



An Undertaking of Bhaktapur Municipality

Khwopa Engineering College

Affiliated to Purbanchal University

CHAITRA 2080

ISSUE 24

NEWSLETTER

Robotics Competition and Project Exhibition in Khwopa



Mr. Sunil Prajapati, Mayor of Bhaktapur Municipality; Ar. Rajani Joshi, Deputy Mayor of Bhaktapur Municipality; Er. Sujan Maka, Principal, Khwopa Engineering College and Er. Ratna Shova Prajapati, Vice-Principal of Khwopa College of Engineering at Inauguration Ceremony

24th Falgun

The robot competition and project exhibition program commenced on 24th



of Falgun, 2080, as a collaborative effort between Khwopa Engineering College and

Khwopa College of Engineering, both run by Bhaktapur Municipality.

During the inauguration, the Mayor of Bhaktapur Municipality and Chairman of the college management committee, Mr. Sunil Prajapati, emphasized the significance of perseverance and hard work in achieving success in life. He underscored the colleges' mission to foster skilled professionals capable of competing nationally and internationally, asserting Bhaktapur Municipality's commitment to bridging education and employment.

He further highlighted that Bhaktapur Municipality has initiated youth

entrepreneurship loans to encourage self-reliance and deter Nepalese youth from seeking opportunities abroad.

Deputy Mayor Ar. Rajani Joshi emphasized the pivotal role of competition in motivating engineering students to undertake innovative research endeavors, highlighting the pivotal role of information technology in driving the country's development.

Er. Sujan Maka, the principal of Khwopa Engineering College, extended congratulations to the participants and emphasized the institution's commitment to holistic student development through



On the program, Er. Yogesh Bajracharya provided insights into the Robostack race, the Line Following competition, and the final-year project exhibition.

Following the opening ceremony,



extracurricular engagements alongside the curriculum. He announced the college's plan to host a national conference on architecture in 2081.

Er. Ratna Shova Prajapati, Vice Principal of Khwopa College of Engineering, reiterated the importance of aligning student education with practical application, framing the competition as a step towards achieving this goal.



Mayor Prajapati and other dignitaries visited the robot and project exhibition.

A total of 26 teams comprising 103 students participated in the robot competition, while 53 exhibits featuring 210 students were showcased in the project exhibition.

Winners of the Robostack Race and Line Following Competition were honored

with trophies, certificates, and cash prizes. Below are the outcomes of the competition:

Category	Robostcale Race	Line Following
Winners	Khwopa Secondary School	Shree Bhairabnath Sanskritik Samuha
1st runner up	Khwopa Engineering College	Kathford International College
2nd runner up	Kathford International College	Khwopa Secondary School
Best Design	Khwopa College of Engineering	Khwopa Secondary School
Best Engineering Design	Basu Secondary School	Khwopa College of Engineering
Emerging Team	Everest English School	Banepa NIST



Participation in Yantra 9.0

11th Falgun

Khwopa Engineering College participated in Yantra 9.0 2024, an international Robot Competition organized by Robotics Association of Nepal (RAN), at Dasharath Stadium Covered Hall, Kathmandu on February 11 and 12, 2024.

At the event team Khwopa, comprising Saurav Dhoju, Rabisha Machamasi, Upendra Shahi, Sanjib Kasti, and Cinderella Kaju, clinched the prestigious "EMERGING TEAM AWARD" in the Yantra

Swarmnoid category. Another team from the college with members Afreena Ansari, Debaki Shrestha, Samunnati Giri, Monika Kapadi and Sangita Majhi participated in the Yantra International League awarded "TECH DIVAS AWARD".

The competition comprised of various events like Business Cup, Soccer, Robo-war, Swarmanoid and many more.



Khwopa Engineering College Joins Public Campus Quality Enhancement Program

14th Falgun

Khwopa Engineering College teamed up with the Education Development Directorate, Ministry of Social Development, Bagmati Province Government, Hetauda, to launch the "Public Campus Quality Enhancement Program." This initiative aims to raise educational standards across the province.

Out of 90 applicnt colleges, 40 have

been chosen to take part in this program. Khwopa Engineering College is proud to be one of the selected institutions, showing its dedication to academic excellence and improvement.

As part of the agreement, each participating college will receive 10 lakhs NRs to fund projects that improve higher education quality. This financial support will kickstart various projects, including classroom management and research

& development activities, at Khwopa Engineering College, benefiting both students and faculty.

The official signing ceremony took place on 2080 Falgun 11 at the Education Development Directorate office in Hetauda. Dipendra Subedi, Director of the Education Development Directorate, chaired the

event, with Kumari Moktan, Honorable Minister of Social Development, as the chief guest.

Principal Sujan Maka, Ganesh Ram Dhonju, Head of the Examination Section, and Siddhi Ram Suwal, Head of the Administration Section, attended the ceremony.



Department Heads and Faculty Attend 'AI Conference for Prosperous Nepal'

18th Falgun

Yogesh Bajracharya and Dinesh Gothe, Heads of Electronics and Communication Engineering (KhEC), and Computer Engineering department (KhCE), along with faculty Dinesh Ghemosu, participated in the "AI Conference for Prosperous Nepal" on March 3, 2024.

Organized by Ministry of Education, Science and Technology (MoEST), Nepal is preparing to develop AI policy and has already formed National AI committee for the same purpose. This event acts as the foundation for developing AI policy in Nepal.



Khwopa Engineering College and Khwopa College of Engineering Collaborate with Innov Nepal for Robotics Competition with Memorandum of Understanding

18th Falgun

Khwopa Engineering College and Khwopa College of Engineering are pleased to announce the signing of a Memorandum of Understanding (MOU) with Innov Nepal, indicating a significant collaboration for organizing the upcoming Robostack and Line Following Competition.

The MOU was signed on the 18th of Falgun 2080, cementing the partnership between the two esteemed academic institutions and Innov Nepal. The MOU was signed by Yogesh Bajracharya, the Head of Department of Electronics Communication and Automation Engineering and Gaurab Tamakhu, the Representative of Innov Nepal in presence of Sujan Maka, Principal of Khwopa Engineering College.

Innov Nepal is a company founded

by the alumni of Khwopa Engineering College by utilizing the entrepreneurship fund provided by Khwopa Engineering College. This Company provides different Services such as import and export of electronics components, training related to arduino and robotics and other electronics solutions.

The Robostack and Line Following Competition is going to be held on 24 Falgun 2080 and is expected to bring together students enhancing their knowledge in Robotics.



Oratory Competition Held at College

18th Falgun

Khwoopa Engineering College, with the initiation of the Department of Science and Humanities, organized the Oratory Competition on 2080/11/18 as a part of extra curricular activities. The competition was held among the students of Batch-2080 and the title of the competition was "Benefits and Challenges of Artificial Intelligence (AI) in Teaching-learning". The number of participants in the competition was 20, representing the faculties of Civil Engineering, Computer Engineering, and Electronics, Communication and Automation Engineering.

The program was held in the college premises under the chairmanship of Hari Prasad Gyawali, Senior Lecturer of the department, and in the valuable presence of Er. Sujan Maka, the principal. In the competition, a panel of jurors (Dr. Subegman Bijukchhen, the Vice-principal, Sr. Lecturer Nabaraj Budhathoki, and

Sr. Lecturer Er. Amit Shankar Ranjit) concluded with the following result:

First Position: Samriddhi Prajapati
(Computer Engineering)

Second Position: Nimta Shrestha
(Architecture)

Third Position: Kripa Thapa (Civil
Engineering)

Consolation I: Garima Chaulagain
(Computer Engineering)

Consolation II: Alishon Sivahari (Computer
Engineering)

Er. Sujan Maka, the principal, made remarks at the end of the program and distributed prizes to the winners. The program was run by Senior Lecturer Arjun Kumar Gaire.





A 15 Hour Workshop on Robstacle and Line Following Competition

19th Falgun

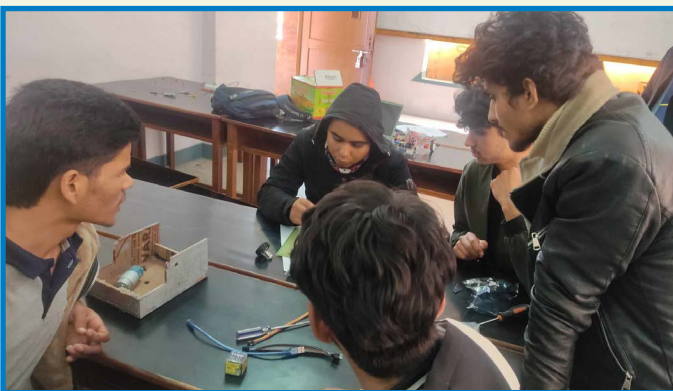
Khwopa Engineering College and Khwopa College of Engineering jointly organized a robotics event on 24th of Falgun 2080. For this event, a 15-hour workshop on Robstacle and Line Following Competition was given for free to the participants of the event. The workshop, held from 12th of Falgun to 19th of Falgun 2080, aimed to equip participants with the necessary knowledge and skills to excel in robotics competitions.

The workshop was conducted by trainers Anoop Shrestha, Gaurab Tamakhu, Prasanna Dahal and Subin Shrestha, representatives of Innov Nepal, a group awarded with entrepreneurship fund by the college. The training covered various

topics including the basics of robotics, programming microcontrollers, sensor integration, and techniques for navigating obstacles and following lines.

The workshop was attended by 68 participants from seven different schools and colleges. Throughout the workshop, they engaged in hands-on activities, building and programming their own robots to navigate through obstacle courses and follow lines.

The workshop proved to be a resounding success, providing a platform for students to enhance their robotics skills and inspiring them to pursue further opportunities in the field of technology and innovation.



Guest Lecture at Khwopa Engineering College

22nd Falgun

Department of Architecture conducted a guest lecture on 5th March, 2024 (22nd Falgun, 2080) at Khwopa Engineering College. Ar. Rumi Singh Maharjan delivered her presentation on “Crafting culture” that focused on her journey via her practices. The talk focused on some of the vernacular practices and the preservation work having essential

communal features. She focused on her work as built to last, learning from the past, climate responsive, and place specific, sustainable and innovative. Through insight into her work, students became mindful of the necessity of detailed effort in the drawing for the better implementation of the project.



Guest Lecture for Civil Engineering Students

23rd Falgun

Department of Civil Engineering organized a guest lecture for civil engineering final year students on 23rd of Falgun, 2080. Er. Jagadishwar Man Shrestha (Former Senior Divisional Engineer, Department of Irrigation, Ministry of Energy, Water Resources and Irrigation, Government of Nepal) delivered an insightful lecture entitled “Innovative

Works for Civil Engineers” to BE Civil 8th semester 2076 Batch students, focusing on the innovative ideas that civil engineers can put forward for the efficient and economic civil engineering works. Engineer Shrestha shared his perspectives, experience and opinions in the analysis and optimization in engineering designs of buildings, water resource related structures and quality of materials.

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Master program's Entrance Examination 2024 online entrance application

Deadline :- 2081-01-02, with late fee :- 2081-01-06

M.E. Earthquake Engineering M.Sc. Urban Design & Conservation

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 info@khec.edu.np

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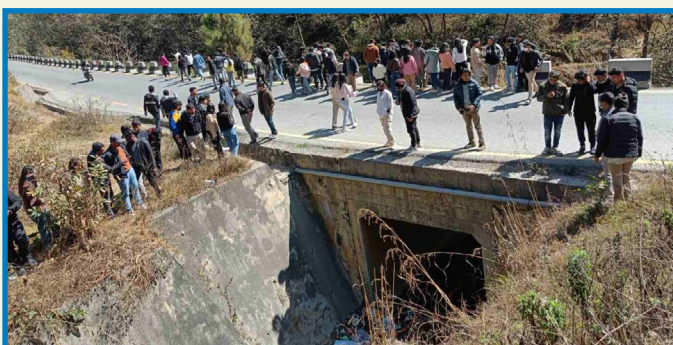
Students' field trip on Water Supply and Transportation Engineering

23rd Falgun

Department of Civil Engineering arranged a field visit for sixth semester (2077 batch) students on 22-23 Falgun, 2080. The field visit was led by Er. Razim Ganesh, Er. Sarita Prajapati, Er. Umesh Sukamani, Er. Saroj Phaiju, Er. Shyam Sundar Basukala, and Er. Ramila Shrestha. A total of 88 students attended the visit. The field visit was related to Transportation and Water Supply Engineering. The objective of the visit was to observe various elements of B.P. Highway and the sequential components of water supply system which would help students visualize the theoretical knowledge they obtained during lectures.

On the first day, along the travel, various highway features, such as catch

drain, water drop structures, pipe and box culverts, hairpin bends, slope and river protection works were observed in addition to a brief visit at micro hydropower project situated at Mangaltar, Kavre. At Nangedanda Pumping water supply system, Mulkot, students observed all the components of the Water Supply System. Sump well at the bank of Sunkoshi River was visited from where water is pumped to plain sedimentation tank, then to slow sand filter and to clear water reservoir. From clear water reservoir, water is pumped up to the service reservoir in three stages. At Selfie Danda, the next day, the students were explained about the shotcrete mechanism and bio-engineering process as slope protection measures. The field trip concluded with a visit to Sindhuligadhi.



Architect Speaks Program Highlights Sustainable Practices at Khwopa Engineering College

24th Falgun

Department of Architecture collaborated with the Society of Nepalese Architects (SONA) to host an enlightening event, named "Architect Speaks," on March 28th, 2024. This initiative was organized under the joint efforts of the SONA Committee on Green and Sustainable Architecture (SCGSA) and the SONA Committee on Architecture Education (SCAE), aimed at fostering dialogue and promoting sustainable architectural practices.

Led by Ar. Sakar Shrestha, Chairperson of SCGSA, the event started off with a focus on the importance of such gatherings within academic institutions. Emphasizing the significance of integrating

sustainable principles into architectural education, Shrestha highlighted the role of initiatives, like Architect Speaks, in enriching the learning experiences of students.

A highlight of the event was the presentation delivered by Ar. Alex Shrestha, an accomplished Architect and Urban Planner from Wonaw and Associates. With a focus on sustainable practices, Shrestha captivated the audience with insights drawn from his projects, notably the Pavilion Himalaya in Pokhara. Through his presentation, he showcased innovative approaches to sustainability in architecture, drawing attention to the harmonious coexistence of built environments with nature.



Students' Visit to Physical Modelling Site at Pulchowk

24th Falgun

The 4th semester, BE Civil 2078 Batch students visited a physical modelling site dedicated to studying hydraulic structures at Hydro Lab Pvt. Ltd. at Pulchowk on 24th of Falgun, 2080. The



visit aimed to highlight the significance of model studies, different types of similitudes, undistorted and distorted models, scale effects in model studies, and the application of model laws in open channels. The site showcased a range of scaled-down models replicating various hydraulic structures, such as dams, spillways, weirs, and channels.

During the visit, the students were introduced to the fundamental concept of model studies and their vital role in designing and evaluating hydraulic structures before their actual implementation. The experts Er. Nirmala Lama and Er. Kunjan Lal Pradhan from Hydro Lab explained the models which provide engineers with invaluable

insights on the behaviour of water flow, pressure distribution, and other hydraulic parameters, helping to optimize the design, improve efficiency, and ensure the safety of full-scale structures.

The students were introduced to the types of similitude and the concept of undistorted and distorted models. Another important aspect covered during the visit was the scale effect in model studies. The experts emphasized that scaling down a hydraulic structure introduces certain complexities due to the differences in flow behaviour. The students gained insights into the challenges posed by scale effects and learned techniques to mitigate their impact through proper scaling laws and



adjustments.

Er. Jeevan Kumar Ban guided students to a testing lab where they were briefed about the types of lab tests to be performed for the sedimentation studies, necessary tools, equipments, and methodologies which were to be

implemented in the field.

Lastly, the application of model laws in open channels was illustrated. The students were shown how hydraulic engineers utilize principles such as Froude's law and Manning's equation to

ensure accurate representation of open-channel flow in model studies. These laws, when appropriately applied, assist in determining the appropriate flow conditions and hydraulic parameters in scaled-down models.



Studio Interaction Session of B.Architecture Students

27th Falgun

Department of Architecture completed a Studio Interaction Session on 10th March, 2024 (27th Falgun 2080). The objective of the session was to share the work and experiences from their design studio work among students. It is essentially an interaction between junior and senior students to establish a forum for sharing and listening to the designers themselves.

The initiative was commenced by students from the 075 batch; Mr. Dipesh Magar, Ms. Modita Manandhar, Ms. Merina Rai, Mr. Kritan Prajapati, Ms. Monika Dhital, and Ms. Bandika Awa who shared their involvement undertaking conservation studio in the 8th semester on “Documentation of Chandeswori Temple at Bnaepa”. They captivated the audience with the journey of inspiration and challenges while doing studio

work. Meanwhile, they emphasized the importance of group effort and the role of mentors in achieving greater results at work.

Similarly, Ms. Ronista Manandhar (Batch 2076) showed her sixth semester design work for a “Housing Project” and

Ms. Krishma Duwal (Batch 2077) presented her third-semester “Residence Design” project. Students learned from their separate projects how to begin the project, what to consider while planning spaces and how to deal with the constraints.



Guest Lecture by Mr. Nripal Adhikari

30th Falgun

Department of Architecture organized a guest lecture on 13th March, 2024 (30th Falgun, 2080) at Khwopa Engineering College for B. Architecture students. Mr. Nripal Adhikari (founder of ABARI) delivered his presentation on “Vernacular Architecture- Practices by ABARI”. ABARI is a socially and environmentally committed research, design and construction firm that examines and encourages the vernacular architectural tradition of Nepal.

He emphasized the benefits and sustainability aspect of bamboo and mud in construction through the examples of both small and large-scale projects accomplished by ABARI. He explored the possibility for incorporating bamboo into contemporary design approaches. He promoted the utilitarian design of bamboo and mud for thermal comfort via his major ventures, including Annapurna Bal Ashram, Kopila Valley School, Madan Puraskar Pustakalaya, and Dhulikhel Learning Centre.



Khwopa Engineering College

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