# Digital and Entrepreneurship Academy Program Calendar for 2022

Alliance of Guangzhou International Sister-City Universities

The Alliance of Guangzhou International Sister-City Universities (GISU) is pleased to offer 16 two-hour online non-credit professional development programs in 2022 through its Digital and Entrepreneurship Academy. These Academy programs are offered free of charge for the students and faculty of Alliance members, industry representatives, area officials and alumni each member university invites.



Supported by the People's Government of the Guangzhou Municipality, the mission of the Alliance of Guangzhou International Sister-City Universities is to attract and leverage the academic resources of its members in close collaboration for the sustainable development of our cities. GISU's current 18 members represent 15 countries, 17 sister and friendly cities, a combined population of almost 38 million, over half a million students and 44,000 faculty and staff.





































### **Program Calendar for 2022**



#### **February**

• International Scientific and Technical Cooperation and Entrepreneurship 4.0 Thursday, February 24, 2022 from 3:00 pm to 5:00 pm (Beijing Time)

#### March

• Entrepreneurship and Circular (Bio)Economy

Thursday, March 3, 2022 from 3:00 pm to 5:00 pm (Beijing Time)

• Innovative Entrepreneurship and Development of Start-Up Projects

Thursday, March 10, 2022 from 3:00 pm to 5:00 pm (Beijing Time)

• Innovative Development of the Energy Sector in the Context of Industry 4.0

Wednesday, March 16, 2022 from 3:00 pm to 5:00 pm (Beijing Time)

• B2B Marketing and Marketing Research as Key Competencies of the Industrial Marketing Department

Thursday, March 17, 2022 from 3:00 pm to 5:00 pm (Beijing Time)

Intellectual Economy

Thursday, March 24, 2022 from 3:00 pm to 5:00 pm (Beijing Time)

#### **April**

• Team Learning and Psychological Safety – The Blueprint of a Dream Team

Wednesday, April 6, 2022 from 3:00 pm to 5:00 pm (Beijing Time)

• Computational Creativity

Thursday, April 7, 2022 from 3:00 pm to 5:00 pm (Beijing Time)

• Watching and Identifying Trends in Human Resource Projects

Thursday, April 14, 2022 from 3:00 pm to 5:00 pm (Beijing Time)

• Entrepreneurship in Creative Tourism: Insights for Post-Pandemic Re-emergence

Thursday, April 21, 2022 – two sessions offered from 3:00 pm to 5:00 pm (Beijing Time) and 9:00 pm to 11:00 pm (Beijing Time)

• Carbon Neutrality as a Climate Solution

Thursday, April 28, 2022 from 3:00 pm to 5:00 pm (Beijing Time)

#### October

Driver's Behavior Cognition

Thursday, October 6, 2022 from 3:00 pm to 5:00 pm (Beijing Time)

• Intellectual Property Valuation

Thursday, October 13, 2022 from 3:00 pm to 5:00 pm (Beijing Time)

 Analyzing and Identifying Optimal Heating Systems to Support Decision Making in the Green Energy Transition Wednesday, October 19, 2022 from 3:00 pm to 5:00 pm (Beijing Time)

• The Use of Modeling the Irrational Behavior of Economic Agents in Modern Entrepreneurship

Wednesday, October 26, 2022 from 3:00 pm to 5:00 pm (Beijing Time)

Exploratory Data Analysis through Machine Learning Algorithms

Friday, October 28, 2022 from 3:30 pm to 5:30 pm (Beijing Time)

### February/March



#### International Scientific and Technical Cooperation and Entrepreneurship 4.0

Thursday, February 24, 2022 from 3:00 pm to 5:00 pm (Beijing Time)

This program presents the socio-economic changes in society under the influence of the quarantine restrictions of 2020-2021. The influence of Industry 4.0 on the reasons and forms of organization of quarantine restrictions at the international level is revealed. This webinar explains the need to change the economic model of organizing the production using Industry 4.0 technologies. The possibilities of financing the necessary changes and assessing their effectiveness have been analyzed.

Discussion includes the theoretical aspects of competition under Industry 4.0 conditions. It explains the connection between theories of competition and economic harmonies and suggests a system view on their mutual application. Highlights include the theoretical aspects of Product Development 4.0 and the influence of global problems of Humanity (such as COVID-19) which changes the approach to the Product Development.

This program will be coordinated by Serhii Voitko, Head of the Department of International Economics, Doctor of Economics, Professor, National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute" with lecturers to include Serhii Voiko, Head of the Department of International Economics, Doctor of Economics, Professor; Anna Kukharuk, PhD, Associate Professor of the Department of International Economics; Natalia Skorobogatova, PhD, Associate Professor of the Department of International Economics; and Olena Korohodova, PhD, Associate Professor of the Department of International Economics.

#### **Entrepreneurship and Circular (Bio) Economy**

Thursday, March 3, 2022 from 3:00 pm to 5:00 pm (Beijing Time)

This program will explore the potential to effective entrepreneurship towards a transition for a circular (bio)economy and the accomplishment of UN Sustainable Development Goals.

In this context, the five business models of the circular economy will be analyzed and discussed, highlighting opportunities and challenges, as well as revealing the fundamental role of implementing biological and biomedical technologies and other biomimetic approaches. Considering the entrepreneurial nature of the program, it will include the presentation and discussion of cases studies of start-up companies that are currently implementing circular economy business models.

This program will be led by Professor Dr. Jorge F. B. Pereira, University of Coimbra, CIEPQPF, Department of Chemical Engineering, Faculty of Sciences and Technology and lecturers Simao Soares, CEO - SilicoLife, Andre Eiras Santos, Founding Team and VP of Strategic Business Development - SWORD Health.



### February/March



#### Innovative Entrepreneurship and Development of Start-Up Projects

Thursday, March 10, 2022 from 3:00 pm to 5:00 pm (Beijing Time)

This program will explore innovation and innovative entrepreneurship; the essence and key features; the essence and importance of startup projects in the development and dissemination of innovative technologies; stages of startup projects development, types of startups, startup business models, investing in startups, and the scaling of startups.

This program will be led by Kateryna Kopishynska, PhD in Economics, Associate Professor, Department of Management of Enterprises, National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute" with lecturers Maryna Kravchenko, Doctor of Sciences (Economics), Professor, Dean of the Faculty of Management and Marketing, National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute"; Kateryna Boiarynova, Doctor of Sciences (Economics), Professor, Department of Management of Enterprises, National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute"; and Kateryna Kopishynska, PhD in Economics, Associate Professor, Department of Management of Enterprises, National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute".

#### Innovative Development of the Energy Sector in the Context of Industry 4.0

Wednesday, March 16, 2022 from 3:00 pm to 5:00 pm (Beijing Time)

This program is devoted to the concept of global trends in economic development and energetics in Industry 4.0., decarbonization of the economy through introduction of innovative technologies in the energy sector, transforming the energy sector in Industry 4.0 to ensure economic stability, and implementation of the principles of global goals of sustainable development to ensure the development of industry. This program further explains the mechanisms for implementing regulatory models of innovative development of the national economy in the energy sector and stimulating the development of entrepreneurship in the field of energy innovation.

This program will be led by Tetiana Pavlenco, PhD in Economics, Associate Professor, National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute" and lecturer Olena Trofymenko DSc, Associate Professor, Associate Professor of the Economic Cybernetics Department.

## B2B Marketing and Marketing Research as Key Competencies of the Industrial Marketing Department

Thursday, March 17, 2022 from 3:00 pm to 5:00 pm (Beijing Time)

This program will discuss performance marketing in the enterprise management and digital strategies for B2B and B2C markets. Topics will include mathematical modeling methods for innovative startup-projects, success prediction and marketing strategy development with a focus on curiosity.

This program will be led by Liudmyla Shulhina, Doctor of Economics, Professor, National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute" with lecturers Serhii Solntsev, Head of the Department, Doctor of Physical and Mathematical Sciences, Professor; Liudmyla Shulhina, Doctor of Economics, Professor; Nataliia Psyarenko Ph.D. in Economics, Associate Professor; Oleksii Kofanov Ph.D. in Economics, Ph.D. in Engineering Sciences, Senior Lecturer; and Nataliya Yudina, the Laureate of the President of Ukraine Prize for young scientists, Ph.D. in Economics, Associate Professor, a Founder of the Futurology Portal.

#### Intellectual Economy

Thursday, March 24, 2022 from 3:00 pm to 5:00 pm (Beijing Time)

This program explains the concept of an Intellectual Economy as the newest economic system. This system is mediated by intellectual and technological transformations of productive forces and economic agents, patterns of their interaction, exchange and commodity-money relations which form a new sixth technical and technological paradigm. Thus, the program will determine the basics of an intellectualized mechanism of sustainable economic development according to new patterns of economic agent interactions in this novel economic system, the specifics of their development, as well as the features of transformed process of value creation. This transformed mechanism is supplemented by a program to stimulate investment demand, an updated venture model and a modified model of the business ecosystem of additive production.

This program will be led by Tetiana Pavlenco, PhD in Economics, Associate Professor, National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute" and lecturer Julia Yereshko, DSc, Associate Professor, Associate Professor of the Economic Cybernetics Department.

### **April**



#### Team Learning and Psychological Safety – The Blueprint of a Dream Team

Wednesday, April 6, 2022 from 3:00 pm to 5:00 pm (Beijing Time)

Studies have shown that teams who practice team learning are innovative and competence-creating. Team learning requires a shared feeling of psychological safety. This program aims to show how to build psychologically safe teams to include virtual environments and short-term projects. In the program, participants are also welcome to share experiences as well as good practices.

This program will be led by Tampere University entrepreneurship team HUBS specialists in sustainable entrepreneurship, psychological safety and team-based learning to include Anna-Elina Pekonen, Joni Ramu and Maria Ruokonen.

#### **Computational Creativity**

Thursday, April 7, 2022 from 3:00 pm to 5:00 pm (Beijing Time)

Based on a high-level introduction to Artificial Intelligence aimed to give an overall perspective of the field and the main issues and challenges that lie ahead, this program introduces Computational Creativity research as one of the open challenges in the field. Different types of creative systems will be highlighted, including computer-aided creativity, mixed-initiative approaches, co-creativity, and autonomous systems. Focus will then be given on the theoretical and practical aspects associated with the development of creative systems with concrete state-of-the-art research examples. Finally, a roadmap for research in this area will be presented.

This program will be led by Penousal Machado, University of Coimbra, CISUC - Centre for Informatics and Systems of the University of Coimbra, Department of Informatics Engineering.

#### Watching and Identifying Trends in Human Resource Projects

Thursday, April 14, 2022 from 3:00 pm to 5:00 pm (Beijing Time)

This program encourages entrepreneurs to constantly monitor changes in supply and demand, the cost of material resources, reduce production costs, improve the quality of their products and services sold in the market, increase productivity and staff skills. Implementation of the latest approaches to personnel management increase the relevance of HR project management. This program will consider HR project management in the enterprise on the example of employer brand management. Developing a strong HR brand is an effective tool of attracting, engaging and retaining high-potential employees. This program explains the concept of the employer brand, EVP (employee value proposition), employee journey map, and promotion of a HR brand.

This program will be led by Tetiana Pavlenco, PhD in Economics, Associate Professor, National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute", and lecturers Eugenia Udovytska, PhD in Economics, Associate Professor of the Economic Cybernetics Department; and Tetiana Pavlenco, PhD in Economics, Associate Professor.



### **April**



# Entrepreneurship in Creative Tourism: Insights for Post-pandemic Re-emergence

Thursday, April 21, 2022 – two sessions offered from 3:00 pm to 5:00 pm (Beijing Time) and 9:00 pm to 11:00 pm (Beijing Time)



Creative tourism presents "an encouraging opportunity for entrepreneurs with low entry hurdles" (*Creative Tourism: Activating Cultural Resources and Engaging Creative Travellers;* CABI 2021) but successfully developing and managing a creative tourism initiative requires attention to many planning and operational aspects, dynamic opportunities, and contextual challenges. Acknowledging that the specific approaches and pathways innovated in each situation must be developed out of particular contexts and circumstances, this program highlights key observations, analyses, and insights based on the GISU Alliance "Creative Tourism" research project (2021) with a focus on re-emergence following the pandemic period.

Coinciding with World Creativity and Innovation Day, this program will highlight key insights emerging from the research conducted in Portugal, Australia, South Africa, China, Canada, and Ukraine. It will include a framing presentation, invited country-specific presentations, and opportunities for discussion. It will be relevant for tourism students and teachers, independent entrepreneurs and not-for-profit associations, and "public entrepreneurs" such as regional development agencies and municipalities, which can play key roles facilitating local and regional networks of independent actors, supporting new ideas and initiatives, and (re)positioning tourism to pursue diverse public benefits.

This program will be led by Dr. Nancy Duxbury, Centre for Social Studies, University of Coimbra, and involve other invited lecturers from the University of Quebec at Montreal, Western Sydney University, Guangzhou University, Durban University of Technology, and the National Technical University "Igor Sikorsky Kyiv Polytechnic Institute". The Creative Tourism research track is part of the Smart Cities and Tourism program led by the University of Quebec at Montreal (UQAM).

#### **Carbon Neutrality as a Climate Solution**

Thursday, April 28, 2022 from 3:00 pm to 5:00 pm (Beijing Time)

Given the contrasting futures for society and ocean based on different anthropogenic CO2 emission scenarios, in terms of changes in ocean physics and chemistry, impacts on biodiversity, ecosystem services and livelihood, it is urgent to reduce greenhouse gases, especially CO2 emissions to help mitigate climate change. In order to achieve the Paris 1.5 oC or 2 oC target, China has promised to reach peak emissions by 2030 and carbon neutrality by 2060. Chinese authorities also unveiled a guiding document on the country's work to achieve these goals under the new development philosophy which lays out key specific targets and measures for the coming decades. It outlines five major tasks which include creating a green, low-carbon and circular economy, improving energy efficiency, increasing the share of non-fossil energy consumption, lowering CO2 emissions and boosting the carbon sink capacity of ecosystems. Discussion will include details regarding the carbon peak and neutrality goals of China, and the approaches to boost the carbon sink capacity of marine ecosystems to climate change mitigation.

This program will be led by Peng Jin, PhD, Associate Professor, School of Environmental Science and Engineering, Guangzhou University and Shanmin Fu, PhD, Lecturer, School of Environmental Science and Engineering, Guangzhou University.



### **October**



#### **Driver's Behavior Cognition**

Thursday, October 6, 2022 from 3:00 pm to 5:00 pm (Beijing Time)

The main objective of this program is to describe an approach to early recognition of abnormal, inattentive or distracted driving in order to increase traffic safety based on mobile phone sensors. More specifically, discussion will focus on a software developing solution to collect data from mobile phone sensors, process it and make alerts to drivers in real time about potentially dangerous situations which help to prevent possible car accidents and correct bad driving habits. Collected data can also be used at a later stage through data science techniques to further profile drivers. Discussion will also include the possible application of suggested approach for autonomous driving.

This program will be led by Iryna Husyeva, PhD, Associate Professor from Igor Sikorsky Kyiv Polytechnic Institute (Ukraine) with Polytechnic Institute of Tomar (Portugal).

#### **Intellectual Property Valuation**

Thursday, October 13, 2022 from 3:00 pm to 5:00 pm (Beijing Time)

This program will explore the valuation of intellectual property as carried out in the case of licensing IP assets; franchising; sale or purchase of IP assets; M&A; divestures, spin-offs; joint venture or strategic alliance; donation of IP assets; investment in R&D; internal management of IP assets; strategic financing and/or raising equity/capital; investor relations; financial reporting; bankruptcy/liquidation; optimizing taxation; and insurance of IP assets. This program will further explain the main methods of intellectual property valuation, their advantages and limitations.

This program will be led by Tetiana Pavlenco, PhD in Economics, Associate Professor, National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute" and lecturer Iryna Kreidich, Doctor of Science in Economics, Professor of the Economic Cybernetics Department.

### Analyzing and Identifying Optimal Heating Systems to Support Decision Making in the Green Energy Transition

Wednesday, October 19, 2022 from 3:00 pm to 5:00 pm (Beijing Time)

More than 110 countries, including 500 cities worldwide, have set the goal of reaching carbon neutrality. Heating contributes to most of the residential energy consumption and carbon emissions. The green energy transition of fossil-based heating systems is needed to reach the emission goals. However, heating systems vary in energy source, heating technology, equipment location, and these complexities make it challenging for households to compare heating systems and make decisions. Hence, a decision support tool is proposed to analyze and identify the optimal choice for decision-makers.

This program will be led by Professor Yang Liu and PhD student Qianyun Wen. Yang Liu is currently a tenured Associate Professor in the Department of Management and Engineering, Linkping University, Linkping, Sweden. His research interests include sustainable smart manufacturing, product service innovation, decision support system, competitive advantage, etc. Prof. Liu has authored or co-authored more than 130 peer-reviewed scientific articles. His publications have appeared in multiple distinguished journals, and some ranked as top 0.1% ESI Hot Papers and top 1% ESI Highly Cited Papers. He serves as an Associate Editor of the prestigious Journal of Cleaner Production.

Qianyun Wen is a PhD student with the Division of Environmental Technology and Management at Linkping University, Sweden. She is mainly involved with an EU Horizon 2020 project: "Flexibility for Smart Urban Energy Systems", focusing on developing a data management, energy intelligence, and analytics platform to support decision making on green energy transition for city planners. Her research interests include a wide range of data and AI applications in Management and Engineering fields.

### October



## The Use of Modeling the Irrational Behavior of Economic Agents in Modern Entrepreneurship

Wednesday, October 26, 2022 from 3:00 pm to 5:00 pm (Beijing Time)

This program is devoted to the components of behavioral economics which namely include the processes of preparation, analysis, measurement, accumulation, identification, presentation and interpretation of nonfinancial data. This program explains the use the modeling the irrational behavior of economic agents for making operational and strategic management decisions by enterprises.

This program will be led by Tetiana Pavlenco, PhD in Economics, Associate Professor, National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute" and lecturer Glib Mazhara, PhD in Economics, Senior lecturer of the Economic Cybernetics Department

#### **Exploratory Data Analysis through Machine Learning Algorithms**

Friday, October 28, 2022 from 3:30 pm to 5:30 pm (Beijing Time)

Exploratory Data Analysis is an exciting way of applying interesting techniques to uncover unknown or difficult to manually determine patterns through the application of Feature Transformation and Engineering. This program will not only review various useful ways of Exploratory Analytics using example dataset but also demonstrate ways of implementing various supervised Machine Learning Algorithms to build predictive models.

This program will be led by Dr. Asif Karim who is a Research Intensive Lecturer with Charles Darwin University, Australia. His primary research interest is AI based Data Analytics and predictive model development, especially in the arena of Health Informatics. He also works on Blockchain based Smart Contracts. Dr. Karim has a number of publications in international top tier journals and Conference proceedings.

