KHWOPA COLLEGE OF ENGINEERING
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Poush 2080 | Volume 3 | Issue 6
Newsletter

A Proposal for Affiliation to Conduct M.Sc. in Engineering Programs was Submitted to IOE

Khwopa College of Engineering has officially submitted a request to the Institute of Engineering, Tribhuvan University, seeking approval to conduct M.Sc. in Engineering programs. Dated on the 18th of Poush 2080, this initiative reflects the college's aspiration to extend its academic offerings to the postgraduate level in engineering.

In the realm of advanced education, KhCE has put forth proposals for Master's programs that cater to various engineering specializations.

The Master of Science in Computer Engineering, focusing on Data Science and Analytics, addresses the increasing demand for professionals skilled in handling and analyzing extensive datasets. Other proposed Master's programs include Power System Engineering, Distributed Generation, Transportation Engineering, Geo-Technical Engineering, and Water Resources Engineering. With a high hope of a positive response from the university, Principal Sunil Duwal, former principal Chandra Kiran Kawan, and Head of Administration Sanjaya Manandhar met the dean and assistant dean of IOE to discuss the master's programs at KhCE.

Proposed Masters Programs at KhCE

1. MSc in Computer Engineering Specialization: Data Science and Analytics
2. MSc in Power System Engineering
3. MSc in Distributed Generation
4. MSc in Transportation Engineering
5. MSc in Geo-Technical Engineering
6. MSc in Water Resources Engineering

Appointment Letters Distribution Event

In a ceremony on 9th Poush 2080 graced by the presence of Bhaktapur Municipality Mayor and Chairman of the College Management Committee, Mr. Sunil Prajapati, as a chief guest, emphasized the importance of selfless and disciplined work among the teaching and non teaching staff within the college. This message was conveyed during the letter handover program of newly appointed faculty and staff in both Khwopa Engineering College and Khwopa College of Engineering, both run by the Bhaktapur Municipality. Mr. Prajapati stressed the need for honesty in thought, speech, and action among the teaching and non teaching staff for the betterment of the colleges. He underscored the importance of fostering a sense of ownership within the organization and emphasized the need to provide constructive criticism to colleagues and actively work towards improving individual weaknesses.

Furthermore, he advocated for the self-sufficiency of the college, emphasizing that it should operate independently rather than relying on foreign funding.

During the event, Er. Sujan Maka, the Principal of Khwopa Engineering College, Er. Sunil Duwal, the Principal of Khwopa College of Engineering and Adminstration Head Sanjaya Manandhar welcomed the newly appointed members and extended their best wishes for their successful tenure.

As the Chief Guest, Mr. Sunil Prajapati presented appointment letters to the newly appointed teaching and non-teaching staff, symbolizing the commencement of their roles in the colleges.

Guest Lecture by Prof. Dr. Brijesh Mainali; Explores Research and Collaboration at KhCE

On January 5, 2024, the Civil Department at Khwopa College of Engineering hosted Prof. Dr. Brijesh Mainali, Associate Professor at Linnaeus University, Sweden, for an enlightening guest lecture. Dr. Mainali's prolific academic career includes numerous scientific publications, with a notable focus on international journal articles, conference papers, book chapters, guidelines, and monographs. With an impressive 25 years of experience in Energy and Sustainable Development, Dr. Mainali brought a wealth of knowledge to the final-year students, providing deep insights into the complex intersections of research, academia, and sustainability. The lecture covered diverse facets of research, emphasizing the significance of multidisciplinary collaboration for comprehensive problem-solving. Practical insights on formulating research questions, conducting literature reviews, selecting methodologies, ethical considerations, and continuous learning were discussed to guide effective research endeavors.

Following the guest lecture, an engaging session unfolded between Dr. Mainali and the faculty of the Civil Department. The discussion spanned teaching methodologies, research collaboration, and the potential for joint initiatives between Khwopa College of Engineering and Linnaeus University. This exchange of ideas and expertise lays the groundwork for a meaningful partnership, fostering collaboration and excellence. The faculty, staff, and students extend heartfelt appreciation to Prof. Dr. Brijesh Mainali for his invaluable contribution, inspiring us toward a future where education and sustainability go hand in hand.

Field visit of Engineering Geology-II

Khwopa College of Engineering, Department of civil engineering has managed a field visit on engineering geology-II for 4th semester students on 22nd - 25th Poush at proposed Budhigandaki HEP damsite area, Krishnabhir and Malekhu area. The Field visit was led by senior lecturer Mr. Nirmal Kafle, Lecturer Er. Raju Miyan, Shiva Ram Suwal and part time faculty Er. Bikesh Khatri. Different geological hazards, preventive and protective measures, roadside bioengineering, test tunnel construction and supports, selection of sites for different hydraulic features of large hydroelectric project were the measures of the visit.

The team explored different geological formations such as rock outcrops, riverbeds, and slopes. They closely examined the geological structures, mineral composition, and the effects of natural forces on the terrain. The Lecturers emphasized the importance of field visits in engineering education, stating, Field visits provide an invaluable opportunity for students to bridge the gap between theory and practice.

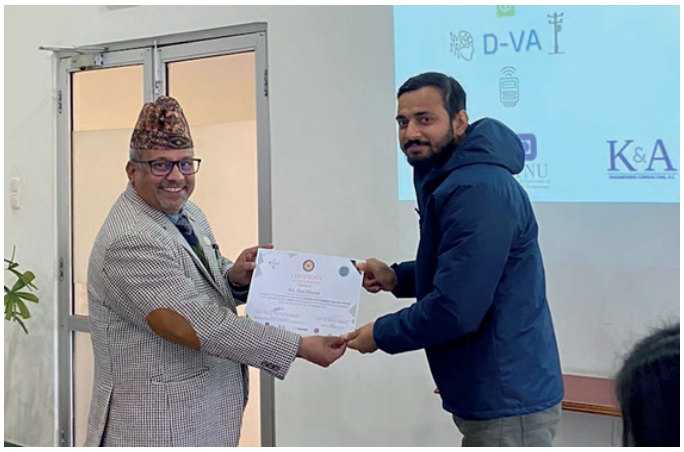
Certificate Distribution of Online Training Classes

The Civil Engineering Department continued the practice of seniors to juniors training during the semester gap, wherein the department organized online training classes for second, third, and fourth-year civil engineering students in the month of Mangsir 2080 to enhance their skills.

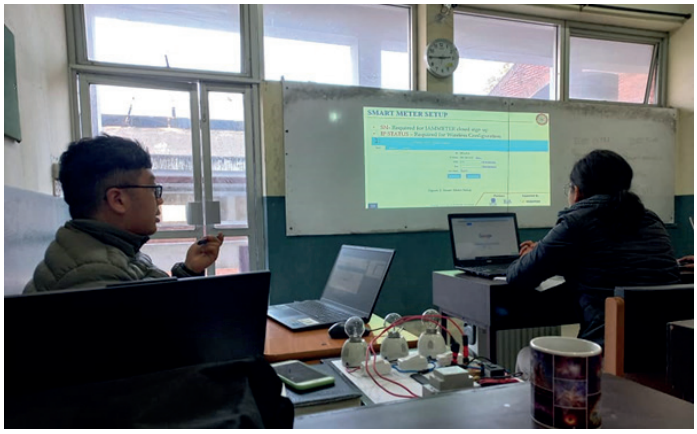
The online training sessions were tailored to each academic level. The second-year students underwent training in Sketchup, facilitated by Swornim Aaganja, Nabin Duwadi, and Anish Lageju (a student from the Civil 2077 batch). Third-year students were instructed in Latex by Shreeshuva Maharjan and Shanti Karki, while fourth-year students received training in Google Earth Engine from Er. Yogesh Bhattarai and Er. Unisha Ghimire.

Upon completing the training program, the department hosted a Certificate Distribution Program on the 20th of Poush, 2080. During the program, College Principal Sunil Duwal and College Vice Principal Ratna Shova Prajapati offered additional encouragement to the students, emphasizing the significance of participating in such department-organized initiatives and elucidating the importance of these training classes. Certificates were awarded to the participating students, recognizing their commitment and achievement during the training. Additionally, certificates of appreciation were presented to the trainers for their valuable contributions to the student's skill development.

Participation in Training on Distribution Grid Visualization



Hari Bhusal from the Department of Electrical Engineering completed Training on Distribution Grid Visualization held from 27th to 29th December 2023. The training was organized by Distribution Grid Visualization and Automation (D-VA) and EMCS projects. The training was conducted at the Department of Electrical and Electronics Engineering, Kathmandu University. The training highlighted tools and techniques for distribution grid visualization and automation. The training was divided into three sections: presentations on relevant topics, training on using tools for grid visualization and automation, and workshops. There were presentations from Prof. Dr. Bhupendra Bimal Chhetri, Dr. Basanta Raj Pokhrel, Dr. Samundra Gurung, and Dr. Kamal Chapagain. During the workshop session, the participants exchanged their ideas and views on different topics. Mr. Amrit Parajuli and Mr. Phurba Tshering Sherpa provided training on using the DIgSILENT PowerFactory tool, and it was explored more for use in modeling and visualization of real-time distribution systems, which could further be used for automation.



Most Circulated Subject on Poush 2080

S.N.	Circulation	Title
1	341	Mathematics
2	200	Physics
3	125	Mechanics Dynamics and static
4	86	Sanitary engineering Environmental engineering series-II
5	69	Steel structures
6	65	Economics Civil Engineering
7	59	Hydraulics Civil Engineering

Guest Lecture on Challenges and Opportunities in Future Power System

On January 4th, 2024, Dr. Basanta Raj Pokhrel, a Research Scientist affiliated with NTNU in Norway, delivered a presentation to the Electrical Engineering faculty and fourth-year students (BEL 2076 Batch) of Khwopa College of Engineering regarding the paradigm shift occurring in contemporary power systems.

His presentation delved into the evolving dynamics of power networks, showcasing how technology advancements, such as ICT and machine learning, are reshaping their architecture. Dr. Pokhrel introduced the National Smart Grid Laboratory, a hub facilitating cutting-edge Research and Development, verification, and testing across diverse smart grid applications.

The session illuminated the audience on the exciting horizons of power system innovation, and the pivotal role technology plays in this transformative journey of the power system networks.

Guest Lecture on Challenges and Opportunities in Future Power System

The Department of Electrical Engineering conducted a guest program entitled "Role of Electrical Engineer in Electrical Distribution System of Nepal" on 11th Poush, 2080 (27th December 2023) for fourth-year students. The resource person, Er. Jayanand Jha, Assistant Manager, Thimi Distribution Centre, NEA, highlighted the importance of the distribution system in Nepal and emphasized the essence of proper knowledge regarding the distribution system.

His presentation was about the fundamentals of the distribution system linked with engineering education in Nepal and advocated the ground reality of problems faced during the procurement and establishment of distribution along with the methods for troubleshooting and mitigating those problems. The session was insightful and up to the notch with his sharing, including personal experiences dealing with distribution problems working as a manager in the NEA Distribution Center.

The session provided the audience with the fundamentals of engineering and motivated all the participants to gain engineering knowledge to broaden their horizons in the practical field.

Guest Lecture on Nepal's Present and Future Electricity Market

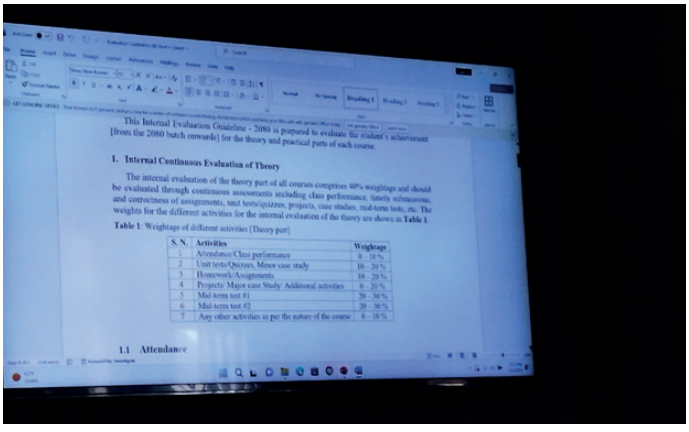
On 13th Poush, 2080 (29th December, 2023), Er. Saroj Koirala, a representative from the Electricity Regulatory Commission, Nepal, delivered a presentation to the Electrical Engineering faculty of Khwopa College of Engineering regarding the past and present scenario of the electricity market in Nepal.

In the program, he shared the knowledge gained from his experience working as a consultant in the Electricity Regulatory Commission regarding Nepal's energy market, policies, and grid code. There was rigorous discussion on the insights presented and Nepal's energy market framework. Mr. Koirala has prepared a crash course related to the same for undergraduate students to provide them with information and knowledge. The discussion also focussed on finalizing the subject topics from the crash course. The program concluded with a fruitful discussion on expertise in Nepal's energy market.

Faculties Attend CIMDU Program at IOE, Pulchowk

Faculty members from the Sciences and Humanities Department at Khwopa College of Engineering played a dynamic role in a collaborative venture with CIMDU, Institute of Engineering, Pulchwok, Lalitpur. Their active engagement encompassed in-depth discussions, interactions, and the conceptual framework formulation for the revamped curriculum of the first semester in the academic session 2080/81. It was a four-day program that commenced on the 22nd of Poush, following an invitation from CIMDU.

The participants included Prof. Dr. Raju Bhai Tyata, who represented the physics department, and Ram Prasad Dhungana and Rashmi Koju from the chemistry department. Additionally, Bhimsen Khadka and Chhabi Dhungana from the Mathematics department played pivotal roles in contributing to the program. The sessions were not solely focused on course content; they also delved into micro-syllabus development, question model formulation, internal evaluation systems, and the commencement strategies for the upcoming semester. This collaborative effort yielded valuable insights into course guidelines, ensuring a comprehensive understanding of the anticipated curriculum changes.



Khwopa Engineering College and Khwopa College of Engineering Release JScE Vol. 10 (2023) on NepJOL

Khwopa Engineering College and Khwopa College of Engineering proudly announce the publication of Volume 10 (2023) of the Journal of Science and Engineering (JScE) on Nepal Journals Online (NepJOL). Released on January 2, 2024, this issue features diverse research papers from leading professionals, academics, and research organizations in the science and engineering fields.

The volume covers a broad spectrum of topics, including Arjun Kumar Gaire's exploration of the Skew Lomax Distribution, Sunil Kumar Shrestha's comparison of optical OFDM techniques, and a comprehensive study on the Site-Specific Non-Linear Ground Response Analysis of the newly constructed Dharahara Tower.

Yogesh Bajracharya, Pujan Adhikari, and Bishnu Prasad Sharma delve into factors influencing the adoption of induction stoves in Bhaktapur, offering insights into local consumer preferences. Rakesh Gwachha and team present a case study on Distribution Network Reconfiguration Using Genetic Algorithm for Loss Reduction in Bhaktapur's Katunje Feeder, emphasizing practical applications in electrical networks.

Environmental science takes center stage with Prateek Pradhan and Bhim Kumar Dahal's Landslide Susceptibility Analysis of Jugal Rural Municipality, Sindhupalchok, addressing the region's geological vulnerabilities.

Managed by Tribhuvan University Central Library and established by INASP in 2007, NepJOL is a crucial platform for scholarly knowledge dissemination. Nepal Journals Online (NepJOL) further extends the reach of these publications.

Khwopa Engineering College and Khwopa College of Engineering express gratitude to contributors, reviewers, and readers for their dedication to advancing scientific knowledge and engineering innovation in Nepal.

QR Scan for JScE

Unveiling Surumkhim: A Journey through Education, Infrastructure, and Community Resilience in Eastern Rural Nepal

In an effort to contribute to the preparation of a Detailed Project Report (DPR) for an old and damaged Primary School, a team consisting of two Civil Engineers (Er. Sasin Prajapati and Er. Aashish Lageju) and an Architect (Ar. Rabita Shilpakar) from the Technical Section undertook a visit to Surumkhim village, located in Sidhingwa Rural Municipality, ward no 7, Taplejung from Poush 17th to Poush 24th, 2080. Over the course of an 8-day trip, the team engaged in documentation and survey activities for three days, encompassing a comprehensive study of both the school area and the entire village. Utilizing tools such as Visual Investigation, Questionnaire surveys, Total Station, DGPS, and Drone Survey, they aimed to gather essential data.

While the primary focus was on preparing the DPR for the school, the team concurrently conducted a broader study on the socio-economic aspects of the community and the prevalent construction methodologies in the region. Interactions with village officials, including Mr. Laxman Tamang (Ward Chairman of Sidhingwa Rural Municipality Ward 7), Mr. Jairub Limbu (Chairman of the School Management Committee), Mr. Jaharman Tamang (school principal), and other school staff, not only delved into the existing condition of the school but also explored the overall educational landscape with the rural municipal authority. Additionally, the team participated in a community interaction program organized by the School Committee, during which Er. Sasin Prajapati, head of the Technical section, shed light on Bhaktapur Municipality's efforts to enhance sectors like education and health. Discussions also touched upon the potential positive impact of public participation in social and construction activities for the development of Bhaktapur city.

A site survey in the village uncovered several challenges, including a disorganized road map to the village, a lack of connection with the Nepal Electricity Authority necessitating reliance on renewable energy sources, primitive health facilities, a low socio-economic status, dependence on agriculture for livelihood, and a disconnect with the market, aside from modern amenities.

This hands-on experience provided the team with insights into the architectural practices within the village, where indigenous construction technology was employed. Villagers constructed two-story houses and school buildings using locally available materials such as stone, mud, and wood (Utis and Katus) for wall construction, complemented by thatched roofs in some of the older structures.

Beyond the technical aspects, the team immersed themselves in village life, witnessing firsthand the commendable efforts of students striving for education despite challenging family backgrounds dependent on agriculture.

3rd National Conference on Architectural Trends and Heritage (NCATH 2024)

April 26th, 2024

Call for Participants

Key Dates

Submission of extended abstract : 29th March 2024

Notification of acceptance : 5th April 2024

Early Registration : 10th April 2024

Themes

- Heritage (Historic, Contemporary, Risk, Policies, Construction Technology)
- Contribution of practice
- Public and private land: ownership and management
- Sustainability and Resilience

(Note : Please go through the link for online registration and detail submission procedure.)

Registration Charges

Institutional	NRs 5,000/-
Individual	NRs 2000/-
Student	NRs 1500/-

Payment Details

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