talent and are highly appreciated by all.

CESS-NCE will be a platform to enhance any kind of innovative activities of Civil students and its alumni.

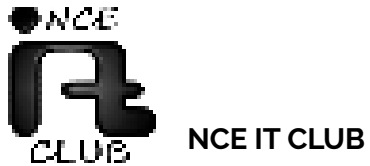


ROBOTICS CLUB

National College of Engineering has a very special group of students' club known as NCE Robotics club. It was established to facilitate students interested in robotics, use their skills to develop robots. Students here not only develop robots but also learn basics of engineering mechanics, electronics, and programming in a very practical and industrial way. Since its establishment, the club has participated in many national competitions. Robotics club has always been a place of pride for NCEans as it has always made the college proud.

NCE Robotics Club was completely renovated and reformed in 2067 by some robotics enthusiast students of Bachelors of Electronics and communication 2066 batch. They modified the club in such a way that it is now not just a place where students build robots, but is now a learning center where student built robots as well as experts train them to do work properly and professionally. Club has participated in various National level Robotics competition and have won several prizes.

Since then, robotics club has organized several robotics trainings, workshops and seminars in order to facilitate students with opportunities around. In robotics club, we have a slogan, "its not just about making robots, its about building a team" and as the slogan says robotics club not just helps them learn to work in team which is the primary key to succeed in the professional life.



NCE IT CLUB is a team "for the students by the students". It is formed by computer engineering students to share their common interests. The book knowledge is not sufficient for the IT students. So the idea of IT Club formation rose in our mind. The members of the IT club are dedicated to provide an IT environment inside the college so that each IT student can feel that they are warriors of Computer Science and Technology. IT Club organizes different programs to enhance the creativity of the students. The present IT Club was reformed on January 2014. It consists of total 11 members from the computer faculty of each year including two members from 1st, 2nd and 4th year and five members from 3rd year. IT Club has some specific objectives listed as:



The NCE Alumni Association maintains and enhances a highly engaged, vibrant community of alumni and friends worldwide. The association was formed on 2012. It raises awareness about the impact of alumni engagement with students, educates the student body on the importance of giving back and provides opportunities for students and alumni to interact.

Through these opportunities, the association educates and emphasizes the importance of developing a life-long relationship with the college and cultivates a spirit of philanthropy. The purpose of the NCE Alumni Association is to promote the welfare of National College of Engineering and to establish a mutually beneficial relationship between NCE and its alumni. The association helps alumni connect with the college and with fellow graduates through a wealth of Club activities, continuing education programs, online services, and alumni events around the world.



NCE reflection is the team of student studying at national college of engineering (NCE) of all year. This special group is student's team known as NCE REFLECTION was established in 2013 to facilitate the student to share their knowledge and ideas about engineering, science and latest technologies and make all student to know about this. This group is currently publishing a highly technical magazine which is targeted to the student and other people working in the field of engineering and various technologies. This magazine includes several contents from informative materials to research articles. NCE REFLECTION initiated this project in order to fill up the gap between engineering student and information about latest technologies around the world. This magazine will enlighten student's information as well as will explore various technologies to the communities. The NCE REFLECTION explores the hidden talents in

the college by exploring their expression skills also act as a bridge to fulfill the gap between technology and user. This magazine have various contents such as research papers from experts, projects listing, latest technology exposing articles. Interview of the one of the technical experts etc. hence NCE REFLECTION Provides a comfortable platform for technology enthusiasts to learn and share more about the recent trends and engineering and technical fields in local as well as global market.

Research and Development Unit

The Research and Development (R & D) Unit is an academic wing of the NCE mandated to conduct and coordinate research activities in the institute. R & D creates a platform for faculty and students to establish a research culture and establish one's identity in the national/international arena and also help in acquiring research grant from national and international funding agencies.

The R & D unit at NCE is established with following objectives:

- To assist the students and faculty members to conduct research under student project and research scheme from various funding agencies; build healthy competition among researchers, faculty members and students.
- To initiate, develop, cultivate partnerships, network and groups amongst the various researchers, faculty members and students and motivate towards research activities.
- To assess training needs of students and faculty members and executing these programs.
- To collaborate with industry, government, professions and the wider community on all research matters to promote faculty and student's research activities to external stakeholders.
- Attract external funding for research (through individual/joint/interdisciplinary research proposals) and its effective dissemination and use.
- To inspire students and faculty members to publish research papers and technical papers in National and International Journals.
- To organize workshops, seminars, technical exhibitions and talk programs.

Block A

Reception
Class rooms
Library
HOD Rooms
Conference Hall
Drawing Rooms
IT Club
Project Room

Block B

Front Desk Office
Student Clubs
Photocopy & Stationery
Chemistry Lab
Physics Lab
Exam Section
HOD Rooms
Faculty Rooms
Electronics & Communications Labs
Computer Labs
Computer Maintenance Room

Block C

Concrete Technology / Civil Engineering Material Lab
Soil/Transportation Lab
Thermodynamics Lab
Canteen
NCE Hall

Block D

Faculty Rooms
Robotic Club
Surveying Store

Block E

Confidential Room
Principal Room
Account Section
Administration
Advisors Room
Chairman Room
Kitchen
Main Store
Computer Lab
Meeting Hall
Student Project Hall

Block F

Mechanical Workshop

Block G

Hydropower / Fluid / Hydraulic/
Switch Gear & Protection Lab /
Structure Lab

Block H

Guard Room / Generator

Block J

Basic Electrical / Electrical Circuit Lab
Electrical Machine / Utilization/Power electronics Lab





Quality for excellence



NCE

National College of Engineering
AFFILIATED TO TRIBHUVAN UNIVERSITY

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