

Khwopa Host National Conference to Address Earthquake Challenges and Disaster Solutions



The Fourth National Conference on Earthquake Engineering was inaugurated on Friday, 4th of Magh, 2081, during a program organized by Khwopa Engineering College and Khwopa College of Engineering, run by Bhaktapur Municipality. The event was organized on the occasion the 27th National Earthquake Day, to emphasize the significance of disaster preparedness and resilience.

The conference was inaugurated by Mr. Prem Suwal, Secretary of Nepal Workers and Peasants' Party and member of Federal Parliament. He highlighted the critical need for collaborative efforts in earthquake engineering to enhance Nepal's capacity for mitigating seismic risks.

Inaugurating the conference, MP Suwal emphasized that poverty eradication is achievable through balanced national development and underscored the importance of global peace as a prerequisite for progress.

He highlighted the crucial role of local governments in minimizing earthquake and disaster risks by planning settlements that align with community needs. MP Suwal called for the development of housing areas with a focus on safety and sustainability, stressing the necessity of effective monitoring systems to prevent negligence and shortcomings in the construction of physical infrastructure. He pointed out that lapses in construction standards often lead to significant damage during disasters.

MP Suwal also criticized the growing dependency on contractors and consultants for tasks that could be managed by local user communities, noting that such practices are weakening the government's effectiveness. He further expressed concern over the substandard quality of work delivered by contractors, calling for improved oversight and accountability in infrastructure development to ensure resilience against disasters.

MP Suwal highlighted concerns raised by geologists regarding the weakening soil conditions in the valley, noting that the land is becoming increasingly incapable of supporting heavy structures. He emphasized the critical need for engineers, technicians, and geologists to prioritize studying and researching this issue to ensure sustainable urban development.

Underscoring the importance of quality construction materials, MP Suwal called for stringent checks to minimize earthquake damage. He urged businesspeople in the construction sector to act with integrity and stressed the necessity of developing a skilled workforce to enhance construction standards.

MP Suwal also pointed out the role of consultants and contractors in contributing to the country's challenges, noting that their practices often undermine progress. He expressed confidence that the balanced development of the country would not only address structural vulnerabilities but also strengthen the nation's

economy, paving the way for resilience and growth. MP Prem Suwal emphasized the critical importance of strengthening the foundation of areas and structures during construction to mitigate risks and ensure resilience against disasters. He underscored the need for robust planning and execution in construction practices to address vulnerabilities effectively.

Highlighting the significance of collective learning and collaboration, he advocated for national and international conferences to serve as platforms for discussing and debating global risk reduction strategies. According to MP Suwal, such forums are vital for exchanging knowledge, sharing best practices, and fostering cooperation to tackle disaster risks on a broader scale.

The chairman of the program and Mayor of Bhaktapur Municipality, Mr. Sunil Prajapati, highlighted the significant contributions of the municipality-run colleges in advancing research and promoting scientific education. He stated that these institutions are playing a pivotal role in mitigating the loss of life and property caused by earthquakes by organizing both national and international conferences that foster awareness and preparedness.

Mayor Prajapati further mentioned that Bhaktapur Municipality has completed all necessary infrastructure for the operation of Khwopa University. However, despite their efforts, the government has been delaying the approval required to initiate the university's operations. He emphasized that Bhaktapur Municipality, committed to providing affordable and quality education, holds the distinction of being the first municipality in Nepal to propose the establishment of a university, reflecting its progressive vision for education and community development.

Deputy Chief Ar. Rajani Joshi emphasized that the colleges under Bhaktapur Municipality have been instrumental in enhancing the dignity not only of the local society but also of the entire nation by hosting national and international conferences. She highlighted the significant contributions made by these institutions to the reconstruction efforts in Bhaktapur following the devastating earthquake, showcasing their commitment to rebuilding resilient communities.

Ar. Joshi also noted that while the earthquake disaster brought immense challenges, it also offered an opportunity to learn and grow. The lessons from such events, she stated, have been invaluable in fostering innovation, improving disaster preparedness, and strengthening the community's ability to respond effectively to future calamities.

Mr. Dinesh Prajapati, Program Officer of the

University Grants Commission, provided insights into the various initiatives undertaken by the commission for the development and enhancement of Nepal's education sector. He emphasized Nepal's high vulnerability to earthquakes and expressed optimism that the conference would serve as an effective platform to develop solutions to mitigate disaster risks.

Er. Sunil Duwal, Principal of Khwopa College of Engineering, warmly welcomed all guests, presenters, and participants to the event. He underscored the importance of organizing a national conference, emphasizing its role in fostering dialogue, research, and innovation in addressing earthquake-related challenges.

Dr. Subeg Man Bijukchhen, Vice Principal of Khwopa Engineering College, also addressed the program, highlighting the collaborative efforts of the institutions in promoting scientific education and research to minimize the impact of disasters.







Talk Program on 27th National Earthquake Safety Day Jointly Organized by KhEC and KhCE

Khwopa Engineering College (KhEC) and Khwopa College of Engineering (KhCE), jointly organized a talk program on the occasion of the 27th National Earthquake Safety Day on Magh 2, 2081 (January 16, 2025). The program brought together experts, faculty members, and students to discuss earthquake safety measures and highlight the significance of preparedness and research.

Er. Sujan Maka, Principal of Khwopa Engineering College, emphasized the importance of observing National Earthquake Safety Day and encouraged both faculties and students to actively contribute to the upcoming 4th National Conference on Earthquake Engineering, scheduled for January 17, 2025. He also stressed the need for thorough preparation for the 4th International Conference on Earthquake Engineering and Post-Disaster Reconstruction Planning, set to take place from January 19-21, 2026.

Er. Sunil Duwal, Principal of Khwopa College of Engineering, elaborated on the colleges' strategic plans to establish a Research Center for Multi-Hazard Risk Reduction. This initiative aims to address multifaceted hazards, aligning with the academic programs offered, such as ME in Earthquake Engineering and MSc in Urban Design and Conservation. Er. Duwal also emphasized the importance of learning from global events, such as the recent wildfires in Los Angeles, to enhance disaster resilience strategies.

Vice Principal of Khwopa Engineering College, Subeg Man Bijukchhen, delivered an insightful presentation on the recent 2025 South Tibetan Earthquake (M7.1), shedding light on its epicenter, seismic impact and other aspects of earthquake.

Dr. Manjip Shakya, Head of the Postgraduate Department of Earthquake Engineering at Khwopa Engineering College, provided updates on the progress and preparations for the forthcoming conferences on earthquake engineering. He highlighted the importance of such platforms in fostering academic research and collaboration for disaster mitigation and recovery.

The program concluded with a collective commitment from the participants to prioritize earthquake safety awareness and contribute to research and innovations in disaster risk reduction.



Khwopa College of Engineering Signs MoU with Skill Square Pvt. Ltd. to Enhance Practical Learning Opportunities

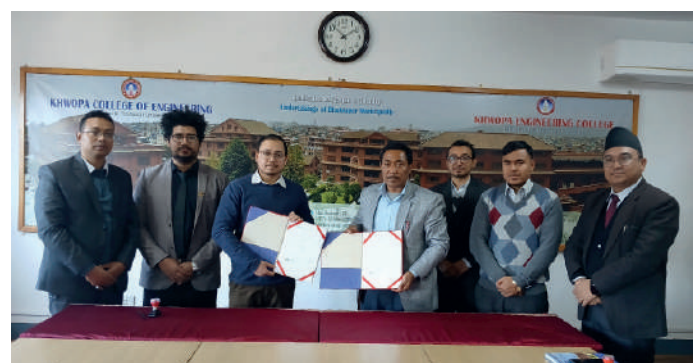
On 9th Magh 2081, Khwopa College of Engineering (KhCE), through its Placement Cell, signed a Memorandum of Understanding (MoU) with Skill Square Pvt. Ltd., aiming to provide students with enhanced real-world exposure and practical learning opportunities. The signing ceremony was chaired by Prof. Dr. Raju Bhai Tyata, Coordinator of the Placement Cell, in the presence of KhCE Principal Er. Sunil Duwal.

Skill Square Pvt. Ltd., established in 2020, collaborates with corporate and government organizations, academic institutions, and individuals to advance skills and knowledge across various sectors. Dedicated to empowering individuals for success in a dynamic world, the organization designs and delivers evidence-based training programs to solidify skills and contribute to national development.

The purpose of the MoU is to establish a framework for collaboration between KhCE students and Skill Square Pvt. Ltd. to implement skill development programs. It aims to organize training sessions focused on enhancing soft skills essential for professional and personal growth. Additionally, the partnership seeks to foster entrepreneurship skills, encouraging students to address societal challenges and drive technological advancements. Furthermore, the agreement includes the design and delivery of evidence-based training, courses, and materials by experienced trainers to ensure effective learning and skill enhancement. The MoU was signed by Prof. Dr. Raju Bhai Tyata on behalf of KhCE and Mr. Neeraj Pradhan, Founder and Managing Director of Skill Square Pvt. Ltd. Other notable attendees included Er. Dinesh Gothe, Head of the Computer and Electronics Engineering Department; Er. Naresh Khatri, Deputy Head of the same department; Mr. Sanjaya Manandhar, Head of Administration; Er. Chandra Krishna Prajapati, Member Secretary of the Placement Cell; and

Mr. Nikhil N. Shakya, Co-founder of Skill Square Pvt. Ltd.

This partnership is expected to strengthen students' practical knowledge and skills while fostering a foundation for effective industry-academia collaboration. It marks a significant step in preparing KhCE students for professional success and societal contribution.



Field Visit of Irrigation and Drainage Engineering Civil Engineering 2078 Batch

The Department of Civil Engineering successfully conducted a field visit for the 2078 batch specializing in Irrigation and Drainage Engineering from Magh 17 to 20, 2081. The visit aimed to bridge the gap between classroom learning and real-world applications by allowing students to study major irrigation projects firsthand. During the visit, students had the opportunity to study three major irrigation projects: the Bagmati Irrigation Project, the Narayani Lift Irrigation Project, and the Khageri Irrigation Project.

At the Bagmati Irrigation Project students examined headworks, the western main canal, desilting basins, cross drainage structures, head regulators, canal falls, and outlets, gaining insights into system design and maintenance. In the Khageri Irrigation System they observed river training works and diversion headworks, understanding their role in water distribution and flood control. At Narayani Lift Irrigation Project the visit included an in-depth look at the intake system and pump house, where students learned about the mechanisms involved in lifting water for irrigation.

The visit was led by Er. Ramesh Bala, Er. Bibek Thapa, Er. Bikesh Khatri, Er. Gaurav Bhusal, Er. Aenish Dyopala, and Er. Riya Shrestha, who provided expert guidance throughout the trip. Interacting with technical personnel allowed students to better understand the planning, operation, and challenges of irrigation systems in Nepal. Such hands-on

experiences are crucial in reinforcing theoretical knowledge, ensuring students are well-prepared for real-world engineering challenges.



International Conference on AI and Engineering (ICAIE 2025)

Kantipur City College (KCC), Putalisadak, Kathmandu, hosted the International Conference on AI and Engineering (ICAIE 2025) on the 6th of Magh, 2081. The conference brought together leading experts, researchers, practitioners, and civil and computer engineering students to explore the transformative role of Artificial Intelligence (AI) in engineering. The event provided a platform for exchanging knowledge, discussing pressing challenges, and identifying opportunities for AI integration in engineering. Senior lecturers Bibek Thapa (Civil Engineering) and Naresh Khatri (Computer and Electronics Engineering) represented KhCE in the event.

The conference highlights are, the opening session & keynote speech by Associate Dean of Lovely Professional University (LPU), India, on “Challenges and Opportunities of AI in Engineering.” Invited speakers were Professor Sudan Jha (Kathmandu University) and Professor Ritu Raj Lamsal (Deerwalk Institute of Technology). Four researchers presented their work in two interactive sessions on AI applications in engineering. Panel discussion session was conducted on “Nepal’s AI Policy and Future of AI in Engineering” with a panel of Dr. Suresh Manandhar (CEO, Wiseyak), Mr. Anil Kumar Dutta (Joint Secretary, Ministry of Communications and IT), Dr. Manoj Shakya (Assistant Professor, Kathmandu

University) and moderated by Vivek S. Rana, Digital Enterprise Architect, US. The last session was a networking session and the event ended with informal discussions and networking opportunities.



Parent-Teacher Meetings – Winter Semester B.S. 2081

The Civil Department of Khwopa College of Engineering conducted a series of parent-teacher meetings during the first assessment of the Winter Semester, B.S. 2081 as a regular semester-wise schedule. Held from the 22nd to the 25th of Poush, these meetings were designed to keep parents informed about the department's bi-annual activities, including curricular, co-curricular, and extracurricular events. Additionally, updates on examination results and strategic plans for the future were shared to foster transparency and collaboration between parents and faculty.

The meetings were organized batch-wise, with each session focusing on specific topics relevant to the student's academic and personal development. On the 22nd of Poush, the meeting for the 2077 batch addressed career opportunities, job prospects, and support for academically weaker students. The session was attended by parents and faculty members, including the Head of the Department (HoD), Er. Aanand Kumar Mishra, and the Deputy Head of the Department (DHoD), Er. Anil Kasula. The HoD provided updates on departmental activities, highlighting the progress and plans.

The following day, on the 23rd of Poush, the 2078 batch's meeting focused on examination results, co-curricular activities, student skill development, and the importance of balancing academics with overall well-being. Practical education was also a key topic of discussion. This session saw the participation of parents and faculty members, led by DHoD Er. Anil Kasula, who shared updates on the department's strategic plans.

On the 24th of Poush, the 2079 batch's meeting emphasized academic performance, skill development, additional classes, laboratory experiments, and student involvement in research. The session was attended by parents and faculty members, with HoD Er. Aanand Kumar Mishra leading the discussions.

The final meeting, held on the 25th of Poush for the 02080 batch, covered topics such as the revised

syllabus, internship planning, academic performance, and skill development. This session was attended by parents and faculty members participating, including HoD Er. Aanand Kumar Mishra and DHoD Er. Anil Kasula.

Throughout the meetings, parents were encouraged to share their feedback. The feedback addressed various aspects of the department's operations, including academic performance, the learning environment, facilities such as transport, laboratories, and the library, as well as co-curricular and extracurricular activities. Parents also provided insights on scholarships, examination results, and infrastructure. This valuable feedback will be carefully reviewed to implement meaningful improvements that enhance the overall student experience.

The Civil Department extends its heartfelt gratitude to all the parents for their active participation and valuable contributions. Together, we are committed to ensuring the holistic development of our students and fostering a supportive and enriching academic environment.



Field Visit to Gorkha Red Brick Factory & Ambika Plywood Manufacturer

A field visit on the subject "Civil Engineering Material" was successfully organized on Magh 9, 2081, for the 081 Batch civil engineering students. Er. Sunita Kharbuja and Er. Upu Rasiya Lasiwa, Er. Radhika Kharbuja, Er. Pramila Rajchal, and Er. Aenish Dyopala coordinated the visit, which was intended to enhance students' practical understanding of civil engineering materials.

The selected destinations, Gorkha Red Brick Factory and Ambika Plywood Manufacturer were chosen for their direct relevance to the curriculum and their ability to provide hands-on learning experiences. During the visit, students observed the transformation of raw materials into final commercial products, bridging the gap between theoretical knowledge and real-world applications.

The technical team at both sites guided the students through the entire manufacturing process, explaining each stage in detail. This interactive learning opportunity allowed students to better understand construction materials and their production processes.



Most Circulated Subject on Magh 2081

S.N.	Circulation	Title
1	580	Mathematics
2	194	Engineering Physics
3	186	Engineering Chemistry
4	138	Transportation Engineering
5	111	Irrigation Engineering
6	106	Engineering Mechanics
7	85	Sanitary engineering Environmental engineering series-II
8	79	Economics Civil Engineering

An Educational Tour to Bandipur

The Department of Civil Engineering at Khwopa College of Engineering recently organized a three-day educational field visit to Bandipur, held from 8th to 10th Magh 2081. This immersive experience was designed for fourth-year students specializing in Transportation Planning and Engineering, Structural Engineering, and Groundwater Engineering, offering them a unique opportunity to observe and interact with practical engineering concepts in a real-world setting. The tour was packed with activities that blended technical learning with cultural exploration, making it a memorable and enriching experience for all participants.

The key highlight was the Bandipur cable car system, where students examined its structural components, pulley mechanisms, and safety features, gaining insights into transportation infrastructure in hilly terrain. It also served as a case study for transportation planning, covering design, efficiency, and environmental impact. Exploring Bandipur's traditional Newari architecture, students studied indigenous construction techniques and post-2015 earthquake restoration efforts. This experience underscored the balance between heritage preservation and modern seismic safety.

At Siddha Cave, students observed geological formations like stalactites and stalagmites, enhancing their understanding of erosion, mineral deposition, and underground structure stability. The visit to Tin Dhara, an ancient natural spring, focused on groundwater management. Students analyzed water quality, flow patterns, and sustainable resource utilization, gaining insights into rural water supply challenges. At the Bandipur Monastery, students examined Buddhist architectural elements, including tiered roofs, wooden supports, and stone masonry, understanding their structural stability and cultural significance. The tour also included observing the Queen Tower's construction, showcasing vertical

engineering techniques, material selection, and safety considerations. Beyond technical learning, the tour provided cultural insights, demonstrating how traditional heritage coexists with modern development. It reinforced the importance of context-sensitive engineering that integrates technical expertise with cultural and environmental considerations.

In conclusion, the tour bridged theory with real-world applications, fostering critical thinking, problem-solving, and innovation. It emphasized sustainable, community-centered engineering approaches, inspiring students to embrace the broader societal responsibilities of engineering.



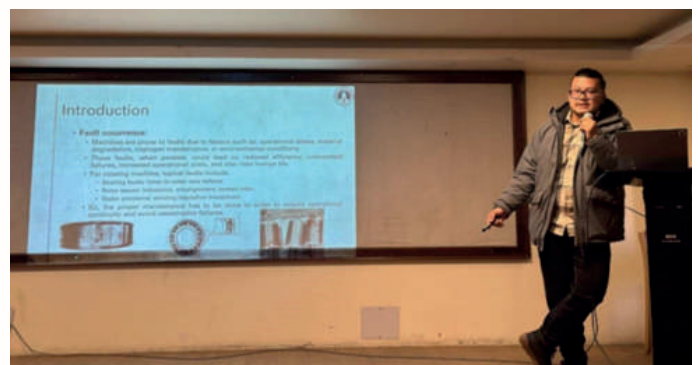
KHCE Alumni Association & Electrical Department Host Guest Lecture

The KhCE Alumni Association, in collaboration with the Electrical Department of Khwopa College of Engineering, successfully conducted an insightful guest lecture on January 31, 2025. The program featured Er. Shreeshuva Maharjan as the esteemed speaker. He addressed students on the topic "Fault Diagnosis on Induction Motor."

The session was attended by 2nd, 3rd, and 4th-year Electrical Engineering students, who gained valuable technical knowledge and practical insights into fault detection and troubleshooting techniques in induction motors. Er. Maharjan elaborated on various diagnostic methods, emphasizing real-world applications and the significance of early fault detection in industrial settings.

Beyond the technical discourse, Er. Maharjan also shared his professional journey, offering guidance on career development, industry expectations, and skills essential for aspiring electrical engineers. His experiences and words of motivation resonated with the students, inspiring them to excel academically and professionally.

The interactive session allowed students to engage in Q & A discussions, where they clarified their doubts and explored deeper diagnosis techniques. The event was well-received, with students appreciating the opportunity to learn from an industry expert.



The KhCE Alumni Association and the Electrical Department expressed their gratitude to Er. Maharjan for his valuable time and insights. Such events continue to strengthen the bridge between academia and industry, equipping students with practical knowledge and preparing them for future challenges.

Field visit to the Solar Rooftop Installation of Khwopa Hospital

On 28th Magh, 2081, 16 students from the Electrical Engineering Department's BEL 2077 batch (IV/II) recently visited the Solar Rooftop Installation of Khwopa Hospital as part of the Elective II course: Applied Photovoltaic Engineering under the direction of Er. Yogesh Bajracharya and Mr. Aayush Bhatta. The design process, procurement, installation, and troubleshooting associated with the current solar rooftop installation were the primary focus of the visit. Students analyzed the entire Solar PV installation setup throughout the tour, including the project's techno-economic analysis and design significance. The electrical department has been concentrating on updating the latest trends on the growth of renewable energy since it is an important and burgeoning energy source. The visit has provided the students with the real scenario analysis of the installation and also acquainted them with the significance of the theoretical knowledge imparted in the course.



A Successful Alumni Interaction Program with Er. Dina Khagi

The KhCE Alumni Association with the collaboration of the Electrical Engineering Department, KhCE shared the success of our recent Alumni Interaction Program featuring Er. Dina Khagi, Alumni BEL 2072 Batch. The event, held on February 9th, 2025, brought together alumni, students, and faculty for an engaging and insightful discussion.

Er. Dina Khagi, a professional in Transmission Design, currently working as an Associate Electrical Engineer at K&A Engineering Consulting, shared valuable experiences, career insights, and expert advice that resonated deeply with the attendees. From personal career journeys to industry challenges and opportunities, the session provided a platform for learning, networking, and inspiration.

The interactive Q&A session allowed students and young professionals to seek guidance on career growth, industry trends, and skill development. The event truly embodied the spirit of mentorship and alumni engagement, strengthening the bond between past and present members of our academic community.

We extend our heartfelt gratitude to Er. Dina Khagi for taking the time to connect with us and share such invaluable wisdom. Your contributions continue to inspire and empower our alumni network.



Training on Matlab Basics and Latex

The Department of Electrical Engineering held a 30 hours course on "Training on MATLAB Basics and Latex" from 19th January –9th February 2025 (6th to the 27th of Magh, 2081), which covered fundamentals of MATLAB and the mathematics underlying their formulation using the MATLAB tool along with familiarization and conceptualization of simulation tools interlinked with the Electrical Engineering studies.

For reproducible documentation, an overview of Latex and its significance was also imparted. 27 students from 2080 and 2079 batches of Electrical Engineering Students participated in the training.

The training's primary objective was to highlight tool applications and integrate them with course-related topics' practical applications. The training started with MATLAB basics, covered a variety of simulation techniques, and ended with practical instruction on creating models for the power system and machines. Er. Ojaswi Bahadur Lakhey, a part-time faculty member of the Electrical department, and Rojan

Tamang, Anil Bhatt, and Chhabindra Shrestha, fourth-year BEL 2077 Batch students, led the event. They gave insights on the software and the state-of-the-art of various models generated.

A wide range of engineering topics were covered in the program, and there was also a great chance to network with the instructors. As a forum for information sharing and cooperation between seniors and juniors, the program was interactive and effectively finished. Overall, the initiative was a huge success and concluded with substantial support for expanding the participants' research activities.

