



香港學術及職業資歷評審局  
Hong Kong Council for Accreditation of  
Academic & Vocational Qualifications

## **SUMMARY ACCREDITATION REPORT**

**HONG KONG INSTITUTE OF INFORMATION  
TECHNOLOGY  
VOCATIONAL TRAINING COUNCIL**

**LEARNING PROGRAMME ACCREDITATION**

**HIGHER DIPLOMA IN DATA SCIENCE AND AI**

**PROFESSIONAL CERTIFICATE IN IMMERSIVE  
GAME DEVELOPMENT**

**JULY 2024**

## 1. TERMS OF REFERENCE

1.1 Based on the Service Agreement (No.: VA1721), the Hong Kong Council for Accreditation of Academic and Vocational Qualifications (HKCAAVQ), in the capacity of the Accreditation Authority as provided for under the Accreditation of Academic and Vocational Qualifications Ordinance (Cap 592) (AAVQO), was commissioned by the Hong Kong Institute of Information Technology, Vocational Training Council (職業訓練局香港資訊科技學院) (“Operator”), a branch of the Vocational Training Council (職業訓練局) to conduct a Learning Programme Accreditation (LPA) Exercise with the following Terms of Reference:

- (a) To conduct an accreditation test as provided for in AAVQO to determine whether the following programmes of the Operator meet the stated objectives and Hong Kong Qualifications Framework (HKQF, or in short QF) Level 4 standard and can be offered as accredited programmes:
  - (i) Higher Diploma in Data Science and AI;
  - (ii) Professional Certificate in Immersive Game Development; and
- (b) To issue to the Operator accreditation report setting out the results of the determination in relation to (a) by HKCAAVQ.

1.2 The accreditation exercise was conducted according to the relevant accreditation guidelines referred to in the Service Agreement. The Education Bureau’s *“Updated Revised Common Descriptors for Associate Degree and Higher Diploma Programmes under the New Academic Structure (Effective since the 2024/25 academic year)”* was also a guiding document used by the Panel and the Operator in conducting this exercise for the Higher Diploma programme. A site visit took place on 10 May 2024.

## 2. HKCAAVQ’S DETERMINATION

### **Higher Diploma in Data Science and AI (HDDSAI)**

2.1 HKCAAVQ has determined that, subject to the compliance with the restriction set out in 2.7, the Higher Diploma in Data Science and AI meets the stated objectives and QF standard at Level 4, and can be offered as an accredited programme with a validity period from 1 September 2024 to 31 August 2027.

### 2.2 **Validity Period**

2.2.1 The validity period will commence on the date specified below.

2.3 The determinations on the Learning Programme Accreditation are specified as follows:

<b>Name of Operator(s)</b>	Hong Kong Institute of Information Technology, Vocational Training Council 職業訓練局香港資訊科技學院
<b>Name of Award Granting Body</b>	Vocational Training Council 職業訓練局
<b>Title of Learning Programme</b>	Higher Diploma in Data Science and AI 數據科學及人工智能高級文憑
<b>Title of Qualification(s) (Exit Award(s))</b>	Higher Diploma in Data Science and AI 數據科學及人工智能高級文憑
<b>Primary Area of Study and Training</b>	Computer Science and Information Technology
<b>Sub-area (Primary Area of Study and Training)</b>	Computer Science and Information Technology
<b>Other Area of Study and Training</b>	Not applicable
<b>Sub-area (Other Area of Study and Training)</b>	Not applicable
<b>Industry</b>	Not applicable
<b>Branch</b>	Not applicable
<b>QF Level</b>	Level 4
<b>QF Credits</b>	321
<b>Mode(s) of Delivery and Programme Length</b>	Full-time, 2 years 3,219 notional learning hours (including 1,279 contact hours)
<b>Intermediate Exit Award(s)</b>	Not applicable
<b>Validity Period</b>	1 September 2024 to 31 August 2027
<b>Number of Enrolment(s)</b>	One enrolment per year
<b>Maximum Number of New Students</b>	Maximum of 90 learners per year

<b>Specification of Competency Standards-based Programme</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Specification of Generic (Foundation) Competencies-based Programme</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Vocational Qualifications Pathway Programme</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Notes to be indicated on the QR</b>	Not applicable
<b>Address of Teaching/ Training Venue(s)</b>	See Appendix

### **Professional Certificate in Immersive Game Development (PCIGD)**

2.4 HKCAAVQ has determined that Professional Certificate in Immersive Game Development meets the stated objectives and QF standard at Level 4, and can be offered as an accredited programme with a validity period from 1 September 2024 to 31 August 2026.

#### **2.5 Validity Period**

2.5.1 The validity period will commence on the date specified below.

2.6 The determinations on the Learning Programme Accreditation are specified as follows:

<b>Name of Operator(s)</b>	Hong Kong Institute of Information Technology, Vocational Training Council 職業訓練局香港資訊科技學院
<b>Name of Award Granting Body</b>	Vocational Training Council 職業訓練局
<b>Title of Learning Programme</b>	Professional Certificate in Immersive Game Development 沉浸式遊戲開發專業證書
<b>Title of Qualification(s) (Exit Award(s))</b>	Professional Certificate in Immersive Game Development 沉浸式遊戲開發專業證書

<b>Primary Area of Study and Training</b>	Computer Science and Information Technology
<b>Sub-area (Primary Area of Study and Training)</b>	Computer Science and Information Technology
<b>Other Area of Study and Training</b>	Not applicable
<b>Sub-area (Other Area of Study and Training)</b>	Not applicable
<b>Industry</b>	Not applicable
<b>Branch</b>	Not applicable
<b>QF Level</b>	Level 4
<b>QF Credits</b>	36
<b>Mode(s) of Delivery and Programme Length</b>	Part-time, 6 months 360 notional learning hours (including 72 contact hours)
<b>Intermediate Exit Award(s)</b>	Not applicable
<b>Validity Period</b>	1 September 2024 to 31 August 2026
<b>Number of Enrolment(s)</b>	Two enrolments per year
<b>Maximum Number of New Students</b>	Maximum of 60 learners per year Maximum of 30 learners per class
<b>Specification of Competency Standards-based Programme</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Specification of Generic (Foundation) Competencies-based Programme</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Vocational Qualifications Pathway Programme</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Notes to be indicated on the QR</b>	Not applicable

<b>Address of Teaching/ Training Venue(s)</b>	See Appendix 2
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2.7 **Restriction(s)**

The Operator is expected to fulfil and comply with all restriction(s) during the validity period as stipulated in the accreditation report.

<b>Restriction(s)</b>	<b>Date of Fulfilment</b>
<p><b><u>Higher Diploma in Data Science and AI (HDDSAI)</u></b></p> <p>The Operator is to ensure the effectiveness and consistency of its quality assurance mechanism at the institutional level to align with the HD programmes developed under and beyond the Programme Area Accreditation status for the Hong Kong Institute of Vocational Education (IVE) including but not limited to the Higher Diploma in Data Science and AI programme. To this end, the Operator is</p> <p>(a) to conduct ongoing review on the effectiveness of the implementation of the newly introduced admission requirements for the Academic Proficiency Examination; and</p> <p>(b) to ensure compliance with EDB’s <i>“Updated Revised Common Descriptors for Associate Degree and Higher Diploma Programmes (Effective since the 2024/25 academic year)”</i> and other prevailing explanatory note(s) issued by HKCAAVQ or EDB.</p>	On-going

2.8 **Recommendation(s)**

HKCAAVQ offers the following recommendation(s) for continuous improvement.

<b>Recommendation(s)</b>
<p><b><u>Higher Diploma in Data Science and AI (HDDSAI)</u></b></p> <p>1. The Operator should review the mapping of Programme Intended Learning Outcomes (PILOs) against the Generic Level Descriptors (GLD) to ensure the mappings accurately reflect the skills and knowledge outlined in the PILOs.</p>

2. The Operator should invite external examiners to review students' work, performance, and relevant information each semester in order to obtain their expert views and facilitate ongoing improvements.

### **Professional Certificate in Immersive Game Development (PCIGD)**

3. The Operator should ensure that the programme content introduces a diverse range of game techniques, and that both the programme content and assessments incorporate adequate game principles and concepts to better equip students with sufficient fundamental knowledge, as well as more comprehensive, adaptable knowledge as stated in the Programme Intended Learning Outcome.

- 2.9 HKCAAVQ will subsequently satisfy itself whether the Operator remains competent to achieve the relevant objectives and the Programme continues to meet the standard to achieve the relevant objectives as claimed by the Operator by reference to, amongst other things, the Operator's fulfilment of any conditions and compliance with any restrictions stipulated in this Accreditation Report. For the avoidance of doubt, maintenance of accreditation status is subject to fulfilment of any condition and compliance with any restriction stipulated in this Accreditation Report.

## **3. INTRODUCTION**

- 3.1 The Hong Kong Institute of Information Technology (HKIIT), Vocational Training Council (VTC) obtained the Initial Evaluation status at QF Level 4 in February 2024. In this accreditation, the HKIIT is seeking to obtain learning programme accreditation for Higher Diploma in Data Science and AI and Professional Certificate in Immersive Game Development.

## **4. PROGRAMME DETAILS**

The following is the programme information provided by the Operator.

- 4.1 Programme Objectives (POs)

### **Higher Diploma in Data Science and AI (HDDSAI)**

The POs of HDDSAI programme are to:

- PO.1 provide students a solid foundation on the conceptual, theoretical and practical knowledge in the fields of data science, artificial intelligence and information technology;

- PO.2 develop students' ability to apply data science methods on data to gain insight, make predictions and extract intelligence in real world situations;
- PO.3 develop students' ability to apply suitable artificial intelligence and machine learning (AI/ML) algorithms, programming libraries and tools on optimized datasets to build models and applications for solving real-world problems;
- PO.4 develop students' professional attitude, sense of social, ethical and environmental responsibility and passion in pursuing creativity and innovativeness as a practitioner in the ICT industry;
- PO.5 strengthen students' generic skills including languages, IT, interpersonal communication for further study and work;
- PO.6 cultivate students' notion for lifelong learning and develop students to be independent learners; and
- PO.7 prepare students for further study and professional development in the ICT industry.

### **Professional Certificate in Immersive Game Development (PCIGD)**

The POs of PCIGD programme are to:

- PO.1 equip learners with essential knowledge and skills in designing and producing realistic contents for immersive game development field;
- PO.2 develop learners' competency in creating immersive environment and 3D scenes for immersive game development; and
- PO.3 enable learners to gain expertise in deploying immersive games to different platforms.

#### 4.2 Programme Intended Learning Outcomes (PILOs)

### **Higher Diploma in Data Science and AI (HDDSAI)**

Upon completion of the Programme, graduates are expected to be able to:

- PILO.1 integrate knowledge from statistics, computer science and business to design and implement data analytic and AI solutions for different problem domains;
- PILO.2 extract, transform and load data from internal and external data sources of various formats; and apply data visualization and business intelligence tools to analyze and present intelligence;

- PILO.3 select and use appropriate AI/ML algorithms and libraries on optimized datasets to develop analysis and prediction models for data-driven decision-making systems;
- PILO.4 possess conceptual knowledge and practical skills in data science, artificial intelligence and information technology for pursuing further academic and professional development;
- PILO.5 comprehend essential knowledge and skills in Information and Communications Technology as IT practitioners;
- PILO.6 perform duties in the workplace professionally and ethically and according to the codes of conduct of leading professional bodies of related disciplines;
- PILO.7 communicate effectively verbally and in written form, perform IT, numerical and soft skills so that they can work independently or as part of a team in workplace; and
- PILO.8 reflect on personal learning needs and construct a personal development plan for employment and further study upon learning experience gained throughout the programme.

### **Professional Certificate in Immersive Game Development (PCIGD)**

Upon completion of the Programme, graduates are expected to be able to:

- PILO.1 comprehend essential knowledge and skills in immersive game development in Digital Entertainment Industries;
- PILO.2 develop realistic game assets for immersive game development; and
- PILO.3 foster a comprehensive understanding of game development and promote adaptability in the rapidly evolving game industry.

#### 4.3 Programme Structure

### **Higher Diploma in Data Science and AI (HDDSAI)**

Module	QF Credit
<b>Semester 1</b>	321
Applied Statistics	
Data Science and AI Fundamentals	
Database Principles	
Introduction to Programming	
Operating Systems Fundamentals	
Essential Workplace Communication: Effective Oral Interaction	

Module	QF Credit
MindShift: Achieving Personal Growth & Effectiveness	
<b>Semester 2</b>	
Big Data Ecosystem and Cloud Computing	
Business Statistical Modeling	
Network Fundamentals	
Object Oriented Programming	
Essential Workplace Communication: Digital Written Correspondence	
Collaboration, Teamwork & Social Engagement	
Information Technology Essentials – Web	
職業中文傳意：普通話報告與紀實文書	
<b>Semester 3</b>	
Programming for AI	
IT Professionalism	
Professional Workplace Communication: Storytelling and Job Search	
職業中文傳意：普通話對話與匯報	
Collaboration, Teamwork & Social Engagement	
Big Data and AI Project Management	
Enrichment Module B	
<b>Semester 4</b>	
Business Intelligence Systems and AI Analytics	
Data Visualization	
Modern Database Systems	
Final Year Project	
Enrichment Module A	
Professional Workplace Communication: Proposal and Report Writing	
Enhancing Competencies in the 21st Century Workplace	
AI and Machine Learning Applications	
<b>Semester 5</b>	
Data Warehousing and Data Mining	
Web Analytics	
Final Year Project	
Professional Workplace Communication: Pitching and Persuasive Presentation	
<b>Industrial Attachment</b>	

Module	QF Credit
Industrial Attachment	
<b>Total</b>	<b>321</b>

#### **Professional Certificate in Immersive Game Development (PCIGD)**

Module	QF Credit
Unreal Engine Fundamental	36
Unreal Engine Advanced Training	
<b>Total:</b>	<b>36</b>

#### 4.4 Graduation Requirements

##### **Higher Diploma in Data Science and AI (HDDSAI)**

- a) To be eligible for an award, a student must have satisfactorily completed the credit and other requirements. The minimum credit requirement of the HDDSAI is as follows:

General Education Modules	Vocational Modules	Enrichment Module	Industrial Attachment	Total
76	226	9	10	321

- b) The minimum passing mark and grade are 40% and D grade respectively. A mark of 40% is also the minimum pass requirement in each form of assessment as detailed in the Definitive Programme Document (DPD). A student has to pass the End-of-module Assessment (EA) to pass the module concerned.
- c) The minimum attendance requirement for an individual module is 70% of the maximum attendance. The maximum possible attendance includes normal class attendance only. Students will not be allowed to undergo the End-of-Module Assessment if they fail to meet the minimum attendance requirement of the module concerned, unless with a special approval from the Principal concerned.

##### **Professional Certificate in Immersive Game Development (PCIGD)**

- a) To be eligible for an award, a student must have satisfactorily completed the credit and other requirements. The minimum credit requirements of the PCIGD are 36 credits.

- b) The minimum pass mark for a module is 40%, which is the minimum requirement in each assessment as detailed in the DPD. Learners need not pass all individual assessments / components to pass a module. Where appropriate, individual Programme / Module Board may set additional criteria on passing a Module, based on the nature of the module concerned and/or requirements of relevant industry, professional bodies and/or financial funding scheme.

#### 4.5 Admission Requirements

##### **Higher Diploma in Data Science and AI (HDDSAI)**

(1) Admission of Secondary 6 Hong Kong Diploma of Secondary Education Examination (HKDSE) Holder

- Five HKDSE subjects at Level 2 or above, including English and Chinese Languages; or
- VTC Diploma of Foundation Studies; or
- VTC Diploma of Vocational Education/ Diploma of Vocational Baccalaureate; or
- Diploma Yi Jin/ Diploma of Applied Education; or
- Relevant and substantial work experience and/or prior qualifications obtained in or outside Hong Kong (e.g. assessed through recognition of prior learning and credit accumulation and transfer), with demonstrated ability to undertake sub-degree education; or
- Equivalent.

OR

(2) Admission of Secondary 7 Hong Kong Advanced Level Examination (HKALE) & Hong Kong Certificate of Education Examination (HKCEE) Holder

- One HKALE A-Level subject / Two AS-Level subjects at Grade E or above; and Five HKCEE subjects at Grade E / Level 2 or above, including Chinese Language and English Language; or
- Equivalent.

OR

(3) Admission of Applicants with Non-Local / Other Local Qualifications

(a) Applicants with Non-Local Qualifications-Mainland China Qualifications

- Completion of Senior Secondary 3 Education; and obtained either (i) or (ii)
  - (i) The National College Entrance Examination (NCEE) / 普通高等學校招生全國統一考試（普通高考）
    - Attainment of 90 out of 150 full marks in Chinese Language in NCEE mainstream system or equivalent;
    - Attainment of 80 out of 150 in English Language in NCEE mainstream system or equivalent; and

- Attainment of a minimum 50% of NCEE total score for the year that the score is obtained.  
*For those applicants' English Language score is below 90, applicants must secure a pass in the admission interview (conducted in English) and English written assessment arranged by the VTC.*
- (ii) Academic Proficiency Examination (APE) / 普通高中學業水平考試 in the corresponding admission year in Guangdong Province only (Combined APE results from multiple years will not be accepted)
  - Attainment of a minimum total score of 340 in the APE with Grade B in the English Language; and
  - Pass the admission assessment arranged by the VTC.
- (b) Applicants with other non-local qualifications
  - Successfully completed senior education of their countries.
  - Applications will be assessed individually by the department concerned based on applicants' national or public examinations results, internal school results and the language qualification standards and proficiency.

### **Professional Certificate in Immersive Game Development (PCIGD)**

- Five HKDSE subjects at Level 2 or above, including English and Chinese Languages, or equivalent; or
- Five HKCEE subjects at Grade E/Level 2 or above, including English and Chinese Languages, or equivalent; or
- Completion of a QF Level 3 programme that is deemed acceptable to the respective Programme Board; or
- Relevant RPL qualification(s) at QF Level 3 or above; or
- Other relevant verifiable prior learning and/or work experience that is/are deemed appropriate by respective Programme Board

## **5. IMPORTANT INFORMATION REGARDING THIS ACCREDITATION REPORT**

### **5.1 Variation and withdrawal of this Accreditation Report**

- 5.1.1 This Accreditation Report is issued pursuant to section 5 of the AAVQO, and contains HKCAAVQ's substantive determination regarding the accreditation, including the validity period as well as any conditions and restrictions subject to which the determination is to have effect.
- 5.1.2 HKCAAVQ may subsequently decide to vary or withdraw this Accreditation Report if it is satisfied that any of the grounds set out in section 5 (2) of the AAVQO apply. This includes where HKCAAVQ is satisfied that the Operator is no longer competent to achieve the relevant objectives and/or the Programme no longer

meets the standard to achieve the relevant objectives as claimed by the Operator (whether by reference to the Operator's failure to fulfil any conditions and/or comply with any restrictions stipulated in this Accreditation Report or otherwise) or where at any time during the validity period there has/have been substantial change(s) introduced by the Operator after HKCAAVQ has issued the accreditation report(s) to the Operator and which has/have not been approved by HKCAAVQ. Please refer to the '*Guidance Notes on Substantial Change to Accreditation Status*' in seeking approval for proposed changes. These Guidance Notes can be downloaded from the HKCAAVQ website.

- 5.1.3 If HKCAAVQ decides to vary or withdraw this Accreditation Report, it will give the Operator notice of such variation or withdrawal pursuant to section 5(4) of the AAVQO.
- 5.1.4 The accreditation status of the Operator and/or Programme will lapse immediately upon the expiry of the validity period or upon the issuance of a notice of withdrawal of this Accreditation Report.

## 5.2 Appeals

- 5.2.1 If the Operator is aggrieved by the determination made in this Accreditation Report, then pursuant to Part 3 of the AAVQO the Operator has a right of appeal to the Appeal Board. Any appeal must be lodged within 30 days of the receipt of this Accreditation Report.
- 5.2.2 If the Operator is aggrieved by a decision to vary or withdraw this Accreditation Report, then pursuant to Part 3 of the AAVQO the Operator has a right of appeal to the Appeal Board. Any appeal must be lodged within 30 days of the receipt of the Notice of Variation or Withdrawal.
- 5.2.3 The Operator should be aware that a notice of variation or withdrawal of this Accreditation Report is not itself an accreditation report and the right to appeal against HKCAAVQ's substantive determination regarding accreditation arises only from this Accreditation Report.
- 5.2.4 Please refer to Cap 592A ([www.elegislation.gov.hk](http://www.elegislation.gov.hk)) for the appeal rules. Details of the appeal procedure are contained in section 13 of the AAVQO and can be accessed from the QF website at: [www.hkqf.gov.hk](http://www.hkqf.gov.hk).

## 5.3 Qualifications Register

- 5.3.1 Qualifications accredited by HKCAAVQ are eligible for entry into the QR at [www.hkqr.gov.hk](http://www.hkqr.gov.hk) for recognition under the QF. The Operator should apply separately to have their quality-assured qualifications entered into the QR.

- 5.3.2 Only learners who commence the study of the named accredited learning programme during the validity period and who have graduated with the named qualification listed in the QR will be considered to have acquired a qualification recognised under the QF.

Ref: VA12/02/62-63

**Address of Teaching/ Training Venue(s)**

- (1) Hong Kong Institute of Information Technology  
20A Tsing Yi Road, Tsing Yi Island, New Territories  
香港資訊科技學院  
新界青衣島青衣路 20A 號
- (2) Hong Kong Institute of Vocational Education (Chai Wan)  
30 Shing Tai Road, Chai Wan, Hong Kong  
香港專業教育學院（柴灣）  
香港柴灣盛泰道 30 號
- (3) Hong Kong Institute of Vocational Education (Haking Wong)  
702 Lai Chi Kok Road, Cheung Sha Wan, Kowloon  
香港專業教育學院（黃克競）  
九龍長沙灣荔枝角道 702 號
- (4) Hong Kong Institute of Vocational Education (Lee Wai Lee)  
3 King Ling Road, Tseung Kwan O, New Territories  
香港專業教育學院（李惠利）  
新界將軍澳景嶺路 3 號
- (5) Hong Kong Institute of Vocational Education (Tsing Yi)  
20 Tsing Yi Road, Tsing Yi Island, New Territories  
香港專業教育學院（青衣）  
新界青衣島青衣路 20 號
- (6) Hong Kong Institute of Vocational Education (Morrison Hill)  
6 Oi Kwan Road, Wan Chai, Hong Kong  
香港專業教育學院（摩理臣山）  
香港灣仔愛群道 6 號
- (7) Hong Kong Institute of Vocational Education (Tuen Mun)  
18 Tsing Wun Road, Tuen Mun, New Territories  
香港專業教育學院（屯門）  
新界屯門青雲路 18 號
- (8) Hong Kong Institute of Vocational Education (Sha Tin)  
21 Yuen Wo Road, Sha Tin, New Territories  
香港專業教育學院（沙田）  
新界沙田源禾路 21 號
- (9) Hong Kong Institute of Vocational Education (Kwai Chung)  
20 Hing Shing Road, Kwai Chung, New Territories  
香港專業教育學院（葵涌）  
新界葵涌興盛路 20 號

(10) Hong Kong Institute of Vocational Education (Kwun Tong)  
25 Hiu Ming Street, Kwun Tong, Kowloon  
香港專業教育學院（觀塘）  
九龍觀塘曉明街 25 號

(11) Hong Kong Design Institute  
3 King Ling Road, Tseung Kwan O, New Territories  
香港知專設計學院  
新界將軍澳景嶺路 3 號

**HKCAAVQ Report No.: 24/104**