

An Undertaking of Bhaktapur Municipality

Khwopa Engineering College

Affiliated to Purbanchal University

ASOJ 2079 ISSUE 6 NEWSLETTER

Orientation for Newly Admitted Students in Master Level



Chief Guest, Narayan Man Bijukchhen, Chairmen NWPP, and Mayor of Bhaktapur Municipality Mr. Sunil Prajapati along with College Faculties at the Orientation Progarm

15th Bhadra

Khwopa Engineering College organized an orientation program for newly admitted students in ME in Earthquake and MSc in Urban Design & Conservation.

In his speech, Chief Guest Senior Leader Narayan Man Bijukchhen (Rohit), Chairman, Nepal Workers and Peasants Party (NWPP), motivated newly admitted students to study hard, gain specialized knowledge and apply it to serve country and people alike. Chairman Rohit urged faculties to provide quality education to the students so that they can

face challenges of the 21st century. He emphasized that the college administration must ensure conducive environment for academic enhancement . "Research and innovation should be key focus in post graduate education", he stressed.

Mayor of Bhaktapur Municipality & Chairman of College Management Committee Sunil Prajapati welcomed newly admitted students to the college, an undertaking of Bhaktapur Municipality. Mayor Prajapati shared with the students the experiences of renovation and reconstruction of the heritage



Senior Leader Narayan Man Bijukchhen (Rohit), Chairman, Nepal Workers and Peasants Party (NWPP)



Mr. Sunil Prajapati, Mayor, Bhaktapur Municipality



structure damaged and collapsed after 2015 Gorkha Earthquake. "Faculties, students & alumni of KhEC Post-graduate Departments played a valuable role in reconstruction, research and conservation," he said.

He said, "Bhaktapur Municipality wishes to establish Bhaktapur as center of exellence. It has been running seven higher education institutions



along with KhEC and in the process of establishing 'Khwopa University'. However, the political parties in government are reluctant to pass the 'Khwopa



University Bill' through Parliament".

Er. Sujan Maka, Principal, KhEC, Er. Sunil Duwal, Principal, KhCE, and Er. Rabindra Phoju, Vice-Principal, KhEC, welcomed students and extended their best wishes for their stay in the college and their academic ventures. They also assured students of all necessary support to the students.

Er. Manjip Shakya (PhD), Head of Department, Post-Graduate Department of Earthquake Engineering, Ar. Libash Phaiju, Head of Department, Post-Graduate Department of Urban



design & Conservation and Subeg Man Bijukchhen (PhD), Head, Research & Deelopment Unit, oriented students with respective departmental information along with rules & regulations of the college & Purbanchal University.

Thirty seven students from nine districts of Nepal,



who have completed their Bachelor Degree in Civil Engineering/Architecture from 12 different colleges in Nepal and abroad, have been admitted in two post-graduate programs. Out of 37 students 19 are



female (51.4%) and 18 male (48.6%) students. Two hundred and seventy students have already completed their post-graduate course from these two departments of the college.

Interaction on "Hiti Pranali"

3rd Bhadra

Library Section, Khwopa Engineering College (KhEC) and Khwopa College of Engineering (KhCE), jointly organized an Interaction Program on "Hiti Pranali", a book written by Er. Padma Sundar Joshi on 3rd Bhadra 2079.

Er. Sujan Maka, Principal, KhEC, extended vote of thanks for publishing book on such valuable historic heritage "Hiti Pranali". He stressed, "Hiti Pranali" developed & practiced in Kathmandu Valley in history is as engineered as cutting edge technology

in water supply and management system. Hence, it should be incorporated in the curriculum of BE Civil, B Architecture and MSc. Urban Design & Conservation."

Author and Er. Padma Sundar Joshi Provided power point presentation on the book and elaborated on different aspects on the issue.

Engineers, architects and participants from different walks of life experienced two hour long program insufficient for such invaluable issue. The program concluded promising next meet soon.



Author of Book "Hiti Pranali" Er. Padma Sundar Joshi



College faculties and staff at the interaction program

Workshop on Commercial Complex Design

6th Bhadra

Department of Architecture organized a two day Workshop on Commercial Complex Design for the Architecture students of 2076 batch on 5th and 6th Bhadra. This two day intensive workshop was conducted by a team of architects from Mathema and Partners (MAP); namely Ar. Dipesh Shrestha, Ar. Parmila Maharjan and Ar. Bibek Shrestha. The studio teachers also participated in

the workshop.

Students participated enthusiastically in the workshop on both days. On the first day, the students learned about different constraints and their impacts on design evolution. On the second day, they came up with different design solutions. The workshop was concluded with the presentations and interactions.





Participants and Presenter of the Workshop in the frame

Final Year Project Exhibition-2079

6th Bhadra

The final year project exhibition was successfully organized by Department of Computer Engineering and Department of Electronics and Communication Engineering on 6th Bhadra, 2079 at Khwopa Engineering College. Total 19 projects were exhibited by Students from 2074 batch. The opening ceremony was started with words of welcome from Er. Sujan Maka, Principal of Khwopa Engineering College at, 8:00 am.

Students and faculties from Khwopa Engineering College, Khwopa College of Engineering, and Khwopa Secondary School visited the exhibition. Exhibitors explained their project ideas and demonstrated how their project was implemented. Visitors provided valuable feedbacks and gave their suggestions to further improve the performance of the project. Internal Robo-soccer event attracted visitors which organized by students of Electronics and Communication Department during the exhibition.

After the completion of exhibition, Closing Ceremony was held in Hall 1 of Khwopa Engineering College. The program was hosted by Er. Ram Nakarmi. Er. Bikash Chawal, Head of Computer Engineering Department, congratulated students for successful completion of the event. Er. Rabindra Phoju, Vice principal of Khwopa Engineering

College, encouraged students with his motivational speech. He said that small increasing effort in our work will impact more in final result. Er. Sujan Maka Principal, of Khwopa Engineering College, gave best wishes for their future endeavors to final year students and welcomed them in group of Engineers. Exhibitors were provided with the certificate by Principal and vice-Principal.

Students from Electronics and Communication Engineering Department Anoop Shrestha, Gaurab Tamakhu, Subin Shrestha, Subarna Poudel and Suman Kandel were provided with certificate for securing second position in Aquabot Competition organized by Hydrocon Expo 2022 on 2 April 2022. The prize money Rs.10,000 was hand over to the college. Er. Yogesh Bajracharya HOD of Electronics and Communication Department informed that the prize money will be utilized for organizing training and development of Robotics club of college.







Principal, Vice Principal and Head of Computer Engineering Department, Head of Electronics, Communication and Automation Department, Sujan Maka, Rabindra Phoju, Bikash Chawal and Yogesh Bajracharya respectively at Closing Ceremony

Training On Electronics Repairing and Maintenance



- Er. Sujan Maka, Principal of KhEC, giving speech

10th Bhadra

Department of Electronics and Communication Engineering, Khwopa Engineering College (KhEC), is organized 50 hour long training on Electronics Repairing and Maintenance for the fifth semester students of Bachelor in Electronics and Communication Engineering.

In the opening ceremony of the training, Er. Sujan Maka, Principal of KhEC, gave his motivational talk comparing repairing and maintenance of electronics with maintenance and reconstruction of Heritage Structures. He said, "E-waste is increasing day by day because of lack of repair and maintenance. If proper training is provided, e-waste production will be reduced and that will support national economy by reducing imports of e-products". He further added that Khwopa Engineering College was established with the motto of "education linked with production labour". Hence, this training will aid in fulfilling its goal. He concluded his speech by mentioning that trainees of the program with skills and expertise will reduce the need of hiring foreign experts, which is highly costly. So, this kind of training is really essential.

Er. Rabindra Phoju, Vice principal of KhEC, also



- Participants listening to guest and faculties at opening ceremony of training

gave his motivational talk for the participating students and wish all the participant students for the training. He shared vote of thanks to Mr. LB Sunchuri for providing his precious time as a trainer. He added that skilled engineers are required in every sector, and due to lack of skilled manpower our country is lagging behind.

Mr. Sunchuri, the trainer, spoke about the importance of repair skill for an engineering student. He further added that, 'Nepal being a developing country is unable to produce its own electronic products but repairing and maintenance of electronics is really essential for a country like Nepal' and most importantly training like this will be really helpful for reduction of electronic waste and reducing economic deficit of country. He further added that this kind of training will further helps in research and production for an engineer in their career by upgrading their skills and knowledge.

At the end of program Er. Yogesh Bajracharya, Head of the Department also extended acknowledgement to Prof. Dr. Jagannath Shestha for his effort to initiate such valuable training for the engineering students and thanked him for the arrangements.

Two Day Workshop on Design Studio III

12th Bhadra

Department of Architecture, Khwopa Engineering College (KhEC), organized a two day workshop on Design Studio for the students of Bachelor of Architecture, III Semester on 12 to 13 Bhadra 2079 at Room 406 and 407 in Block A. The Workshop was led by the team of Ar. Prajal Pradhan from "A for Architecture" (AFA). The workshop aimed at facilitating students in conceptualizing and design thinking process.













Workshop on Machine Learning Using AWS

20th Bhadra

Khwopa Engineering College, in coordination with Genese Academy and AWS User Group Nepal, hosted a webinar on the 5th of September 2022. Ms. Anjani Phuyal, Genese Global CTO & Sushant Paudyal, Sr. Cloud Engineer, were the panelists for the webinar titled "Machine Learning on AWS."

The webinar was begun by introducing the fundamental ideas of AI, machine learning, and deep learning to the attandence. The aforementioned issues' basic use cases, benefits, and future prospects were briefly presented. As the audience became more familiar with the subjects, then the webinar shifted on to the interactive section of the presentation, where the panelists demonstrated various AWS software products that uses AIML as their foundation. The main goal of the event was to show attendees how to use and navigate the various machine learning services accessible on AWS.

The panelists discussed about computer vision, which is the process of extracting information from images. Then they demonstrated the AWS Management Console, which allows users to navigate through all of the accessible services. One of the main services on exhibit during the presentation was Amazon Rekognition. This tool offers features, such as

facial analysis, recognition, and comparison. The demo was centered around recognizing celebrities of Nepal, which piqued the curiosity of the audience. A video on "Amazon Go" was presented as one of the best use cases of the Amazon Rekognition. All of the demo sessions were facilitated by Mr. Sushant Paudyal.

The focus then switched to software that utilized Natural Language Processing (NLP). The most popular and useful NLP tools were discussed, Some of which include:

1.Amazon Transcribe - uses advanced ML technology to transcribe audio to text

2.Amazon Polly - a managed service that converts text to lifelike speech

3.Amazon Translate - provides high quality translation on demand

4. Amazon Comprehend - extracts useful insights from documents

5. Amazon Lex - builds conversational interfaces by using voice and text

Mr. Paudyal then presented to the audience Amazon SageMaker after thoroughly outlining the best use cases for all of these products. The SageMaker is a cloud machine-learning platform that allows developers to build, train, and deploy machine-learning models. The event concluded with a Q&A session, during which the attendees' questions and doubts were addressed.





- Presenter pannel on webinar

-Mr. Anjan Phuyal as a presenter in Webnar

Presentations by Alumni of KhEC

23th Bhadra

Two KhEC alumni – Dr. Debesh Jha and Er. Shree Ram Khaitu – delivered presentations at a program organized by Department of Electronics and Communication Engineering on 8 September 2022, with an objective of informing concerned students about new trends in technology and maintaining academic connection between curresnt students and the KhEC alumni.

Dr. Debesh Jha presented on the topic "Artificial Intelligence Transforming the Future of Medicine.". Debesh Jha, Ph.D. is a research associate at the Department of Radiology, Feinberg School of Medicine, Northwestern University, USA. He received his Bachelor's degree in 2013 from Khwopa Engineering College. In this presentation, he provided knowledge about the needs and importance of AI in medical treatments. He pointed out that even though treatment is more precisely done, some of the facts may be missed out by a human. To overcome this type of critical error AI can be implemented in the diagnosis and treatment. According to him, AI is a very essential factor in every field nowadays. He also talked about AI applications in reproduction, Alzheimer's Disease, ENDO-AID, Colon polyps, Mammography, and many more.

Similarly, Er. Shree Ram Khaitu presented on the topic "Latest Trends of Telecommunication

in Nepal". He is a Telecom Engineer in Nepal Telecom. He provided brief knowledge of Telecommunication systems in a reallife scenario. According to him, Artificial Intelligence is the most important component having a huge significance in the field of Telecommunication systems. He also put forward his words in the future missions and ambitions in telecommunication via GI (General Interface), E-sim, BI (Business Intelligence), and SON (Self-Organizing Networks).

The students of the Electronics Department actively participated in the program and benefitted from it. The program was held in the presence of Principal of Khwopa Engineering College Er. Sujan Maka, Vice- Principal Er. Rabindra Phoju, Head of the Department Er. Yogesh Bajracharya, and Deputy Head of the Department Er. Ram Nakarmi, other faculty members.

In the same program, certificates were distributed to the participants of Arduino training. Fourty seven students completed the 15 hour long arduino training. Raunak Josihi and Krishna Prasad Chaulagain also the alumini of KhEC, were the trainers of the training.





Certificate and Prize Distribution Program

27th Bhadra

On 27th of Bhadra, Department of Architecture conducted Certificate and Prize distribution program for students' training and model competition in the presence of Principal and Vice Principal of Khwopa Engineering College Er. Sujan Maka and Er. Rabindra Phoju, respectively.

Architecture department has always kept competency of its graduates in a higher priority so that they could be technically sound and efficient in the job market and professional field. Regarding this, the department has organized 30hr long professional training course on Photoshop and InDesign to 2017 and 2018 batch students, 15 hour training course on Sketchup and V-Ray Rendering to 2019 batch students. These trainings were conducted

from June to the 1st week of September this year. The best part of this training was Khwopa alumni Ar. Binish Prajapati (2010 batch), Ar. Sujan Sahukhala (2012 batch) and Ar. Shreejan Mushyaju (2014 batch) were invited as instructors in the training. Another major and most awaited event associated with this program was the result announcement of Model competition of 24th earthquake safety day which was delayed due to COVID-19 pandemic. The group of Dattatraya Temple model was successful to bag the 1st position, followed by Namuna Ghar in 2nd position, Laxmi Narayan Temple and Bhaila Kha in 3rd position and Maju Dega model in 4th position. Both Principal and Vice Principal distributed certificates to instructors, students and prizes to the winners of the competition.









- Moments of certificate distribution program

Guest Lecture in Sharing Professional Experience

27th Bhadra

On 27th of Bhadra 2079, a guest lecture plus professional experience sharing program was held at Khwopa Engineering College by Professor Anne Feenstra. Prof. Anne, also being a practicing architect, shared most of his projects of South Asia especially, Nepal, India and Afghanistan. Majority of his projects in overall focused on designing with and for local communities, with locally available materials, with micro climate and nature in order to obtain an inclusive and sustainable architecture. His designs seemed to be simple yet functional and blending with natural environment eventually depicting the contemporary architecture and maintaining the authentic character of the area. His main motto in designing buildings is to provide human comfort than to focus on

fancy façade. One of the interesting parts in his presentation was also about his concluding remarks he made at the end. He discussed techniques on being proactive like how to learn and plan ahead, how to set goals and create your project, how to share your project responsibly and learn to solve problem, and lastly maintain your project and not to dwell on mistakes from past but to learn from them. To sum up, because of Prof. Anne's diverse practicing and teaching experience, the guest lecture was informative and beneficial for students and for faculty members too. The program was concluded with vote of thanks and token of love to our guest speaker by head of the department.



Prof. Anne Feenstra Guest Lecturer, receiving Token of Love





Participants of Guest Lecture



Sharing Expericence in "Seeds For the Future" Program held in Thailand -Jatin Bhusal

I,Jatin Bhusal, B.E Computer 4th year student have successfully completed the 10 Days Seeds For the Future Program held in Bangkok and Hua Hin Thailand from 18th to 28th August



2022. Our team also secured Third Position among 16 countries and 24 teams in the Tech for Good Competition where we presented a Block Chain and AI-supported technology idea to detect counterfeit medicines and other products. In those 10 days, the team got a chance to understand the culture of Thailand and meet and get trained by top-class Entrepreneurs, Executives, Mentors, Coaches, and Trainers globally.

On day 1, we arrived in Bangkok in the evening and headed straight toward the Grand Fortune Hotel. There the teams were introduced by their team captains alongside every country translating the "Dream It Possible" song into their own native language. On day 2, we had an opening ceremony, visited the United Nations office, and had a cruise dinner. The next day, the delegates visited The Royal Palace, Meta-verse Expo, and Iconsiam Market. The Fourth day was Global Village day. All the delegates were taken to Assumption University, one of the top universities in Thailand. Every country got a stall where flags and unique items from their respective nations were displayed. Later, a conference was held where all delegates were given the challenge to develop solutions from a list of problems given. Team Nepal partnered with delegates from countries like Vietnam, Indonesia, and Myanmar. Jatin represented the team and presented their solution on "Gender Equality."

On Day 4, we visited Huawei's Office where we were greeted by the CTO of Huawei explaining about the research and technologies Huawei has been working on. Then the Chief Innovation Officer took a seminar on the Organization structure and functioning at Huawei. In the afternoon, the delegates left for Hua

Hin where we took all the training and where the final competition took place. In Hua Hin, we had lectures and seminars on Leadership by R. Akwése Nkemontoh, one of the world's leading Leadership Coaches. We took classes and exams on AI, Digital Power, 5G, Cloud Computing, and Panel Talks on Meta-verse between Day 4 to Day 8. Aside from that, delegates also refreshed themselves with Water parks, Beach dinners, and dance parties. But to keep them focused, various mind calmness and motivating sessions were also organized.

For the Tech for Good competitions, the delegates were assigned reputed expert mentors. We were also trained in Problem formulation, solution deriving, business modeling, market analysis, business pitch development, and so on. The teams presented their ideas in two rounds on the final day. Team Nepal



presented their project, "Advait" where the pitch was delivered by Jatin. The team won the third position and was selected for the Accelerator camp held in Singapore.

Here are the main key points I summarize as lessons he learned there:

- 1. When you dream it, it's possible.
- 2. Always be open to opportunities and grab them quickly.
- 3.Success is all about sacrifices and priorities. Choose them wisely.
- 4. Always prioritize your mental health above anything. Never let anyone affect it.
- 5. Leadership is all about taking responsibility.
- 6. Visit and connect with international communities as much as possible.
- 7. Check your emotions and never let them impact your decisions.
- 8. Everything happens for a reason.
- 9. Maintain a low pitch and calm posture while delivering your point. It will present you as more professional and convincing.
- 10. Always dress properly with proper hygiene. It impacts the perspective of everything you deliver.

Recruitment Seminar for Computer and Electronics Students

31th Bhadra

On Friday 31 Bhadra 2079, an informative cum recruitment seminar on cutting edge technology of drones was organized at Khwopa Engineering College for the students of the Computer Engineering and Electronics & Communication Engineering. A team from Angelswing conducted the session which lasted about 2 hrs. The primary objectives of the session were to inform the students about the cutting egde technologies in the field of drones applied at construction sites and provide recruitment opportunities to them. A total of 110 students participated in the seminar.

Angleswing is a South-Korean startup that mainly works on using drones to capture the environment and provide a Software As A Service (SAAS) model for Orthophoto Analysis. It aims to be the next to the Google Earth. Angleswing presents itself as the 3rd generation of Con-Tech (Construction Technology) startups considering AutoDesk as 1st and PlanGrid and BlueBeam as 2nd. Angleswing basically collects data from aerial surveys and provides Documentation, Management, Sites surveys, and helps in Construction Safety.

The session was formally begun by Peter Park, Co-Founder of Angleswing. According to him, the motivation to start Angleswing came after the Gorkha Earthquake, 2015, Nepal. He said that the gap in technology could be filled by using drones to survey and analyze disaster-

struck areas with much safety and accuracy. According to him, the system also helps to monitor sites without being in the field. The plan is to establish drone stations where the drone can fly and collect data, send it back to the cloud and charge itself without or with very less human involvement.

At the program, the Lead Engineer for Nepal Er. Ayush GC also spelled out his valuable insights on how this company is working on innovations and encouraged students to be a part of this organization and explore new problem-solving sectors.

The Product leader Mr. Mathew Lee shed light on the technologies that stay at the core of Angleswing, mentioning a few, like DJI Mobile SDK, AWS, GDAL & OGR, Point Cloud, etc. The research leader Er. Aayushma Pant invited and encouraged students to work in this research field, too.

The program was concluded with the distribution of tokens of love to the guests by Er. Bikash Chawal, Head of Department, Computer Engineering and Er. Yogesh Bajracharya, Head of Department, Electronics & Communications Engineering. Er. Chawal shared his valuable insights on how students should connect with such innovative projects and assures all that the department and Khwopa Engineering College will always help to organize such events in the future and promote such initiatives.





Interaction About Exam

26th Bhadra

On 26 Bhadra 2079, a interaction program was organized by the exam section of Khwopa Engineering College titled " How to operate Exams smoothly ". At program Er. Ganesh Ram Dhonju, Head, Exam Section, elaborate the roles of the invigilator and the staffs. With the help of all teachers and staff only, college can impact students positively and we can have good image. As of today, Khwopa Engineering College is known for its good management and discipline, For the sake of this impact we have, we must be proud and with this feeling. We should work hard further to maintain our stability. Er. Ganesh Ram Dhonju further added that invigilator should be strict to the limit, we should not create panic in students mind in the name of being strict and students should also be disciplined and follow the rules and regulation as instructed by the University.

Er. Rabindra Phoju, Vice Principal of KhEC,

added that invigilator should be more focused on exam rather than on something else. He clarfied about the complaints of some invigilator during exam. And request all the invigilator and exam related officials to be focused on exam and wished for a positive suggestion.

At the program, Er. Sujan Maka further added that the minor carelessness of invigilator also can prove to be big blunder and have a negative impact on students. Invigilator should be careful in every aspects of exam. Attendance, absentees, presence, reports are all the important aspects of exam. He said that all the members of college family should be fully motivated and be careful for the smooth running of exam and the responsibilities we get through college. He thanked exam section for the organization of interaction program and wished for more program similar as and when required.

Participation on Robo- War at KU

31th Bhadra

On 31 Bhadra 2079, a team of 5th semester Electronics and Communication Department students representing Khwopa Engineering College participated in Robo-War competition organized by Kathmandu University EEPEx-22. The team members include Suman Raj Kandvel (Leader), Sameer Rawal, Subarna Poudel and Manjil Raut. Robots

were competed in a one on one match in which the match could be won by either pushing the opponent's robot out of the arena or dropping it into the pit situated in the arena.

Participant students have gained a good sense of robotic competition and knowledge of robotics in general from participating in the Robo-War Competition. A total of 8 teams participated in the competition.





Most frequency circulated Books from April to September 2022					
S.N.	Title	Author	Barcode	Item Callnumber	Total Circulations
1	A text book of	Shrestha, S.P.	TU4508	510 STH-t	661
	Engineering	Chaudhary, H.D.			
	Mathematics vol. I	Pokharel, P.R.			
2	A text book of	Shrestha, S.P.	TU7747	510 STH-t	549
	Engineering	Chaudhary, H.D.			
	Mathematics vol. III	Pokharel, P.R.			
3	Applied mechanics	Parajuli, Hari Ram	TU16973	620.1 PAR-a	517
	for engineers				
4	Fundamental of	Sapkota, Balkrishna	TU12822	530 SAP-f	449
	engineering physics	Pokharel, Bhadra			
		Bhattarai			
5	Engineering	Pradhananga, Shiddhi	15995	510 KHA-0	434
	mathematics vol. II	Prasad Khatakho,			
		Nhuchhen B			
6	Probability	Gaire, Arjun Kumar	TU5870	512.76 GAI-p	424
	and Statics for				
	engineering				
7	Course manual on	Dhital, Mahendra Raj		620.103 DHI-c	406
	applied Mechanics II				
	(Dynamics)				
8	ABC of Electrical	Jain, Malika Jain,	TU3882	621.3 JAI-a	402
	Engineering	Priyanka			
9	A course book of	Adhikari, Usha	19859	427 ADH-c	381
	communicative	Yadav, Raj Kumar			
	english	Yadav, Vijay K			
10	A text book of	Shrestha, S. P.	TU6605	510 SHR-t	376
	engineering	Chaudhary, H. D.			
	mathematics Vol. II	Pokharel, P		A A	