UOW COLLEGE HONG KONG 香港伍倫貢學院

Part of UNIVERSITY OF WOLLONGONG AUSTRALIA

Bachelor of Science (Honours) in Smart-City Technology and Urban Informatics

BScSCTUI

NMTSS

1st Year Tuition fee HKD 35,810*

* Non-means-tested Subsidy Scheme (NMTSS) for Self-financing Undergraduate Studies in Hong Kong

FACULTY OF SCIENCE AND TECHNOLOGY

☎ 2707 3232

UOWCHKFST

UOWCHKFST

✉ uowchk-fst@uow.edu.au

83%*

Faculty Further Studies Rate

* Local / overseas institutions, including non-government-funded programmes

Apply Now

Programme Features

This programme's comprehensive curriculum covers the conceptual, intellectual, and technical skills required for smart city development. The programme aligns with the six key areas identified by the Smart City Blueprint proposed by the Hong Kong SAR Government. With the support of world-class academic input from the University of Wollongong and cutting-edge technologies, students gain the expertise needed to make a difference in the cities of today and tomorrow.

Graduate Outcome

Our graduates have a comprehensive understanding of urban dynamics, communication and information processing systems, data management and analysis, as well as geographic information systems and remote sensing. They will possess the technical skills and interdisciplinary knowledge necessary to effectively contribute to the development and implementation of smart city initiatives.

Competency Achieved

A strong competency in computer science fundamentals, programming, artificial intelligence, machine learning, and emerging technologies, that will equipgraduates with the skills to design and implement innovative solutions, analyze complex data sets, and contribute to advancements in artificial intelligence and its applications.

Main Subject Areas

Urban Dynamics and Growth

- Understanding Contemporary World
- Urban Planning Theory and Practice
- Urban Systems
- Understanding Global Cities
- Public Management and Urban Politics
- Urban Transport Planning for the Digital Age

Communication and Information Processing Systems

- Fundamentals of Artificial Intelligence
- Cloud Foundations
- Software Engineering and Project Management
- Ethical and Security Issues in Smart Applications

Data Management, Analysis and Applications

- Discrete Mathematics
- Database Systems and Designs
- Research Methods
- Big Data Analytics with Application
- Agent-Based Modelling of Urban Systems

Geographic Information Systems and Remote Sensing

- Foundations of Geo-information and Mapping
- Environmental Energy and Resource Management
- Internet of Things
- Participatory Design Techniques for Urban and Infrastructure Planning
- Artificial Intelligence and Blockchain in Supply Chain Management

Career Prospects

Graduates are suitable for a wide range of smart city-related jobs across various sectors, which include:

- Government and Public Services
- Software Engineer/Web developer for Automation and Intelligence
- Public Utilities (Water, Town Gas, Electricity and Telecommunication)
- Traffic Consultants

Further Studies Pathways

(below is not exhaustive but only aims to show some examples)

City University of Hong Kong

- Master of Urban Design and Regional Planning
- Master of Arts in Housing and Urban Management

The Hong Kong Polytechnic University

- Master of Science in Urban Informatics and Smart Cities (MSc)
- Postgraduate Diploma in Urban Informatics and Smart Cities (PgD)

The Hong Kong University of Science and Technology

- Master of Science Programme in Intelligent Building Technology and Management
- Master of Science Programme in Information Technology

The University of Hong Kong

- Master of Science in Urban Analytics