



Volume - XII
Issue 1

IN THIS ISSUE

- Page 2**
i. BNBL Conducts Financial Literacy Awareness Program
ii. Occupational Health and Safety (OHS)
- Page 3**
i. Comprehensive Sexuality Education workshop
ii. Annual Award Day – Honoring Leadership, Service & Spirit!
iii. JNEC Recognized as an Official Cisco Networking
- Page 4**
i. International Academics and Students Visit JNEC
- Page 5**
i. First-ever 70-day course on Timber Engineering
- Page 6**
i. Workshop on Electrical Safety and Quality Assurance in Electrical Installations
ii. Training on Quality Control, Assurance and Monitoring
- Page 7**
i. Celebration of the International Day of Yoga
ii. Training on Construction Safety Supervision
iii. Training on Basic Computing and Office Productivity Tools
iv. Training on Design Thinking
- Page 8**
i. JNEC launches Annual Campus Maintenance Week
ii. Audit Advocacy Program
iii. Shared Learning between Austria and Bhutan (S-LAB) for Enhancing Sustainability in the Built Environment
- Page 9**
i. JNEC Conducts Annual College Rimdro
ii. JNEC conducts Intellectual Property Awareness Program to Observe the World IP Day
iii. Training on Digital Fabrication
- Page 10 - 13**
i. Graduation day
- Page 14**
i. "JNEC INFINITY" Monument and Teachers' Day

The visit of Dasho Vice Chancellor

The visit of Dasho VC

Dasho Chewang Rinzin, the Honorable Vice Chancellor of the Royal University of Bhutan (RUB), made his inaugural and familiarization visit to Jigme Namgyel Engineering College on 15th to 16th February, 2025.

During the Vice Chancellor's visit to JNEC, key concerns were raised by the college staff. The discontinuation of BE programmes in Power Engineering (PE) and Surveying & Geoinformatics (S&G) was a major concern, as these programmes had strong market demand

and their closure led to staff and student demotivation, loss of potential collaborations and funding, and increased staff attrition. Existing laboratories were already equipped to support these programmes. Additionally, the discontinuation limited opportunities for Class XII graduates and impacted institutional performance targets, HR regulations, and budgeting policies.

The Academic Board, in its 54th meeting, advised JNEC to propose the continuation of

these programmes to the University Council, possibly as self-funding programmes. It was also noted that TTIs under the Department of Technical Education and Skills Development are planning to introduce similar diploma programmes. JNEC has initiated discussions with TTIs and MoESD to avoid duplication. Concerns about aging infrastructure were also highlighted, with renovation plans included in the 13th FYP.



BNBL Conducts Financial Literacy Awareness Program

Bhutan National Bank Limited (BNBL) successfully conducted a financial literacy awareness program at JNEC on 14th May, 2025. The initiative aimed to educate students on essential financial concepts and empower them with knowledge to make informed financial decisions.

The session was led by four BNBL staff members and was attended by 300 students from various academic disciplines. The program was a part of BNBL's broader effort to promote financial literacy across the country, especially among the youth who represent the future of Bhutan's economy.



During the interactive session, the facilitators covered key topics such as personal savings, budgeting, the benefits of digital banking, responsible use of credit, and financial fraud awareness. Special emphasis was placed on mobile and internet banking services, which are becoming increasingly relevant in the digital era.

The BNBL team also shared practical financial tips and real-life examples to help students understand the value of money management. Students actively participated in discussions and engaged with the speakers during the Q&A session.



Occupational Health and Safety (OHS)



The final year students of JNEC participated in an informative and engaging session focused on Occupational Health and Safety (OHS), alongside a career-focused educational consultancy session, organized by the Institute of Technology and Professional Learning (ITPL) on 21st May, 2025.

The program aimed to equip graduating students with essential knowledge on maintaining health and safety standards in the workplace—critical skills for future engineers and technical professionals. Experts from ITPL

shared practical insights into the importance of adhering to OHS protocols across industries, highlighting real-world case studies and safety practices.

In addition to the safety talks, the session also covered educational consultancy services provided by ITPL. Students were introduced to various professional learning opportunities and

higher education pathways, both within and outside the country. The session helped clarify options for those planning to pursue further studies or specialized training after graduation.

JNEC continues to collaborate with external institutions to provide its students with relevant industry exposure and support their career development.



Comprehensive Sexuality Education workshop

JNEC hosted a 3-day Comprehensive Sexuality Education (CSE) training from 27th to 29th March, 2025. A total of 17 staff members from JNEC participated in the training facilitated by an expert from Paro College of Education.

The training aimed to equip participants with essential knowledge and skills to engage in discussions on sexual education, fostering a more informed and supportive educational environment for students.



Annual Award Day – Honouring Leadership, Service & Spirit!



JNEC hosted the Annual Award Day on 28th May, 2025. The celebration was dedicated not just to the academic performers, but to the heart of what makes our college truly exceptional: student leadership, co-curricular engagement, and meaningful contributions to the community.

The event was graced by the Dasho Thrompon of Samdrup Jongkhar Thromde. Dasho's insightful wisdom encouraged and inspired the students to continue leading with purpose, compassion, and resilience.

JNEC extends hearty congratulations to all the award recipients for their outstanding efforts beyond the classroom. Their passion, leadership, and commitment to service were the foundation of a thriving college community.

JNEC Recognized as an Official Cisco Networking Academy

In a remarkable milestone, JNEC achieved international recognition as an official Cisco Networking Academy, marking a significant step in enhancing its technical education and networking capabilities. This prestigious acknowledgment underscores the college's commitment to providing industry-relevant skills and training in networking, cybersecurity, and IT infrastructure. By becoming a Cisco Academy, JNEC has empowered its students and faculty with access to world-class learning resources, certifications, and hands-on experience with cutting-edge networking technologies. This achievement not only strengthens the institution's academic excellence but also enhances career prospects for students, equipping them with globally recognized certifications that align with the demands of the digital era.



International Academics and Students Visit JNEC



JNEC warmly welcomed Dr. Nina Jakubeit and Dr. Max Trauernicht from the Humanitarian Engineering Research Group at the University of Twente, Netherlands on 17th February, 2025. They jointly conducted a Design Thinking Workshop for the staff and students of JNEC, fostering innovation and problem-solving skills.

Additionally, JNEC also welcomed Mr. Ricardo Daniel Ferreira Carreira, a Master of Science student in Sustainable Energy Engineering at Lund University who was conducting his Master's thesis on AI-Improved Solar Power Forecasting: Data Collection and Prototype Development in Bhutan. He was supervised by Ms. Srijana Gajmer and Dr. Dileep Gopalakrishna, faculty members of Department of Electrical and Electronics Engineering.



JNEC welcomed Professor Henrik Davidsson from Lund University, Sweden on a short term teaching assignment on 24th March, 2025. Additionally, Ms. Jessika Einir Singe Selligren, Ms. Seyeden Marziyeh Taghizadeh, Mr. Linda Lundevaller and Ms. Noah Andreasson from the same university were also welcomed to the campus for a student exchange program.



JNEC hosted Professor Anton Kraler from the University of Innsbruck (UIBK), Austria for a week on 15th April, 2025. During his stay at JNEC, Prof Anton taught Acoustics, Fire Safety, Moisture and Quality Management in timber structures and conducted laboratory sessions on timber testing equipment like RESISTOGRAPH which is used to assess the internal condition of trees and timber structures, timber



hardness and moisture content. The advanced timber engineering lab was developed with the support of APPEAR-OeAD, Austria.

A total of 17 participants from various stakeholders attended the 70-day certification course on Timber Engineering, jointly offered by JNEC and UIBK.

JNEC welcomed Mr. Antoine Bercy, a PhD student, Faculty of Tropical AgriSciences, Czech University of Life Sciences Prague on 21st April, 2025.

Mr Antoine spent three weeks at the campus working on JNEC's one tonne per day (1 TPD) capacity biogas plant which was installed in 2022 under the joint funding support of World Wildlife Fund (WWF),

National Environment Commission (NEC) and Department of Energy, Ministry of Energy and Natural Resources.



JNEC warmly welcomed Professor Michal Szypowski from Institute of Electrical Power Engineering, Lodz University of Technology, Poland on a short visit to the college on 5th May, 2025. During his stay, he taught Electrical Lighting and Intelligent Building Installations to the Diploma in Electrical and BE in Power Engineering students.



First-ever 70-day course on Timber Engineering



To promote the sustainable use of timber in construction, JNEC launched a 10-week Certificate Course in Timber Engineering on 17th February, 2025. The course was designed to equip engineering professionals with a comprehensive understanding of key principles in timber engineering. The course was taught by distinguished professors Prof. DI Michael Flach, Prof. DI Dr. techn. Anton Kraler, and Prof. DI Dr. techn. Maderebner Roland from the Institute for Construction and Material Sciences, Unit of Timber Engineering, University of Innsbruck, Austria.

The course successfully concluded on 30th April, 2025, marked by the inauguration of a Smart

Timber Grid Shed constructed by the course participants as a part of their practical training. Additionally, Prof. Henrik Davidsson and Ms. Marziyeh Taghizadeh from Lund University, Sweden, delivered more than 20 hours of guest lectures focusing on energy efficiency in buildings, further enriching the participants' learning experience.

Smart Timber Grids are spatial structures bearing loads in two directions. On the contrary to simple beams orientated in a single direction, the timber grid is a "redundant system" where crossed layers of beams are interconnected to allow the stronger sections to support the weaker sections in case of local failure.

The individual weakness is compensated by a group effect of interconnected beams, so that the system only fails as a group, ensuring higher bearing capacities with medium strength values and not because of the weakest values of a single piece. Nature systematically uses "redundancy" to strengthen the group capacities by interconnections and symbiosis, social and health systems use it to protect the weakest members by the stronger members of a social group.





The primary objective of the workshop was to enhance awareness and build capacity in electrical safety and quality assurance practices. The sessions covered key thematic areas such as electrical safety protocols and regulatory compliance, risk assessment methodologies and hazard identification techniques, emergency response strategies and contingency planning.

This initiative plays a critical role in strengthening the resilience of electrical infrastructure in schools, aligning with the broader goals of climate-resilient renewable energy development.

The event witnessed an active participation of 337 individuals, comprising students and staff from the host schools as well as from nearby institutions, including Martshala Central School and Phuntshothang Middle Secondary

School from Samdrup Jongkhar, Tshenkharla



Training on Quality Control, Assurance and Monitoring

The training included theoretical and practical sessions on essential topics such as aggregate,

soil and concrete testing, load calculations, wiring installations, and compliance to industry standards. The participants made a day-long site visit to JHD Infra Construction and Pundu Port Construction in Guwahati, India. These activities aimed to enhance practical knowledge and improve quality assurance in engineering projects.

With experienced trainers and interactive approaches, the program provided valuable insights into industry best practices. The training concluded with positive feedback, reinforcing the significance of quality control in construction and electrical works.



Celebration of the International Day of Yoga



In collaboration with the Indian Consulate Office, JNEC organized a special yoga session for students and staff on 16th June, 2025,

ahead of the celebration of International Day of Yoga on 21st June. The event saw the participation of around 80 individuals who came together to embrace the practice of yoga and its many benefits. Dasho Dzongdag, the Sr. Superintendent of Police (SSP), and Dasho Thrompon of Samdrup Jongkhar Dzongkhag graced the occasion and their presence added great significance to the program.

The session was aimed at promoting awareness about the positive impact of yoga on one's physical, mental, and emotional well-being.



Training on Construction Safety Supervision

JNEC organized a five-day training program on Construction Safety Supervision from 16th to 20th June, 2025 with support from the Institute of Technology and Professional Learning (ITPL). A total of 82 students from different programmes took part in the training. The program was designed to help participants build essential safety management skills and raise awareness about safe practices on construction sites.

JNEC sincerely thanks ITPL for offering the training to students at a concessional rate of Nu. 3000 per participant, which is a substantial reduction from their usual fee of Nu. 10,000.



Training on Basic Computing and Office Productivity Tools

JNEC provided a free training on Basic Computing and Office Productivity Tools from 20th to 24th, January 2025 to the students of Dewathang locality and nearby areas as a community service initiative.

It aimed to help the participants enhance their digital skills and productivity through, introduction to basic computer operations,



hands-on experience with Microsoft Office tools, email and internet usage for daily tasks, file management and data organization, identification of computer hardware parts

It also included a presentation from the JNEC's APNIC project team which covered topics related to cyber security awareness.

Training on Design Thinking

A 3-day Design Thinking training was held at JNEC from 17th to 19th February, 2025. The training was facilitated by Dr. Nina Trauernicht and Max Trauernicht from the University of Twente, Netherlands specifically from the Faculty of Engineering Technology (CTW), Department of Design, Production, and Management (DPM). The primary objective of the training was to equip staff and students with the skills and knowledge necessary to apply Design Thinking principles to enhance campus life.

A total of 60 participants, comprising faculty, administrative staff, and students from various

disciplines, participated in the training. The training followed a structured, hands-on approach, covering the five stages of Design Thinking: Empathize, Define, Ideate, Prototype, and Test.

The training resulted in the development of several innovative prototypes addressing various challenges within the campus. These included:

1. **Roof Water Sprinklering System**
2. **Website for JNEC Sports Facility Booking System**
3. **Solid Waste Management in JNEC**
4. **Sanitary Pad Incinerator**
5. **Portable Badminton Poles**
6. **JNEC Sports Booking App for Gender Equality**
7. **Rainwater Harvesting System**
8. **Mobile App for Cafe Services**
9. **Solar-Electric Hybrid Cloth Dryer**

JNEC launches Annual Campus Maintenance Week



JNEC conceptualized and organized the first-ever Campus Maintenance Week (CMW) from 17th to 21st March, 2025, aimed to foster teamwork, ownership, and community spirit in creating an Inspiring Campus.

A total of 660 staff and students participated in various improvement projects, including construction of a toe wall, footpaths, steps, PCC flooring, and other landscaping and beautification activities. Through this initiative, JNEC is not just transforming its environment but also shaping a culture of shared responsibility and ownership.



Audit Advocacy Program

A specialized audit team from the Royal Audit Authority (RAA), Samdrup Jongkhar Regional Office, conducted an Audit Advocacy Program at JNEC on 21st May, 2025. This program targeted final-year students and members of the JNEC Integrity Club, aiming to promote the values of accountability, transparency, and ethical governance in both academic and professional contexts. The session underscored the significance of audit functions within higher education institutions and the engineering profession.

The program's key objectives included raising awareness about the mandate and functions of the RAA, educating future professionals on the role of audits in fostering institutional

accountability, illustrating how audits contribute to good governance and financial compliance, highlighting ethical challenges prevalent



in engineering and management fields, and providing practical knowledge and tools to detect and prevent financial irregularities. Deliberations on audit framework, case studies, ethics, workshop and preventive measures were also held.

The enthusiastic participation of students and faculty highlighted JNEC's commitment to nurturing ethically conscious and governance-aware graduates. The RAA reaffirmed its dedication to fostering a culture of accountability and transparency through such targeted advocacy programs and looks forward to continued collaboration with academic institutions in building a future rooted in ethical excellence.

Shared Learning between Austria and Bhutan (S-LAB) for Enhancing Sustainability in the Built Environment

appear

**Austrian Partnership Programme
in Higher Education and Research
for Development**

JNEC in collaboration with Technical University in Graz (TU Graz), Austria was awarded the APPEAR project titled “Shared Learning between Austria and Bhutan” which officially began from 1st April 2025. The project aims to develop human capacity and provide the necessary resources to support state-of-the-art building physics and sustainable design, research and training. S-LAB will be achieved through equipping a modern research and training center in Bhutan, development of a bespoke ‘micro-credentials’ scheme, and providing advanced diploma level training in Building Physics, Building Energy Modelling and Energy Efficiency using existing TU Graz masters level modules and creating the foundation for ongoing applied research and consultancy projects that explore regionally appropriate practices for achieving healthy, net zero carbon buildings in Bhutan.

With funding from



**Austrian
Development
Cooperation**

JNEC Conducts Annual College Rimdro



Organized by the student councilors, JNEC conducted its annual Rimdro, on 21st June 2025. The event began with a warm reception of Khenchen and the monks of Chökyi Gyatso Institute (CGI), Dewathang, led by the President, Deans, staff, and students. This was followed

by Lhabsang Thruessel, a purification ritual performed to cleanse and sanctify the space. The day was marked by a series of spiritual rituals, communal meals, and tea sessions that beautifully blended faith with community togetherness.

The ceremony aimed to purify the environment, seek blessings for the college community, promote unity, and invoke peace, prosperity, and protection from misfortune.



JNEC conducts Intellectual Property Awareness Program to Observe the World IP Day



JNEC actively engaged in an Intellectual Property (IP) awareness program beginning on 23rd April 2025 with funding support from the Department of Media, Creative Industry and Intellectual Property under the Ministry of

Information, Communication and Employment (MoICE).

On 23rd April 2025, the Technology, Innovation and Support Centre (TISC) Focal conducted a half-day IP Awareness Workshop to 169 final-year students of the college. The workshop covered key topics including Intellectual Properties, Intellectual Property Rights, and the Hague Agreement.

Subsequently, during the World IP Day on 26th April 2025, the JNEC Media Club and the TISC collaboratively extended their advocacy efforts within and beyond the campus under the theme "IP and Music: Feel the Beat of IP". This campaign benefited around 800 community members including staff and parents at the Dewathang Primary School, staff at the Jigme Dorji Wangchuck Military Hospital, and

students at Garpawoong Middle Secondary School. Throughout these public awareness sessions, Q&A sessions were conducted, and prizes were awarded to participants.



Training on Digital Fabrication



A 10-day course on digital fabrication was provided by JNEC FabLab to a total of 16 school students from the local community from 26th December, 2024 to 7th January, 2025. The students were introduced to installing and interfacing Autodesk Fusion 360, 2D sketching, 3D modeling techniques, assembly design, laser cutting and 3D printing.



Graduation day

JNEC celebrated its 51st Graduation Day on 25th June, 2025. The day was filled with pride and warm memories as the college community came together to honor the achievements of its graduates.

The occasion was graced by the esteemed Chief Guest, Dasho Drangpon of Samdrup Jongkhar, alongside the President of JNEC, invited guests, deans, faculty members, proud parents, and most importantly the graduates.

Wishing the Class of 2025 continued growth, success, and happiness as they embark on new chapters in their lives!



B.E in Surveying & Geoinformatics



B.E in Power Engineering



B.E in Mechanical Engineering



Diploma in Electrical Engineering



Diploma in Civil Engineering



Diploma in Surveying



Diploma in Construction Supervision



Diploma in Electronics and Communication Engineering



Diploma in Mechanical Engineering



Diploma in Materials and Procurement Management



Diploma in Computer System and Network

Unveiling the “JNEC INFINITY” Monument on Teachers’ Day



Coinciding with the celebration of Teachers' Day, JNEC inaugurated its first monument "JNEC INFINITY." Designed in the form of an infinity symbol, the monument stands

as a powerful representation of limitless knowledge, endless possibilities, and the unbounded spirit of learning that defines the institution's ethos.

Adding a special touch to the occasion, the students presented gifts to the staff which were conceptualized, designed, and crafted by the JNEC FabLab Club.



MEMBERS OF PUBLICATION UNIT

Advisor: Mr. Tashi Wangchuk, Dean of Research & Industrial Linkages

Coordinator: Ms. Tashi Yangchen, Assistant Lecturer, DIT

Editors: Mr. Gangaram Bhattarai, Lecturer, DHM
Mr. Phurba Tamang, Associate Lecturer, DCES
Mr. Ngawang Chojey, Research Officer
Ms. Phul Maya Tamang, Assistant Liaison Officer

Designers: Mr. Bhagawath Khatiwara, Asst. ICT Officer
Mr. Tandin Dorji, Technician, ITSU

Contact:

ngawangchojey.jnec@rub.edu.bt

<https://www.jnec.edu.bt>