

## 'LITE' Technical Exhibition 2018



Research, Training and Consultancy Division (RTCD) of Kantipur Engineering College, Dhapakhel, Lalitpur along with the support of students through Civil, Computer and Electronics Clubs organized a one-day 'LITE' Technical Exhibition 2018 at the college premise on February 1, 2018. 'LITE' stands for Learning and Innovating Technology for Enhancement. It is an annual event for

providing the platform and exposure to students in order to showcase their learning, skills and creative ideas.

The inauguration ceremony was chaired by Er. Rameshwar Rijal, Principal of KEC. Prof. Dr. Jiba Raj Pokharel, Vice Chancellor, NAST was the chief guest of the event. Mr. Ganesh Sah, Former Minister of Ministry of Environment, Science and Technology; Prof.

Dr. Ram Chandra Sapkota, Assistant Dean, Examination, IOE, Mr. Bhuyu Kaji Maharjan, Ward Chairperson, Lalitpur Metropolitan Ward No. 23 along with former and present members of college management committee were the special guests of the event.

Er. Rabin Dhakal, Lecturer was felicitated during the opening ceremony for having the best research paper at International Conference on Renewable Energy Research and Applications (ICRERA 2017) held at San Diego, California. Similarly, Mr. Rabi Sharma, Deputy Instructor was also felicitated during the opening ceremony of the exhibition for his valuable contributions to the college for the past 17 years and also in making the exhibition successful through his technical support to the students.

'LITE' 2018 consisted of exhibition and competitions mainly in three categories: Civil, Hardware and Software. It also consisted of Quiz Competition, Programming Competition, Civil Attack and Defense, Arduino Workshop, Android Development Workshop, Photography Contest and Gaming Tournaments. More than 2000 students from KEC and other colleges attended the exhibition.

## Congratulations !!!

### First Position in Robotics Competition

A team of first year students; Mr. Pankaj Japrel, Mr. Pankaj Paneru, Mr. Manav Khadka and Mr. Achyut Timalsina of Electronics and Communication Engineering bagged First Prize in the Robotics Competition Battlebot 2.2 organized at Southwestern College, Basundhara Kathmandu on June 23, 2018. Their project named KANTIbir used scrap hardware materials to make a destructive bot. They were also named Best Controller of the Tournament.



### First Position in Hardware Competition

We are proud of our III year Electronics students Mr. Bijaya Sapkota, Mr. Mayank K. Gurung, Mr. Prabhat Mali and Mr. Rabin

Gupta who were able to bag the First prize in HEx-2018 held on June 29 to July 1, 2018 for SMART GLOVE project. Smart glove is a wearable device engineered to translate sign language to speech/text and vice versa.

### Second Position in Quiz Competition

KEC students Mr. Suraj Pandey, Mr. Dipesh Pandit, Mr. Suraj Joshi & Mr. Abesh Jha secured 2nd position in "Technical Quiz Competition" held on June 27, 2018 at Himalaya College of Engineering (HCOE) HEx exhibition. Eight teams participated in Quiz Competition from different Engineering Colleges in the valley and KEC



### First Position and Best Idea in Civil Engineering Model Competition

Students from 4th year, Mr. Samman Pokhrel, Mr. Sandeep Balami, Mr. Saurav KC, Mr. Alash Dhakal, Mr. Sabin Pokhrel & Mr. Aarogya Raj Ojha participated in "Civil Model Competition" on Himalaya College of Engineering (HCOE) HEx exhibition dated June 29 to July 1, 2018. KEC succeeded in winning the best model on "Slope Stabilization of Muglin Narayanghat Road By the Application of Bio-Engineering". The same Project bagged the Best Idea Award in Yatra-2.0 organized by National College of Engineering on July 14-15, 2018.

### Second Position in Presentation Competition

Mr. Abhigya Paudyal and Mr. Rohit Chettri had grabbed the 2nd position in the presentation competition in YATRA 2.0 organized by National College of Engineering. The topic of their presentation was "Infrastructure. What for Nepal?"

## Editorial

*We are very pleased to come up with yet another edition of our regular newsletter. It gives us immense pleasure to showcase the achievement of our students and Kantipur Engineering College. We hope that this serves as a platform for new students to better understand us in every way possible.*

*Innovation with creativity and originality is what we encourage here at KEC. Our students have shown effective participation in major competitions at national and international levels. This has helped our students to garner experiences that strengthen them as a competent engineer in future and at the same time it shows the effectiveness of our hard work and dedication.*

*The LITE Technical Exhibition organized by the College is the major platform for students and enthusiast to flourish their talents and learn about variety of disciplines in engineering. We are humbled by the outstanding participation and support of all the sponsors including Broadway Infosys Nepal and students from other colleges too.*

*We encourage all the students and staffs to work collectively for the betterment of the college and maintain its hard earned reputation. Each year, we hope to achieve something new and different that uplifts the glory of KEC and surpasses its 19 year long history.*

### Conference on Tunnel Safety-2017

Er. Sabin Paudyal, Lecturer, attended Nepal Tunneling Conference held on December 19, 2017 at Radisson Hotel, Kathmandu; which focused on the Systematic Tunneling Practice. The thematic approach of the conference was to introduce the Tunnel Boring Machine (TBM) and its implementation in the highway, hydropower, water supply, irrigation projects that are undergoing in Nepal. Mr. Shiv Kumar Basnet and Mr. Sanjaya Rana were the lead presenters of the conference and they drew attention on traditional tunneling practice and its consequences featuring the importance of the modern tunneling approach.

### Guest Tech Talk Program at Spiralogics

Er. Tirtha Acharya and Er. Ankit Shekhar Adhikari, Lecturers, participated in a Guest Tech Talk program organized by Spiralogics International on February 21, 2018. The Tech talk program was presented by Chief Technology Officer (CTO) of Spiralogics International on the topic "The impact of Data Science and Machine Learning on the future of technology".

## Faculty and Staff Development

### One Day Workshop on Effective Teaching ▼

A "One Day Workshop on Effective Teaching" was conducted by Research, Training & Consultancy Division (RTCD) on November 1, 2017 at Kantipur Engineering College for the new faculty members. The objectives of the workshop were to improve teaching skills and enhance teamwork and communication among faculty members and with the students as well. Er. Nabin Chandra Sharma and Dr. Madan Bista were the guest speakers for the workshop who delivered their presentations on Lesson/Course Planning, Effective Teaching, Team Work & Communication respectively. The workshop also included an interactive session with senior teachers in the college. Er. Sujin Gwachha, Mr. Santosh Rawal, Er. Tirtha Acharya and Er. Praticchya Pradhan were the senior teachers sharing their experiences. A total number of 16 faculty members from all the departments actively participated in the workshop sharing their experiences and ideas, relevant to teaching-learning process, among themselves and with the guest speakers.



### Participation in IOE Graduate Conference 2014

A two day 5th IOE Graduate Conference, organized by Centre for Applied Research and Development on December 29-30, 2018 in Architecture building of Pulchowk Campus, IOE was attended by Mr. Sushil Ghimire, Lecturer, Er. Sanjaya Neupane, Department Assistant/Senior Lecturer and Er. Niraj Bohara, Department Assistant/Lecturer, as presenters. The conference focused on increasing the participation of Nepalese young scientists and engineers in the sector of science, research and development related innovations. The programme started with a keynote speech from Prof. M. Balakrishnan (IIT-Delhi) on the topic "ASSISTECH: Assistive Technology for the Visually Impaired."

In the Conference, Mr. Sushil Ghimire presented on "Infinite Server Queueing Model with State Dependent Arrival and Service Rates". Er. Sanjaya Neupane presented on "Performance Evaluation of 18kW Solar Photovoltaic BaidiMicroGrid at Baidi, Tanahun, Nepal". Similarly, Er. Niraj Bohara presented on "A Study of Effect of

Filler Contents and Filler Types in Marshall Stability and Flow Value in Asphalt Concrete".

### National Conference on Road Safety, 2018

Road safety has been one of the major concern for transportation engineers everywhere in the world. Increasing road fatalities, vulnerable road users, unsafe roads, unsafe vehicles and need of immediate response team has been the critical aspects to intervene on. To discuss about these matters and give some proper recommendations to all the responsible authorities here in Nepal, Nepal Engineers' Association along with its co-organizers; government department, ministries, private institution and supporting organizations organized a two days conference programme on January 20-21, 2018 in Kathmandu. The conference was attended by Er. Sudeep Thapa and Er. Niraj Bohara. A total of 22 papers were presented highlighting five pillars of road safety and possible interventions to increase the road safety in context of Nepal. The technical and policy level aspects were discussed and recommended suitable practices for Nepal based on the national and international level practices on road safety. The main supporter of the conference was Safe and Sustainable Travel Nepal (SSTN).

### Presentation on Course Planning for KEC Faculties

A presentation on "Course Planning for Effective Teaching and Learning in the Prevailing Context" was held on KEC premises on November 2, 2017 for the KEC faculties from all three

departments. The presentation was done by Er. Nabin Chandra Sharma, Visiting Professor, with the aim to orient the teachers on how to plan a subject for the whole semester by preparing the course/lesson approach, instructional objectives for each lesson and determining the instructional requirements of each chapter.

## Congratulations !!!

### First position in Mora ventures 3.0

*Ms. Melisha Ghimire from Kantipur Engineering College and her team represented our country Nepal as well as the whole youth of the nation in Mora Venture 3.0, Colombo, Sri Lanka held on March 13, 2018 with their startup (Echo Innovators) and FarmLi and bagged the first prize. Mora Venture 3.0 is the competition that motivates the younger generation or the youth in South Asia to bring their own business ideas into life, platform focused to encourage budding Entrepreneurs, business ideas, social innovations and products which can make a difference in the world.*

### **Non-Destructive Testing Equipment and Techniques Conference-2018**

A conference on “Condition and Damage Assessment of Reinforced Concrete Structures using Non-Destructive Testing Equipment and Techniques” was organized at Hotel Radisson on March 7, 2018. The programme was organized by PROCEQ SA, Switzerland & Create ACME Associates, Kathmandu. The major objective of the conference was to introduce NDT as a possible measure for quality control, monitoring strength, structural integrity and material deformation of structure as well as the material in the construction. Er. Imanath Duwadi and Er. Abhinesh Khatri, Lecturers, participated in the programme.

### **Hellenic Open University Visit**

Er. Rajeev Prajapati, Chief of Exam Section, visited Hellenic Open University, Patras, Greece for one month starting from October 6, 2017 under Erasmus Mundus ‘SmartLink’ project. During his visit, he had an opportunity to visit several electronics and communication laboratories and interact with key persons. Also, he had a chance to interact with Prof. Stavros Kotsopoulos, Director of the Wireless Telecommunication Laboratory, University of Patras regarding their research work in 5G mobile networks.

### **Participation in “Agile Meet-up”**

Er. Partha Chudal, Er. Aashi Maharjan and Er. Anuradha Maharjan the members of software development unit had attended “Agile Meet-up” which was held on January 28, 2018 focusing towards agile methodologies. Agile software development describes an approach under which requirements and solutions evolve through the collaborative effort of self-organizing cross-functional teams and their customers. Various experts from different IT companies were present who had shared their experience regarding agile implementation in their project which advocates adaptive planning, evolutionary development, early delivery and continuous improvement.

### **Socialization of Information Technology**

On October 14, 2017 ITS (Information Technology Society) Nepal organized a Socialization of Information Technology programme at Kings College, Babarmahal Kathmandu, where 25 individuals including students from different colleges participated to discuss the ongoing situation of IT in Nepalese society. The programme was led by Er. Sailendra Jha, president of ITS Nepal. Mr. Tek Narayan Adhikari, Er. Dipesh Shrestha and Er. Bishal Thapa, faculty from Kantipur Engineering College were among the participants of the programme. The programme provided a platform to discuss many problems related from school level to jobs in IT sector and to look deeper into Nepalese society for not making expected progress in the IT sector.

### **Participation in One Day Workshop on IOE Examination System and its Automation**

Dr. Keshar Prasain, Vice Principal and Er.

Rajeev Prajapati, Chief of Exam Section participated in a one day work shop on “IOE Examination System and its Automation” organized by Institute of Engineering (IOE), Dean’s office on November 28, 2017 at Pulchowk Campus. The workshop was focused on Semester Exam Automation System of IOE (SETISI) and was conducted as discussion and training session. The main objective of workshop was to disseminate information regarding online exam registration and preparation for 2074 Magh Exam and onwards.

### **Participation in SSAWM**

Mrs. Anjana Devi Bhandari, DHO, Department of Engineering Science and Humanities attended “Symposium for South Asian Women in Mathematics (SSAWM)” as a participant and speaker from 12 October to 15 October 2017 at Central Department of Mathematics, TU, Kirtipur, Kathmandu, Nepal. The symposium was organized by the Women of Nepal in Mathematical Sciences (WoNiMS) in collaboration with Central Department of Mathematics, Tribhuvan University. The purpose of the event was to promote scientific communication in mathematics, to establish a mathematical network for sharing and communicating with women mathematicians, experts and organizations with similar goals in South Asian region.

### **FET IT Workshop – 2018**

Er. Tirtha Acharya, Lecturer, participated in FET (Flying Eagle Technology) IT Workshop on February 2-4, 2018 in Mount Princess hotel, Dhulikhel. The aim of workshop was to transfer the knowledge on 4 different areas: Knowledge Management: by Ananta G Risal, Computer Network: by Bikash Shrestha, Object Oriented Design: by Ganesh Kunuwar and Database Design: by Prakash Aryal.

### **Presentation on Moodle**

A special presentation titled “e-education (Moodle): Using an online platform” from Prof. Dr. Dimitrios Zevgolis was held on October 18, 2017. Dr. Zevgolis was at Kantipur Engineering College under SmartLink Staff Mobility program. The presentation mainly aimed to provide a forum for the exchange of information on the introduction of contents into teacher training curricula based on new technologies (e-learning) and to make suggestions concerning the establishment of common approaches in the development of a general methodology in teacher training which could be applied to new contents (i.e. e-classes and production of digital educational learning material). The key personnel of the college attended the presentation.

### **Participation in Solar PV System Design for University Teachers**

Er. Milan Shrestha and Er. Sushil Paudel, Lecturers, participated in a training “Solar PV System Design for University Teachers” jointly organized by Centre for Energy Studies, Institute of Engineering, Tribhuvan University, and University Grant Commission (UGC) held in Pulchowk Campus, Kathmandu

dated May 15-19, 2018. The objective of the training was to provide basic knowledge of solar PV system to university teachers from different backgrounds and make them able to design some basic parameters in solar PV system.

### **Seminar on Graph Theory and Optimization with Applications in Industry and Society**

Mr. Sushil Ghimire, Lecturer, participated in a workshop-seminar on Graph Theory and Optimization with Applications in Industry and Society (Linear, Integer and Multi-Criteria Optimization) dated March 12-23, 2018. The workshop-seminar was organized jointly by Central Department of Mathematics, TU, Kirtipur and DAAD at Hotel Hillside and Resort, Kirtipur, Kathmandu. Dr. Sven O. Krumke, Professor, University of Kaiserslautern, Germany, facilitated the seminar where the participants were from Nepal and Indonesia.

### **NEA Convention**

Er. Shree Bhadra Wagle, Associate Professor, participated in the 15th National Convention of Engineers organized by Nepal Engineers’ Association (NEA). The convention was held in Kathmandu during March 21-23, 2018 with the theme “Engineering for Prosperous Federal Nepal”. He presented a paper in “Digital Governance” in the conference. The major objectives of the convention were to reflect the sentiment and aspiration of the Nepalese engineers towards their tireless efforts for the prosperity of the people and to provide a common forum for engineers of various disciplines to debate, discuss and deliberate their thought provoking ideas on the cross-cutting issues related to the national development in the context of federal system.

## **Congratulations !!!**

### **Best Paper Award at ICRERA**

*Er. Rabin Dhakal, Lecturer, participated in 6th International Conference on Renewable Energy Research and Application (ICRERA) 2017 organized by Institute of Electronics and Electrical Engineers at San Diego, CA USA on November 5-8, 2017. The conference was organized with the propose of bringing together researchers, engineers, manufacturers, practitioners and customers from all over the world to share and discuss advances and developments in renewable energy research and application. Er. Dhakal presented his research paper entitled “Computational and Experimental Investigation of Turbine for Gravitational Water Vortex Power Plant” in the conference. His paper was awarded the Best Paper Award among more than 500 papers presented in the conference from all over the world.*



## KEC welcomes Er. Shree Bhadra Wagle !!!

KEC family is proud to welcome Er. Shree Bhadra Wagle, Associate Professor, as full time faculty member in Department of Computer and Electronics Engineering on October 29, 2017. Before

joining KEC, Er. Wagle spent his long career from 'Radio Engineer' to 'Deputy Executive Director' at Radio Nepal (1992-2017). Er. Wagle has Masters in Communication Management (Coventry University, UK) and M. Tech. (Andhra University, India). He is an author of book- "Fundamentals in Broadcast Engineering" and several articles in national

and international publications. He has travelled to USA, UK, Switzerland, Germany, Italy, France, Japan, Malaysia, Singapore, Thailand, India and received several professional trainings in broadcast, LAN wireless N/W, RF Spectrum and Monitoring etc.

## Departmental Activities

### MoU Signed between KEC and Robotics Association of Nepal (RAN)

Kantipur Engineering College and Robotics Association of Nepal (RAN) has signed an MOU on November 7, 2017. KEC has been collaborating with RAN for a long time for producing much needed, highly talented and skilled engineers to meet mutual dream of technologically enhanced society. On the occasion, Principal of Kantipur Engineering College, Er. Rameshwar Rijal and President of RAN, Mr. Bikash Gurung signed the MoU that ensures the mutual cooperation and institutionalizes this relationship. Our students will be directly benefited from this relationship as they will be getting regular trainings, will be participating in workshops and competition that will be organized by RAN in coming days like Miss Tech and Yantra etc.

#### Activities with RAN

As per MoU, following programs were

organized by Department of Computer and Electronics in collaboration with RAN:

#### • Interaction program on Robotics

An interaction session was organized for the first year Electronics and Computer students on Robotics in collaboration with Robotics Association of Nepal (RAN) on November 16, 22 and 24, 2017, in presence of Vice Principal, HODs from Engineering Science & Humanities and Computer & Electronics Departments. Er. Bikash Gurung, President of RAN, had given a presentation outlining on recent developments on Robotics and the activities conducted by RAN for the development of Robotics in Nepal. A hardware demonstration on Walking Robot and Drone was given by Er. Utsab Shrestha and Er. Manoj Lekhak. Those sessions were fruitful for raising interest on Robotics among students.

#### • Workshop on Drone Flying

A one day workshop program on Drone

Flying was organized for Computer and Electronics Club members on January 26, 2018 and for faculty members on March 27, 2018. Various aspects of Drone flying such as assembling, flight controlling and piloting were presented by Er. Manoj Lekhak from RAN.

#### • Workshop on 3D Printing

Department of Computer and Electronics in collaboration with RAN organized a workshop on 3D printing for Computer, Electronics and Civil Club members on May 16, 2018. The workshop was focused on 3D printing including 3D designing and modeling.

#### • Workshop on Robotics

A one day workshop on Robotics was organized for the IV year Electronics & Communication Engineering students on May 28, 2018. The workshop was fruitful regarding basic concept, application and research perspective.

### MoU between KEC and Spiralogics

KEC has been stressing not only on producing better graduates but also on developing graduates to become market ready. In long running history of KEC, it has been a pioneer educational institute to establish a good relationship with industry leading organization to provide best-in-class training and internship to its students. Adding another name in such milestone, MoU was signed between KEC and Spiralogics international, on October 24, 2017, to establish a strong bond between education and industry and to reduce gap between theoretical and practical knowledge.

On this occasion, Principal of KEC, Er. Rameshwar Rijal, and Operation Manager of Spiralogics international, Mrs. Anukha Wagle, signed the MoU. This MoU has defined a clear track that will facilitate our students for various internship, training, etc., also this will also ensure Spiralogics will be getting much needed fresh and highly qualified graduates.

### MoU signed with LRBSU

Memorandum of Understanding was signed between Local Roads Bridge Support (LRBSU) Manbawan, Lalitpur and Kantipur Engineering College (KEC), Dhapakhel, Lalitpur on July 19, 2017. The purpose of MoU is to establish a framework of collaboration between KEC Dhapakhel and LRBSU for

introducing and incorporating "Design of Bridge" in academic curriculum (Bachelor of Civil Engineering), research and exposure visits. This will also help to meet the need of competent engineers in the field of bridge design and construction within the country. The MoU will be effective till July 2020.

### Project Orientations

In order to guide the students in making their final projects as innovative as possible, every year the Department of Computer and Electronics organizes orientation program inviting established entrepreneur and specialists from different sectors. This year Er. Shankar Gangaju, Associate Professor at Kathmandu Engineering College, Er. Roshan Regmi from NMB bank, Er. Sudhir Shakya, Founder, Sorus Nepal Pvt. Ltd., Mr. Kiran Regmi, Senior Engineer from Leapfrog Technology, and his associates, Er. Sachin Shrestha, Assistant Professor at NEC, Er. Sushil Sapkota from Info developers Pvt. Ltd. and Er. Sunil Lama and his associates from Spiralogics were invited to guide the students of fourth and third year Electronics and Computer Engineering students for their Major and Minor Projects. The orientations were organized in the month of December 2017.

### A Guest Lecture on "The Bridge Between Coding and Building Solutions"

A Guest Lecture on "The Bridge Between Coding and Building Solutions" was delivered by Mr. Saunak Ranjitkar, Chief Technical

Officer, Spiralogics Institute of Technology on July 3, 2017. The lecture was delivered to the students of BCT III/I, most of whom will be involved in real life software development after their graduation.

### An Interaction Program with "TEACH FOR NEPAL"

An interactive event was organized by Department of Computer and Electronics in the month of May 2018 with the representatives of Teach for Nepal for the final year students of Computer and Electronic Engineering. Mr. Ram Kumar Thapa, Hiring Coordinator, from Teach for Nepal spearheaded the program and busted the queries of students. Teach for Nepal with joint venture with Ministry of Education, US Embassy, Sarvodaya USA and with support from many other partners has been battling to improve the egregious education system of rural sector of Nepal by providing skilled and motivated fellow to the government and community school in need.

Mr. Thapa highlighted the objectives of Teach for Nepal and encouraged students to apply for the fellowship program. He added through this program students will help change the community and will help seed foundation of modern education system.

### Workshop on "Software Project Management"

A workshop on "Software Project

Management” was successfully conducted on July 5, 2017. Mr. Ananta Risal, CEO of Knowledge Interface Inc., New Jersey, USA, was invited as an expert and 6 Major Project groups namely – “Secure Chat”, “Himalayanminerals.com”, “Drishya- Image Mining”, “Data Analyzer”, “Green Cloud” and “Sales Window” participated in the workshop. The prime motive of the workshop to provide discussion platform for students with the expert. During the workshop, each project’s progress and problems were discussed individually which was beneficial for the successful completion of the projects.

#### **A Guest Lecture on “SAP software and its use in ERP world for successful Business”**

A Guest Lecture on “SAP software and its use in ERP world for successful Business” was delivered by Er. Prakash Sigdel, SAP Business Analyst, Maryland, USA, on July 5, 2017. The lecture was delivered to the students of BCT III/I. This event helped students enhance their understanding on career development in the field of Computer Engineering.

#### **Participation in ICT Conference**

Mr. Tek Narayan Adhikari, Junior Associate Professor and students: Mr. Prakash Ratna Prajapati, Mr. Abin Maharjan, Mr. Kritish Dhaubanjari, Mr. Ramesh Hyaumikha, Mr. Suezet Twanabashu, Mr. Shusheel Chaudhary, Mr. Ramal Maharjan, Mr. Amit Shrestha, Mr. Nabin Bhusal, Mr. Amril Subedi, Mr. Gaurav Subedi, Ms. Samikshya Paudel, Mr. Bijay Sapkota, Ms. Sikhshya Neupane and Mr. Rajendra Chataut attended a Student ICT Conference held on May 5, 2018 at Nepal College of Information Technology (NCIT), Lalitpur; focusing on “Role of Youth in Digitization of Local Government”. Mr. Chhibabu Maharjan, Mayor of Lalitpur Metropolitan City and Mr. Laxmi Prasad Yadav, Director General, Department of Information and Technology, Government of Nepal were the key invitees of the conference organized by Information Technology Society Nepal (ITSN).

#### **Participation in Microsoft Event**

Mr. Tek Narayan Adhikari, Junior Associate Professor, attended an event organized by Microsoft Nepal: “What does it take to breach a lock?” on Jun 24, 2018 at Hotel Annapurna, Kathmandu; organized by Microsoft. The session kicked off with the welcoming speech of Ms. Sonia Kabir, Managing Director Microsoft Bangladesh, Nepal, Bhutan, and Laos focusing on what digital transformation looks like in the developing countries like ours and how can we go hand in hand with Microsoft to empower every individual and organization in the planet to achieve more.

#### **Participation in Spirathon Event 2017**

Spiralogics International in partnership with Spiralogics Institute of Technology hosted Spirathon- #CodeForSociety’ as part of its Corporate Social Responsibility initiation and to groom the ideas of young learning developers on November 18-19, 2017. Out of 122 teams, 10 were selected on the basis of social awareness theme. During the event, selected teams built a prototype and application based on a social awareness theme which was judged by professionals

from top IT companies. Two teams, namely- ‘Smile Again’ and ‘Curious Hat’, from Kantipur Engineering College also stepped forward to compete in this event and were able to achieve Second and Third positions respectively.

#### **Participation in “Empowering Women in Geospatial Information Technology (GIT)”**

Ten students from Department of Computer and Electronics Engineering attended the four day training on “Empowering Women in Geospatial Information Technology (GIT)” held on June 25-28, 2018, organized by the International Centre for Integrated Mountain Development (ICIMOD), in partnership with Robotics Association of Nepal (RAN). The participants were Ms. Sabbu Maharjan, Ms. Kriti Gajurel, Ms. Sikhshya Neupane, Ms. Pooja Khadka, Ms. Rashmi Thapa from BEX and Ms. Neha Jha, Ms. Sadhana Khadka, Ms. Pooja Bhatta, Ms. Shova Sedai, Ms. Arshiya Shrestha from BCT. The aim of this training was to train the young women from Nepal on the use of Earth observation data and Geospatial Information Technology which will support the efforts to bridge the gender gap in GIT fields.

#### **Info Session regarding Hult Prize**

The “Info Session regarding Hult Prize” was held on December 3, 2017 with objective to present information about ‘Hult Prize Competition’ to the students of Kantipur Engineering College. This session was presented by Mr. Bikram Adhikari and Mr. Anusandhan Pokharel, presenters from Hult Prize at IOE, Pulchowk. Three teams had registered for the competition from KEC among which ‘Team Powerhouse’ managed to put themselves as top 10 team of Hult Prize @ IOE, Pulchowk Campus - 2018 which was the quarter final round of annual Hult Prize Challenge.

#### **Course Familiarization Programs**

With the initiation of Department of Computer and Electronics Engineering, two different presentations were delivered to BEX I/II, III/II and IV/II students. Er. Shree Bhadra Wagle, Associate Professor carried out the presentation sessions on trending issues in electronics and communication engineering in the month of December 2017.

#### **Workshop on Programming with Arduino**

A workshop on Programming with Arduino in collaboration with Rotaract Club of Jawalakhel Manjushree (RCJM) & Robotics Association of Nepal (RAN) was conducted by students Ms. Anima Acharya and Ms. Seema Bhandari on July 7-8, 2017. The objective of the workshop was to educate and guide student about Arduino in order to successfully complete their minor and major projects and also to provide discussion platform for students with expert that would help to generate innovative ideas.

#### **Electronics Kit Distribution Program**

In an event organized by Electronics Club on November 12, 2017, Electronics kits were handed to the students of Electronics and Communication Engineering of 2074 batch. Electronics kits were jointly distributed by Dr. Keshar Prasain, Vice Principal and Mr.

Maha Datta Paudel, HOD, in the presences of Electronics Club & Electronics Kit includes various components like Arduino board, bread board, multimeter, motors and many others essential components that will help students to materialize their ideas. On this program, Dr. Prasain highlighted the importance of practical knowledge and encourages students to pursue their knowledge beyond text books.

As part of this program, the Electronics Club members organized basic hardware training to 1st year BEX students on November 23, 2017. Electronics Project Book compiled by Mr. Krishna Keshav Chaudhary (2071 Electronics batch) was also distributed.

#### **Interaction Program on Presentation Skill**

Ms. Mona Aditya, Alumni Affair Manager, Teach For Nepal (TFN) delivered her insight and shared her experiences and knowledge during an interaction organized for students of III year Electronics on December 24, 2017. The program was helpful for enhancing the presentation skill of students.

#### **MoU with Picasso for Internship in Civil Engineering**

On October 30, 2017 Picasso Consultant Pvt. Ltd. conducted interview for internship in civil engineering for graduates of Kantipur Engineering College. Students were interviewed by the professional from the consultancy. The selected students would get opportunity to be a part of different civil engineering projects under Picasso Consultant Pvt. Ltd. The internship program shall be a platform for the students to refine their skills and gain some experience of civil engineering field.

#### **Two Minutes Coding Challenge Program**

Spiralogics Institute of technology organized “Two Minutes coding Challenge Program” on May 10, 2018 with the mission of increasing the critical thinking, logics building and instant programming skills of students. The expert team of Spiralogics conducted the program and Students from III and IV year BCT/BEX participated the program.

#### **Career Bridging Orientation Seminar**

An orientation seminar on “A Graduate’s Guide to Professional Training and Getting Hired”, was organized for the students of 4th Year Computer Engineering on May 6, 2018. The session was delivered by Mr. Prakash Aryal, an expert from Good Minds Technologies. The program was focused on pre-graduate preparation and how to choose the training program that makes students hired immediately after finishing the bachelor’s degree.

#### **Interaction on Block Chain Technology**

In order to encourage students towards the emerging block chain technology and to support the major projects of IV year computer students, an interaction program on block chain technology was organized on January 21, 2018. The session was delivered by Mr. Suresh Gautam, a senior solution architect of Verscend Information Technology, Hattisar, Kathmandu, Nepal.

## Orientation Program 2074

Kantipur Engineering College organized students' orientation program for the newly admitted 1st year students on October 29, 2017 at Lovely Banquet, Lalitpur. Dr. Tara Prasad Pokhrel, Chairman of KEC, chaired the program and Prof. Dr. Ram Chandra Sapkota, Assistant Dean (Examination), IOE, was the Chief Guest. Mr. Maha Datta Paudel, HOD, welcomed the new students and guardians and highlighted the difference between school and university level education. Mr. Paudel also urged the guardians to associate and coordinate closely with the departments for academic performance of the students.

Renowned Philosopher and Philanthropist, Mr. L.P. Bhanu Sharma, Special Guest of the Orientation Program highlighted on the different aspects of ownership, personal responsibility and attitude to be a successful entrepreneur. Dr.



Er. Sunil Kumar Pokhrel, Ex-chairman of KEC, delivered a presentation entitled "Engineering Profession: Opportunities and Challenges - Two examples" through which he focused on the vital role of engineering in the nation building process. On the

occasion, Er. Rameshwar Rijal, Principal of KEC presented a brief introduction of college and its rules and regulations to the newly admitted students. Around 500 participants including students, parents and guests attended the program.

## Activities at Research, Training & Consultancy Division

### Participation in SKIMA-2017

Er. Rameshwar Rijal, Principal, participated in SKIMA 2017 organized by Sri Lanka Institute of Information Technology (SLIIT) from December 6-8, 2018 in Colombo, Sri Lanka. During the visit the consortium was created among our partner universities to work in SUNspace Project. The project is targeted towards farm management & optimization. Kantipur Engineering College has successfully organized SKIMA in 2008 and 2015 at Kathmandu, Nepal.

### University Visits

Er. Rameshwar Rijal, Principal visited Hellenic Open University (HOU), Greece on March 4 to March 18, 2018 under the SmartLink Project.

During his visit a MoU was signed between KEC and HOU for joint collaboration and cooperation.

He also visited the University of the West of Scotland (UWS), UK on March 19, 2018 for the Joint Coordinator Meeting to review the project activities. The Joint Coordinator Meeting was held on April 2, 2018 at UWS.

### Staff Visit through International Projects

Under the staff mobility of SmartLink project, Dr. Dimitrios Zevgolis and Claire Lhomme have visited KEC for a period of one month. Dr. Dimitrios Zevgolis is an Associate Professor at Hellenic Open University, Greece. Claire Lhomme is Director of Studies

at Université Lumière Lyon 2, France.

### IIT interaction with faculties and students

Delegates from Indian Institute of Technology (IIT) Mandi and IIT Ropar visited Kantipur Engineering College on May 8, 2018. The delegates had an interaction with the CORE team members of KEC (Principal, Vice Principal, HODs and Section Chiefs) in which the possibilities of mutual cooperation, research collaboration, possible exchange programs, etc. were discussed. The delegates then gave a presentation to the students of IV year and interested faculty about their institutions. There was also discussion about research and scholarship opportunity in their institutions for masters and PhD programs.

## Educational Visits

### Survey Camp 2074

With an objective of giving the students an opportunity to consolidate and upgrade the practical and theoretical knowledge on Engineering Surveying in the actual field condition, survey camp 2074 was organized for Bachelor's 3rd year, Batch of 2072 of Civil Engineering under the Department of Civil Engineering team lead by Er. Imanath Duwadi. The Survey Camp was organized in MARS Nepal Engineering Survey Camp Pvt. Ltd. at Bungmati, Lalitpur on November 14-24, 2017. The camp was successful in providing students insights on preparing and performing Topographic Map and its survey, bridge site survey and road survey.

With support from team of teachers, administrative staffs, staffs of MARS Nepal and cooperation of all students Survey Camp 2074 was successful in fulfilling its objectives and course requirements.

### Irrigation and Hydropower Tour 2074

The Irrigation and Hydropower tour was conducted on December 20-23, 2017

for Civil 4th year in four different sites viz. Lower Marshyangdi Hydropower Project, Seti Hydropower Project, Fewa Hydropower Project and Begnas Irrigation project. The main purpose of the tour was to familiarize the students about the practical knowledge of Irrigation project and Hydropower Project which they had gained from their theory class. The tour was coordinated by a team

of Er. Sudeep Thapa, Dr. Surendra Bahadur Tamrakar, Er. Niraj Bohara and Er. Niman Maharjan.

### Geology Tour 2074

Department of Civil Engineering organized Geology Field Visit on January 11-13, 2018 for the students of Civil II/I. The field visit helped them to learn and explore about various geological features.



The Geological Tour to Melekh Dhading, focused on Classification of Rocks and their Properties, Different Geological Features and Structures, River Morphology and Use and Handling of Brunton Compass. This tour helped the students to visualize practical application, operation and difficulties involved in the field. The tour was orchestrated by Er. Sabin Paudyal, Er. Abhinesh Khatri and Mr. Pramod Simkhada.

### Water Supply and Hydrology Tour 2074

Department of Civil Engineering organized Water Supply & Hydrology Field Visit on January 23, 2018 for the students of Civil III/I. Students were taken to Bode Water Treatment Plant, Bhaktapur and Nepal Agriculture Research Centre, Khumaltar as a learning field trip.

The students are currently learning a curriculum which educates them on the various components of a water supply system. From their visit to the site, they were introduced the various processes of water treatment in the water supply system. Regarding the hydrological field visit, the visit was made in Agrometeorological Station of NARC, Khumaltar where students were briefed about the automatic climate recorder which can measure rain, humidity, number of sunshine hour, sunshine radiation in addition to manual recorders for wind (anemometer), wet bulb and dry bulb thermometer for humidity, minimum and maximum temperature recording thermometer, sunshine recorder, evaporimeter and Steven Screen. The tour was orchestrated by Er. Meelisha Maharjan, Er. Kirti Dhungana, Er. Niraj Bohara and Er. Abhinesh Khatri

### Educational Tour for 3rd Year BCT & BEX Students

A four day Educational Tour was organized for the students of IIIrd year Computer and Electronics & Communication Engineering (2072 Batch) at different sites



viz. Manakamana Cable Car, Seti Power House, Mountain Museum and Lower-Marsyangdi Hydropower in two phases; the first phase was on November 17-20, 2017 and the second phase was on November 30-December 3, 2017. The main motto of this visit was to accumulate the knowledge about the application of computer and electronics technologies in these sectors. The tour was focused on gaining practical knowledge of microprocessor based instrumentation,

control system, mechanical and power system related operations. Mr. Tek Narayan Adhikari, Er. Dipesh Shrestha, Er. Anup K.C., Er. Sujin Gwachha, Er. Kobid Karki, Er. Tirth Acharya, Er. Trilochal Bhatta and Er. Susheel Joshi guided the students during the tour.

### Transportation Tour, 2075

Transportation tour to Dhulikhel – Bardibas (BP highway) of length 161 km was organized on May 22, 2018 for IV/II, 2071 batch Civil Engineering Students. The main objective of the tour was to familiarize students with road side facilities, road elements, drainage elements (side drains, cross drains, energy dissipating structures) and bio-engineering activities. Along with road elements, students observed Benkelman Beam Test in pavement and were informed about the importance of vertical and horizontal alignment of hill roads and their impact in overall cost of the project. The transportation tour was coordinated by Dr. Surendra Bahadur Tamrakar, Er. Niraj Bohara, Er. Niman Maharjan and Er. Suman Neupane.

## Students' Activities

### Welcome and Farewell Programme 2074

Kantipur Engineering College organized Welcome and Farewell programme 2074 on January 18, 2018 at Tribhuvan Army Officers Club, Kathmandu. The programme was



organized with the initiation of Students' Main Organizing Committee with members: Mr. Ajeeb Rimal, Mr. Ashwin Pokhrel, Mr. Bibek Gautam, Mr. Alash Dhakal, Mr. Paras Thapa, Mr. Rupesh Kunwar, Mr. Anuj Adhikari, and Mr. Samman Pokhrel, representing existing students' unions, to welcome the students of batches 2073 and 2074 and to bid a warm farewell to the batches 2069 and 2070. The event was accompanied with cultural and musical programs whereby the students showcased their talents. Er. Dr. Tara Prasad Pokhrel, Chairperson of Kantipur Engineering College, was the Chief Guest for the programme chaired by Mr. Ajeeb Rimal.

### Celebration of Saraswati Puja and Prize Distribution Ceremony

KEC has been celebrating and organizing Saraswati Puja and Prize Distribution

coincidentally on the same day. This year the events were celebrated on January 22, 2018. Since the early days of our college, we have established this tradition of recognizing the excellent results and performances.

With this, we expect better motivation and environment for the students, teachers and staffs. Some of prize categories like Best Student in Drawing, Best Student in Mathematics, Best Student in Structural Analysis, Best Minor Project, and Best Final Year Project really showed our commitment towards achieving the excellence.

The ceremony was chaired by Er. Rameshwar Rijal, Principal of KEC and the Chief Guest for the event was Er. Dr. Tara Prasad

Pokhrel, Chairman, College Management Committee. Certificates and prizes were distributed in various categories to the students. Prize for Best Scholar Girl Student (Odd Semester) were bagged by Ms. Ruby Shakya, student of 4th year Computer Engineering and Ms. Uditia Bista, student of 2nd year Computer Engineering. The prize for Laurel of the College went to Ms. Sushila Sipai, student of 4th year Computer Engineering for her outstanding

achievements. Mr. Pitambar Simkhada, Library Chief, was awarded with Best Staff Award 2074 for his exemplary performance in his career at KEC.

The ceremony was concluded by the chair person with congratulations to the awarded students and staff. The event was emceed by Er. Susheel Joshi, Lecturer of the College.

### Sports Week 2075

As with the continuation of the last year sports week herein Kantipur Engineering College, the college along with the main organizing committee organized Sports Week 2075 to increase the student-student interaction through different forms of sports. The events were organized by main organizing committee: Mr. Ajeeb Rimal, Mr. Bibek Gautam, Mr. Sushant Kandel and Mr. Alash Dhakal. The events included Cricket, Football, Basketball, Volleyball, Chess, Table Tennis, Badminton and Mini-Marathon. Principal Er. Rameshwar Rijal and students representatives awarded prizes and certificates to the winners and runner-ups of the events.



## New Appointment & Motivation

Newly Appointed Teachers	
Er. Meelisha Maharjan	Civil
Er. Kamal Katwal	Civil
Er. Abhinesh Khatri	Civil
Er. Nabin Tiwari	Civil
Er. Bhuvan Adhikari	Electronics & Communication
Er. Rajendra Shrestha	Electronics & Communication
Er. Ganesh Mainali	Electronics & Communication
Er. Bishal Rimal	Electrical
Er. Shiva Gautam	Computer
Er. Anuradha Maharjan	Computer
Er. Robi Dahal	Electronics & Communication
Er. Suman Neupane	Civil
Er. Ashutosh Kumar Jha	Electrical
Er. Binod Wosti	Computer
Newly Appointed Staff	
Mr. Pankaj Kumar Sah	Asst. Instructor

Faculty Motivation	
Mr. Bikram Desai	Office Assistant
Er. Sudeep Thapa	Permanent
Mrs. Anjana Devi Bhandari	Sr. Lecturer
Er. Ima Nath Duwadi	Sr. Lecturer
Mr. Ammar Bahadur Karki	Permanent/ Department Assistant (Engg. Science & Humanities)
Er. Dipesh Shrestha	Department Assistant (Computer & Electronics)
Er. Anup K.C.	Sr. Lecturer
Er. Kobid Karkee	Sr. Lecturer
Er. Niraj Bohara	Department Assistant (Civil)
Er. Sujin Gwachha	Sr. Lecturer/Project Coordinator (Electronics)
Er. Tirtha Acharya	Sr. Lecturer/Project Assistant (Computer)
Mr. Santosh Rawal	Permanent

Mr. Deepak Dhas G	Sr. Lecturer
Er. Rita Khadka	Sr. Lecturer
Mr. Sushil Ghimire	Sr. Lecturer
Mr. Jaya Prakash Kafle	Deputy Instructor
Mr. Birendra Prasad Chaudhary	Deputy Instructor
Mr. Shiva Raj Khadka	Deputy Instructor
Mr. Laxmi Sah	Deputy Instructor
Mr. Pawan K.C.	Sr. Office Assistant
Mr. Nirajan Khadka	Permanent
Mr. Bikas Khadka	Permanent
Mrs. Dibya Bhusal	Permanent
Mrs. Jamuna Maharjan	Permanent
Mrs. Nirmala K.C	Peon

## Final Year Projects of 2070 Batch

### Civil Engineering

Detail Analysis and Design of RC-T Girder Bridge over Kerunga River, Chitwan  
 Analysis and Design of Seismic Resistant Multistoried Building  
 Analysis and Design of RC-T Beam Bridge over Sapan Tirtha River Along Gongabu Sangla Gurje Bhanjyang Road Kathmandu  
 Performance Assessment of Intersection (A Case Study of Chabhil Intersection)  
 Public Transportation Management Along Ring Road (HO16) with Introduction of Bus Rapid Transit (BRT) System  
 Analysis and Design of Earthquake Resistant Multistorey Commercial Building  
 Design and Analysis of Multi Storey Parking Lot  
 Seismic Resistant Design of Educational Building  
 Analysis and Design Earthquake Resistant Design of Multistoried Commercial Building at Chitwan  
 Earthquake Resistance Design of Multistoried Building at Pokhara  
 Analysis and Design of Seismic Resistant Multistoried Building  
 Analysis and Design of Seismic Resistant Multistorey Building  
 Prefeasibility Study on Chino Khola Small Hydropower Project  
 Prefeasibility Study of UpperMardi Small Hydropower Project  
 Marsyandi Khola Hydropower Project Manang, Nepal

Detail Analysis and Design of Truss Bridge over Kerunga River, Chitwan  
 Analysis and Design of Seismic Resistant Multistoried Building

### Computer Engineering

Infovista  
 Data Analyzer  
 Handwriting recognition and Font Generation  
 NEP BOT  
 Travel Pioneer  
 Movie Ticket Booking  
 Green Cloud  
 Automated Essay Marking  
 Blinker  
 Helping Hand  
 Vayu: Distributed Password Cracking System  
 Remote Desktop  
 Decision Support System for HR Management  
 GetJob  
 Fantasy Warfare  
 Cryptovault  
 Yatayat Sewa  
 The Dealer  
 Drishya: Image Mining  
 Automatic Number Plate Scanner

Routine App  
 Online Shopping System  
 Text Editor  
 Musikimo  
 Bhasa  
 Futsal Booking  
 Himalayanminerals.com  
 Secure Chat  
 Smart Home  
 Project Aider  
 Sales Window

### Electronics Engineering

Bio-Robotic Arm  
 Visible Light Communication System  
 Wildlife Monitoring and Protection using Wireless Picture Transmission  
 Smart Car  
 Weather Forecasting System  
 Glove Controlled Robotic Hand  
 Automatic Irrigation System  
 Smart City  
 Quadcopter  
 Digital Stethoscope  
 Home Automation System  
 Restaurant Automation System

## Distinction Holders 2073/74

<b>BCE I/I 2073</b>	%	<b>BCT III/I 2071</b>	%
Aayush Khadka	83.12	Ramal Maharjan	80.23
Hari Krishna K.c.	87.86	<b>BCE I/II 2073</b>	%
Keshab Raj Subedi	82.23	Hari Krishna K.c.	81.15
Sailesh Kumar Sah	80.45	Keshab Raj Subedi	80.72
<b>BCE II/I 2072</b>	%	Sailesh Kumar Sah	81.72
Dipesh Pandit	84.15	<b>BCT I/II 2073</b>	%
<b>BCE III/I 2071</b>	%	Kabin Devkota	85.85
Abriti Panta	83.09	Nishan Khanal	84.47
Sumnima Singh	80.0	Udita Bista	82.93
Tankar Rokaya	83.89	Ananta Poudel	84.47
Suraj Pandey	82.29	Arpan Sapkota	81.39
<b>BCE IV/I 2070</b>	%	Gaurav Karki	85.24
Suraj Shrestha	80.27	<b>BCT II/II 2072</b>	%
<b>BCT I/I 2073</b>	%	Prakash Ratna Prajapati	82.67
Nishan Khanal	83.87	Gaurav Subedi	87.23
Abhishek Karkee	81.11	Bishal Malla	87.12
Gaurav Karki	81.66	Kritish Dhaubanjari	85.34
<b>BCT II/I 2072</b>	%	<b>BCT IV/II 2070</b>	%
Prakash Ratna Prajapati	81.03	Rupak Chaulagain	82.27
Gaurav Subedi	82.52	Sabin Maharjan	81.47
Bishal Malla	84.46	Sonu Adhikari	81.34
Kritish Dhaubanjari	81.95	Kritika Rajbhandari	82.27
Raju Bhattarai	80.58	<b>BEX I/II 2073</b>	%
<b>BCT IV/I 2070</b>	%	Karan Kc	80.62
Ruby Shakya	83.52	<b>BEX II/II 2072</b>	%
Binod Wosti	82.43	Bijay Sapkota	84.59
Dev Raj Adhikari	80.37	<b>BEX III/II 2071</b>	%
<b>BEX II/I 2072</b>	%	Ramal Maharjan	81.7
Bijay Sapkota	84.0	<b>BEX IV/II 2070</b>	%
		Bibek Khanal	82.0

## International Linkage



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