

'Smart City' cannot be a Substitute for Unplanned Urbanization



Narayanman Bijukchhen (Rohit), Chairman of the Nepal Workers and Peasants' Party, inaugurated the 3rd National Conference on Architectural Trends and Heritage (NCATH) on 14th Baishakh, 2081. The event was jointly organized by Khwopa Engineering College and Khwopa College of Engineering, run by Bhaktapur Municipality. In his address, Chief Guest Bijukchhen congratulated the success of the conference. He emphasized that heritage conservation entails preserving the original and ancient skills and styles of Bhaktapur for the benefit of future generations. He highlighted that rebuilding heritage is to utilize traditional knowledge and skills to contribute to the country and society.

Chairman Bijukchhen asserted that labeling a city a 'smart city' cannot remedy unorganized urbanization. He emphasized the importance of academic institutions such as universities, archaeology departments, and Academic Council in safeguarding tangible and intangible heritage.

He further stated, "Besides preserving and promoting historical heritage, the study of antiquity propels humanity towards its future destination from the current standpoint." He highlighted the renowned 'Silk Road' as a historical example that interconnected the world along a single path. He

emphasized the importance of bridging antiquity and history with the present while stressing the protection of museums and zoos. He noted that Darwin's theory has disseminated evolutionary thinking throughout society, underscoring the significance of connecting past narratives with contemporary understanding.

The Chairman of the program, Mayor of Bhaktapur Municipality, and Chairman of the College Management Committee, Sunil Prajapati, expressed optimism that the professors, students, architects, engineers, and policymakers would engage in profound discussions on heritage conservation during the conference, leading to significant conclusions. He announced that the fourth international conference on Earthquake Engineering and Post Disaster Reconstruction Planning (ICEEPDRP) would occur in January 2026. He emphasized that it is the collective responsibility and duty of all to safeguard the finest examples of woodwork, metalwork, and art, such as the Golden Gate, 55 Window Palace, Taha Falcha, located in the Bhaktapur Darbar area, as well as landmarks like Nyatapola Temple and Bhairabnath Temple of Taumadhi. He highlighted their role as sources of income and services provided through schools, colleges, and hospitals. Underlining that the Lal Baithak of Bhaktapur has not been reconstructed



due to various technical reasons, he emphasized everyone's shared responsibility and duty to preserve this heritage site.

Ar. Rajani Joshi, Deputy Mayor of Bhaktapur Municipality and Vice-Chairman of the College Management Committee, expressed that the initiative "Bhaktapur after a Century" serves as a guiding principle to make Bhaktapur city exemplary. She further informed that the municipality is steadfastly progressing with the commitment that 'Together we can. Together we will.'

She elaborated on Bhaktapur Municipality's role in heritage conservation and highlighted that the municipality is actively involved in several initiatives. This includes implementing a local curriculum that educates about Bhaktapur's rich art and culture across all 92 schools. Additionally, the municipality organizes various skill-based training programs and recognizes cultural mentors for their contributions.

The Chief Administrative Officer of Bhaktapur Municipality, Basant Bhattarai, expressed confidence that the presentations delivered at the conference would significantly aid policy-making bodies. He emphasized the crucial importance of maintaining a distinct identity in heritage protection and stressed the inclusion of discussions regarding the utilization of local resources and skills in the conference agenda.

During the program, Er. Sunil Duwal, Principal of Khwopa College of Engineering, showcased examples of efforts towards heritage conservation. He emphasized the need for awareness regarding donors'

involvement in heritage conservation, pointing out that they may have their own vested interests.

Ar. Libas Phaiju delivered a welcoming address, setting the stage for the conference—subsequently, Ar. Eurika Rajbanshi shared her perspectives and insights during the inaugural session.

Thirty research papers were presented across three sessions. Ms. Saubhagya Pradhananga (Director General of Department of Archeology) delivered a valuable keynote speech. The organizing committee thanked the Society of Nepalese Architects (SONA) for their support and cooperation in hosting the conference and facilitating the insightful panel discussion.

Likewise, in his vote of thanks, Dr. Subeg Man Bijukchhen, vice principal of Khwopa Engineering College, reiterated the importance of conferences like this and expected similar research contributions in the coming ICEEPDRP 2026 for its success. In summarizing the speech, Ar. Archana Bade Shrestha thanked everyone for making the conference successful.







Societal Change Remains Unattainable until the Awareness Level of the Ordinary People is Elevated.



Narayanan Bijukchhen (Rohit), Chairman of the Nepal Workers and Peasants' Party emphasized the significant contribution and role of the working class in societal development and change. He stressed the importance of inspiring the new generation to study the biographies of revolutionary leaders.

Addressing the program held on the occasion of the 135th International Workers' Day on 23rd of Baishakh, hosted jointly by Khwopa Engineering College and Khwopa College of Engineering, which is run by Bhaktapur Municipality, he highlighted the necessity for a critical approach to all societal issues and emphasized that meaningful societal change pivots upon raising the populace's awareness level.

He emphasized, "Capitalists will not advocate for the working class, so the working class must persist in their ideological struggle against them." Asserting that pseudo-communists aim to undermine the labor movement, he warned against foreign investment in Nepal without considering local interests, viewing it as a form of neocolonialism. Expanding on the interconnectedness of international dynamics with Nepal, he highlighted that Nepal would have been better if India had had a progressive government.

During the program, Mr. Sunil Prajapati, Chairman of the College Management Committee and Mayor of Bhaktapur Municipality, reminisced about NWPP's vigorous protest against the passage of

the Investment Board Bill. He cautioned that foreign investment posed a threat of Nepal becoming a neo-colony of imperialist powers.

By penning the Communist Manifesto in 1848, Marx and Engels introduced a revolutionary concept: the working class could seize power from the bourgeoisie through class struggle. He noted that the study of the Communist Manifesto has inspired over half of the world's population to combat the bourgeoisie and strive for socialism in their respective nations. However, he lamented that the communist parties in Nepal have struggled to adhere to the fundamental principles and ideals of communism.

Principal Er. Sujan Maka of Khwopa Engineering College and Er. Sunil Duwal, principal of Khwopa College of Engineering, shed light on the historical context of the labor movement, highlighting the ruling party's efforts to sow discontent among the people regarding communist ideologies. Emphasizing the importance of a thorough discourse on May Day, they underscored that the labor movement remains steadfast in advocating for workers' rights.

Vice Principal Dr. Subegman Bijukchhen of Khwopa Engineering College addressed topics related to 'Modi fascism' and other pertinent issues. Naresh Khatri delivered a presentation on the 'History of the Labor Movement.' Subsequently, Mr. Sanjaya Manandhar shared insights on International Workers' Day.



Greeting Exchange Program on the Occasion of Biska Jatra and New Year 2081 was Completed

The greeting exchange program in celebration of Biska Jatra and New Year 2081 concluded on the 3rd of Baishakh, 2081. The event, jointly organized by Khwopa Engineering College and Khwopa College of Engineering, run by Bhaktapur Municipality.

Addressing the program, Chief Guest Mr. Sunil Prajapati, Mayor of Bhaktapur Municipality and Chairman of the college management committee, highlighted the ongoing progress of establishing Khwopa University and efforts towards its recognition. He emphasized the importance of facing challenges head-on and continuously striving for progress amidst opportunities and obstacles.

Mr. Prajapati also underscored the essential role of Khwopa Hospital in serving the community, noting potential challenges in healthcare provision due to delays in government insurance payments. He mentioned recent achievements such as the reconstruction of Bhajupukhu and He reflected on the events of the previous year, including the imprisonment of 'Bhutanese refugees, the gold case, the Lalita Niwas scandal', and the detention of other high-ranking officials. He urged everyone to learn from these incidents and emphasized the importance of adhering to legal procedures in all endeavors.

Advocating for political awareness, he emphasized leadership driven by a vision for national advancement rather than personal gain. Mr. Prajapati cautioned against foreign economic influence and highlighted concerns over Indian expansionism,



particularly in hydropower projects.

Deputy Mayor Rajani Joshi shared updates on the realization of Khwopa University's objectives and the increasing demand for skilled professionals from Khwopa Circle. He linked the success of the event to Bhaktapur's ability to transform challenges into opportunities, particularly in the context of Biska Jatra's significance to engineers.

During the program, Khwopa Engineering College, Principal Er. Sujan Maka, Khwopa College of Engineering Principal Sunil Duwal, and Vice Principals Dr. Subegman Bijukchhen and Er. Ratnashova Prajapati, Heads of Departments Er. Yogesh Bajracharya and Er. Dinesh Gothe, Head of Account Section Mr. Kaji Bahadur Pancha, Head of Administration Mr. Sanjaya Manandhar and Head of Store Section Mr. Rajan Jati provided insights into the achievements and progress of the year 2080.

The event showcased the collaborative efforts and dedication of the Khwopa community towards academic excellence and societal development.





Promotion and Appointment Letters Distribution Event

Khwopa College of Engineering and Khwopa Engineering College distributed appointment letters to the newly appointed and upgraded staff and faculty members on 12th Baishakh 2081. Mr. Prajapati emphasized the importance of selfless and disciplined work among the teaching staff within the college. Mr. Prajapati stressed the need for honesty in thought, speech, and action among the teaching staff for the betterment of the colleges. He acknowledged the people's contributions and unpaid efforts that have

played a crucial role in developing the colleges run by Bhaktapur Municipality.

During the event, Er. Sujan Maka, the Principal of Khwopa Engineering College, emphasized the institution's dedication to teaching and research. He underscored that the valuable contributions of the faculty and staff members not only lead to their promotion but also instil hope for significant future contributions.

Er. Sunil Duwal, the Principal of Khwopa College of Engineering, remarked that the behavior of the staff reflects the college's goodwill. He urged everyone to maintain discipline and decorum.

Mr. Sanjaya Manandhar, the Administration Head, extended his best wishes to the newly appointed and promoted teachers and staff members.

As the Chief Guest, Mr. Sunil Prajapati distributed appointment letters and promotion letters to senior Lecturers, Lecturers, and non-teaching staff members by the college's regulations.



List of promoted staff and faculty

SN	Name	Promoted Post	Department/Section
1	Er. Rakesh Gwachha	Senior Lecturer	Electrical Engineering Department
2	Er. Rupesh Gautam	Senior Lecturer	Electrical Engineering Department
3	Mr. Chhabi Dhungana	Senior Lecturer	Science & Humanities Department
4	Er. Ekata Niraula	Lecturer	Computer & Electronics Engineering Dept.
5	Mr. Govinda Maka	Officer Helper 3 rd level	Administration

List of newly appointed faculty

SN	Name	Post	Department/Section
1	Er. Anish Baral	Lecturer	Computer & Electronics Department
2	Er. Sanyukta Lital	Assistant Lecturer	





"Reflecting on Resilience: Commemorating the 2015 Gorkha Earthquake"



A program was conducted on the 12th of Baishakh, 2081, in remembrance of the earthquake that struck on the 12th of Baishakh, 2072. Organized jointly by Khwopa Engineering College and Khwopa College of Engineering, run by Bhaktapur Municipality, the event served as a platform for reflecting Gorkha Earthquake, 2072.

During the program, Mr. Sunil Prajapati, Mayor of Bhaktapur Municipality and Chairman of the College Management Committee, launched the website for the 4th ICEE-PDRP conference.

Mr. Prajapati underscored the significance of commemorating the earthquake that occurred nine years ago, emphasizing the critical importance of immediate rescue and relief efforts during such disasters. He stressed the necessity of disaster prevention measures. Addressing concerns about individuals exploiting disasters for personal and political gain, he warned against overlooking seismic risks, particularly regarding non-compliant construction practices in the valley.

Mr. Prajapati highlighted the municipality's commitment to heritage restoration, prioritizing local resources over foreign assistance. He expressed apprehension over ongoing challenges, including the exodus of youth abroad, privatization of industries, pervasive corruption, and the emergence of independent political movements as alternatives to established parties, even fifteen years after the establishment of the Republic.

In the program, the Principal of Khwopa

Engineering College, Er. Sujan Maka highlighted the institution's commitment to research and journal publication, along with the organization of regular conferences focusing on earthquake-related topics. Similarly, Er. Sunil Duwal, Principal of Khwopa College of Engineering, emphasized the importance of studying disasters comprehensively, seeing them as not only destructive but also offering opportunities for research and learning.

During the program, Prof. Dr. Gokarna Bahadur Motra from Tribhuvan University's Institute of Engineering delivered a presentation on the Study of Jajarkot Earthquake, focusing on its impact and future directions for earthquake-resilient reconstruction. Prof. Dr. Chandra Kiran Kawan presented research on the Study of Seismic Site Effect and Soil Structure Resonance in Bhaktapur District, Nepal, utilizing micro tremors. Additionally, Dr. Subegman Bijukchhen discussed strategies for earthquake damage mitigation.

Dr. Manjip Shakya, Department Head of Earthquake Engineering, emphasized the potential for innovation and advancement presented by earthquakes. He discussed ongoing research efforts, including exploring new technologies to mitigate earthquake damage and enhance resilience.

The presentations and discussions underscored the importance of leveraging research and innovation to build resilience in the face of seismic events, highlighting the collaborative efforts of academia and practitioners in earthquake-prone regions.



Most Circulated Subject on Baishakh 2081

S.N.	Circulation	Title
1	405	Mathematics
2	177	Transportation Engineering
3	130	Electromagnetics
4	123	Irrigation engineering
5	110	Foundation engineering
6	105	Mechanics

"Empowering Through Technology: Celebrating International Girls in ICT 2024"



On Thursday, the 13th of Baishakh, 2081, Khwopa Engineering College and Khwopa College of Engineering organized a Talk Program for International Girls in ICT Day 2024. This day, observed on the fourth Thursday of April, highlights the pivotal role of women in the Information and Communication Technology (ICT) sector. It serves as a global platform to encourage female participation in technology-related fields and bridge the gender gap in the industry.

Ar. Rajani Joshi, Deputy Mayor of Bhaktapur Municipality and Vice Chairperson of the College Management Committee was the chief guest of the program. In her address, she emphasized the imperative of utilizing information technology for the betterment of society and its members. She underscored the 21st century as an era of inclusivity, where women possess equal rights and responsibilities to contribute to all facets of society.

Chief Guest Joshi highlighted Bhaktapur Municipality's sustained efforts over two decades to elevate society's intellectual capacity. The municipality strives to establish Bhaktapur as a hub of excellence while preserving its rich art, architecture, and culture.

In pursuit of the ambitious goal of ensuring every household has at least one graduate, Bhaktapur Municipality is guided by the manifesto of the Nepal Worker and Peasants' Party and a book penned two decades ago by party leader Mr. Narayanman Bijukchhen. Encapsulated in "Bhaktapur after a

Century," this vision aims to enhance intellectual prowess through research-driven teaching and learning methodologies continuously.

During the program, Er. Sunil Duwal, the Principal of Khwopa College of Engineering, delved into the intricate relationship between gender equity and cultural norms. He advocated for providing more opportunities for women in society, recognizing the importance of empowering them to participate fully in all spheres of life. Drawing comparisons with socialist countries where women often receive greater priority, he highlighted the relatively higher number of female teachers and students in colleges run by Bhaktapur Municipality.

In addition, discussions led by Dr. Subegman Bijukchhen, Vice Principal of Khwopa Engineering College, and Er. Ratnashova Prajapati, Vice Principal of Khwopa College of Engineering, along with Er. Ramila Maharjan, Er. Reena Manandhar, Er. Sarla



Shakya, Er. Rosina Shakya and others underscored the significant participation and contributions of women in the field of information technology. Their

contributions highlighted the importance of fostering an inclusive environment that encourages and supports women in pursuing careers in ICT.



Site Visit of Sunkoshi Marin Diversion Project

A two-day site visit to the Sunkoshi Marin Diversion Project was arranged by the Khwopa College of Engineering Department of Civil Engineering as part of a workshop on “Quality Assurance and Quality Control of RCC Structures,” which was facilitated by Er. Jagadishwar Man Shrestha. This instructional tour took held on the 6th and 7th of Baishakh, 2081, with 22 people in all.

During the visit, participants had the opportunity to witness various components of the project's operations. On the first day, Er. Sarad Pokharel guided the participants to the project site's headwork, providing insights into the work conducted in that area. The participants were also allowed to observe the construction of a cofferdam equipped with seepage control mechanisms at the site.

On the second day, Geologist Purushotam Shilpakar guided the participants, allowing them to witness the tunneling process conducted by a Tunnel Boring Machine, a novel technique in Nepal. Furthermore, Er. Ashok Gautam and Purushotam Shilpakar jointly delivered a comprehensive presentation that covered various aspects of the project, including the powerhouse, construction sites, and laboratories.

Overall, the site visit proved to be highly beneficial. It offered participants invaluable insights and firsthand experiences with new tunneling methods. It greatly enhanced their knowledge and expertise, contributing significantly to their professional development in civil engineering.



Guest Lecture on Computer Vision

On 16th Baishakh 2081, Ramesh Marikhu, CEO of Almonds AI Co. Pvt. Ltd., shared his remarkable journey in a guest lecture on Computer vision with students of the computer and electronics department. Ramesh's story is one of perseverance and innovation. His computer vision and traffic analysis expertise, backed by a Ph.D. in Computer Science and a Master's in Information and Communication Technologies, has led to transformative projects like the Automatic Ticketing System and Police Eyes. Ramesh's diverse skill set in programming languages and project management and his unwavering dedication to innovation make him a true driving force in AI-driven technological advancements.

His lecture focused on implementing computer vision in tangible, real-life problems, including traffic

management and home automation, to aid humans in daily life. He highlighted the widespread use of AI and computer vision in industrial applications and simple household problems. Central to effective innovation is identifying genuine issues or pains and driving practical problem-solving initiatives rather than focusing solely on grand projects or technological ambitions. As per him, one should ask, "Where is the Pain?" before delving into a project. Successful projects often commence by addressing small-scale issues, with continuous upgrades and optimization enabling them to evolve into solutions for more significant challenges over time. He prompted students to collaborate on any such problem-solving ideas with him. He assured students they would be open to help and accept suggestions on any projects or research.

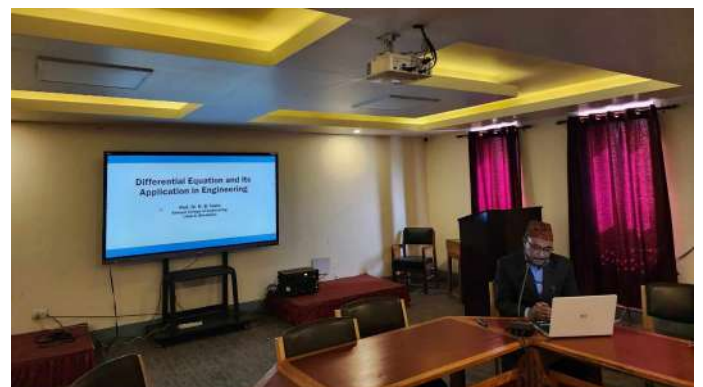


An Insightful Presentation titled "Differential Equations and Their Applications in Engineering" to Faculty Members

The Research and Development Unit of Khwopa College of Engineering organized a presentation on May 3, 2024, featuring Prof. Dr. Raju Bai Tyata, who serves as the Head of the Science and Humanities Department. Prof. Tyata delivered an insightful presentation titled "Differential Equations and Their Applications in Engineering" to faculty members from the civil, electrical, and computer & electronics departments. He emphasized the wide-

ranging significance of differential equations across various engineering disciplines.

Additionally, Prof. Dr. Chandra Kiran Kawang, the Head of the R & D Unit, underscored the importance of such presentations for knowledge dissemination and encouraged attendees to participate in similar sessions on relevant topics.



"Exploring Antrangaka Tarangaharu (Itihas, Sanskariti ra Puratatwa): A Talk Program"

On Baishakh 27, Thursday, the library sections of Khwopa Engineering College and Khwopa College of Engineering jointly organized a captivating Book Talk Program, spotlighting the insightful tome titled "Antrangaka Tarangaharu (Itihas Sanskriti ra Puratatwa)" by Purushottam Lochan Shrestha,.

Er. Sujan Maka, Principal of Khwopa Engineering College, expressed profound gratitude to the esteemed author for enriching the audience with such a valuable literary gem. He emphasized the book's significance in providing profound insights into history, culture, and archaeology, particularly in the face of growing extremist ideologies posing a threat to societal harmony.

The author, Prof. Dr. Purushottam Lochan

Shrestha, illuminated the audience with profound insights into his labor of love with 101 meticulously crafted articles spanning the realms of history, culture, and archaeology, Dr. Shrestha revealed that the book is the culmination of four decades of dedicated dedicated scholarly research.

Head of the library section, Mrs. Jastara Koju, extended a warm welcome to the distinguished guests and the eager audience. The program was expertly moderated by Ms. Sabina Lakha, adding a touch of finesse to the enriching discourse.

The event served as a beacon of intellectual engagement, fostering a deeper understanding of our rich cultural heritage and the importance of scholarly pursuit in preserving it for generations to come.



Senior - Junior Collaborative Training Initiative

The Civil Engineering Department, Khwopa College of Engineering, continued the Senior-Junior Collaborative Training Initiative during the semester gap. In the month of Baishakh 2081, the department organized training courses targeted to second, third, and fourth-year civil engineering students.

During the program, the second-year (2079 Batch) students received training in AutoCAD Basics, facilitated by Shrija Guragain, Riya Shrestha, Sagar Bati from the 2076 batch, and Agaman Aganza from the 2078 batch. The students were provided basic knowledge of using AutoCAD, its commands, functions, and user interface. By the end of the training session, they were able to make the building plan, sections, and complex shapes.

Sanjaya Sejuwal, Swornim Aganja, Rijan Adhikari, and Anjal Timsina from the 2077 batch provided training in QGIS to the third-year (2078 Batch) students. The objective was to introduce students to the concept of GIS and its applications, the QGIS software interface, and basic functionalities, provide hands-on experience in data input, manipulation, and analysis, and enable students to create informative and visually appealing maps using QGIS.

Similarly, fourth-year (2077 Batch) students received Drone and DGPS Surveying training from Prabesh Shrestha, Rejee Shilpakar, and Rohan Maharjan from the 2076 batch. The training featured the drones available in the college, namely, Mavic 2 Pro and DJI Phantom 4 Pro. The training provided students with hands-on experience in deploying the drone both manually and through flight planning apps. It also included key applications essential for drone surveying and mapping: a) PIX4Dcapture Pro for drone flight planning that helps students create efficient flight paths, b) Agisoft Metashape, for processing drone images and transforming raw drone data into actionable insights, c) SW Maps, for DGPS RTK surveys, enabling students to gather precise geolocation data for better accuracy in their projects.

This training enabled students with skills in flight planning, drone image processing, georeferencing using coordinates obtained from DGPS, and creating outputs such as orthomosaic, DSM, DEM, and 3D models. Both trainers and students showed great enthusiasm, making the training highly productive.



Guest Lecture on Recent Updates of Research in Various Scopes of Electrical Engineering

On 2nd May 2024, Er. Sagar Dharel, a PhD Fellow student at Kathmandu University, delivered a presentation on the latest updates of research in various scopes of Electrical Engineering to fourth-year students (BEL 2077 Batch) of Khwopa College of Engineering. The presentation's primary goal was to assist fourth-year students with their final-year projects by providing insights into research ideas and scope finding.

His talk covered the latest developments in electrical engineering research published in recent

years. His focus was on the nation's problem-based research in several socioeconomic sectors. Through his captivating presentation of his experiences working on national and international projects, he emphasized the significance of electrical engineering and its impending advancement.

During the presentation, the audience had a deeper comprehension of the inventive capacity of Electrical Engineering studies and the pivotal function that technology plays in the groundbreaking trajectory of contemporary research.



Training on Fundamentals of MATLAB

The Department of Electrical Engineering held a 30-hour course on "Training on fundamentals of Matlab" from April 21 to April 29, 2024 (the 9th to the 17th of Baishakh, 2081). The training aimed to provide Electrical Engineering students from the Second Year (BEL 2079) to the Fourth Year (BEL 2077) an overall understanding of the fundamentals of Matlab, including cutting-edge co-simulation techniques and optimization techniques. The training, which covered the fundamentals of Matlab tools as well as engineering-related optimization techniques and the mathematics underlying their formulation using the MATLAB tool, was facilitated by Er. Tanus Bikram Malla, Assistant Lecturer, Electrical Department, and Er. Rupesh Gautam, DHoD, Electrical Department. Additionally, some knowledge on co-simulation was

gained via the course.

The course was structured to emphasize the practical application of tools and techniques for metaheuristic optimization. A comprehensive study of metaheuristic optimization was conducted, utilizing a range of techniques, including genetic algorithm (GA) and particle swarm optimization (PSO). The course commenced with MATLAB basics, delved into a wide range of optimization techniques, and concluded with co-simulation, a cutting-edge technique for validating mathematical models and algorithms. The training provided a broad overview of several technical topics, fostering a conducive environment for student interaction. The course was a resounding success, concluding with strong support for extending the reach of research projects.

