A BRAND OF QUALITY ENGINEERING EDUCATION SINCE 1994

Bachelor Programs

Civil | Architecture | Computer | Electronics & Communication | Civil for Diploma Holders | Electrical & Electronics | Civil & Rural

Master Programs CM|NRM|iWRM|TEAM



Glory

NEPAL ENGINEERING COLLEGE

(Affiliated to Pokhara University)

Self Financed Not-for-Profit Social Academic Institute (D.A.O. Bhaktapur, Regd. No. 552/2060)



College Board of Directors



Mr. Jeevan Khatri Chairperson (Mayor, Changunarayan Municipality)



Mr. Dorendra Niraula Member Deputy. C.D.O., Bhaktapur



Er. Arjun Gautam *Member* Pokhara University

the Founders

- 1 Late Prof. Dr. Deepak Bhattarai
- 2 Mr. Hari Prasad Pandey
- **3** Dr. Ram Ratna Upadhyay
- 4 Er. Lava Raj Bhattarai
- 5 Dr. Upendra Gautam
- 6 Mr. Lambodar Neupane
- 7 Late Mr. Surya Bahadur K.C.



Member Teachers' Representative



Mr. Som Prasad Pradhan Member



Mr. Dinesh Khanal Member



Mr. Naresh Khadka Member



Mr. Santosh K.C. Member



Assoc. Prof. Durgaprasad Bhandari Member Secretary, Principal



Message from the **Chairperson**

Changunarayan Municipality welcomes all the freshers of Nepal Engineering College (*nec*). We are immensely proud to have one of the finest engineering colleges of the country in our municipality. This college has lots of contribution towards the upliftment of academic and social standard of this municipality and along with that towards the overall development of the nation. Over the period of 30 years of providing its services Nepal Engineering College has produced thousands of highly qualified technical human resources who are providing their services not just in Nepal but also in various foreign countries.

The college has been helping the meritorious and needy students to pursue their dreams of becoming an engineer through various scholarships and financial assistance programs. Changunarayan Municipality considers this college as one of the valuable gem of this municipality and vows to assist the college in its dream of providing quality education and producing highly qualified human resources in terms of financial assistance for development of infrastructures or through scholarships.

The municipality is also working towards the facility of providing student loan schemes to help the student in terms of their financial need to pursue their dreams of being highly skilled personnel. I am highly confident that students who chose this college for their academic journey will find the overall academic experience in this college highly rewarding for their professional career.





Message from the **Principal**

t was a grand vision & mission of our beloved founder member and Principal Late Prof. Dr. Deepak Bhattrai and other six prominent founders, to provide opportunities of technical education in Nepal to the students of our country. Since its establishment in 1994 the institute has taken giant strides and reached today's position.

It is a matter of great pride that our Institute has been bestowed with a permanent affiliation status by the Nepal Engineering Council for all the eligible Engineering courses being run in *nec*. This became possible due to the sustained support and encouragement provided by our founders, also the hard work done by the teachers' staff and the blessings from all our stakeholders, parents/guardians and alumni.

Known for quality education, discipline, eco-friendly campus, concern for society and environment, *nec* has carved a niche for itself in the field of technical education in Nepal. With a proud legacy of 30 years, the institute has excelled in every field. The students who graduated from this institute are occupying prestigious positions in the organizations of national and international repute.

Our aim is to transform the students into rational thinkers, problem solver, competent technocrats and managers, law abiding citizens and spiritually enlightened individuals and also to inculcate social and moral values, sportsmanship, compassion for nature, pride for our culture and traditions. This is our firm belief that the rich values and traditions imbibed here would carry our students to greater heights.

We believe that in this era of knowledge society, our students must be equipped with an appropriate knowledge, habits, attitudes and morals leading to holistic development. The students must participate in the co-curricular and extracurricular activities to facilitate the process of creative and critical thinking. I earnestly believe that our institute provides ample opportunities for developing and shaping the personalities of the students.

Ready to cheer you at *nec* !!! With warm regards,

Assoc. Prof. Durgaprasad Bhandari Principal www.nec.edu.np

LET'S KNOW nec

nec was established in 1994 as a self-funded, not-for-profit social academic institute by a group of visionary Nepalese eminent professionals, academicians, managers and industrialists who realized the need of an institution serving the higher educational needs in engineering, technology and management reaching out to a wider section of Nepalese youths and making quality education accessible and affordable. Their aim was to produce technically competent engineering graduates ready to contribute in the accelerated social and economic growth of the country. This pioneering example set by *nec* led to the establishment of several engineering colleges in the country in the later years. nec is committed to retaining its long earned reputation as 'an institution with concerns for quality education and academic freedom', again an example set by it for others to follow.

Since its establishment, *nec* is engaged in designing, upgrading and standardizing academic curriculum and its delivery at Bachelor and Masters level courses in engineering, technology and allied disciplines. nec intends to continue with this initiative, offering more innovative and applied courses in the established and emerging areas in the days to come. In doing so nec has succeeded in establishing a "brand" of its own.

Initiated with limited physical and instructional resources, *nec* has now grown into an institution with its learning resources comparable to any institution of repute in the country and the region. The physical infrastructure and instructional resources, built on 210 ropanies (10.69 ha) of land at the lap of Changunarayan in Bhaktapur, a UNESCO world heritage site, right beside the Manohara river bank provide an ideal ambience of learning.

Currently, *nec* offers Bachelor level courses in Civil Engineering, Electronics and Communication Engineering, Computer Engineering, Electrical and Electronics Engineering, Civil and Rural Engineering and Civil Engineering for Diploma Holders leading to B.E. (Bachelor of Engineering) degree, Bachelor level course in Architecture leading to B. Arch (Bachelor of Architecture) degree, and postgraduate courses leading to Master of Science (M.Sc.) degree in Construction Management (CM), Natural Resources Management (NRM), Interdisciplinary Water Resources Management (iWRM) and Transportation Engineering and Management (TEAM). The B.E. Civil for Diploma Holders course is organized at *nec*-BDH in Lalitpur and all the Postgraduate courses are organized at *nec*-Center for Postgraduate Studies (*nec*-CPS) also located in Lalitpur.







Nec Environment





Vision and Mission of nec

The vision of nec is to evolve as the center of higher learning, excelling in academics, through continued engagements in education, research and outreach as three integrated functions of the college.

In approaching the stated vision, the mission of *nec* includes:

- Providing the youth with the best opportunities and environment of learning >to help them attain high level of academic standard, scientific temper, technical and professional competence and life-skills.
- Train and develop youth as total person, ready to serve the society and people ≻ to transmit the cultural heritage and improve their quality of life.
- Inculcate the values to appreciate the need for ethical standards in personal, >social and public life, to become leaders, to be a voice to influence the society and the nation, and to uphold just social order.









International Linkages & Projects

nec has established institutional linkages for academic exchanges, with a number of universities, institutions and organizations in different parts of the world. Exchange of faculty and students, sharing of knowledge, experiences and publications and collaboration in teaching and research have been some of the continued activities initiated and supported under such linkages.



Co-funded by the Erasmus+ Programme of the European Union Bhutan+Nepal Higher Education for accomplishing the Sustainable Development Goals (B+NeSDG)

The B+NeSDG (Bhutan and Nepal Education for Sustainable Development Goals) Project, co-funded by the Erasmus+ program, draws together institutions from Nepal, Bhutan and EU for a common purpose. Nepal Engineering College, along with Pokhara University, Kathmandu University, Far Western University, and Sagarmatha Engineering College, in collaboration with international counterparts such as Universidad Politécnica de Cartagena (Spain), Riga Technical University (Latvia), and Jigme Namgyel Engineering College (Bhutan), demonstrating the importance of international cooperation in advancing sustainability. Through lectures, workshops, and discussions, the transformative B+NeSDG Project Easter School nurtured new perspectives and fueled a commitment to sustainability. Milestones like capacity-building training at Riga Technical University and the Polytechnic University of Cartagena enrich the voyage. This initiative cultivates cognizant leaders to secure a greener and more inclusive future for Nepal and Bhutan.



Co-funded by the Erasmus+ Programme of the European Union



Key Action 1 – Mobility for learners and staff – Higher Education Student and Staff Mobility (Student mobility Exchange program for studies)

Inter-institutional agreement 2022-2023 between Nepal Engineering College, Nepal and The Technical University of Cartagena (UPCT), Spain has been signed to cooperate for the exchange of students and/ or staff in the context of the Erasmus+ programme. Both institutions commit to respect the quality requirements of the Erasmus Charter for Higher Education in all aspects of the organisation and

management of the mobility, in particular the recognition of the credits (or equivalent) awarded to students by the partner institution. The institutions also commit to sound and transparent management of funds allocated to them through Erasmus+. Under this program, twelve students of *nec* has already completed 6 months of studies in UPCT.

South Asia Water (SAWA) Leadership Program on Climate Change

SAWA Leadership Program on Climate Change (2017-2022) in continuation to earlier IDRC SAWA Fellowship Project for iWRM program, is being supported by International Development and Research Center (IDRC) Canada and executed by South Asia Consortium for Interdisciplinary Water Resources Studies (SaciWATERs) in four academic institutions of South Asian Countries including nec. The aim of the program is to increase the number of women occupying leadership roles in the water sector fostering an interdisciplinary approach linking climate change and water insecurity by awarding fellowships to 36 women enrolled in masters level Integrated Water Resources Management (iWRM) program in Bangladesh, India, Nepal and Sri Lanka. Three female students for three academic sessions from each academic institution shall receive financial support to pursue course in Interdisciplinary Water Resources Management (iWRM). Currently, nec as one of the Partner Institutions (PIs) had successfully completed the 14 day workshop for the first batch of SAWA Fellows on "Leadership and Research Methods for Interdisciplinary Water Research". The second and third workshops are scheduled to be held in India and Sri Lanka respectively.

Internationalization at nec



A ssociate Professor Bibhuti Ojha from Nepal Engineering College (*nec*) has earned a prestigious 12-week USDA fellowship for her project on "Managing Water for Climate-Smart Agriculture," hosted at Michigan State University from September 11 to December 6, 2023. Under the mentorship of Professor Myswish K. Maredia, this achievement highlights *nec*'s exceptional research potential and its faculty's ability to address global challenges and advance sustainable agricultural solutions.

TOWARDS QUALITY EDUCATION

Providing the **youth** with the **best opportunities** and **environment of learning** to help them **attain high level** of **academic standard,** scientific temper, technical and professional competence and lifeskills.



Erasmus KA1 Mobility of Students to UPCT Spain in 2023

n recognition of our **commitment** to **internationalization**, we are pleased to announce the **selection of three B.E. students** from the **2018 Batch** for the **Erasmus KA1 Student Mobility program** for the **year 2023**. They will participate in a transformative academic exchange at **Universidad Politécnica de Cartagena (UPCT), Spain**. This opportunity illustrates our commitment to international education.



Ongoing Projects

Assessment of Current Status of Solid Waste Management in Kathmandu Valley and Development of GIS Based Fleet Management System for Efficient Waste Collection funded By University Grant Commission (UGC)

Due to the lack of an inefficient solid waste management system in the Kathmandu Valley, there are disparities in waste generation - collection rates, large amounts of waste remain uncollected and eventually end up in open fields and water bodies which are hazardous for the environment and public health. Besides socio-economic factors, poor operational scheduling and routing are significant issues in waste management, resulting in increased operating costs. The Department of Computer Science and Engineering is pursuing a University Grant Commission (UGC) funded research project under Faculty Research Grant scheme in developing an GIS Based Fleet Management System for efficient collection of waste. The major objectives of the research work are to assess the current status of Solid Waste Management in Kathmandu Valley and to develop a decision support system for allocation of collection vehicles, as well as determination of their routes by applying Artificial Intelligence. The research work is led by Asst. Prof. Ashish Kumar Jha, Assoc. Prof. Dhiraj Kumar Das and Asst. Prof. Krishna Bikram Shah.

IoT-Based Automated Hydroponics System funded By University Grant Commission (UGC)

Department of Electronics & Communication Engineering is conducting a research work on Hydroponics system led by Associate Prof Bijaya Shrestha. This is soil less cultivation technique in which the plants are grown in water. It has several advantages over traditional approach: it is water efficient, space efficient, nutrition efficient, space efficient and is free from soilborne diseases. This research project is funded by University Grant Commission (UGC). The main objective of this project is to design and develop an "IoT-Based Automated Hydroponics System for cultivating Leafy Vegetables". The system will be www.nec.edu.np used to cultivate the vegetables in natural environment and controlled environment for comparative analysis. The nutrition level and pH level of the nutrient-rich water will be monitored and maintained automatically. The IoT facility will be added to monitor several parameters of the system from remote places online.

Professional Learning Course in Sanitation Technology (PLCST-nec)

Professional Learning Course in Sanitation Technology is a 4-month program based on the Graduate Professional Diploma Program (GPDP) developed originally by IHE Delft Institute for Water Education, Netherlands, but has been tuned to fulfill requirements of professionals and students who have keen interest to work and excel in the field of sanitation in Nepal. This 3 year program is run under the Global Sanitation Graduate School (GSGS) at IHE Delft and is supported by the Bill and Melinda Gates foundation.

The program consists of eight modules where students will familiarize themselves with social, technical, behavioral, environmental and economic aspects of sanitation, especially in fecal waste management. It is a great platform for network building for students as highly experienced instructors from respective fields are hired for different modules. Moreover, graduating students are connected to a network of International professionals working in WASH (Water, Sanitation and Hygiene) sector through the GSGS School.

Ict Based Social Story Teaching Aid For Children With Autism of Nepal Funded by PURC

The research project "ICT-Based Social Story Teaching Aid for Children with Autism in Nepal" developed a desktop application using the Flutter framework to enhance traditional teaching methods for children with autism. This innovative platform integrates visual aids, personalized content, and audio features, significantly improving engagement and learning outcomes. Field testing at Autism Care Nepal Society showed positive reception from both tutors and children. The application's user-friendly interface and customizable social stories library facilitated better educational experiences and streamlined lesson planning, reducing reliance on physical materials and promoting eco-friendliness. The project's effectiveness was evaluated using tools like the Child Behavior Rating Scale (CBRS), Teacher Engagement Report Form-New (TERF-N), and the Student Motivation Scale. The project was led by Assoc. Prof. Sachin Shrestha, Assoc. Prof. Amit Shah, and Assoc. Prof. Rupesh Dahi Shrestha.

Nurturing Independence: AR Based ICT Tool To Teach Practical Life Skill In Children With Autism of Nepal Funded by UGC Nepal

The study aims to develop and evaluate the impact of an AR-based ICT tool on practical life skills for children with autism. Utilizing a quasi-experimental design, the research involves around 5 autistic children in Nepal. The AR tool, developed using Unity, will simulate practical scenarios (e.g., road-crossing) on devices like tablets or mobiles. Stakeholders, including special educators and parents, will actively participate. The study will assess effectiveness through interviews, observations, and focus groups. Privacy measures will be stringent due to the sensitive nature of research involving children. The expected outcome is valuable insights into enhancing independence and well-being for children with autism in Nepal. The project was led by Assoc. Prof. Sachin Shrestha and Assoc. Prof. Amit Shah.



Completed National & International Projects



Co-funded by the **Erasmus+ Programme** of the European Union



Empowering Learning Through Problem-Based Learning (PBL): Fostering Critical Thinking, Collaboration, and Real-**World Application**

Problem-Based Learning (PBL) is an educational approach that centers on students actively engaging with real-world problems to develop solutions. In this student-centered method, learners take charge of their own learning by identifying, analyzing, and resolving complex issues relevant to their field of study.

Unlike traditional didactic approaches, PBL encourages a dynamic learning process where students collaborate in groups, drawing from various sources to address multifaceted problems. This approach cultivates critical thinking, teamwork, communication skills, and the ability to integrate knowledge from different disciplines. By emphasizing the practical application of theoretical concepts, PBL not only enhances understanding but also motivates students to learn. This pedagogical approach is instrumental in fostering lifelong learning habits, preparing students for a dynamic professional landscape, and nurturing a holistic understanding of the subject at hand.

Seasonal food plasticity of snow leopard in Lapchi Valley, GCA, Nepal funded By University Grant Commission (UGC)

Research on Seasonal food plasticity of snow leopard in Lapchi Valley, Gaurishankar, Conservation Area (GCA), Nepal is currently being conducted at nec-CPS under the direction of Dr. Narayan P. Koju, Program coordinator (NRM), with funding from the University Grants Commission's Faculty Research Grants for the year 2021-23.

Community-based camera trap monitoring of snow leopard and its associated species at Lapchi Valley, Gaurishankar, Conservation Area (GCA), Nepal

The project titled "Community-based camera trap monitoring of snow leopard and associated species in Lapchi Valley, GCA, Nepal" is funded by UNDP, GEF, Amity foundation, and Shanshui Conservation, Peking University. The duration of the grant is between June 2022 and February 2023. The research is supported by South-South exchange and practice grants.



Co-funded by the **Erasmus+ Programme** of the European Union



Nepal Engineering College is a member institute of InterNepInd consortium consisting of nine universities from Spain, Portugal, India, and Nepal. InterNepInd consortium works together to support the internationalization process of Higher Education Institutions in India and Nepal, promoting a comprehensive approach based on strategy design,

capacity building, development of structures, and networking. As a result, international opportunities will be created for different stakeholders: students, teachers, researchers, managers, and administrative staff. The project is co-funded by the Erasmus+ Programme of the European Union, KA2 2019 Capacity Building in Higher Education.

- AI based Delivery Robot
- ICT Based Assistive Technology for Children with Autism of Nepal
- Promoting Sustainable Hydro-power Development in Nepal and India
- Peri-Urban Water Security Project (2010-2013)
- Energy Efficient Lighting Education in Nepal and Bhutan (ELNAB) EU funded

Ongoing Projects on nec CPS

Gendering water and climate science research in South Asia

The three-year project "Gendering Water and Climate Science Research in South Asia," funded by IDRC, Canada, involves the University of Peradeniya (Sri Lanka), BUET (Bangladesh), and nec (Nepal). Its goal is to enhance gender analysis and interdisciplinary research in water and climate science (WCS) in South Asia. Objectives include identifying barriers to gender inclusivity in WCS, improving interdisciplinary methods and teaching tools, and building a network for knowledge exchange and mentorship. A five-day international workshop on field research methodology for SAWA fellows was held in Kathmandu and Dhulikhel from February 4-8, 2024.



Gendering water and climate science research in South Asia

Nepal Engineering College collaborates with a multi-year, multi-nation and multi-disciplinary project REgional cooperation for FReshwater Ecosystem Services in theHimalayas (REFRESH): Understanding the influences of monsoon variability and compound extremes funded by APN Japan. The project is led by IIT Roorkee and IITMandi, IIT Indore, NIH Roorkee, Acharya Narendra Dev University of Agriculture,Royal University of Bhutan and Nepal Engineering College are the collaborators of theproject.

The project aims to (i) Map and characterize freshwater ecosystems and services inselected river basins in Himalayan regions (ii) Examine monsoon variability and itsconnections to freshwater ecosystems services (FES) in Himalayan (iii) Analyze theimpacts of emerging concurrent and compound extremes on freshwater ecosystemservices (FES) (iv) Review of existing policies in three countries (i.e., Bhutan, India, and Nepal) and provide novel insights into freshwater ecosystem sustainability.

International Workshop on Himalayan Freshwater organized by NepalEngineering College



Notable Events of the Recent Past

Memorandum of Understanding (MoU)

- Aug 15, 2023: Sprout Technology Service Pvt. Ltd. (CloudFactory) and Nepal Engineering College (*nec*) have formalized their partnership through a Memorandum of Understanding (MOU). The MOU outlines joint initiatives, including guest lectures, practical learning events, workshops, placement fairs, and flexible part-time digital work opportunities for nec students. CloudFactory will contribute expertise for various activities, while *nec* will provide infrastructure for academic engagements. Both parties commit to maintaining confidentiality and aligning their efforts to enrich students' educational experiences. This collaboration bridges academia and industry, fostering student growth and employability.
- July 13, 2023: An MoU between Nepal Engineering College and IMAC Engineering Co. Ltd has been signed. This memorandum aims to connect Nepalese Universities, which aim to develop human resources who will lead the country's industrial boom in the future and Japanese companies, and to cooperate with each other, aiming for mutual development. Specifically, the aim is to develop the technical skills of Nepalese university graduates in Japanese companies, support the overseas expansion of Japanese companies, and contribute to the development of Nepal's labour market by those skilled graduates through this exchange program.
- May 02, 2023: An MoU with William & Mary Institute for Integrated Conservation (USA) was signed to conduct joint research activities, publications, and mobility involving students and faculty members.
- December 29, 2022: nec and JESA (JAPAN ENERGY SAFETY ASSOCIATION) executed a fresh MoU pursuing joint research to promote the practical use of advanced energy technologies in Nepal to set up a wind power energy system at nec, evaluate its performance, and conduct joint research into its application. This partnership represents an investment in Nepal's future that seeks to strengthen the technological understanding of Nepal's students. Another aim is to increase Nepal's international competitiveness. Hāwā Energy Development Group (HEDG) joint research group involving nec faculty members, students, and the JESA Technical assistance team was established.

To strengthen the academic relationships thus established by Joint Academic Venture (JAV), especially

- August 2023, IPO is delighted to announce a remarkable achievement by Associat Prof. Bibhuti Ojha has been selected for an esteemed research residency fellowship program at Michigan State University. This exciting opportunity, scheduled for the fall of 2023, is a 12-week endeavour hosted by the Visiting International Professional Program (VIPP) and sponsored by USDA-FAS. The Managing Water for Climate Smart Agriculture in South Asia Program (MW-CSA-SA) seeks to elevate research capacity in climatesmart agriculture (CSA). The program's focus on water management for agricultural food productivity and reducing greenhouse gas (GHG) emissions aligns perfectly with our evolving understanding of climate change mitigation. This recognition not only Associat Prof. Ojha's dedication and underscores our institution's commitment to fostering exceptional research talent. This information regarding this was circulated to the concerned HoDs/Section on March 28, 2023.
- May 08-12, 2023. Erasmus+ KA1 Mobility to UPCT, Spain: We are pleased to announce that the selection process for the Erasmus+ KA107 Program, conducted under the framework of the International Staff Week at Universidad Politécnica de Cartagena, had been successfully concluded. The chosen participants for the program have been finalized as follows: For the STA (Teaching) category, the selected candidates are:
 - Assoc. Prof. Krishna Prasad Shrestha Bhuju, Department of Architecture
 - Assoc. Prof. Ram Sthapit, Department of Civil Engineering
 - Assoc. Prof. Ganesh Adhikari, Department of Electronics and Communication
 - In the STT (Training) category, the final selection is:
 - Mr. Satya Prasad Khanal, SWECAD

This initiative is anticipated to play a pivotal role in enhancing the knowledge and experience of our staff members. We are confident that the insights gained from this program will not only enrich their professional growth but also contribute significantly to the advancement and progression of our institution.



Information Communication and Technology (ICT) Center

The information and communication technology (ICT) center consists of the hardware and software infrastructure required for information and communication. These components include computer and network hardware, middleware for communication, and essential software. The ICT center manages the seven Windows and Linux-based Computer Laboratories, which allow students to experiment with preinstalled software and develop their own during and after class hours. Additionally, it includes CCNA course materials. It establishes links between various research institutes in Nepal and other nations.

Research Centers

The following research centers established within the *nec* umbrella are involved in research, development and promotional activities:

- 1. Center for Research in Social Defense Technology (CRSDT)
- 2. Computer Technology and Robotonix Club (CTRC)

Co-curricular Activities

Games/Sports

The college encourages students to participate in sports, athletics and other co-curricular activities on *nec* holidays. Sports activities are strictly prohibited on college days. The facilities for outdoor sports include volleyball and basketball courts and a large football ground maintained within the college premises.

Site Visits and Study Tours

The college arranges required site visit or study tour of students to relevant industries, institutions and construction projects. Settlement study, directly complementing the learning of the students pursuing B.Architecture. is part of the curriculum. A survey camp of ten days is organized for the third year students of B.E. (Civil and Civil & Rural) and B.E. Civil for Diploma Holders. Two weeks educational exposure tour (NASA) to India is organized for the third year students of architecture. Similar visits are provided for B.E. Computer, Electronics, and Communication students, as well as Electrical and Electronics students. After such visits, students are asked to submit a report in prescribed format as a part of internal evaluation system.

Library

nec library provides the ambience of learning for the students and faculty. There is collection of more than 35000 books and references on wide ranging subjects in engineering, technology, basic and applied sciences, social sciences, language and culture. The library has been essentially serving *nec* students and faculty and also professionals and researchers from outside. The computerized catalogue system allows easy retrieval of text books and other references.

By using DELNET resources and services, *nec* libraries is getting the following advantages:

- I. Access to selected international full-text journals in various fields, including the Arts, Science, Commerce, Education, Social Sciences, Management, Engineering & Technology, Dental and Medical Sciences, etc.
- II. Access to more than three crore catalogue records of books, journals, articles, etc. with the facility to borrow books (on Inter Library Loan) and get copies of journal articles through DELNET.
- III. DELNET has introduced Knowledge Gainer Portal which has more than 1.6 Crore full-text documents including e-books, e-articles & e-journals.

SWECAD: Student Welfare and Extra Curricular Activities Division

The SWECAD emphasizes nurturing of the "whole student" – socially responsible, emotionally matured, intellectually capable, and spiritually sound. This spirit has helped the students in their overall development, to make them ready to accept the challenges in their professional career. In order to achieve this, SWECAD organizes a number of creative, co-curricular and personality development activities. SWECAD monitors the progress of the students and extends needed emotional and moral support. SWECAD is headed by a senior faculty, who coordinates the activities on a regular basis. Parents are kept informed on a frequent basis about their children's progress in all activities, including academic performance, during each semester by respective class counselor assigned to each section.

Allied Services

Students' Union

Students' Union (SU) has been constituted with the objective of promoting students' participation in academics and cocurricular activities. SU provides a forum for the students to interact with fellow students coming from different parts of the country with diverse social and cultural backgrounds and helps them manage their scholastic pursuit actively. SU also provides feedbacks to the college management on academic issues when needed.



Student Projects

Final Year Project for partial fulfilment of Bachelor Degree from Pokhara University Final Project Electrical & Electronics Engineering

2018 Batch



Electronics and Communication Project title "Design and development of ground station, ML model and IOT monitoring platform for weather forecasting"

2018 Batch



CIVIL Project name

2019 Batch

- Bulding design



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Computer_Final Year Project_Oyester Mushroom Disease Classification and Prediction System

2019 Batch

Bachelor of Civil & Rural Engineering Project title - Soil stabilization using plastic waste.

2019 Batch



Architecture-Final Thesis

Project Vipassana Meditation Center at Pumdi Bhumdi Pokhara

2017 Batch





Bachelor of Civil for Diploma Holders (nec - BDH)

2018 Batch



CARRD

NCRES

nec IT Club



Tri-¶ Youth Club

Hult Prize at nec

HULT PRIZE 2024

ACAS

Madan Bhandari Sports Academy

Youth Redcross Circle

CRAST

CTRC

CARRD

Center for Applied Research and Rural Development (CARRD)

A research and development club comprising of students pursuing their studies in different areas of engineering and technology. CARRD is

expected to create synergy for productive engagement of the students in the development and promotion of appropriate technology for rural development and similar scholarly activities supporting the academic discourse in the college.

Microsoft Student Partners (MSPs)

MSPs are the brightest and most innovative student developers and technology enthusiasts from Colleges/ Universities around the world. The MSPs at nec provides niche of opportunities for the students and faculty to enhance their software skills.

Nepal Civil Engineering Students' Society (NCESS) NCESS activities have always been driven by

the spirit of empowering the civil engineering students through engagement in scholarship activities.



Academic Council of Architecture Students (ACAS)



ACAS is a social venture that aims to develop strong camaraderie amongst the architectural students studying at nec.

Society for Civil and Rural Engineering Students (NCRES)

NCRES works for enhancement of concerned students knowledge by conducting seminars, workshops etc.

Computer Technology & Robotics Club (CTRC)



CTRC is a group of students of nec which basically includes students from Electronics and Communication, Electrical and Electronics and Computer Science and Engineering having eager to have knowledge in computer, its

application and robots.

nec IT Club

nec IT Club focuses on growth of skills and decision making capabilities regarding technology.

Hult Prize at nec



The Hult Prize is an On-Campus program of the Hult Prize, an annual competition worldwide. It HULT is a platform for university students to venture into their startups with mentorship and seed capital of a million dollars from the Hult Prize

Foundation, US. In 2018, Team One Step from nec with their idea of Artificial Trees against Carbon Emission was the Regional Finalists in the Hult Prize at the Mumbai Regionals.

Tri-y Youth Club

Trisha Youth Club is the social youth club for the betterment and upliftment of the lives of needy peoples.



Madan Bhandari Sports Academy

Youth Redcross Circle

Center For Research in Applied Sciences and Technology

CRAST is club for new student to understand the research process and areas with new technology.



www.nec.edu.np

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dent Club

Accommodation

On Campus Accommodation

nec runs a girls' hostel able to accommodate 70 students. The hostel provides the required amenities for simple and decent living. The Girls' hostel is supervised by a senior resident lady administrative staff. Fee details of girls' hostel is given in page 28.



Off Campus Accommodation

Students may opt for private accommodation available at Duwakot, Jhaukhel, Changunarayan and Mulpani which lie within one km radius of the college. Rents vary depending upon amenities available. More information on offcampus accommodation can be obtained from the college administration.

Cafeteria

nec is managing two cafeterias which serve meals, snacks and beverages, catering to a variety of tastes and preferences at reasonable cost. In addition to the college cafeterias a number of entrepreneurs operate eateries close to the college premises that serve food, snacks and beverages to the students and staff.

Coffee Shop



A coffee shop, located within the premise of the academic block A, serves tea, coffee, soft-drinks and bakery to the college community. This has been a convenient place for someone looking for quick refreshment.



Health Care Scheme

All students at *nec* are insured for NRs. 1,00,000/- (One Lakh) to cover the expenses for major accidental injuries.

nec Alumni Association (nec-AA)

Nepal Engineering College Alumni Association (*nec*-AA) is a body of graduates from *nec*, established with the objective of maintaining continued linkage with the graduates by keeping track of their where about and professional engagements and growth.

Transportation Facility

A fleet of buses managed by the college provides transportation to the students, faculty and staff. The buses operate from designated locations along prescribed routes, covering

major locations of student concentration in Kathmandu, Bhaktapur, Lalitpur, Kritipur and Kavre. Students are required to obtain a bus pass, upon payment of the prescribed fees to use the college buses for daily commuting.



nec Clinic

nec Clinic provides health care services to students and employees, including treatment of minor injuries and first aid treatment.







Bachelor Level Programs

The following Bachelor level programs are currently underway at nec:

Bachelor of Civil Engineering

nec has been offering Bachelor program in Civil Engineering since 1994. The objective of the course is to produce qualified Civil engineers to deal with design, construction, operation and maintenance of physical infrastructure and services. The students opting for this course undergo theoretical and practical learning in the areas of material engineering, structural engineering, environmental engineering, transportation engineering, water resources engineering, geotechnical engineering and surveying, so that they systematically develop theoretical learning and analytical and hands-on skill to deal with, and cater wide ranging infrastructure development projects.



Faculty Members and Staff of Department of Civil Engineering



I, Rajendra Paudel, a proud student of BE Civil Program at Nepal Engineering College would like to extend my heartfelt gratitude to all the *nec* teachers and students for the achievement I got in the college. Throughout this journey, I have gained a deep understanding of engineering concepts and the practical applications of civil engineering. I highly recommend Nepal Engineering College

for its dedicated full-time faculty, well-equipped laboratories, and the opportunities it provides for involvement in various projects and extracurricular activities. This institution supports and nurtures its students, paving the way for their success. Thank you once again for this incredible honor.

Rajendra Paudel BE Civil (019 Batch)



Choosing to be a part of Nepal Engineering College has been nothing short of a blessing for me. The presence of well-qualified faculty, well-equipped laboratories, and a supportive environment has consistently encouraged my academic growth. The hostel facilities have been an invaluable asset, providing a conducive environment for learning and personal development. My journey at **nec** has

not only been about academic growth but also about forging lasting friendships with my fellow students. Activities such as academic tours and sports week have further strengthened these bonds. *nec* has truly provided a holistic platform where learning and personal growth go hand in hand. Signing off with *nec* makes me feel gloomy and at the same time confident about my carrier ahead and would say "This has been one of the best part of my life and will continue to be".

> Siwani Rauniyar BE Civil (019 Batch)





My time at *nec* over the past five years has been incredibly enlightening and full of knowledge. This transformative journey has deepened my understanding and passion for architecture. The vibrant academic atmosphere, the wide array of courses, and the exposure to research have expanded my perspective and pushed me to think creatively and critically. Our architecture college offers a dynamic and inspiring

environment where students can explore and express their creativity. With access to full time faculty teachers, a diverse curriculum, students are equipped with the skills and knowledge to excel in the ever-evolving field of architecture. Our experienced faculty and vibrant community foster a culture of collaboration and innovation, preparing graduates to become visionary in the future. Moreover, the friendships and connections I've built, along with the cherished memories and those yet to come, have been the highlights of my time here. Embracing the iterative design process, I've grown from both successes and setbacks over the years. I am sincerely thankful to *nec* for this remarkable experience, which I has shaped me into who I am.

Bharosa Adhikari B. Architecture (018 Batch)



Hi, myself Bigyan Rawal, for me Nepal Engineering College (*nec*), Changunarayan, Bhaktapur, has been a transformative journey as a final-year architecture student. Over the past five years, *nec* has not only nurtured my academic growth but also helped me evolve personally. The college's serene environment, nestled amidst lush green forests, offers an ideal setting for focused study. The supportive bonds

among students, seniors, juniors, and full time faculty create a positive atmosphere that inspires learning and ambition.

nec's faculty comprises experienced professionals who provide a solid foundation in both theory and practice. As an architecture student, the proximity to architectural diversity, workshops, seminars, and experienced mentors has been crucial in enhancing my creativity. The college offers rich learning experiences through heritage walks, educational tours, hands-on projects, and community collaboration. The campus itself, with its eco-friendly design and closeness to cultural heritage sites, serves as a living classroom, deeply connecting us to the natural and built environment.

Bigyan Rawal B. Architecture (018 Batch)

Bachelor of Architecture



Faculty Members and Staff of Department of Architecture

The Bachelor program in Architecture, leading to B. Arch. (Bachelor of Architecture) degree is a five years course that aims to provide systematic knowledge and skills in planning, design and conservation of buildings and other built forms with concerns for aesthetics, comfort, durability, social responsiveness and integration with natural and man-made landscapes. The area of instruction covers a spectrum of courses relating to architectural design and planning, structural design, landscape management, interior design, building construction and conservation of urban spaces and built forms. The program has been designed to meet international standards in Architecture education, preparing the students to become competent professionals for work in Nepal and abroad. The students have the opportunity to gain competence

in both hand-drawing and computer graphics to enable them to excel in the competitive professional environment. A full semester of apprentice in an architect's office helps prepare them to tackle professional challenges before graduation. The final semester is dedicated to a thesis project wherein the students are expected to accomplish an architectural design project independently.

Bachelor of Computer Engineering



Faculty Members and Staff of Department of Computer Science and Engineering

Microelectronics and computer science are advancing at a tremendous speed, necessitating the development of specialist workforce capable of fusing these two cutting-edge technologies. This synthesis of knowledge and technology has resulted in the emergence of a highly specialized professional sector known as Computer Engineering. Computer engineers have a diverse range of job opportunities in business, industry, manufacturing, service sectors, and information technology.

Recognizing the growing demand for Computer Engineers within the country and the rapidly expanding work opportunities outside, *nec* began offering a Bachelor of Science in Computer Engineering in the academic year 1999. The program is unusual in that it combines broad programming and electronics knowledge with specialized skills in software and hardware design and interface.

Bachelor of **Electronics and Communication Engineering**

Electronics and communication have grown exponentially during the previous three decades, from terrestrial to microwave and broadband connection. The progress is projected to accelerate further in the next years, requiring increased sophistication, technology, and skill sets. This has facilitated the development of specialized human resources capable of designing, developing, operating, and maintaining electronic circuits and devices for a variety of communication demands. Recognizing the country's increasing demand for professionally qualified human resources in this field, *nec* began offering a Bachelor of Science in Electronics and Communication Engineering in the academic year 1999. The program's goal is to equip students with the necessary skills for designing, testing, and applying electronic devices and their applications in a variety of domestic, industrial, and communication applications.

Bachelor of **Civil Engineering for Diploma Holders (***nec*-BDH)

Bachelor course in Civil Engineering for Diploma Holders is designed to train competent graduates in Civil Engineering who join the course after the completion of diploma level education in Civil Engineering or Architecture. The students joining the course undergo systematic theoretical and practical learning in basic sciences, material engineering, structural engineering, water resources engineering, geotechnical engineering and transportation engineering. This provides the students opportunity to develop knowledge and skills to take up an array of infrastructure development tasks where civil engineers have an important role to play. Upon successful completion of the course, the students are awarded Bachelor of Engineering degree in Civil Engineering by Pokhara University. *nec* started offering this program from 2000 AD; currently it is located at *nec*-BDH, Satdobato, Lalitpur.



Faculty Members and Staff of Department of Electronics and Communication Engineering



Faculty Members and Staff of Department of Science and Humanities



Faculty Members and Staff of nec-BDH Program



Choosing the right college is a significant decision, and Nepal Engineering College exceeded expectations for this student. The faculty's commitment to student success, practical learning opportunities, and industry connections set it apart. The vibrant campus life and supportive community made the journey memorable. Overall, Nepal Engineering College was an

excellent choice.

Shreya Khadka BE. Computer (019 Batch)



Attending Nepal Engineering College has been a deeply rewarding experience for me. The full-time teachers, along with the well-designed curriculum and practical projects, have created a great learning environment that has offered a strong academic foundation and personal development opportunities. I believe others will also find it to be an excellent environment

for their studies.

Swostika KC BE. Electronics and Communication(019 Batch)

My time at *nec* has been truly enriching. The supportive faculty, diverse opportunities, and vibrant community at *nec* have made my academic journey exceptional. I'm grateful for the knowledge and experiences I've gained here, which have prepared me well for the future. For those of you who are yet to join *nec*, I wish you all the best for the next stage of your career. Hard work and patience

in your regular work will definitely help you reach your goals.

Abhishek katwal BE. Electronics and Communication(020 Batch)



I really feel proud to be a part of Nepal engineeing college.It is truly the best college of Engineeing .Specially ,BDH programme of this college is best opportunity for the Diploma holders. The excellent lectures and practical experiences have profoundly shaped my skills and understanding in civil engineering preparing me for a successful career in the field.For those considering BE

civil in pokhara university .I highly recommend choosing Nepal Engineering college -you will never regret it.

> Kashiram Upadhayaya BE. Civil For Diploma Holders (018 Batch)



It's wonderful to express my experiences at Nepal Engineering College! The combination of rigorous academic training, supportive faculty, and transformative opportunities truly shapes a successful educational journey. Being on the Dean's List reflects your dedication and hard work. The Erasmus Program sounds like an incredible experience,

allowing you to apply your technical skills in an international context. And having access to a well-equipped library and a serene campus environment certainly contributes to academic

excellence. Thank you for sharing your story, and I wish you continued success in your career as an electrical and electronics engineer!

Jay Prakash Mahato BE. Electrical & Electronics (018 Batch)



am a proud graduate of Nepal Engineering College, where I earned my Bachelor's degree in Civil and Rural Engineering. My time at the college was marked by exceptional support and guidance from the faculty, whose expertise and encouragement were pivotal in shaping my educational journey and fostering my passion for engineering.

I am deeply grateful for their mentorship and the invaluable knowledge they imparted. Additionally, engaging in projects, field visits, and survey camps further enhanced my skills and prepared me for future challenges in the field. The college provided a fruitful and enriching learning environment that was essential for my academic and personal growth.

> Sangita Ranabhat BE. Civil and Rural (018 batch)

Bachelor of Electrical and Electronics Engineering



Faculty Members and Staff of Department of Electrical and Electronics Engineering

Electrical engineering is involved with large-scale electrical systems, such as power generation, transmission, and distribution, whereas electronics is concerned with low-voltage applications like computers, communication systems, and integrated circuits. The improvements in power transmission systems and the many uses of electricity in all spheres of life have necessitated the integration of these two disciplines and the development of breeds of engineers with knowledge and skills in both fields. Recognizing the demand for such manpower, *nec* began offering a Bachelor of Science in Electrical and Electronics Engineering in the 2006 academic year. Graduates are anticipated to find employment in organizations that deal with the generation, transmission, and distribution of electricity, alternative/renewable energy, communication, manufacturing, and service industries.

Bachelor of Civil and Rural Engineering



Faculty Members and Staff of Department of Civil and Rural Engineering

In Nepal, significant development challenges persist in rural areas due to rural poverty and a low quality of life. Technology, infrastructure, and services are closely interconnected, and together they have a positive impact on the rural economy and quality of life. This has led to a demand for technical professionals who can apply engineering and technology knowledge to rural development. To meet this need, Nepal Engineering college, nec initially launched a Bachelor program in Civil and Rural Engineering in 2008 as a 4.5 year course, a pioneering initiative in the country and region which focused on addressing the unique challenges of rural areas by producing experts who can design infrastructure and systems specifically tailored to these environments, such as agricultural structures, irrigation systems, rural roads, and sustainable development projects, thereby improving the quality of life and economic stability in rural communities as well as overlapping with the field of conventional civil engineering. In 2018, the program was restructured to be completed in 4 years, making it more accessible and aligning it with international educational standards. This modification maintained the program's comprehensive approach to rural development while optimizing the duration of study to better meet students' needs and career timelines.

Master Programs

nec entered a phase of vertical academic growth in engineering and allied sciences with the initiation of postgraduate programs beginning from 1999. The postgraduate programs are tailored to meet the demand of specialized manpower in different sectors of development.

nec-Center for Postgraduate Studies (nec-CPS)

All the postgraduate courses are organized at the Center for Postgraduate Studies (*nec-CPS*) located at Lagankhel, Lalitpur.

The formation of *nec*-Center for Postgraduate Studies (*nec*-CPS) in 1999 was a significant milestone and commitment of *nec* towards vertical growth of its educational agenda. Four postgraduate courses leading to M.Sc. (Master of Science) degree in Construction Management (CM), Interdisciplinary Water Resources Management (iWRM), Natural Resources Management (NRM), and Transportation Engineering and Management (TEAM) are offered at present.

M. Sc. in Construction Management (CM)

Construction is an essential activity for the continued development of a nation. Rapid growth in construction, engagement of specialized human resources and rapid changes in the physical infrastructure development and technology have all transformed this sector into an industry that demands highly specialized manpower to organize and manage the construction works. M.Sc. program in Construction Management intends to produce managers capable of using state of art, knowledge and skills in organizing and managing the construction works by enhancing technical and professional skills.

M. Sc. in Natural Resources Management (NRM)

The program focuses on the importance of sustainable management of natural resources and also emphasizes on the connection and the ability to communicate between different disciplines and actors. This is designed for those who wish to develop their career in the areas of conservation and management of natural resources. Upon completion of the program the graduates qualify for wide ranging administrative and technical positions with the government agencies and nongovernmental organization engaged in forest management, watershed management, water resource management, urban



Faculty Members and Staff of nec-CPS

and rural planning. It aims to produce graduates with adequate knowledge and skills to be competent natural resources managers, executives or entrepreneurs capable of becoming change agents in the corporate and social field.

M.Sc. in Interdisciplinary Water Resource Management (iWRM)

Water related issues continue to remain at the center of development debate around the world. Water issues are intricately linked to livelihood and well being of people, and have even much broader and often far reaching social, political and economic implications. The governments, planning and development agencies, researchers and academicians are now adequately convinced that solution of water related issues in development, and its use and management require multifaceted approach. This course is designed to address the issues in water resources management through education, research and knowledge dissemination following interdisciplinary approach. It aims at producing professionals with interdisciplinary knowledge and skills and capacity to respond to emerging challenges in water resources management.



Rasmita Karki is a Civil Engineer with a specialization in Hydropower, graduated from Kathmandu University in 2016 and completed her M.Sc in Interdisciplinary Water Resource Management in 2023, achieving a prestigious dean's list position. Since graduation, she has immersed herself in the water sector. For over 7 years, she has excelled as a consultant in the hydropower

industry, continuing her impactful work to this day.

Her career has seen her take the helm in designing numerous hydropower projects, showcasing her comprehensive expertise in Hydrologic and Hydraulic Modeling, Hydrological Analysis, Hydraulic Calculation, Cost Estimation, Stability and Structural Analysis, Civil and Structural Drawing Preparation and Overall Project Management. Her area of interest is Hydropower and other water sector.

> Ms. Rasmita Karki M.Sc. iWRM Gradaute (2021 Batch)



As a first-semester student in the MSc. Natural Resources Management (NRM) program, coming from a background in Civil and Rural Engineering, I am excited about the vast opportunities this field presents. The interdisciplinary nature of NRM allows me to integrate my engineering skills with environmental and resource management principles, opening up diverse career paths.

Professionally, this program offers the potential to work in areas such as sustainable development, environmental consultancy, and resource planning, where I can contribute to impactful projects that address pressing global challenges.

Academically, the MSc. NRM program provides a solid foundation for further research and specialization. It equips me with the knowledge and tools to pursue advanced studies or engage in highimpact research projects, potentially leading to contributions in policy development and innovative resource management strategies. Overall, this program is a perfect bridge between my engineering background and a future focused on sustainable and effective resource management.

> Ms. Mahima Bhandari M.Sc. NRM (2024 Batch)



As a final semester student of M.Sc. in Construction Management, I can confidently say that pursuing the post graduate degree at Nepal Engineering College has been transformative for my professional career. The program's blend of theoretical knowledge and practical application has equipped me with advanced skills essential for

managing complex construction projects.

The faculty's expertise, coupled with hands-on project experience has enriched my approach to construction management. Moreover, collaborating with peers from different disciplines has broadened my perspective and improved my teamwork and leadership abilities. This program is an excellent choice for anyone seeking to excel in construction management.

Mr. Puskar Shrestha M.Sc. Construction Management (2022 Batch)



As a student at the nec-CPS of Transportation Engineering and Management (TEAM), I have greatly benefited from the wellstructured curriculum and comprehensive course content. The program's emphasis on research and innovation followed by a good combination of academia and industry has

allowed me to engage in meaningful projects and develop critical thinking skills.

The professors are incredibly supportive, offering invaluable guidance and mentorship. The TEAM program has significantly added value to my professional role in the Department of Roads (DoR), aligning perfectly with my field of study. Overall, it has excellently prepared me for a successful career in transportation engineering, and I highly recommend it to prospective students.

Mr. Amit Kumar Sharma M.Sc. TEAM 2020 Batch (Gold Medalist)

M. Sc. in Transportation Engineering And Management (TEAM)

The concept of global village was realized mainly due to efficient transport facilities. Natural endowment of resources and competitive advantage of locations prompt increased volume of transport both of people and goods. Each nation, including Nepal, is investing heavily to connect inaccessible areas to the national transport networks. Yet, everyday movement in urban centers is hampered by congestion, insufficiency of public transport facilities, traffic accidents, and other conditions. Rural transport facilities remain inadequate and fragile. Thus, the issue of transportation continues to be crucial. The TEAM program aims to expose students to resolve all transport related problems, in the rural and urban areas. The coursework and research activities equip students with an advanced competence in designing transport facilities and their operation, maintenance and management.

Research Management Cell (RMC)

Research Management Cell has been reformed on 2078/8/1 to organize coordinates and consolidates faculty and students' research activities in the college. Principal chairs the RMC, which also includes Professor Dr. Thusitha Chandani Shahi, Associate Professor Robort Dangol, and Associate Professor Dibangar Khoteja. Assistant Professor Sujan Nepal is the cell's member secretary.

Proposed Master Level Programs

M.Sc. in Disaster Risk Management

Nepal faces multitudes of natural and human induced disasters that result in the loss of lives and properties worth millions of rupees annually. Disaster risks and the resulting damages can be minimized with preparedness to manage the disasters. Realizing the importance of education, research and knowledge dissemination in the area of disaster management, *nec* has taken the lead in proposing to commence Masters program in Natural Disaster Risk Management. Initiatives are underway at *nec* to develop instructional resources so that the course can be started shortly.

M.Sc. in Computer Science and Engineering

Master of Computer Science and Engineering program exposes students to a wide range of courses, combined

with specialized research work which culminates in a thesis. This combination of courses gives students the required depth necessary for pursuing careers in academics, research and in the industry related to IT and computing. This course provides the opportunity of higher education in the field of computer engineering in the country.

M.Sc. in Hydropower Engineering

The development of hydropower in Nepal has been rising significantly in recent days as the demand of electricity and establishment of new power plants increases to meet the lighting facilities and basic energy requirements for household as well as in meeting energy demand at the national level. In addition to the larger national projects, many small scale and rural community based hydroelectric projects have emerged as a boom in terms of rural electrification. M.Sc. in Hydropower Engineering will play a vital role to integrate economic, financial, social, and environmental disciplines and develop international level competent human resources.

Doctoral Programs

There is a great dearth of research manpower in the educational institutions and research organizations, especially in the areas of science and technology. Realizing this need, and with the experience of *nec* in offering Masters' level courses for more than 19 years now, *nec* has proposed to start Doctoral level courses leading to Ph.D. degree. To begin with, the Doctoral programs in two areas- Natural Resources Management and Construction Management, have been proposed. The preparations are underway at *nec* to start the mentioned programs from the Pokhara University.

Academic Entry Requirements

Bachelor's degree having a minimum of 15 years of education with minimum second division (or equivalent) is necessary to apply for the courses. Bachelor degree holders in selected field of engineering for CM; civil engineering for TEAM; engineering, basic/applied/ natural sciences for iWRM and NRM are eligible to apply.

The duration of all M.Sc. programs is two years spread over four semesters, including fourth semester for the thesis writing. Of the total academic credit, the course work involves 45 credits and 15 credit hours are dedicated for an independent research on field based problems. All the courses have to be completed within 4 years, and additional one year can be given to thesis work.

Academic Information

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Academic Information Adapted from the Pokhara University

Semester System & Course Registration

Semester system is followed in the instruction and evaluation of all the Bachelor and Masters level programs underway at *nec*. One semester normally spans over sixteen weeks. The Bachelor level programs generally extends over 8 semesters and B. Architecture which extends up to 10 semesters, while Masters' level courses can be completed in a minimum of 4 semesters. The students are required to register the courses at the beginning of the semester. The academic records are maintained based on the number of courses registered by the student in each semester.

Evaluation System

The Credit System

Each subject carries an academic credit based on instructional needs in theory, practical and tutorial classes. One credit normally means one hour of teaching in theory classes per week.

Student Evaluation

At the Bachelor level, the academic performance of the student is evaluated based on Continuous Internal Assessment (CIA) and End of Semester Examination conducted by Pokhara University. The scores in the internal evaluation (50%) and semester examination (50%) are added up to determine the total score obtained by the student in each subject which is then translated into letter grade. To pass a subject, a student must obtain a minimum of 45% marks in the internal and End of Semester examinations, separately.

In the Masters' level, the scores in the internal evaluation (60%) and semester examination (40%) are added up to determine the total score obtained by the student in each subject which is then translated into letter grade. To pass a subject at the Masters' level a student must obtain 60% marks in Internal Evaluation and Semester Examinations, separately.

Grading System

The grade awarded to a student in a subject is based on the students' aggregated performance in the internal and end of semester examinations. Pokhara University follows relative grading based on 4.0-point scale, as stated hereunder: In some cases a student is awarded a grade I (incomplete) when

For Bachelor Level Programs:

Letter Grade	Grade Point	Description
А	4.0	Excellent
A-	3.7	
B+	3.3	
В	3.0	Good
B-	2.7	
C+	2.3	
С	2.0	Satisfactory
C-	1.7	
D+	1.3	
D	1.0	Satisfying minimum requirements for credits
F	0	Failing

For Masters' Level Programs:

Letter Grade	Grade Point	Description
А	4.0	Excellent
A-	3.7	
B+	3.3	
В	3.0	Good
B-	2.7	
C+	2.3	
С	2.0	Satisfying minimum requirements
F	0	Failing
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he/she fails to complete assignments or project work on time. This may be converted to the relevant grades upon completion of the needed requirements in the following semester. The failure to do so would automatically lead to awarding F (Fail) grade.

Attendance Requirements

The students are expected to attend all lectures, tutorials and practical classes. A minimum of 80% attendance of the student in all the lecture, tutorial and practical classes is the scholastic requirement in each subject. Failure to achieve required attendance in any of the subject may result in non-qualification to take the semester examination in that particular subject.

The aim behind establishment of *nec* is to produce technically competent engineering graduates ready to contribute in accelerated social and economic growth of the country.



Scholarship Scheme, Grants & Awards for Undergraduate Programs

Scholarships for Bachelor level Programs by Pokhara University

nec offers full scholarship to 10% students as referred by Pokhara University. Such scholarship includes waiver of all fees (except the expenses towards Surveying and Geology Camps).

nET Entrance Toper Full Scholarship

nec provides full scholarship to the nET entrance topper.

Provincial Scholarship

Under Provincial Scholarship Scheme, 7 students one from each province, passing SEE from Community or Public Schools under Nepal Government will be offered full scholarship. To be eligible for the scholarship, candidate has to clear the nET and will be allowed to choose the program based on their secured position. Under this scheme only one seat is reserved in each program.

Founder Members' Scholarship

nec provides 2 full scholarship to candidate clearing nET exam with the recommendation from the Founder members.

Neighbourhood Scholarship

nec awards neighbourhood scholarships to Changunarayan's Wards 1, 2, 3, and 4. This program allocates one full scholarship and two partial scholarships (50% on tuition fee) in various programs for each neighbourhood ward depending on the student's nET-2024 rank. Similarly, Wards 6 and 7 of Kageswori Manohara Municipality receive one full and two partial scholarships (50% on tuition fee). To obtain this scholarship, applicants must submit a recommendation letter from their ward office to the college before the nET.

nec-Social Responsibility Scholarship

nec awards *nec*-social responsibility scholarship to 5 or equivalent candidates clearing nET with the recommendation from Changunarayan Municipality.

Scholarship for the wards of nec employees

Under this scheme different scholarships are provided to the

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wards of nec employee as governed by the college rules.

Note(*): Except for the students under the PU Scholarship, the students under other Scholarship schemes do not cover Affiliation, Registration and Examination fee. Further, prescribed security deposit has to be paid at the time of taking admission which is refundable.

Merit Scholarship

nec awards one merit scholarship to faculty topper students for every 48 students in each program in a semester. The scholarship covers full waiver of fees (excluding university fees). The topper of the first semester will get the scholarship in the second semester, the topper of the second semester will get this scholarship in the third semester and so on. The topper of the last semester will not get any scholarship as he/she will have graduated before the announcement of the result of the last semester. The decision for the award of merit scholarship is made after the final verification of the results.

Other Scholarships

Other scholarships instituted by donors, awarded to deserving students are:

- Shree Aashis Smriti scholarship instituted by Aashis Smriti Foundation: Rs. 2,500/- in tuition fee awarded to one deserving student in Civil Engineering.
- Shree P. K. Mainalee scholarship instituted by Ar. Padma Kumar Mainalee, an alumni of *nec*: Rs. 500/- per month to one deserving student in Architecture.
- Shree WAMDEO scholarship instituted by Prof. S. V. Sahashrabudhe from Pune, India: Rs. 1,800/- per year to one deserving student in Architecture.

Awards

- Chairman's Pride Gold Medal is awarded to one deserving student determined to be the overall undergraduate topper of the college.
- Subject awards are given to highest scoring students. The award consists of a certificate and a cash reward.
- Program topper awards will be awarded to one topper student in each undergraduate program.

All decisions pertaining to award and scholarships are made by the college.

Note: Recipient of one scholarship is not eligible to claim any other scholarship.

Rules for Retaining Scholarship Eligibility

All the students admitted under any scholarship scheme must comply with the eligibility conditions put up by Pokhara University.

Girls' Hostel Expenses

The cost of a double occupancy accommodation, inclusive of room rent, water and sanitation, is Rs. 9,000/- plus Rs. 100/towards admission (sub-total Rs. 9,100/-) per student per semester. In addition the student has to pay security deposit (refundable) of Rs. 2600/- at the time of hostel admission. The actual cost of electricity is payable each month by the students. Students are provided a cot, a cupboard and one set of study table and chair. They need to bring mattresses, quilts/blankets, bed linen and pillow cover and other clothing on their own.

Transportation Cost

Students intending to use the college transport must buy a semester bus pass upon payment of Rs. 8,000/-. The bus pass must be availed within two weeks of date of commencement of regular classes in each semester.

Rules applicable for the Payment of Fees

The general rules applicable for the payment of fees are as under:

- i. The stated fee structure is applicable for the intake of academic year 2024. All fees are subject to changes without prior notice.
- ii. Fees once paid are non-refundable, except the refundable deposits and the tuition fees paid in advance.
- iii. Semester fees must be paid before beginning of each semester.
- iv. Students must re-register before the commencement of each Semester. Students will not be allowed to take classes before re-registration.

Fee Structure-2024

Description	4 Years Courses ¹ (NRs)	4.5 Years Course ² (NRs)	5 Years Course ³ (NRs)
Admission Fee	99,500.00	99,500.00	99,500.00
Tution fee 54000/Sem	432,000.00	486,000.00	540,000.00
Semester fee (infrastructure development, maintenance, lab, exam, extracurricular activities, and other expenses) for all semester.	410,000.00	543,725.00	505,000.00
Sub-Total	941,500.00	1,129,225.00	1,144,500.00
University Charges (Affiliation, Registration, Exam, lab, education program development, etc)	To be charged extra as prescribed by Pokhara University & Nepal Engineering Council		ed by Pokhara ing Council
Survey & Geological Camp Fee*	30,000.00		
Security Deposit (Refundable)	15,000.00	15,000.00	15,000.00

*Survey & Geology Camp fee is applicable to B.E Civil/Civil & Rural/BE Civil Engineering for diploma Holders programs.

¹4 Years Courses: BE in Civil/Civil & Rural/Computer/Electronics & Comm./Electrical & Electronics,

²4.5 Years Course: BE Civil for Diploma Holders (Evening Program) ³5 Years Course: B. Architecture

Notes:

- Package 1: Applicable only for the students with minimum 2.8 GPA/60% (in +2 result) or 2.0 GPA/60% (in A-level result) or 60% (in Diploma result) or entrance score >= 45 marks.
- 2. **Package 2:** Applicable only for the students who have passed nET-2024 and not been included in Package 1.
- 3. **Early bird rebate:** Appicable only for the students admitting in Package 2 and with mentioned numbers in First-Come-First-Serve basis.
- 4. Above mentioned Packages doesnot cover the University/Engineering Council Charges .
- 5. *nec* Offers full waiver in the total fee (except University Charges) to the overall topper of nec Entrance Test 2024.
- 6. If Pokhara University increases affliation fee, registration fee, examination fee during the students study period, students are liable to pay accordingly.
- Students admitted in Civil Engineering, Civil and Rural Engineering and Civil Engineering for Diploma Holders program must pay additional amount of Rs. 30,000/- for survey and Geology Camps at the time of admission.
- 8. College shall not bear any cost towards industrial placement, Internship and study tours .
- 9. Security deposit will be refunded only after the completion of study period.
- 10. Ten percent (10%) rebate on admission and total tuition fee will be provided if total/ package fees are paid in advance at the time of admission.
- 11. SAARC students can pay their fees in US \$ equivalent to Nepali Currency.
- 12. Please feel free to visit us for detail information including fee packages and other.

Special Package (Fee Structure) for nec Admission 2024

(On the occasion of 30th years of nec Establishment)

Description	BE Civil (4 years program)	BE Civil & Rural (4 years program)	BE Computer (4 year program)	BE Electrical & Electronics (4 years program)	BE Electronics & Communication (4 years program)	B. Architecture (5 years program)	*BE Civil Engineering for Diploma Holders (4.5 years program)
Package 1	800,275.00	611,975.00	800,275.00	611,975.00	470,750.00	972,825.00	778,670.00
Package 2	894,425.00	706,125.00	894,425.00	706,125.00	470,750.00	1,087,275.00	934,400.00
Early Bird Rebate	50,000/- (for first 12 students only)	-	50,000/- (for first 08 students only)	-	-	50,000/- (for first 04 students only)	25,000/- (for first 06 students only)

* This program is 9 semester (4.5 years) evening program (timing : 5:30 pm to 9:00 pm) operated in Prayag Pokhari, Lagankhel, Lalitpur

Disciplinary Code

Students' Responsibility

Students admitted to the college are expected to adhere to the disciplinary code of conduct prescribed by the college, as stated here under:

- i. The students must fulfill the obligation to discharge their duties with diligence, fidelity and honor.
- ii. Student must have their own laptop during the computer lab class.
- iii. Maintain socially acceptable standards of morality.
- iv. Show proper respect and courtesy to seniors, teachers and staff, on or off the campus, at all times.
- v. Contribute to maintaining peace and harmony and learning environment in the college.
- vi. Be clean and tidy and follow the prescribed college dress codes.

vii. Strictly adhere in the obligations not to:

- Disturb the peace nor to .destroy, damage or remove the college property
- Indulge in violence in any form, nor to pick up arguments with strangers
- Possess, consume and distribute harmful chemicals and substances, including alcohol and narcotics;
- viii. Student must realize that violation of the prescribed codes, in any form, may be sufficient reason to bar their entry to the college or even terminate their admission in the college.

Loss or Damage Made by Student(s)

Students found responsible for the loss or damage of the college property, individually or in groups, is/are liable to pay full damage. Losses can be recovered from his/her security deposit if it covers, if it does not cover, it will be recovered by legal procedure as per government regulations.

Termination / Suspension or Expulsion

A student may be asked to leave the college for good, or may be suspended for one or more semesters, for any or more of the following reasons:

• College can reconsider to de-register the registration if *www.nec.edu.np*

the student doesn't clear at least 60% subjects at the end of fourth semester.

- When his/her conduct is unsatisfactory.
- When his/her ability to fulfill the academic requirements prove unsatisfactory.
- When his/her academic performance is unsatisfactory.
- When payment of fees are not paid within the prescribed due dates.
- When s/he is found participating in activities or acts which are prejudicial.
- When suitable response is not made by his/her parents/ guardians to the communication sent by the college or when parents/guardians withdraw their wards in writing.
- When the information provided in the application for admission is found incorrect.
- When his/her activities are found detrimental to the interest of the college.
- When s/he is disobedient or disrespectful towards the faculty members.
- When found consuming alcohol, drugs and narcotics and indulging in gambling or other immoral acts.

Declaration by the students

The students have to sign the following declarations before admission. They should follow strictly the terms as declared during his/her study period.

- All the personal information about father/mother and local guardian and their contact numbers provided by me are correct.
- I got admission in *nec* after being well informed about the details of the total fee to be paid to *nec* and I will pay all college dues accordingly in time.
- During the period of my study, I will abide by the disciplinary rules of the college and I will not cause damage to any property of the college, failing which I am liable to be penalized, expelled or suspended from the college and fined according to the damages caused.
- If the academic or other certificates submitted by me are found to be false, my admission would be automatically made null and void and I agree to forfeit all the amount paid at the time of admission.

Admission Cancellation

Requests for cancellation of admission shall be lodged by parents/guardian/student in writing with authentic reason and supporting documents addressed to the Principal and shall be submitted in college for seeking refund in the following cases:

- Provisionally admitted student's admission will be canceled automatically if the student does not meet admission criteria set by Pokhara University after the publication of +2 results and the full amount paid at the time of admission will be refunded.
- Cancellation of admission before the start of session:
 - (a) Within 10 days of admission: The total fee deposited will be refunded after deducting NRs. 10,000/- as processing charges.
 - (b) Within 11 to 20 days of admission: The total fee deposited will be refunded after deducting NRs. 20,000/- as processing charges.
 - (c) Within 21 to one day prior to start of session: The total fee deposited will be refunded after deducting NRs. 30,000/- as processing charges.
- Cancellation of admission after the start of session and before one week prior to first date of university registration submission: The total fee deposited will be refunded after deducting NRs. 50,000/- as processing charges.
- In cases other than above, only security deposit, last semester fee and survey camp/internship fee will be refunded.
- Provisionally admitted students are required to fulfill all the documentation process within one week of publication of +2 (or equivalent) result. If the student fails to do so or found to have submitted fake documents all the amount paid at the time of admission will be totally forfeited and no refund will be made.

Note: The management reserves all rights to make additions, alterations or modifications to, any or all, of the disciplinary codes stated above and bring about changes in the working hours and schedule of classes, without any prior notice. The students shall abide by the changes in the disciplinary codes and the changes to the rules and regulations made from time to time.

New Admissions

Admission to Bachelor Level Programs

nec will be admitting a maximum of 480 students (including all quotas) in the first year in the following Bachelor level programs for the academic year 2024.

Bachelor Degree Courses

Course	Total Seats
B. Architecture	48
B. E. (Civil)	144
B. E. (Computer)	96
B. E. (Electronics & Communica-	48
tion)	
B. E. (Electrical & Electronics)	48
B. E. (Civil & Rural)	48
B. E. (Civil) for Diploma Holders	48
Total	480

Eligibility

The students seeking admission to the Bachelor level programs must have completed Higher Secondary (10+2) with Science (Physical & Bio-group) obtaining minimum C Grade in each subject or Diploma in Engineering or equivalent from a recognized institution securing at least second division marks with mathematics (100 marks or 3 credit hours) as one of the subjects.

The students seeking admission to B.E. (Civil) for Diploma Holders program must have completed certificate (Diploma) level course in any Engineering or Architecture from a recognized institution securing at least second division marks.

Admission Procedure

Nepalese Students

The admission granted to the Nepalese students shall be merit based, evaluated on the basis of their performance in *nec* Entrance Test (*n*ET-2024). The entrance test will be paper based on multiple choice questions covering different areas mentioned in the table below:

Course	Percent
Physics	30
Chemistry	20
Mathematics	40
English	10
Total	100
Aptitude Test for B. Arch	20

Foreign Students

Foreign students may be granted admission based on the academic scores in the qualifying examination and /or interview. They should submit application, along with all necessary credentials, addressed to the Principal of *nec*.

B. E. Civil for Diploma Holders Program:

nec Entrance Test (nET- BDH - 2024)

The Entrance Test will be paper-based with multiple-choice questions covering the above subjects. Admission will be granted on merit-based performance of the candidates in the entrance test and the number of years of related work experience.

nec Entrance Test (**nET - 2024**) for various programs at Changunarayan Campus, **nec**-BDH Campus and **nec**-CPS Campus will be held at different dates. Visit nec.edu.np for relevant information or contact us after you apply Syllabus for entrance test will be as follows:

S.N	Subject	Marks	Time
1	Physics	30	
2	Chemistry	15	
3	Mathematics	40	Total
4	Strength of Material & Theory of	30	2 Hours
	Structures		
5	Surveying	30	
6	Building Materials and Construc-	30	
	tion		
7	English	25	
	Total	200	

Admission to Masters' Level Programs

Admissions to Masters' level programs shall be in accordance with the academic qualifications and admission procedures prescribed for the specific courses. Prospective students are advised to contact the college administration for the needed details. Admission related informations are also available in the information brochure of *nec*-CPS.

Master Degree Courses

Course	Total Seats
M. Sc. (Construction Management)	30*
M. Sc. (Natural Resource Management)	30
M. Sc. (Inter Disciplinary Water Resource Manage-	30
ment)	
M. Sc. (Transportation Engg. & Management)	30
Total	120
*Biannual Intake	



STEP

Think about what you really want to know - not just about your course, but about future prospects! Call the given helpline numbers or email us for your queries. You can also schedule meeting with our college representative to clarify any doubts.

> info@nec.edu.np 01-5221006

How to Get Admission?

Fill up the admission form with at most 3 preferred programs (BE or B. Arch) and appear for the nec Entrance Test 2024 (nET-2024).
Visit www.nec.edu.np for your nET 2024 result and verify your name in the merit list and program. There will be separate entrance test for M.Sc. and B.E. Civil for Diploma Holders.

STEP

Successful candidates can take admission by verifying their documents and depositing the admission fee. In case your name doesn't appear under the preferred program, you can still take the admission in the program where you have been qualified and submit an application to transfer your name to your preferred program. If someone takes admission in his/her preferred program, the cancellation of admission will be governed by admission cancellation rules of the college.

STEP

3

STEP

4

(Applicable for program transfer applicants)In case the student doesn't get transferred to the desired program, he/she might choose to stay in the admitted program or can cancel the admission with full refund with in 10 days.

Note: Information provided in this prospectus is for reference purpose. In case of ambiguity and confusion, official documents issued by the college prevails.

Activities & **Educational Tours**







Educational Tours







शेक्षिक समा















nec Management Committee



Principal Assoc. Prof. Durgaprasad Bhandari



Acting Director, nec - CPS Assoc. Prof. Robert Dongol



Chief Administrator Mrs. Shreema Sharma



Chief, Construction and Maintenance Asst. Prof. Sushil Adhikari



Representative (*nec*-DEPAN) Assoc. Prof. Deepak Bahadur Dhami



HoD, Architecture Assoc. Prof. Anil Kumar Regmi



HoD, Computer Science & Engineering Asst. Prof. Jeet Bahadur Bohara



Chief, Student Welfare & Extra Curricular Activities Division Asst. Prof. Bishnu Prasad Bhandari



International Program Officer



Representative (*nec*-Progressive P.A.) Assoc. Prof. Dibangar Khoteja, PhD



HoD, Civil Engineering Assoc. Prof. Ramesh Khanal



HoD, Civil & Rural Engineering Asst. Prof. Sanjeev Bikram Shah



Chief-Exam Division Asst. Prof. Samjhana Shrestha



Chief, Transportation **Mr. Lochan Neupane**



Representative (*nec*-Karmachari Sangh) Mr. Shreeram Khanal



HoD, Science & Humanities Assoc. Prof. Youb Raj Gaire



HoD, Electrical & Electronics Engineering Asst. Prof. Yam Krishna Poudel



Chief-ICT Asst. Prof. Madanraj Upreti



Acting Chief, Store Mr. Narayan Parajuli



Representative (*nec*-Swakasa) **Mr. Santuram Basnet**



HoD, Electronics & Communication Engineering Assoc. Prof. Sachin Shrestha



Co-ordinator, nec-BDH Assoc. Prof. Ramesh Gnawali



Media Relation Officer Asst. Prof. Ashish Kumar Jha



Library Incharge Mrs. Sumitra Shakya



Faculty Members

Department of Civil Engineering

Associate Professors



Ramesh Khanal (NEC reg. 460 Mechanical) (Head of Department) M.Sc. (Industrial Management), UPM (Spain), POLIMI (Italy) & KTH (Sweden), 2008 B.E. (Mechanical), JoE, Pulchowk Campus, TU, 2003 Research Interest:



Waste Water Treatment Technology, Life Cycle Assessment Ram Sthapit (NEC reg. 368 Civil) M.Sc. (Civil Engineering), Makeevyka Civil Engineering Institute, Ukraine, 1991 P.G. Course in Earthquake Engineering, Macedonia, 1997

Research Interest: Detail Design of Building Structures



Rosina Mali M.Sc. (Geology), Tribhuvan University, 1996 **Research Interest:** Engineering Geology, Geohazared

Earthquake Engineering



Ajay Khadka (NEC reg. 5598 Civil) M.Sc. (Construction Mgmt.), nec, PU, 2018 B.E. (Civil), nec, PU, 2007 **Research Interest:**



Dibyashree Lohani Poudyal (NEC reg. 4050 Civil) PhD, Scholar, IUKL, Malavsia M.Sc. (Structural Engineering), IoE, Pulchowk Campus, TU, 2010 B.E. (Civil), nec, Pokhara University, 2004 **Research Interest:**



Mohan Dhoja K.C. (NEC reg. 4767 Civil) PhD Scholar, IoE, TU

Response Analysis, Structural Design

M. Sc. (Transportation Engineering & Management), nec, PU, 2013 M.A. (Sociology and Anthropology), TU, 2008 B.E. (Civil), IoE, Pulchowk Campus, TU, 2006 Research Interest: Highway Safety



GIS

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Sanjay Kumar Kawan (NEC reg. 4650 Civil) M.E. (Earthquake Engineering), Khwopa Engineering College PU 2018 B.E. (Civil), Khwopa Engineering College, PU, 2005 **Research Interest:**

Associate Professors



IOE - Pulchowk, TU, 2011 B.E. (Civil), Khwopa Engineering College, PU, 2005 GIS, Hydrological Modelling

Dibangar Khoteja (NEC reg. 4285 Civil) Ph.D. in Geotechnical Engineering, Huazhong University of Science and Technology, 2022 M.Sc. (Geotech Engineering), IoE, Pulchowk Campus, TU, 2012 B.E. (Civil), IoE, Pulchowk Campus, TU, 2005 **Research Interest:** Treatment of Clav



Bibhuti Ojha (NEC reg. 5503 Civil) M.Sc. (Water Engineering Management), AIT, Thailand, 2013 B.E. (Civil), nec. PU, 2007 Research Interest: Waste Water Treatment Technology, Water Security, Climate Smart Agriculture, Circular Economic, LCA



M.Sc. (Transportation Engineering), IoE, Pulchowk Campus, B.E. (Civil), IoE., Pulchowk Campus, TU, 2010 Research Interest: Traffic Modelling & Simulation

Assistant Professors

Ramhari Shrestha (NEC reg. 7324 Civil) M.E. (Earthquake Engineering), Khwopa Engineering College,







2017 B.E. (Mechanical), IoE, Pulchowk Campus, TU, 2009 Research Interest:

Energy, Environment and Climate Change







Assistant Professors



Binay Shakya (NEC reg. 7449 Civil) M.Sc. (Water Resources Engineering), Katholieke University Leuven, Belgium, 2016 B.E. (Civil), nec. PU, 2010 Research Interest: Surface and Groundwater Hydrology, River Analysis





B. Tech (Civil Engineering), JNTUK University, India, 2016 Research Interest: Steel Structures, Plate and Shell, BIM with AR including Rectrofitting



Rajiv Manandhar (NEC reg. 7824 Civil) M.Sc. (Structural Engineering), JoE, Pulchowk Campus, TU, 2014 B.E. (Civil), IoE, Pulchowk Campus, 2011 Research Interest : Buildings and Bridges





Anu Awal (NEC reg. 12905 Civil) M.Sc. in Water Resource Engineering, TU, 2021 BE (Civil Engineering), Khwopa College of Engineering, TU, 2015 Research Interest Hydraulics and Hydrological Studies, Simulation and Modelling of different hydraulic Structures



Aviral Upadhaya (NEC reg. 13246 Civil A) M.Sc. in Earthquake Engineering Thapathali Campus, TU, Nepal 2020 Bachelors of Civil Engineering, ACEM, TU **Research Interest:** Seismic Pounding in Buildings, Analysis of Modern Building Materials

Junior Professors



Nirmala Bokati (NEC reg. 11282 Civil) M.Sc. (Geotechnical Engineering), IoE, Pulchowk Campus, TU, 2019 B.E (Civil), Kantipur Engineering College, TU, 2014 Research Interest Rock slope stability

Assistant Instructor



Anju Khoteja Diploma in Mechanical Engineering, IoE, Thapathali Campus,

Junior Instructors



Sushil Shrestha Maintenance Assistant Diploma in Mechanical Engineering, Tribhuvan University, 2013







Bikash Shrestha Diploma in Civil Engineering, CTEVT Nepal, 2021

B.E. Civil, 2007, PU Research Interest:

Construction Management of Housing Project

M.Sc. in Construction Management, 2015, PU

Sabir Baidya (NEC reg. 5485 Civil)











BE (Civil) nec.PU. 2012

Research Interest:

Construction Safety

Research Interest:

machine element

Singapore, 2019

Automation

Research Interest:

Bishwo Ram Khatri (NEC reg. 8417 Civil)

Prakash Bashyal (NEC reg. 3088 Mech)

Arun Satyal (NEC reg. 1308 Mech)

MTech (Production Engineering), Shimla University, 2018

BTech (Mechanical Engineering), Shimla University, 2016

FEA/FEM, Tribological Design, Design and optimization of

Precision Engineering, Industrial Manufacturing, Industrial

M.Sc. (Construction Management), nec, PU, 2020







(Head of Department)

Research Interest:

IEEE Reg 90935118

Research Interest:

AMIE (Computer), India, 2005

Krishna Bikram Shah

Ph.D. Scholar, SMIT, SMU, Sikkim, India

Anshu Ghimire (NEC reg. 294 IT)

Jeet Bahadur Bohara (NEC reg. 2467 Computer)

Artificial Intelligence, Computational Linguistics

Numerical Analysis of Engineering Problems

M.Sc. (Information Technology), University of Madras, India,

M.Tech. (Computer Science and Engineering), SMIT, SMU, India, 2012

Artificial Intelligence, Machine Learning, RS-GIS, Bioinformatics, SWM

M.C.A. (Masters of Computer Application), SMIT, SMU, India, 2007 B.Sc. (Software Systems), North Bengal University, India, 2004.

Assistant Professors

2009

Department of Architecture

Professor



Deepak Panta (NEC reg. 239 Architecture) B.Arch, 1991 (NCA, Lahore Pakistan.) M.Sc. in Urban Ecolological Planning 2002 (NTNU Trondheim, Norway.) Research Interest: Historic Settlements and Building Preservation.

Associate Professors



Anil Kumar Regmi (NEC reg. 346 Architecture) (Head of Department) M.Sc. (Construction Management), Pokhara University, 2008 B.Arch., nec, Pokhara University, 2005 Research Interest Construction Management, Land Development



Krishna Prasad (Shrestha) Bhuju (NEC reg. 1400 Civil) M.Arch., Saint Petersburg State University of Architecture & Civil Engg. Russia, 1996 Research Interest: Landscape Architecture, Interior Design



Yojana Tuladhar (NEC reg. 97 Architecture) M.Arch., The Odessa State Academy of Civil Engg. And Architecture, Ukraine, 1996 Research Interest: Landscape Architecture



M.Sc. (Urban Planning), IoE, Pulchowk Campus, T.U., 2010 B.Arch., nec, Tribhuvan University, 2001 **Research Interest:** Urban Planning, Urban Change, Landscape Architecture



Ram Prasad Suwal (NEC reg. 535 Architecture) M. Sc. (Urban Design & Conservation), Khwopa Engineering College, PU, 2012 B.Arch., Khwopa Engineering College, PU, 2006 Research Interest: Heritage Conservation and Vernacular Settlement Studies

M.Arch., Russian Peoples' Friendship University, Russia, 2004

B.Arch., Russian Peoples' Friendship University, Russia, 2002

Sankalp Pokhrel (NEC reg. 609 Architecture)

Heritage Conservation, Traditional Architecture

Research Interest:





Shyam Sunder Kawan (NEC reg. 471 Architecture) (On Study Leave) M. Sc. (Urban Planning), University of Hong Kong, Hong Kong, 2012

B.Arch., Khwopa Engineering College, Purbanchal University, 2006

Research Interest: Urban Design, Built Environment



Samjhana Shrestha (NEC reg. 627 Architecture)

Assistant Professors



M. Sc. Engineering (Disaster Risk Management), IoE, TU, 2016 B. Arch., Kathmandu Engineering College, TU, 2009 Research Interest: Sustainable Architecture







Pujita Upadhyaya (NEC reg. 603 Architecture) M. Sc. (Urban Design & Conservation), Khwopa Engineering College, PU, 2015 B.Arch., nec, Pokhara University, 2008 Research Interest: Conservation







Raghav Syangadan (NEC reg. 1922 Architecture) MSc (Human Settlement) Khulna University, Khulna, Bangladesh, 2018 BArch, Khulna University, Khulna, Bangladesh, 2016





Krishna Ram Bhandari (NEC reg. 1453 Architecture) Master of Science in Energy for Sustainable Social Development, Pulchok Campus, 2019, Bachelor of architecture, nec. PU 2014 Research Interest Sustainable Construction Technology, Sustainable Housing,



Bishow Shakya (NEC reg. 211 Architecture) M.Sc. Engineering Management PU, Nepal, 2018 B. Architecture, Pokhara University, Nepal, 2004 Research Interest Traditional Architecture, Culture

Department of **Computer Science** & Engineering

Dhiraj Kumar Das (NEC reg. 317 Elx & Comm)

M.E. (Computer), NCIT, Pokhara University, 2009

Associate Professors



AMIE (Electronics & Comm.), India, 1993 Research Interest: Data Warehouse Mining, Image Processing, Network Security Deepak B. Dhami (NEC reg. 162 Computer)



MBS TU 2010 1 year Master Non-Degree Course, Corvinus University of Budapest, Hungary, 2010 M.E. (Computer), NCIT, P. U., 2007 B.E. (Computer), nec. P.U., 2003 Research Interest: E-Governance, Image Processing, Modeling and Simulation

P G Diploma, (Comp. Appl.), 2001



Dinesh Dangol (NEC reg. 1143 Computer) M.Sc. (Information & Comm. Engineering), IoE, Pulchowk Campus, T.U., 2013 B.E. (Computer), nec. Pokhara University, 2006 Research Interest: Image Processing, Network Design, and Automatic











Classification











Sundar Kunwar (NEC reg. 1211 Computer) M.Sc. in Software Development, Finland, 2013 B.E. (Computer), Advanced College of Engineering and Management, T.U., 2006

Research Interest: Humanoid Robotics, Agile Software Development



Research Interest:





Machine Learning Ashish Kumar Jha (NEC reg. 3495 Computer)

(Media Relation Officer) M. Tech (Computer Science - Networking) Sharda University, India, 2017 B.E. (Computer Science & Engineering), T.U. 2013 Research Interest: IoT, Machine Learning, Image Processing, Pattern Recognition



Trailokya Raj Ojha (NEC reg. 1814 Computer) M.Sc. IT (Software Engineering) Tampere University of Technology, Finland, 2014 B.E. (Computer), Purbanchal University, Nepal, 2008 Research Interest Big Data, Automatic MBT



Madan Raj Upreti (ICT Chief) M.Sc. Computer Science South Asian University. India, 2017. B.Sc. CSIT, Tribhuvan University, Nepal, 2013 Research Interest: Real Time System, Cyber Physical System, Design and Analysis of Algorithm, Computer Network





Assistant Professors



Dipak Kumar Chaudhary (NEC reg. 2727 Elx & Comm) M.Sc. Information System Engineering, PU, Nepal, (Running) M.Sc. Renewable Energy Engineering, TU, Nepal, 2012 B.E. Electronics & Communication Engineering, TU, 2010 **Research Interest:**

OOSD, Energy Economics, Numerical Analysis, Instrumentation System, DSP, Solar PV



Tara Chandra Shrestha (NEC reg. 2490 Computer) M. Tech Networking and Cyber Security, Sharda University, India, 2020 Bachelor in Computer Engineering, PU, Nepal, 2011 **Research Interest:** Network and Communication, Cyber Security, ML and AI



Gobinda Subedi M.Sc. IT. Sikkim Manipal University, India, 2015 B.Sc. CS, Tribhuvan University, Nepal, 2003 Research Interest Algorithm Bias in Al, Sentiment Analysis in Text



Santosh Bhattarai (NEC reg. 1544 Computer) Master of Science Computer Engineering **Research Interest:** Cloud Computing, Programming



Ghana Shyam BK (M.Sc CSIT) CDCSIT, TU, Kirtipur Research Interest: Machine learning, Deep Learning, Computer Vision



Sudarshan Subedi (NEC reg. 5649 Computer) MSc. In Computer Science, Pokhara University BE. Computer Engineering, TU, Nepal, 2017 **Research Interest:** Machine learning, Deep Learning, Computer Vision

Bijayasri Barun (NEC reg. 3331 Computer) MSc. In Computer Science, Pokhara University BE, Computer Engineering, TU, Nepal, 2013 **Research Interest:**

Machine learning, Deep Learning, Computer Vision

Junior Professor



Sushant Bhujel M.Sc, Information and Communication, TU, 2022 **Research Interest:** Wireless Communication, Machine Learning, Networking

Department of **Electronics** & Communication Engineering

Associate Professors





Sachin Shrestha (NEC reg. 1396 Elx & Comm) (Head of Department) M. Sc. (Information & Comm. Engineering), IoE, T.U., 2012 B. E. (Electronics & Communication Engineering), KEC. TU, 2007 Research Interest Low Powered Embedded System Design, Biomedical Signal Processing, ICT for disability.

Ganesh Adhikari (NEC reg. 283 Elx & Comm) M.E. (Computer Engineering), NCIT, PU, 2017 B.E. (Electronics & Communication Engineering), A.I.T. Engineering College, KUVEMPU University, India, 1995 Research Interest:

Instrumentation System, Logic Circuits, Computer Graphics, IP Routing & Switching

Rupesh Dahi Shrestha (NEC reg. 736 Elx & Comm) M.Sc. (Information & Comm. Engineering), IoE, Pulchowk Campus, T.U., 2013

B.E. (Electronics & Comm.), HEC, Pokhara University, 2005 **Research Interest:** Signal and Image Processing, Machine Intelligence, Embedded



System Design.

Amit Shah (NEC reg. 608 Electrical) M. Sc. (Information & Comm. Engineering), IoE, Pulchowk Campus, T.U., 2015 B. Sc. (Electrical Engineering), University of Engineering and

Technology, Pakistan, 2004 **Research Interest:**

Signal processing, Machine Learning.



M. Sc. (Radio Frequency Electronics), Tampere University of Technology, Finland, 2011 B. E. (Electronics & Communication Engineering), Pulchowk Campus, TU, 2006 **Research Interest:** Internet of Things (IoT), AI, RF Electronics, Wireless Communications

Assistant Professors



Abinash Singh (NEC reg. 1029 Elx & Comm) B.E. (Electronics & Comm.), Bangalore University, India, 2001 Research Interest: Wireless Communication



Deepesh Prakash Guragain (NEC reg. 5692 Elx & Comm) M. Tech. in Embedded System, JNTU, India, 2015 B. F. (Electronics & Communication Engineering), KEC, TU, 2010 Research Interest: Embedded System, IoT, Hardware Design and EPGAs.



Ramesh Kumar Pudasaini (NEC reg. 3089 Elx & Comm) M. Sc. (Information System Engineering), PU, 2017 B.E. (Electronics & Communication Engineering), Acme Engg. College, PU, 2007 Research Interest:

Internet of Things (IoT), Wireless Communication, Networking



M. Tech. (Communication Systems), National Institute of Technology, Trichy, India, 2011 B. E. (Electronics & Communication Engineering), ACEM, TU, 2007 Research Interest:

Anil Kumar Yadav (NEC reg. 1302 Elx & Comm)

Wireless Communication, Automation, Networking

Senior Instructor



Gvan Bhakta Maharian Diploma in Electrical Engineering, CTEVT, 1993

Instructor



Rupesh Karn (NEC reg. 30240 Civil) B.E. Civil, PoU, 2021 Diploma in Electronics Engineering, T.U., 2011

Department of Civil Engineering for Diploma Holders

Associate Professor



Ramesh Gnawali (NEC reg. 5700 Civil) M.Sc. (Structural Engineering), IoE, Pulchowk Campus, TU, 2011 B.E. (Civil), TU, 2009 **Research Interest:**

Shear Strengthening and Nonlinear Finite Element (NLFE) Analysis of RC Structures, BIM

Department of **Electrical & Electronics** Engineering

Associate Professors



Aiav Kumar Lal (NEC reg. 850 Electrical) IEEEreg . 94334313 P. Engg., South Asia Region-10. M.Tech. (Electrical Power Engineering), JNTUH, India, 2015 B.E. (Electrical Engineering), NIT, Allahabad, India, 2002 Research Interest:

Cascading Failure, ATC, Synchronized PMU, Security System



Madan Raj Chapagain (NEC reg. 42 Electrical) M.Sc. (Power System), IOE-T.U., 2006 BSc. (Electrical & Electronics) BUET, 1995 **Research Interest:** Power System Automation & Smart Grid

Assistant Professors



Yam Krishna Paudel (NEC reg. 1224 Elec & Elx), IEEE member (Head of Department)

PhD Scholar at RIMT University, MSc. IT Leeds beckett university, UK MSc. in Power System Engineering, IoE Pulchowk campus, MBA KFA Business School & IT . BE Electrical & Electronics (2015) Research Interest





Narayan Prasad Acharya (NEC reg. 481 Elx & Comm) M.Sc. (Power Engineering), Brandenburgische Technische University Cottbus, Germany, 2011 B.E. (Electronics & Communication) Nec, PU, 2003 Research Interest: Solar Photo Voltaic System & Power System

Basanta Pancha (NEC reg. 1655 Elec & Elx) M.Sc. in Renewable Energy Engineering, TU, 2019 B.E. in Electrical Engineering, TU, 2015 Research Interest: Distributed Generation, Optimization, Islanding, ANN

Department of **Civil & Rural** Engineering

Associate Professor



Rakesh Dumaru (NEC reg. 6489 Civil) Ph.D., University of Porto, Portugal, Civil Engineering, 2018 M.Sc.(Structural Engineering), IoE, Pulchowk Campus, TU, 2011 B.F. (Civil). IoE, Pulchowk Campus, TU, 2009 Research Interest: Performance Assessment of Existing Infilled Reinforce Cement

and Heritage building in Nepal

Assistant Professors



Sanjeev Bikram Shah (NEC reg. 08 Civil & Rural) (Head of Department) M.Sc. (Geotechnical Engineering), IoE, TU, 2016 BE (Civil and Rural), nec. PU, 2013 **Research interest:**



Yaman Dhakal (NEC reg. 40 Civil & Rural) M.Sc. (Construction Management), *Nec*, PU, 2019 BE. (Civil and Rural) HEC, PU, 2013 Research interest Material Management System in Construction Project



Binay Kumar Sah (NEC reg. 11740 Civil) M.Tech. (Structural Engineering) JNTUK, India, 2017 B. E. (Civil) VTU.Belgaun, India, 2014 Research interest:

RC Buildings, Masonry Buildings, Seismic Analysis, Non-Linear Static Analysis, Retrofitting



Rakshak Dhungel (NEC reg. 05 Civil & Rural) M.Sc. (Geotechnical Engineering), IoE, TU, 2018 BE. (Civil and Rural) nec, PU, 2013 **Research interest:** Liquefaction modeling, Ground Improvement technique



Nirmal KC (NEC reg. 16052 Civil) M.Sc. Environmental Engineering, 2078 **Research interest:** Solid Waste Management, Nitrification of Ground Water

Junior Professor



Pratibha Parajuli (NEC reg. 15485 Civil) M.Sc. (TEAM), PU, 2020 BE. (Civil), IoE, TU, 2016 Research interest:

Solution for Parking Problem, Congestion in urban area



Professor



Sabitri K. Tripathi (Pandey) M.Sc. (Chemistry), Tribhuvan University, 1991 Water treatment and sanitation

Associate Professors







Sulochana Pradhan (Shrestha) M.Sc. (Chemistry), Tribhuvan University, 1993 Research Interest: Water Quality Analysis, Protein Analysis



Assistant Professors





Bishnu Prasad Bhandari Chief-Student Welfare and Extracurricular Activities Divison M. Sc. (Mathematics), Tribhuvan University, 2009 Research Interest: Partial Differential Equation

Dola Raj Pandey



Yuba Rai Paudel M.Sc. (Physics), Tribhuvan University, 2011 Research Interest: Surface Modification of Polymer (Plasma)



Limesh Bhattarai M.Sc. (Math), Tribhuyan University, 2009 Research Interest: Mathematical Analysis



Lok Naravan Pokhrel M. Sc. (Physics), Tribhuvan University, 2013 Research Interest: Galaxy Rotation Curve, Dark Matter



Bibek Koirala M. Sc. (Statistics), Tribhuvan University, 2021 Research Interest: **Biostatistics**, Econometrics

Assistant Instructors







Dr. Thusitha Chandani Shahi (P. Eng. NEC reg. 1652 Civil) PhD, Road & Airfield, MADI, Moscow, Russia, 1999 M.Sc. Highway Engineering, MADI, Moscow, Russia, 1994 **Research Interest:**

Associate Professor



(Acting Director nec-CPS)| (Co-ordinator iWRM) Ph.D Scholar, Kathmandu University, Dhulikhel, Nepal M.Sc. (Environmental Engineering and Management), AIT, Thailand, 2007 B. Sc. (Environmental Science), Kathmandu University, 2004

Research Interest: iWRM, Water and wastewater management, SWM Assistant Professors

Dr. Naravan Prasad Koju (Co-ordinator NRM)

DNSc, Kunming Institute of Zoology, Chinese Academy of Science, 2017 PhD in Zoology (Wildlife Ecology), T.U., 2014

M.Sc. in Zoology (Ecology), T.U., 2006 B.Sc. (Biology), Tri-Chandra College, TU, 2003 **Research Interest:** Conservation Biology, Climate Change, Phylogenetics& Evolutionary Bioloav



(Co-ordinator TEAM)

M.Sc. (Transportation Engineering & Management), Pokhara University, Nepal, 2018 B.E. (Civil). Tribhuvan University, Nepal, 2004 Research Interest Transport Planning, Pavement Engineering & Management



(Co-ordinator CM) PhD (Civil Engineering), Wuhan University of Technology, Wuhan, China, 2022 Master in Civil Engineering (Construction Management), Wuhan University of Technology, Wuhan, China, 2017 B.E. (Civil Engineering), Khowpa Engineering College, PU, 2013 Research Interest: Project Management and Sustainable Evaluation, Engineering Project Investment Financing



Sujan Nepal (NEC reg. 9930 Civil) (Co-ordinator RMC) Ph.D. Scholar, IoE, TU M. Sc. (Climate Change and Development), IoE, Pulchowk Campus, TU, 2017 B. E. (Civil Engineering), T.U., 2013 **Research Interest:** Water resources, Climate change.



Manoi Kunwar M.A. (Economics), Tribhuvan University, Nepal, 2012 B.Sc. (Statistics), Tribhuvan University, Nepal, 2007 Research Interest: Economics & Econometrics

Sudip Pokhrel



Gopal Gautam (NEC reg. 9251 Civil) M.Sc. (Transportation Engineering & Management), nec, PU, 2018

BE (Civil Engineering), nec, 2013 **Research Interest:** Urban Road Planning, Design and Management



Pratik Singh Thakuri (NEC reg. 152 Environmental) M.Sc., Water Resources Engineering and Management, UNESCO-Madanjeet Center for South Asia Water Management (UMCSAWM), University of Moratuwa, Sri Lanka, 2018 BTech. (Environmental Engineering), KU, 2015 Research Interest: Rainfall-runoff modeling, Hydrological and hydraulic analysis, DRR with special focus on flood hazards



M.Sc. (iWRM), 2019 nec Pokhara University Reesearch Coordinator, IDRC-GIST project.

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Dilli Rai Paneru B.Sc. (Physics), Tribhuvan University, 2011

Dhana Pd. Poudel B.Sc. TU, 2022

I.Sc., Tribhuvan University, 2008

Professor









Administrative **Staff**













The **Chartered Engineers** of Nepal working at *nec*

Nepal Engineering College is happy to announce the Chartered Engineers of Nepal working with us. They are our proud properties and are as follows:

ESIGNATION	NAME
ssoc. Prof.	Durgaprasad Bhandari
ssoc. Prof.	Ram Sthapit
ssoc. Prof.	Dhiraj Kumar Das
ssoc. Prof.	Deepak Bahadur Dhami
ssoc. Prof.	Ramesh Khanal
ssoc. Prof.	Rupesh Dahi Shrestha
ssoc. Prof.	Dinesh Dangol
ssoc. Prof.	Sundar Kunwar
ssoc. Prof.	Dibyashree Lohani Poudyal
ssoc. Prof.	Mohan Dhoja K.C.
ssoc. Prof.	Raghu Nath Prajapati
ssoc. Prof.	Bijaya Shrestha
ssoc. Prof.	Sachin Shrestha
ssoc. Prof.	Dr. Dibangar Khoteja
sst. Prof.	Narayan Prasad Acharya

Ar. Aman Kumar Maskey

B. Arcchitecture,(2003 Batch) Minister, Physical Infrastructure Development Ministry, Bagmati Provience



Ar. Baburam Bhattarai

B. Architecture (1996 Batch) Member, City Planning Commssion, Kathmandu Metropolitian City



Er. Rajan Sharma

BE. Electronics and Communication (2006 Batch) Deputy Manager, Nepal Telecom (NTC)



ALUMNI SUCCESS STORIES

Dr. Santi Kala Subedi

BE. Civil (1996 Batch) MD, Krisham Smart Engineering Solution Head of Research and Innovation Unit, Himalaya College of Engineering



Dr. Sanjiv Neupane

BE. Civil (2011 Batch) Chief Executive Officer Smartphones For Water-Nepal



Er. Saroj Koirala

BE. Computer (2002 Batch) MD, Pokhara Internet Pvt. Ltd., Pokhara, Nepal



Dr. Suman N. Rajbhandari

BE. Civil (1994 Batch) Vice-President, Urban Planning Commission, Kathmandu Metropolitian City



BE. Electronics and Communication (2006 Batch) Senior Engineer, Nepal Telecom



Er. Subash Niroula

BE. Computer (2015 Batch) Software Engineer, AXA, Japan



Er. Sangam Jung Gauli

BE. Computer (2014 Batch) Research Engineer at the National Institutes of Biomedical Innovation, Health, and Nutrition (NIBIOHN) in Osaka, Japan



Er. Kailash Karki

BE. Electronics and Communication (2009 Batch) Assistant Director, Nepal Telecommunications Authority(NTA)







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