

# IIOE Multilevel Training Series

## -AI General level

AI General level



Opening Doors for Artificial Intelligence in Higher Education



## What You Can Learn from this Training Programme

The concept of Artificial Intelligence (AI) emerged in the 1950s, shortly after the birth of computers. Nowadays, its applications can be seen in various scenarios. For example, we can use AI-powered translators to check our vocabulary, grammatical errors, use AI to save money by automating and optimising routine tasks. Alternatively, we can integrate AI with existing technologies, such as building self-driving cars that are safer, more convenient, and energy-saving. The combination of AI and Robotics is another cutting-edge field. You might have seen science fiction works depicting those robots develop their intelligence to work for or rebel against human society. So, What is AI? How can AI be made Intelligent? Can AI think like humans? Will AI empower future education to simulate learning & innovation?

IIOE now invites you to explore these topics and develop in-depth understandings of AI applications in our society today, and with a particular emphasis on AI in Higher Education. In this training programme, we will walk you through the history, fundamental theories and ethical issues of AI. Upon the course completion, learners will establish basic understandings of challenges and opportunities generated by AI and how we can use AI, and construct AI for a better future.

## Leading Instructor



### Bin CHEN,

Professor at Peking University, department of earth and space science. Graduate school mentor. Chen has gained his PhD, masters and bachelor's degrees in computer science from Peking University.

### Zheng WEN,

Assistant Professor at Waseda University, Department of Communications and Computer Engineering. Wen has received his B.E. degrees in Computer Science and Technology at Wuhan University, and obtained his M.Sc. and Ph.D. degrees in communications engineering from Waseda University, Tokyo, Japan.



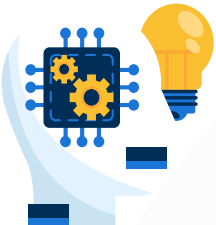
## Prospective learners

Educators and professionals in higher education who wish to enhance their understanding of Artificial Intelligence to improve efficiency in their teaching and research work.

# Training Modules and Content

## Module 1

### Entering the World of Artificial Intelligence



#### Introduction

Module 1 outlines basic conceptions and technical specifications of AI in modern daily life. It then introduces you to the diversity of applying and managing AI technologies across various industries, including Education, Manufacturing and Agriculture; there is also a substantial focus on the AI evolution & impacts for developing countries.

#### Course content

Chapter 1: What is AI  
Chapter 2: History of AI  
Chapter 3: AI in our daily life  
Chapter 4: AI and Education  
Chapter 5: AI Technology in Industry and Agriculture  
Chapter 6: AI and Developing Countries

#### Assignment / length

6 Videos + 14 Quizzes

## Module 2

### AI and Fundamental Theories



#### Introduction

Module 2 will dive into the science of AI by introducing fundamental theories, tools, and functionalities. By the end of this module, learners will develop a more comprehensive understanding of how AI is enabled to 'think' based on Logic Rules, Decision Tree, Machine Learning and so on.

#### Course content

Chapter 1: Definition and History  
Chapter 2: Logic Rules and Expert Systems (1)  
Chapter 3: Logic Rules and Expert Systems (2)  
Chapter 4: Decision Tree and Search (1)  
Chapter 5: Decision Tree and Search (2)  
Chapter 6: Genetic Algorithm  
Chapter 7: Artificial Neural Network (1)  
Chapter 8: Artificial Neural Network (2)  
Chapter 9: Machine Learning and Reinforcement Learning

#### Assignment / length

9 Videos + 27 Quizzes



## Module 3

### The Ethics of Artificial Intelligence



#### Introduction

Module 3 focuses on the ethical and developmental dimensions of AI. It first defines the ethics of AI and discusses data privacy, gender and racial inequality, moral decisions and other relevant issues. It then proceeds to evaluate the role of law in promoting AI's ethical application and the potential of AI in enhancing global economic cooperation.

#### Course content

- Chapter 1: Ethics of Artificial Intelligence
- Chapter 2: Data Privacy and Protection
- Chapter 3: AI and Gender & Racial Equality
- Chapter 4: Ethical Decisions of AI
- Chapter 5: AI Cannot Be a Legal Forbidden Zone
- Chapter 6: AI and Global Cooperation & Economic Development

#### Assignment / length

6 Videos + 21 Quizzes

## Earn your certificate anytime, anywhere



## A training programme that meets your needs

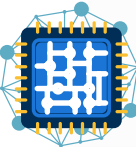
The tailor-made IIOE training series presents an overview of AI & related practices for educators and professionals in HEIs to relate their personal experience with the AI technological innovation. Upon completion, learners will understand how AI can be situated in various professional contexts to transform their teaching and research work.



The 1st Programme of IIOE's Multilevel Training Series about AI



Experienced Instructors with Academic and Professional Backgrounds



Tailor-Designed & Self-Paced Content for University Educators and Professionals



Real-Life Cases on the Applications of Artificial Intelligence in Education and Research



Three different modules introducing you to the AI Worlds



Free Registration and Certification for University Teachers

## Sign-up now

💡 Start-day: April 26, 2021

💡 Instructional Language: English/French

💡 Enrollment: <https://iioe.ichei.org/training>

💡 Duration of Training: 3 weeks



# UNESCO-ICHEI



Under the guidance and inspiration of Education 2030 and SDG4, UNESCO International Centre for Higher Education Innovation (UNESCO-ICHEI) was established in Shenzhen, China, in June 2016, as a UNESCO Category 2 Centre. Relying on the advantages of Shenzhen's Hi-tech sector and drawing upon China's experience with the massification of its higher education, UNESCO-ICHEI intends to improve quality and promote equity in higher education to nurture human capital, as a response to the fourth industrial revolution and rapid development of digital economies across the world.

In partnership with global higher education institutions (HEIs) and enterprises, UNESCO-ICHEI officially launched its flagship project, the International Institute of Online Education (IIOE) in April 2020. IIOE aims to improve access to quality content for teachers' professional development, promote exchange of knowledge, and strengthen university-industry collaboration on a global scale.

## CONTACT

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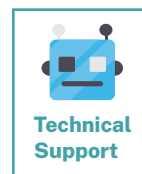
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**Knowledge  
Production**



**Capacity  
Building**



**Technical  
Support**



**Information  
Sharing**



United Nations  
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under the auspices of UNESCO  
联合国教科文组织高等教育创新中心

