

### **FEATURED STORY**

# A Glimpse into the Best Moments from the 2024 Winter Research Program



Concluded on February 6th, the exhilarating 2024 Winter Research Program was nothing short of a scientific odyssey. Spanning a dynamic 10-day period, this groundbreaking initiative unfolded across five state-of-the-art campuses nestled in Beijing and Shenzhen. The iHUB network came alive, hosting a staggering 64 projects that pushed the boundaries of innovation and knowledge. This winter, we saw an unprecedented gathering of minds with over 60 esteemed professors from across the globe converging with more than 800 passionate students. Together, we embarked on a journey of discovery, collaboration, and breakthroughs that promises to shape the future of research and technology. We've captured the essence, the excitement, and the pivotal moments of this monumental program in a captivating video.

Watch now to relive the highlights and join us in celebrating the spirit of discovery that defines the 2024 Winter Research Program.

Please click **HERE** to watch the video on YouTube!



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### Faculty Meeting Recap: Unveiling Interdisciplinary Pathways for Cultivating Green Talent



On January 30th, GEC Academy successfully hosted our first 2024 teaching faculty meeting, centering around the thought-provoking theme of "Interdisciplinary Approaches to Green Talent." This highly accomplished gathering has witnessed a remarkable feat as it unfolded simultaneously in two vibrant cities, Beijing and Shenzhen, with dedicated offline venues established in each location. This event served as a catalyst for inspiration, yielding remarkable outcomes and paving a promising path for future endeavors in the realm of green talent cultivation.

We have invited 11 GEC teaching faculty members, hailing from a diverse range of academic disciplines, including Statistics and Machine Learning, Chemical Engineering, Business, and so on, to share their invaluable insights and expertise on this topic. Coinciding with the 2024 iHUB winter on-site research program, this event attracted an enthusiastic and diverse audience comprising over 200 students majoring in different disciplines from various grade levels and universities, as well as many esteemed professors at iHUB campsites.

Drawing upon their rich expertise and research backgrounds, each guest speaker shared their insights on the connections between their teaching contents, research topics and green technology. They also offered their unique perspectives on green talent cultivation, the intricate interplay between technological advancements and environmental preservation, as well as the pivotal role of international collaboration in shaping the education of the next generation of green talent.



#### February

### **NEWSLETTER**



The faculty meeting concluded with an insightful Q&A session, where our esteemed professors graciously responded to the doubts and inquiries raised by students on various aspects of the topic, for example, the concept of green development and the factors to consider when deciding whether to explore green technology or invest in industries. Students also raised questions regarding academic passion, environmental awareness, and the use of large language models, fostering a deeper understanding of the complexities surrounding green talent cultivation. This exposure to real-world examples and success stories not only motivated students to pursue careers in green technology but also instilled a sense of responsibility and urgency in tackling global environmental issues.



A glimpse into the Q&A session

Looking forward, GEC Academy is committed to continuously seeking opportunities to host such impactful events and meetings by gathering both our teaching faculty and GEC students. By cultivating a space for interdisciplinary dialogue and collaboration, we expect to further our mission of educating and inspiring students and professionals alike, and we'll remain devoted to building bridges between disciplines, industries, and cultures, ensuring that the pursuit of green innovation remains at the forefront of our educational endeavors.



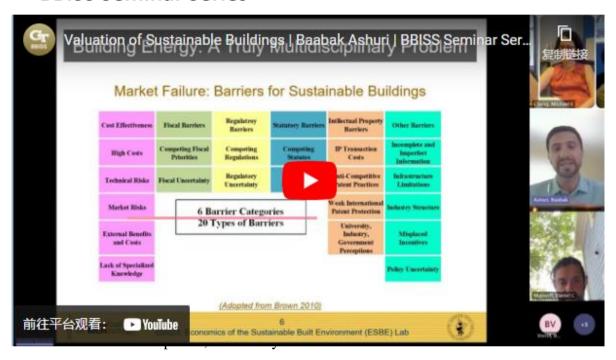
Please kindly reach out to your academic manager if you need the recording of the meeting.



### **Faculty Work Gallery**

This month we introduced a **Seminar** from **Professor Baabak Ashuri**. If you are interested in showcasing your research, grants, book releases, conference presentations, or any work you deem valuable and interesting to share, please feel free to contact us.

### Valuation of Sustainable Buildings | Baabak Ashuri BBISS Seminar Series



<u>Dr. Baabak Ashuri</u>, Professor, School of Civil and Environmental Engineering, Georgia Institute of Technology

#### Abstract

A new perspective for investment valuation of sustainable buildings will be presented. Building energy conservation measures and renewable energy sources will be modeled as real investment options. Novel real options models will be discussed for financial valuation of energy-efficiency measures and renewable energy systems. It will be shown how a new set of tools for valuation and appraisal of renewable energy projects can enhance the building energy investment decision-making under uncertainty.

Please click **HERE** to watch the seminar on YouTube.

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### GEC CULTURE

## GEC's Embrace of Chinese New Year Traditions with Teaching Faculty at iHUB Campuse

In the vibrant landscape of Chinese cultural festivities, Xiao Nian, or the Minor New Year, traditionally celebrated on the 23rd day of the twelfth lunar month, holds a special place as it ushers in the Chinese New Year with rich traditions and anticipatory joy. This year, on February 2, the iHUB campuses in Beijing and Shenzhen captured the essence of this auspicious occasion by organizing a unique calligraphy event titled "Writing Blessings for the New Year." Aiming at blending tradition with educational innovation, the event offered an immersive experience into the art of Chinese calligraphy, inviting teaching faculty, teaching fellows, teaching assistants, students, and GEC staff to delve into a practice deeply rooted in Chinese heritage.



Click **HERE** to watch the video on YouTube!





### GEC CULTURE



Attendees, ranging from seasoned practitioners to curious novices, were invited to engage in the central activity of writing "Fu" characters on traditional red paper, symbolizing good fortune and happiness for the year to come. Guided by GEC staff, participants embarked on a journey through the intricate world of brush strokes, learning the nuances of this ancient art form. The event highlighted the historical significance of calligraphy in Chinese culture as well as set the stage for a day filled with learning, creativity, and cultural exchange.

Gathering everyone at the iHUB campus, the event was not just about practicing calligraphy to mark Xiao Nian; it was a heartfelt attempt to weave the luck and blessings of the Chinese New Year into the very fabric of our community, touching every teaching faculty member and student at GEC. As we look forward to what the future holds, the 2024 calligraphy event will stand out in our memories as a profound celebration of heritage, creativity, and unity.





### **Introducing New Faces**

We're pleased to welcome 2 new faces to the GEC team - Beibei & Haonan!



**Beibei Guo (Belle)** beibei.guo@gecacademy.cn

#### 01 Educational background:

Master of Arts, Royal Melbourne Institute of Technology; Bachelor of Arts, Beijing Institute of Technology.

#### 02 What are your current duties?

I'm the Program Manager for the onsite project center. I'm currently responsible for customizing the onsite program and managing the operations of the iHUB research program.

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#### 03 What made you choose GEC Academy?

I have a strong affinity for the education and training sector, and GEC Academy stood out to me for several reasons. Primarily, the academy's leadership comprises alumni from prestigious universities abroad, which speaks volumes about their academic excellence and global perspective. I firmly believe in the values and educational philosophy that GEC Academy upholds, making it an ideal choice for me to further my career and contribute to the field of education..

#### 04 What are your specialisms and interests?

With a background in arts, I possess a diverse array of interests that span both the creative and leisure spectrums. My academic journey has equipped me with a broad skill set in various artistic disciplines, including drawing and playing musical instruments, which are my professional specialities. Beyond my academic pursuits, I am passionate about staying active through fitness, exploring new cultures and destinations through traveling, and engaging in gaming.



### **Introducing New Faces**

We're pleased to welcome 2 new faces to the GEC team - Beibei & Haonan!

#### 01 Educational background:

Bachelor's degree in Chinese International Education, Jinggangshan University

#### 02 What are your current duties?

In my role as a Project Manager at iHUB, I oversee a comprehensive suite of responsibilities aimed at supporting our students' needs throughout their journey with us. This encompasses managing all aspects of their experience during both online and offline engagements within iHUB, with a primary focus on ensuring they achieve satisfactory academic outcomes. Additionally, I collaborate closely with other departments within our organization to deliver services that not only meet but exceed our customers' expectations. My goal is to ensure a seamless, enriching experience for our students, facilitating their success in every project they undertake..



**Haonan Zhang (Med)** haonan.zhang@gecacademy.cn

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#### 03 What made you choose GEC Academy?

My passion for education has always been a driving force in my career. Over time, I've realized that my strengths lie in the supportive, behind-the-scenes roles within the education sector, where I can make a significant impact by facilitating the learning journey of others. GEC Academy presented an exceptional opportunity that aligns with my aspirations and values, offering a platform where I can contribute meaningfully to the educational experience of our learners. I am deeply appreciative of the chance to be part of an institution that plays such a crucial role in shaping the future of education.

#### 04 What are your specialisms and interests?

I am an avid reader of novels, finding joy and inspiration in the stories and worlds that authors create. City pop music is another passion of mine, with its unique blend of melodies and rhythms providing a perfect backdrop to my days. Feature films captivate me, offering insights into different cultures and perspectives. On the fitness front, I enjoy participating in Les Mills classes, which challenge me physically and mentally. Additionally, I cherish the act of documenting memorable moments, capturing the essence of experiences through writing.



### **AMAZING WORK FROM GEC STUDENTS**

Each month, GEC will introduce some of our exceptional students' work in a specific research area to our audiences. This month we selected two articles from our previous students in the field of <a href="Physics">Physics</a>.

# Experimental Verification of Quantum Entanglement: Insights from EPR Paradox and Bell Tests

Quantum entanglement is an essential principle in quantum mechanics, illustrating the relationship between two or more spatially separated particles. This correlation has been experimentally proven through various techniques, including the entangled photon experiment. Furthermore, the breach of Bell's inequality has confirmed that entanglement represents a genuine physical occurrence, which cannot be accounted for by local hidden variables, thus highlighting the peculiar characteristics of quantum mechanics. This article aims to introduce quantum entanglement and Bell's inequality, and to discuss the experiments conducted by Alain Aspect, John Clauser, and Anton Zeilinger, which paved the way for the development of quantum information science. Additionally, this paper will explore the potential applications of quantum technology in communication, cryptography, and computing, which rely on the exceptional properties of entanglement.



Click **HERE** to read the full text!



#### Analysis of Water Vapour Feedback and its Impact on Surface Temperature

To understand the global warming process, a deeper look into water vapour and its unique positive feedback mechanism is meaningful. This paper will discuss the mechanism of water vapour feedback, the equilibrium established between the content of water vapour in the air and the surface temperature of the earth. In addition, this study will calculate the time scale and magnitude of the response of water vapour to varying (in real cases increasing) surface temperature, and qualitatively analyse how water vapour feedback would affect the global warming process by serving as an amplifier for the greenhouse effect. These results establish a mathematical model for water vapour feedback's impact on surface temperature rise and could be used as a starting point for lab experiments and more complex analysis..

Click **HERE** to read the full text!



# WHAT PROGRAMS DOES GEC OFFER IN FEBRUARY 2024 SEMESTER?

In February, GEC launches a total of 62 online research programs in the areas of Finance, Economics, Management, Computer Science, Electrical Engineering, Biomaterials Engineering, Biochemistry, Sports Medicine and so on. We will continue to gather students, faculty, and staff for an unrivaled academic experience.

The table

**GEC 2024 February Program List** 

shows detailed information about the programs that GEC launches in February.

Please click **HERE** to find previous program/course offerings.

### **Newsletter Improvement Survey**

We would love to hear your thoughts or feedback on how we can improve your experience with our newsletter.

For your convenience, please click **HERE** to fill out the survey link.

**GEC Academy** 

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