

ADVANCED COLLEGE OF ENGINEERING & MANAGEMENT

Affiliated to Tribhuvan University (T.U.)



Greetings from Advanced College of Engineering & Management!

Good education creates a foundation for a bright future and quality education provides opportunities for learners to explore and discover their inherent abilities and help them shine in the areas of their interest.

For more than two decades, we have been consistently working towards the holistic development of our students. With the goal of establishing Advanced College of Engineering and Management (ACEM) as one of the best engineering colleges in Nepal and to achieve excellence in education, ACEM has been offering internationally acclaimed education and has struck a perfect balance between theory and practical application. Our aim is to bridge the gap between demand and supply by producing internationally competent human resources who can industrialize and mechanize the contemporary market. Our motto is to enrich the education we offer with knowledge, skills, technology, creativity, innovativeness and values so that our students can solve the existing national problems.

We have significantly expanded our range of courses and methodology to meet the ever- changing needs in this era of digitalization. We have been consistently working on further enhancing the quality of education, innovation, research and for making our institution accessible to all who have the talent, passion and hunger to grow in the field of engineering.

I welcome you all to be a part of the ACEM family and I wish for your glorious journey.

Mr. Ramesh Kumar Silwal



Advanced College of Engineering and Management (ACEM) is one of the best institutions in Nepal for a bright and prosperous future and it gives me great pleasure to extend our core values amid other aspects of our institution.

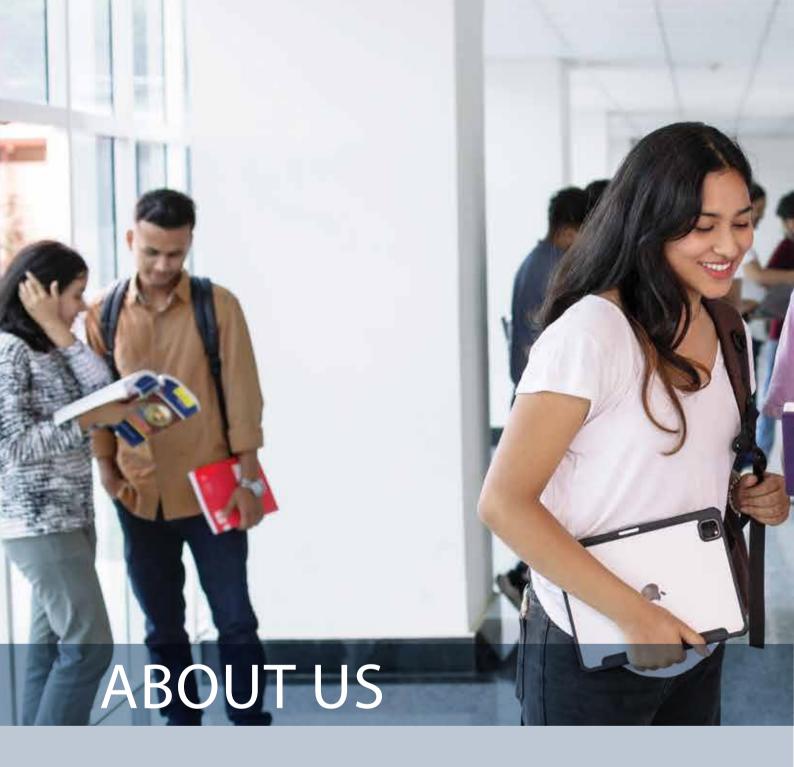
We, at ACEM, are committed to promoting value-based engineering education as per the requirements and expectations of the students, industries, and our nation. Our departments and their respective faculty members put forward their continuous efforts to provide productive as well as modernized knowledge to students. The management of ACEM serves as an inert backbone that always supports the ongoing academic, research and ultramodern technological needs of the institution.

Advanced College of Engineering and Management, ACEM, is spread across a vast area with lush green beautifully planned spacious modern state of art infrastructure equipped with technically sound facilities. The institute has active clubs that constantly motivate students to participate in numerous national and international programs and has also been successful in creating the entrepreneurial mindset to ultimately generate skilled graduates.

Research and Innovation Unit (RIU) here at ACEM encourages and aims to prepare the students to participate in research of high quality which largely contributes to enriching their experience as engineers or technical experts.

I wish all the students success in every step they take in the coming days.

Prof. Dr. Durga Prasad Sangroula



Advanced College of Engineering and Management (ACEM) is one of the leading engineering institutions of Nepal that aims to and has been producing talented engineers and technically skilled graduates who lead engineering, science, technology and knowledge based society.

Since its inception in 2000 AD, ACEM has been relentlessly moving forward to cultivate adept graduates equipped not just within the designed range of course but also with creative thinking abilities, problem solving skills, comprehensive design skills, information acquisition skills, and adaptability to internationalized society. Affiliated with Tribhuvan University (TU), ACEM offers Bachelors in Civil Engineering (BCE), Bachelors in Computer Engineering (BCT), Bachelors in Electronics, Communication and Information Engineering (BEI), Bachelors in Electrical Engineering (BEL) and Bachelors in Computer Application (BCA).

A team of highly qualified, experienced and dedicated faculty and staff aim to enhance the overall development of the students. Our well-skilled teams are updated with the current academic as well as



industry developments and have successfully made significant contributions to the academia through quality teaching, patent publications, seminars and conferences. Moreover, faculties from renowned institutions are invited to deliver guest lectures helping augment students' studies beyond syllabus.

At ACEM, students are provided with hands-on experience and experiential learning through internships opportunities, industry visits, projects, experts' sessions, workshops, case studies, upscale labs and also virtual classroom sessions whenever necessary.

To upgrade the research activities of the college, an international standard Research and Innovation Unit (RIU) is established at ACEM. RIU primarily aims to provide students with various national and international research projects and helps to engage them in productive activities that complements not just the academic objectives but also helps to develop other useful abilities in the area of research and soft skills.



Our vision is to be one of the best technically innovative engineering colleges in Nepal and prove ourselves as a world-class institution.

We aim to provide academic as well as professional qualifications that strike a balance between theory and practical application maximizing the career prospects of our students and graduates.

To produce professionally competent, technically sound, proactive and ethical leaders who can manage the global and diversified workforce and adapt to various cultures.

To establish ACEM as a world-class institution by offering quality education, working on development of faculty and staffs and connecting students to corporate research and consultancies.

To develop long-term relations with national and international educational institutions, corporate houses, research organizations, government and non-governmental organizations and to foster a broad range of self-motivated learning environments.



2000 AD (2057 BS)

Establishment

Tribhuvan University

Affiliation

Kalanki, Kathmandu, Nepal

Location

234000 Sq. ft.

Floor Area

15 Ropanies

Land Area

96 BE Civil

48
BE Electrical

96BE Computer

96

BE Electronics, Communication and Information

35 BCA

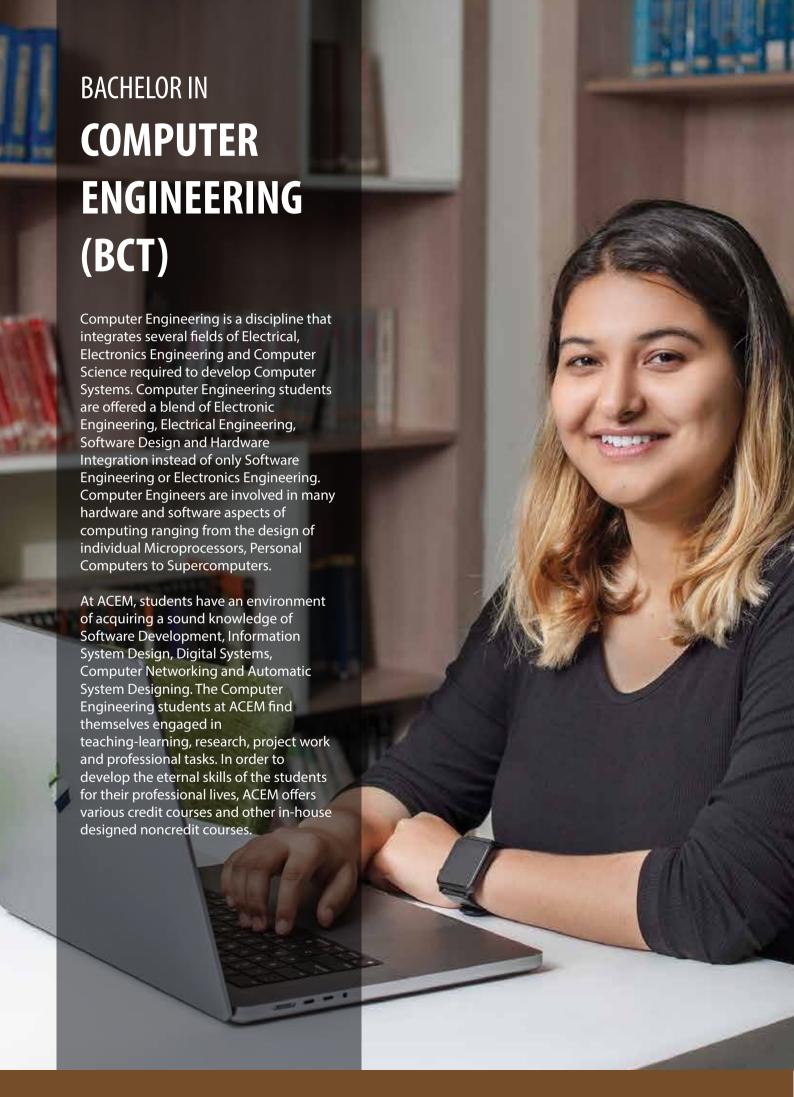




CIVIL ENGINEERING (BCE)

Since its inception, ACEM has been offering academic training in Bachelor of Civil Engineering (BCE). Civil engineering deals with a wide variety of engineering tasks including planning, designing, supervision, construction and maintenance of activities of public works like roads, bridges, buildings, water works, sewage systems, tunnels, airports, dams etc. and offers a multitude of challenging career opportunities. The Department of Civil Engineering is the pioneer department of ACEM. The department plans, arranges, monitors and controls the classes of Bachelor of Civil Engineering except for the first-year program.

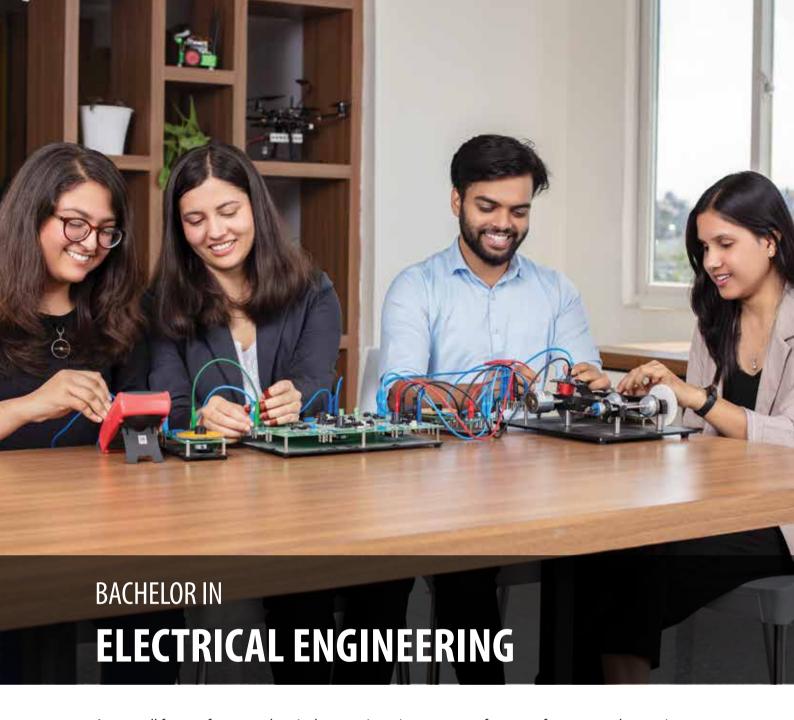
Besides the regular academic courses, students are also trained to use various software related to civil engineering. This department also empowers its students to participate in research activities and technical paper writing. It also recommends students to different educational/professional seminars, and exhibitions as the participants of ACEM. The department strives hard to achieve excellence in teaching, learning and professional development. The department has the vision to develop a center of excellence in the field of Civil Engineering.





Electronics Engineering is a discipline that uses scientific knowledge of behavior and effects of electrons to develop components, devices, systems and equipment that ease life and business. Moreover, this field of engineering covers the area where non-linear and active electrical components such as electrical devices, and semiconductor devices; especially transistors, diodes, and integrated circuits are utilized to design electronic circuits, devices and systems. Combining this engineering with the transmission and reception of electromagnetic signals is Electronics and Communication Engineering. Recently, IOE (Institute of Engineering) has added a new stream 'Information' in this field of engineering and it is now called Electronics, Communication and Information Engineering. This has further strengthened the stream by adding knowledge of programming, software, networking and many more.

At ACEM, students have an environment of acquiring a sound knowledge of Electronic System Design, Digital System Design, Computer Networking and Automatic System design, Digital Signal Analysis and Processing and Communication System Design. The present curriculum of Electronics, Communication and Information Engineering of T.U. aims to deal with the implementation of applications, principles and algorithms developed within many related fields, for example, Wired and Wireless Communication Engineering, Telecommunications, Control Systems, Signal Processing, Computer Systems Design, Software Engineering, Network Engineering and Instrumentation Engineering etc.



Among all forms of energy, electrical energy is easier to convert from one form to another, easier to transmit and is one of the cleanest forms of energy. One cannot imagine modern life without electrical energy and electrical engineering deals with such a form of energy. Electrical engineering deals with the safer generation, transmission and distribution of electricity and aims to make use of electricity safer, cost-effective and environment friendly. Bachelor's in Electrical Engineering aims to provide theoretical and practical knowledge related to electrical engineering that ranges from basic circuit analysis to designing transmission and distribution lines, electrification of buildings and industries and many more. The students are further equipped with research and innovation ideas.

The Department of Electrical Engineering at ACEM is actively involved in various energy-related research activities and in recent years has succeeded in enhancing the participation of the students in such research activities. The department also focuses on providing electrical engineering students with paid internships so that they can strengthen their work skills.

In order to provide internship opportunities to our students, the department has collaborated with the National Association of Community Electricity Users', Nepal. The department was an implementing partner of Urja Nepal Utility Grant Internship Program, where various fresh electrical engineering graduates were provided paid internship opportunities in different offices of NEA (Nepal Electricity Authority) inside Kathmandu Valley.



This program is centered on the "learning by doing and observation" approach. We focus on student-centric teaching-learning mechanisms and employ modern teaching aids coupled with various group activities. This department is backed by well-educated, talented and dedicated computer professionals who are renowned for research not only inside the country but outside the country as well. The teaching module comprises lectures, tutorials and practicals.

We have state-of-the-art infrastructure with high-tech computer labs. The department ensures that the education we provide is reflected not only by success in examinations but also by the success our students achieve in their careers and the contributions they make to the society.











RESEARCH AND INNOVATION UNIT (RIU)

The Research and Innovation Unit (RIU) is an in-house research unit of Advanced College of Engineering and Management (ACEM). It primarily focuses on minimizing the gap between industry and academia.

In order to achieve its objectives, RIU follows the cycle of inspire, interact, influence and iterate that can bring a sustainable change.



INSPIRE

Organizes
multidisciplinary
projects and activities
to inspire students to
be open-minded
enough to accept new
ideas.

INTERACT

Cultivates a meaningful environment where we can interact with students by emphasizing students' interests and motivations.

INFLUENCE

Through communication, collaboration, and active training opportunities, we influence students towards success.

ITERATE

Iterates the ideas generated by the students through a series of refinements as we know that the secret of breakthrough innovation is a series of Iterations.





ACEM CLUBS

Clubs at Advanced College of Engineering and Management, ACEM, aim to provide a platform to students to showcase their talent and to organize a plethora of events for their all-round development. The clubs largely focus on providing the students with extracurricular involvement to link academic knowledge with practical exposure, leading to a better understanding of their abilities, aptitudes and career aspirations.

At present, following clubs are active at ACEM:

- 1. Advanced Robotics Club (ARC)
- 2. Civil Engineering Students Society (CESS)
- 3. Advanced Electrical Engineering Society (AEES)
- 4. Project Association for Computer and Electronics (PACE)

INDUSTRY PARTNERSHIP

















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ACEM shares strong bond with diverse and various industries of Nepal from manufacturing to service sector mainly focusing on IT, Constructions, Hydropower and Robotics and Automation like ERMC (the biggest consulting group working internationally for World Bank, Asian **Development Bank and Nepalese** Government Projects), World Link (One of the largest Internet Service Providers of Nepal), e-Sewa (Strongest Digital Payment Service Provider of f Nepal), Leapfrog (Software company working for the USA), Stars Scholars' Network (International Academic Network based on USA), Federation of Contractors Association of Nepal (Association of Nepalese Contractors), Solu Hydropower (Biggest Hydropower Company of Nepal in Private Initiative), Kashmir World Foundation (Innovative Technology Solution Provider, USA), SICHER (IT consulting, product engineering, and training services provider, headquartered in Silicon Valley, California, USA), Fuse Machine (AI based IT company focusing Education in USA and Nepal), Goethe Institute, (A German Language Institute, Germany), Sheshkant Foundation (Engineering Work-Center, German and NRN Funded Project), BKoI (A Class Construction Company of Nepal), Hama Group of Industries (Steel Manufacturer), Nepal Bank Limited (Oldest Financial Institution of Nepal), Robotics Association of Nepal (Drone and Robotics based Institution), Merojob.com (HR Company, Nepal), NREN (Nepal Research and Education Network, Nepal) to name a few. We develop networks between the public and private sectors – locally, nationally and internationally, bringing industries to the classroom and taking classes to industries.

The probability of our students getting placement or career opportunities is quite bright as we regularly organize Placement Mela via placement cells which helps students in facing jobs' interviews and facilitates industries in finding energetic freshers. We also counsel students regarding placement opportunities and maintain contact with all industrial organizations for further placement purposes



OUR ALUMNI



Looking back at the 4 years that I spent in the Advanced College of Engineering and Management, ACEM, there are so many memories that come as flashbacks. I had the pleasure of completing my graduation from ACEM under the guidance of highly efficient professors and management. I have always believed that studying Engineering is not merely about earning a bachelor's degree but is also about shaping one's entire life and ACEM has perfectly fulfilled its responsibilities in this regard.

I am glad to share that ACEM has played a pivotal role in constructing the foundation of my career. The staff and teachers are very passionate and show a genuine desire to help students achieve their goals.

Er. Ram Kumar ShresthaJoint Secretary Government of Nepal Batch of 2004, BE-Civil

I am currently working in Nepal Telecom Limited as a Telecom Engineer. I completed my Bachelor in Computer Engineering BE from Advanced College of Engineering and Management (ACEM). BE at ACEM honed my engineering skills which has now helped me to take fair judgment when it comes to technical assessments.

My journey at ACEM did not end after my graduation. It flourished as I joined the college as a faculty where I received the opportunity to teach, instruct and guide the students. I would like to thank the entire ACEM family and would also like to wish my fellow junior students a wonderful future.

Er. Purushottam Bagale

Telecom Engineer Nepal Telecom Batch of 2003, BE-Computer





I feel delighted to say that I have graduated with a Bachelor Degree in Electronics and Communication Engineering from Advanced College of Engineering and Management, ACEM.

During my college days, I developed a deep fascination for robotics and automation. As a founding active member of the PACE, one of the clubs of ACEM, I got the opportunity to contribute to our team's success in various robotic competitions. Notably, we secured the first runner-up position in a national-level competition and second runner-up position in another, showcasing our commitment to innovation and technical excellence.

Embarking on a career that combined my engineering skills and passion for innovation, I joined the Civil Aviation Authority of Nepal (CAAN) as a dedicated professional. As the manager of CAAN I have worked in several prestigious national pride projects, including the development of the Gautam Buddha International Airport and Pokhara International Airport from the aspect of Communication, Navigation, and Surveillance (CNS).

With a solid foundation in Electronics and Communication Engineering that I gained from ACEM and a passion for Aviation Technology, I continue to drive innovation and technological advancement in the aviation sector. I feel proud of my journey from a dedicated student to a respected professional that started from ACEM.

Er. Basu Dev Aryal

Manager, Civil Aviation Authority of Nepal. Batch of 2004, BE-Electronics and Communication

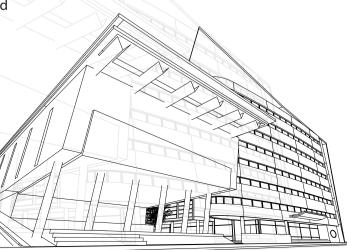


During my formative years at Advanced College of Engineering and Management, ACEM, I found myself in a nurturing environment that shaped my educational journey and future aspirations. The college provided me with a strong academic foundation in electrical engineering, fostering a deep understanding of the field while practical projects bridged theory with real-world application. Engaging in hands-on projects and labs allowed me to develop practical skills that I later applied in my professional endeavors. Collaborative projects enhanced teamwork and communication skills, and industry insights broadened my perspective.

As I reflect on those years, it's clear that my time at the college equipped me with knowledge, skills, and a network of diverse peers and mentors. I embarked on a path dedicated to contributing meaningfully to Nepal's energy sector. In conclusion, ACEM played an instrumental role in shaping my educational journey. The knowledge, practical skills, and values I gained during those years continue to guide me as I endeavor to make a meaningful impact on Nepal's energy landscape.

Er. Sanjeev Ray

Senior Divisional Engineer, Head of Electrification, Power Trade and System Expansion Section Ministry of Energy, Water Resources and Irrigation, Government of Nepal Batch of 2009, BE-Electrical



BOARD OF



Mr. Ramesh Kumar Silwal, Chairperson

Mr. Ramesh Kumar Silwal is the Chairperson of Advanced College of Engineering and Management, ACEM. As an academician, Mr. Silwal has been consistently contributing to uplifting the higher level of education in Nepal. Currently, he is serving as the president of the Higher Institutions and Secondary Schools' Association Nepal (HISSAN). He is also the chairperson of GoldenGate International College. Formerly, he served as the Member Secretary of Nepal's National Sports Council. He holds a Master's degree from Tribhuvan University and has taught for more than three decades at the university.

Er. Laxman Pokharel, Director

Er. Laxman Pokharel is the Chairperson of Cosmos Engineering College and Himalayan White House International College. Also the CEO of PEA, Er. Pokharel served the Association of Engineering College Nepal (AECoN) as the President and as the principal of Advanced College of Engineering and Management. Moreover, he has served thousands of entrance aspirants, most of whom have secured admission to prestigious engineering colleges of Nepal and abroad.





Er. Uddab Raj Chaulagain, Director

Er. Uddab Raj Chaulagain is the Managing Director of Environment and Resource Management Consultant (ERMC) which is one of the biggest Engineering firms in Nepal. He is also the Vice President of SCAEF Nepal (Society of Consulting Architecture and Engineering Firms) which has managed and administered multiple road, irrigation and hydropower projects funded by The World Bank, Asian Development Bank (ADB), DFID and other international organizations. Gautam Buddha International airport, Pokhara International Airport, Sikta Irrigation are few of the remarkable projects that Chaulagain headed.

Er. Lochan Lal Amatya, Director

Er. Lochan Lal Amatya is the chairperson of the Nepal Research and Educational Network (NREN). He served in Nepal Telecom for more than 32 years, starting from Computer Engineer to Chief Technical Officer (CTO). He has landed his support to various IT sectors of Nepal including regional ICT projects of UNDP as National project coordinator. He is currently President of SECEN, ITPF and former President of FCAN. Er. Amatya holds a Master's degree in ICT from Russia.



DIRECTORS

Mr. Shinjan Koirala, Director

Mr. Shinjan Koirala has more than 25 years of experience in managing different organizations and has been actively involved in engineering education since the very beginning of the privatization of engineering education in the country. He is also a board member of Geotechnical and Associates Pvt. Ltd. (GTAA), a newly established laboratory in the country that provides quality service in the field of Geotechnical investigation and material testing.





Mr. Rohit Bahadur Poudel, Director

Mr. Rohit Bahadur Poudel is the principal of GoldenGate Int'l College. He had previously served as vice-principal of FW Taylor College. Mr. Poudel has taught thousands of MBA and EMBA graduates and has published several books for MBA, MBS, EMBA and also for Bachelors and intermediate level. Poudel completed his MBA from Tribhuvan University with Profit Planning and Control as major in 1996.

Mr. Saroj Poudel, Director

Mr. Saroj Poudel is finance director at GoldenGate Education Network Pvt. Ltd. He previously worked as Finance Manager at Chitwan Medical College and also worked as program director at the Chartered Institute of Management Accountant Pvt. Ltd. In addition to this, he has served as Managing Director at Global Investment Securities Pvt. Ltd. and worked at the National Co-operative Development Board, Nepal as an Internal Auditor. Mr. Poudel completed Master's Degree in Commerce from Mumbai University in 2002 and CA Intermediate from ICAI in 2005.







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