香港科技大学（广州）
THE HONG KONG
UNIVERSITY OF SCIENCE AND
TECHNOLOGY (GUANGZHOU)

创新创业与公共政策学域
INNOVATION, POLICY
AND ENTREPRENEURSHIP THRUST
社会枢纽
SOCIETY HUB

HKUST (GZ) SOCIETY HUB

INNOVATION, POLICY AND ENTREPRENEURSHIP THRUST

POSTGRADUATE PROGRAMS

ABOUT IPE THRUST

Mission

IPE Thrust area trains the new generation of leaders in solving complex problems at the interface of technology and society through innovation in technology, institution, policy, and entrepreneurship with cross-disciplinary approaches and real-world applications.

Cross-Disciplinary Focus Areas

- Innovation and Intellectual Property Right Protection
- Innovation and Technology Management
- Innovation and Public Policy
- Health Studies/Health Care Policy/Environmental Policies/Sustainability
- Anti-Trust/Competition Policy
- Experimental Economics and Decision Sciences
- Entrepreneurship and Organization Theory
- Entrepreneurship and Financial Management

Acting Head of IPE Thrust

Prof. Ye Qi
Chair Professor

Welcome to our dynamic and forward-thinking Thrust of Innovation, Policy and Entrepreneurship (IPE). Our mission is to train the new generation of leaders in solving complex problems at the interface of technology and society through innovation in technology, institution, policy, and entrepreneurship with cross-disciplinary approaches and real-world applications. We are dedicated to nurturing change-makers who will drive economic growth, social progress, and sustainable development on a global scale.

Our IPE Thrust brings together a diverse group of faculty with expertise in technology, economics, business, and public policy, creating a vibrant environment for cross-disciplinary collaboration. Our research focuses on the cutting-edge issues of today, such as digital transformation, intellectual property, innovation ecosystems, technology regulation, and the role of entrepreneurship in social and economic development.

We strive to foster a strong network of partnerships with industry, governmental organizations, and academic institutions, both locally and globally. Together we forge a brighter and more sustainable future through the power of Innovation, Policy and entrepreneurship.
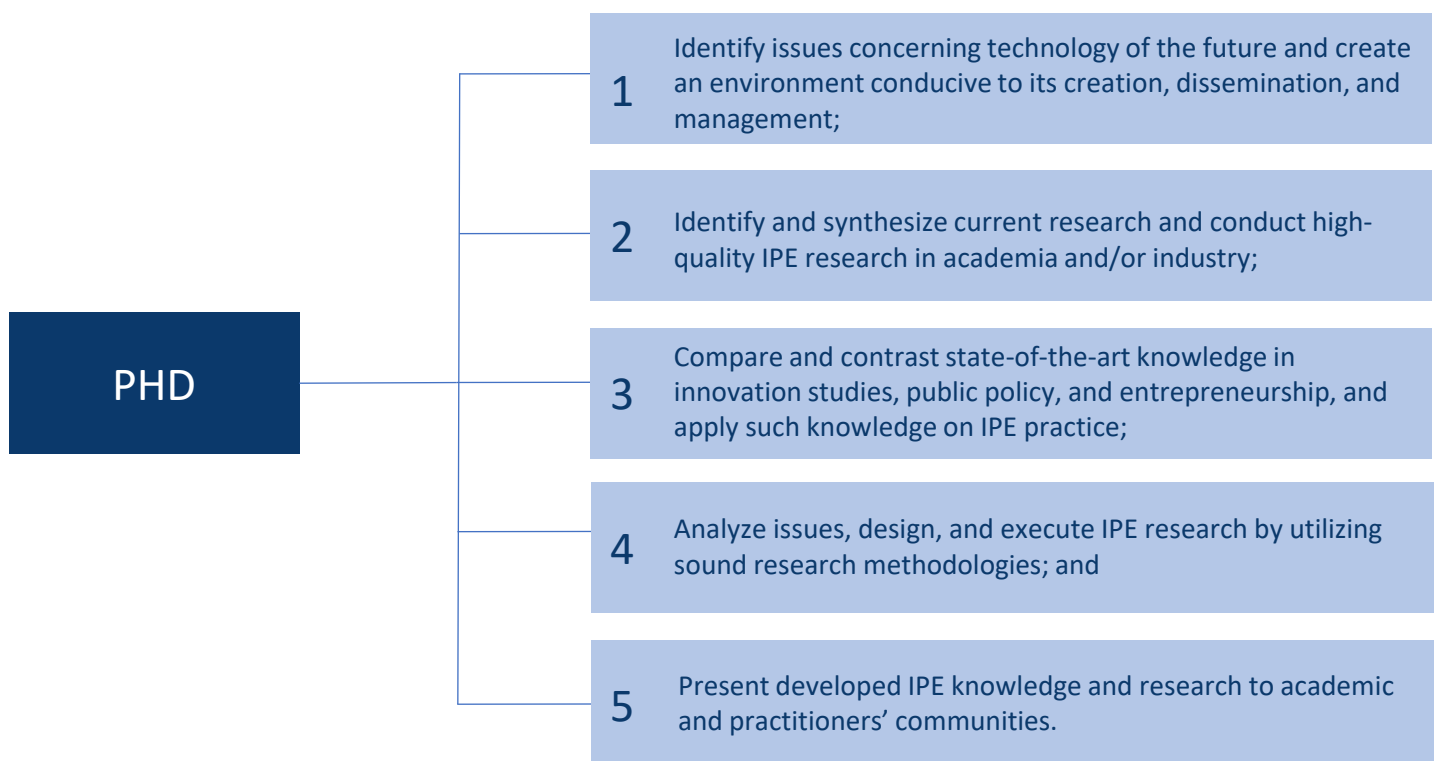
PHD PROGRAM IN IPE

Innovation, Policy and Entrepreneurship is an emerging interdisciplinary area that has become increasingly important in recent years in addressing global challenges in governance and provision of private and public goods and services. It focuses on linkages among innovation, entrepreneurship, and public policy in development of human society. The Master of Philosophy (MPhil) and Doctor of Philosophy (PhD) Programs in Innovation, Policy and Entrepreneurship are interdisciplinary programs that prepare the next generation of leaders in solving problems at the interface of technology and society through innovation in technology, institution, policy, entrepreneurship, and business model.
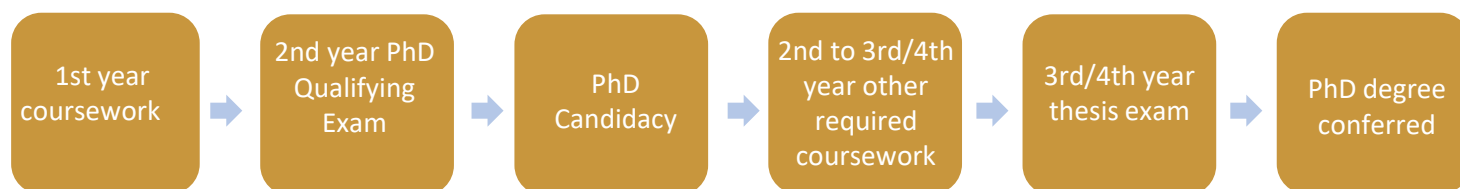
The PhD Program in IPE seeks to train students in original research with cross-disciplinary approach to innovation, policy and entrepreneurship, and to cultivate independent and innovative thinking for knowledge creation in policy, innovation and entrepreneurship. A PhD graduate is expected to demonstrate mastery of knowledge in the chosen area of research and to synthesize and create new knowledge, making an original and substantial contribution to the cross-disciplinary area.

Learning Outcomes

PHD

1. Identify issues concerning technology of the future and create an environment conducive to its creation, dissemination, and management;

2. Identify and synthesize current research and conduct high-quality IPE research in academia and/or industry;

3. Compare and contrast state-of-the-art knowledge in innovation studies, public policy, and entrepreneurship, and apply such knowledge on IPE practice;

4. Analyze issues, design, and execute IPE research by utilizing sound research methodologies; and

5. Present developed IPE knowledge and research to academic and practitioners' communities.

PHD PROGRAM IN IPE

PhD Program Progression

1st year coursework	→	2nd year PhD Qualifying Exam	→	PhD Candidacy	→	2nd to 3rd/4th year other required coursework	→	3rd/4th year thesis exam	→	PhD degree conferred

Doctor of Philosophy Program in Innovation, Policy and Entrepreneurship 2024/25 intake

Award Title	Doctor of Philosophy in Innovation, Policy and Entrepreneurship
Program Short Name	PhD(IPE)
Mode of Study	Both full- and part-time
Normative Program Duration	Full-time: 3 years (with a relevant research master's degree), 4 years (without a relevant research master's degree) Part-time: 6 years
Offering Unit	Innovation, Policy and Entrepreneurship Thrust Area Society Hub
Program Advisor	Program Director: Prof Ye Qi, Professor of Public Policy
Website:	https://soch.hkust-gz.edu.cn/academics/ipe/
Enquiry	ipet@hkust-gz.edu.cn

Please refer to the program catalog for more details:
https://fytgs.hkust-gz.edu.cn/programs/2024-25/society-hub/innovation-policy-and-entrepreneurship-3

PHD PROGRAM IN INNOVATION, POLICY AND ENTREPRENEURSHIP
CURRICULUM DESIGN

1. **Minimum Credit Requirement for PhD**:21 credits (Core Courses+Required Courses+Electives)
2. **Credit Transfer**: Students who have taken equivalent courses at HKUST or other recognized universities may be granted credit transfer on a case-by-case basis, up to a maximum of 6 credits for PhD students.
3. To meet individual needs, students will be taking courses in different areas, which may include but not limited to courses and areas listed below.

Course Type	Course Code	Course Title	Credits
Core Courses	UCMP 6010 OR UCMP 6030	Cross-disciplinary Research Methods I OR Cross-disciplinary Design Thinking I	2
	SOCH 5000	Technological Innovation and Social Entrepreneurship	2
	XXXX 5000	Other Hub Core Courses	2
IPE Core Course	IPEN 5100	Innovation, Policy and Entrepreneurship*	3
Additional Foundation Course	IPEN 5140	Quantitative Analysis and Empirical Methods*	3
PhD Electives	IPEN 5110	Foundation in Public Policy*	3
	IPEN 5120	Research Design for Innovation, Policy and Entrepreneurship Studies*	3
	IPEN 5111	Public Management and Institutional Analysis	3
	IPEN 5130	Economics of Technology Innovation and Entrepreneurship	3
	IPEN 5160	Big Data Applications for Business and Government	3
	IPEN 5200	Uncertainty, Information and Decision Making	3
	IPEN 5250	Text Analysis and Machine Learning	3
	IPEN 5260	Corporate Governance Research	3
	IPEN 5270	Corporate ESG Practice and Research	3
	IPEN 5280	Technological Catching-up Policies and Management	3

* PhD Qualifying Exam Courses

PHD PROGRAM IN INNOVATION, POLICY AND ENTREPRENEURSHIP
CURRICULUM DESIGN

Course Type	Course Code	Course Title	Credits
PhD Electives	IPEN 5290	Public Problems and Policy Design	3
	IPEN 5300	Experimental Economics and Organizational Behavior	3
	IPEN 5310	Behavioral Economics and Public Policy	3
	IPEN 5400	Climate Change: Science and Governance	3
	IPEN 5500	Science, Technology and Innovation Policy	3
	IPEN 5700	Strategic Management of Technology and Innovation	3
	IPEN 5800	New Venture Creation	3
	IPEN 5810	Data Science in Empirical Economics	3
	IPEN 5820	Environmental Economics and Sustainable Development	3
	IPEN 5900	Policy and Technology for Carbon Neutrality	3
GTA Training	PDEV 6800	Introduction to Teaching and Learning in Higher Education	0
Professional Development Course Requirement	PDEV 6770	Professional Development for Research Postgraduate Students	1
	SOCH 6780	Professional Development in Innovation, Technology, and Social Responsibility	1
Thesis Research	IPEN 7990	Doctoral Thesis Research	0

Please refer to the program catalog for more details:
https://fytgs.hkust-gz.edu.cn/programs/2024-25/society-hub/innovation-policy-and-entrepreneurship-3

MSC PROGRAM IN
TECHNOLOGY AND POLICY

The Master of Science in Technology and Policy (MSc(TP)) program will provide professional training to cope with the rapid development in technology-related sectors. In many areas, public policies play a fundamental role of shaping the development, application, and market. We seek to train students and equip them with cutting-edge knowledge in technology sectors and bridge the divide between industries and government.

The rigorous two-year program will provide skill-based training in the uses of *analytic methods for public policy and the development of expertise* in best policy practices, comparable to MSc(TP) degrees offered by leading universities in Europe, the United States. This will be *the first program in Greater China* that offers a Master's program focusing on technology and policy. Students will acquire the knowledge, skills, and confidence to be leaders in government, business, and NGOs to shape public policies of technology, to guide and nurture technologies that change our society.

This program nurtures young talents, equips students with knowledge and skills that stimulate policy solutions to meet the challenges posed by the development of innovation, and facilitates collaboration amongst Hong Kong, the Greater Bay Area (GBA), Greater China, and countries in Asia and elsewhere on entrepreneurship education, research and commercialization.

Learning Outcomes

MSCTP

1 Identify key development and trends in technology sector;

2 Define and analyze complex problems in the development and application of disruptive technologies, and design original and innovative solutions for business and government;

3 Analyze issues, design, and execute IPE research by utilizing sound research methodologies; and

4 Present developed IPE knowledge and research to academic and practitioners' communities.

MSC PROGRAM IN
TECHNOLOGY AND POLICY

> **Postgraduate Program 2024/25**

Master of Science Program in Technology and Policy
2024/25 intake

Award Title	Master of Science in Technology and Policy
Program Short Name	MSc(TP)
Mode of Study	Full-time
Normative Program Duration	Full-time: 2 years
Program Fee	RMB 230,000
Offering Unit	Innovation, Policy and Entrepreneurship Thrust Area Society Hub
Program Advisor	Program Director: Prof Xun WU, Professor of Innovation, Policy and Entrepreneurship Thrust
Website	https://hkust-gz.edu.cn/academics/hubs-and-thrust-areas/society-hub/
Enquiry	mstp@hkust-gz.edu.cn

Please refer to the program catalog for more details:
https://fytgs.hkust-gz.edu.cn/programs/2024-25/society-hub/technology-and-policy

MSC PROGRAM IN TECHNOLOGY AND POLICY
PROGRAM CURRICULUM

1. **Minumum Credit Requirement: 48 credits**

2. **Credit Transfer:** Subject to the approval of the Program Director, students may apply for credit transfer or course substitution of no more than 12 credits.

3. **Electives:** Students can take the following courses to meet the elective course requirement
   - Any postgraduate elective courses offered by IPE
   - A list of other elective courses offered at HKUST(GZ) in a particular year will be announced at the beginning of each intake.

Course Type	Course Code	Course Title	Credits
Core Courses (21 Credits)	IPEN 5110	Foundation in Public Policy	3
	IPEN 5130	Economics of Technology Innovation and Entrepreneurship	3
	IPEN 5150	Policy Analysis for Technology and Innovation	3
	IPEN 5160	Big Data Applications for Business and Government	3
	IPEN 5180	Disruptive Technology and Society	3
	IPEN 6110	Capstone Project	6
Electives (27 Credits)	IPEN 5200	Uncertainty, Information and Decision Making	3
	IPEN 5300	Experimental Economics and Organizational Behavior	3
	AIAA 6011	Topics in Artificial Intelligence	1-4
	AIAA 6021	Topics in Machine Learning	3
	DSAA 5009	Deep Learning in Data Science	3
	DSAA 5020	Foundation of Data Science and Analytics	3
	DSAA 5022	Data Analysis and Privacy Protection in Blockchain	3
	FTEC 5050	Machine Learning and Artificial Intelligence	3
	UGOD 5020	Quantitative Social Science	3
	UGOD 5040	Urban Data Acquisition and Analysis	3

OUR ACTIVITIES

Research Seminars

We invite external professors or professionals to give research seminars so as to expose the students to the current innovation, policy and entrepreneurship research and development, and provide them with opportunities to interact with the speakers from academia and industry.

Thrust Retreats

Thrust retreats are held each term to promote the communication between students and Professors.

OUR FACULTY

Prof. Ye QI
PhD in Environmental Science, The State University of New York and Syracuse University

Research Interests
- Chinese Environmental and Energy Policy
- Sustainable Urbanization
- Sustainability Science and Governance
- Environmental Policy and Governance
- Climate Change and Global Environmental Governance

Prof. Danyang XIE
PhD in Economics, The University of Chicago

Research Interests
- Economic Growth and Development
- Macroeconomics
- Chinese Economy

Prof. Xun WU
PhD in Public Policy Analysis, University of North Carolina at Chapel Hill

Research Interests
- Water Resource Management
- Health Policy
- Anti-Corruption
- Policy Design and Innovations
- Technology Policy

Prof. Jinyu HE
PhD in Business Administration, University of Illinois at Urbana-Champaign

Research Interests
- Corporate Governance
- Competitive Dynamics
- Corporate Social Responsibility and Sustainability
- Firm Knowledge Assets and Innovation

Prof. Jia LI
PhD in Engineering, Imperial College London

Research Interests
- Direct Air Capture (DAC)
- Carbon Capture and Storage (CCS)
- Bioenergy with Carbon Capture and Storage (BECCS)

Prof. Xu ZHANG
PhD in Economics, Brown University

Research Interests
- Microeconomic Theory
- Behavioral Economics
- Experimental Economics
- Neuroeconomics

OUR FACULTY

Prof. Corey Kewei XU

PhD in Public Administration and Policy, Florida State University

Research Interests
- Technology and Governance
- Smart City
- Big Data Analytics
- Sustainability
- Public Policy
- Public Administration

Prof. Luoye CHEN

PhD in Agricultural and Applied Economics, University of Illinois at Urbana-Champaign

Research Interests
- Fields: Environmental and Natural Resource Economics, Sustainable Agriculture Development
- Methodological Interests: Data Science and Computational Methods, Spatial Analysis, Machine Learning in Policy Evaluation

Prof. JI HOON SHIN

PhD in Engineering and Public Policy, Carnegie Mellon University

Research Interests
- Technology Management
- Technology Policy
- Innovation, R&D, High-tech industry

Prof. Yun HOU

PhD in Management, National University of Singapore

Research Interests
- Entrepreneurial Learning
- Innovation Strategy

Prof. Chenyang LI

PhD in Economics, Cornell University

Research Interests
- Industrial Organization
- Platform
- Digital Economics
- Game Theory
- Network Theory
- Business Economics

Dr. Yangsiyu LU

PhD in Environmental Economics, University of Oxford

Research Interests
- Clean Technology Innovation
- Energy Infrastructure
- Energy Finance
- Environmental Risks
- Climate Policy