



The Hong Kong Polytechnic University 香港理工大學

College of Undergraduate Studies 本科生學院

Minor in

Research and Innovation

(科研與創新)

February 2026

This document is subject to review and changes that the programme offering.
Faculty/School/College/Department can decide to make from time to time. Students will be informed of the changes as and when appropriate.

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Part 1: General Information

1.1 Introduction

- 1.1.1 Programme Title : Minor in Research and Innovation
- 1.1.2 Administrative Host Department : College of Undergraduate Studies
- 1.1.3 Credit Requirements : 18
- 1.1.4 Normal duration : 2 years
- 1.1.5 Medium of Instruction : English
- 1.1.6 Implementation Date : January 2026

1.2 Rationale, Aims and Objectives

1.2.1 Rationale for the Minor

Research is fundamental to knowledge advancement and continuous development across various sectors, including technology, business, and healthcare. In today's rapidly evolving academic and professional landscape, undergraduate students need to possess both discipline-specific knowledge and strong research skills.

To address this need, the Minor in Research and Innovation is designed to cultivate research competencies at the undergraduate level and nurture future researchers and innovators.

1.2.2 Aims and Objectives

The Minor in Research and Innovation aims to enhance students' academic experience and maximise their potential for growth and development. The programme provides complementary knowledge and guidance to help students develop strong enquiry-based learning abilities and improve their research credentials. Additionally, it establishes a solid foundation for students interested in pursuing further research studies.

This minor comprises interdisciplinary subjects and a compulsory research project in which students are expected to conduct original research to tackle research challenges. This hands-on experience will enable them to contribute to advancing knowledge within their disciplines, preparing them for future academic and professional endeavors.

1.3 Programme's Intended Learning Outcomes (PILOs)

On successful completion of this minor programme, students will be able to:

1. Develop a strong conceptual understanding of research principles;
2. Demonstrate competence in research methods and techniques;
3. Apply critical thinking and reasoning skills to formulate and analyse research problems, generating practical and innovative solutions;
4. Effectively communicate and disseminate research findings; and
5. Demonstrate the capability for continuous professional development.

1.4 Eligibility and Student Admission

To be eligible for this minor programme, students are normally expected to have a Cumulative GPA of 3.50 by the end of semester 2 of their year 1 study.

To apply, students should reach out to the potential supervisor and obtain their consent to serve as the project supervisor. Students should then submit their application along with a research project proposal for approval by their major programme and minor programme departments.

Part 2: Programme Structure and Curriculum

2.1 Programme Structure*

The programme structure of the Minor in Research and Innovation is as follows:

Minor in Research and Innovation	Credits
<i>Core</i>	
CUS2000 Introduction to Research	2
CUS2001 Introduction to Innovation	2
CUS3001 Philosophy of Knowledge and Science	3
CUS3000 Research Project	9
<i>Electives (Select one)</i>	
CUS2002 Frontiers in Research	2
APSS3001 Qualitative Inquiry and Research Design	2
CUS3002 Quantitative Methods and Visualization in Research	2
Total	18

*Subject to change

2.2 Proposed Study Pattern*

	Semester One	Semester Two	Summer Term
Year 2	CUS2000 Introduction to Research CUS3001 Philosophy of Knowledge and Science CUS3000 Research Project	CUS2001 Introduction to Innovation CUS3000 Research Project (Cont.)	CUS3000 Research Project (Cont.)
Year 3	CUS3000 Research Project (Cont.) Elective	CUS3000 Research Project (Cont.)	CUS3000 Research Project (Cont.)

*Subject to change

2.3 Curriculum Map

The curriculum map shows the alignment of subjects with the Programme's Intended Learning Outcomes (PILOs):

Subject	Programme's Intended Learning Outcomes (PILOs)				
	1	2	3	4	5
Core					
CUS2000 Introduction to Research	I, R, A	I, R, A		I, R, A	
CUS2001 Introduction to Innovation		I, R, A	I, R, A		I, R, A
CUS3001 Philosophy of Knowledge and Science	I	I, R, A	I, R	I, R, A	I, R, A
CUS3000 Research Project	R, A	R, A	R, A	R, A	R, A
Elective					
CUS2002 Frontiers in Research	I, A	I, A	I, A	I, A	I, A
APSS3001 Qualitative Inquiry and Research Design	R	R	R	R	R
CUS3002 Quantitative Methods and Visualization in Research	I, R	I, R, A	I, R, A	I, R, A	I, R

Explanatory Notes:

I – Introduced - This subject offers learning opportunities for this particular intended outcome at an introductory level. On completion, students should have the foundational knowledge / skills / attributes to pursue this outcome further.

R – Reinforced - This subject will build upon student's existing knowledge / skills / attributes in this particular intended outcome to provide learning opportunities through which students can reinforce and/or further develop the knowledge / skills / attributes described in the outcome statement

A – Assessed - The attainment of this outcome will be assessed in this subject.

Part 3: Assessment and Award

3.1 Teaching, Learning and Assessment

The specific learning outcomes for each subject are explicitly outlined in its syllabus. This allows students to understand the aims and expectations before beginning their studies. Various instructional methods are employed to achieve these learning outcomes, including lectures, tutorials, seminars, workshops, laboratories, and case studies. These approaches are clearly described in the subject syllabus.

The primary purpose of assessment is to enable students to demonstrate that they have met the aims and objectives of the programme. Specifically, assessments verify that students have fulfilled each subject's requirements and have achieved the expected programme learning outcomes by the end of their studies.

Assessment serves not only to evaluate whether students have achieved the specific learning outcomes of a subject but also to differentiate their performance in doing so. A criteria-referenced assessment approach is adopted, ensuring that evaluations are based on predefined criteria rather than relative comparisons to a norm.

3.1.1 Assessment Methods and Grading

Students' performance in a subject can be assessed by continuous assessment and/or examinations, as outlined in the individual subject syllabus. Performance in both the coursework and final examination components will be assessed according to the weighting factor assigned to each component in the subject.

The contribution made by each student in continuous assessment involving a group effort shall be determined and assessed separately, and this can result in different grades being awarded to students in the same group.

Assessment grades are awarded on a criterion-referenced basis. At the beginning of each semester, the subject teacher will inform students about the specific assessment methods that will be used within the assessment framework. Detailed criteria for each subject, including the rubrics for major assessment items, will be provided to students outlining the expectations.

The grade conversion of assessment results is as specified in the University's General Assessment Regulations, according to the following table:

<i>Subject grade</i>	<i>Short description</i>	<i>Elaboration on subject grading description</i>
A+ A A-	Excellent	Demonstrates excellent achievement of intended subject learning outcomes by being able to skillfully use concepts and solve complex problems. Shows evidence of innovative and critical thinking in unfamiliar situations, and is able to express the synthesis or application of ideas in a logical and comprehensive manner.

<i>Subject grade</i>	<i>Short description</i>	<i>Elaboration on subject grading description</i>
B+ B B-	Good	Demonstrates good achievement of intended subject learning outcomes by being able to use appropriate concepts and solve problems. Shows the ability to analyse issues critically and make well-grounded judgements in familiar or standard situations, and is able to express the synthesis or application of ideas in a logical and comprehensive manner.
C+ C C-	Satisfactory	Demonstrates satisfactory achievement of intended subject learning outcomes by being able to solve relatively simple problems. Shows some capacity for analysis and making judgements in a variety of familiar and standard situations, and is able to express the synthesis or application of ideas in a manner that is generally logical but fragmented.
D+ D	Pass	Demonstrates marginal achievement of intended subject learning outcomes by being able to solve relatively simple problems. Can make basic comparisons, connections and judgments and express the ideas learnt in the subject, though there are frequent breakdowns in logic and clarity.
F	Fail	Demonstrates inadequate achievement of intended subject learning outcomes through a lack of knowledge and/or understanding of the subject matter. Evidence of analysis is often irrelevant or incomplete.

'F' is a subject failure grade, whilst all others ('D' to 'A+') are subject passing grades. No credit will be earned if a subject is failed.

Notes:

- Marking rubrics aligned with these Grade Descriptors need not include all aspects of the grade descriptor.
- Marking rubrics aligned with these Grade Descriptors may include other aspects aligned with particular subject matter or field of study requirements but are not included in the grade descriptor.

Indicative descriptors for modifier grades

Main Grade (solid)	The student generally performed at this level, indicating mastery of the subject intended learning outcomes at this level.
+ (exemplary)	The student consistently performed at this level and exceeded the expectations of this level in some regards, but not enough to claim mastery at the next level.
- (marginal)	The student basically performed at this level, but the performance was inconsistent or fell slightly short in some regards.

Note: The above indicative descriptors for modifier grades are not applicable to the pass grades D and D+.

The grade points assigned to subject grades attained by students from 2020/21 are as follows:

<i>Grade</i>	<i>Grade Point for grades attained from 2020/21</i>
A+	4.3
A	4.0
A-	3.7
B+	3.3
B	3.0
B-	2.7
C+	2.3
C	2.0
C-	1.7
D+	1.3
D	1.0
F	0.0

A numerical grade point is assigned to each subject grade for computation of the GPA.

3.1.2 Subject Results

The examination and assessment arrangement conforms to the Handbook on Academic Regulations and Procedures.

All assessment grades proposed by the subject lecturers must be reviewed and endorsed by the respective Subject Assessment Review Panel (SARP) of the subject offering department. SARP should only finalise the subject grades upon confirming that the required moderation process has been carried out and any issues arising from the process have been duly resolved.

The minor programme leader would be invited to join these SARP meetings to review the grade distribution of the minor subjects at the end of each semester.

After finalisation by SARP, the subject grades shall be formally released to students.

3.2 Award

Students taking the minor will be considered for an award when they have satisfied the requirements for both their major and minor studies (i.e., having a GPA of 1.70 or above) and have also submitted an application for graduation.

Students should refer to the programme requirement documents of their major programmes for details regarding their major award requirements.

If the 18 credits taken for the approved minor study can meet the requirements for the minor, students may apply to graduate with a specific minor, in addition to their Major. Otherwise, students will graduate with a major only.

The award title of the minor programme will not be reflected on the parchment. It will be recorded in the Transcript of Studies.

Part 4: Programme Leadership and Management

4.1 Administrative Host Department

The administrative host department will provide comprehensive support to the programme, acting as a hub for student interaction, the main source of programme information, and fostering communication between the Programme Leader and students.

4.2 Programme Leader

A programme leader will be appointed to provide the programme's academic and organisational leadership.

4.3 Programme Committee

A Programme Committee will be established to manage this minor programme. It will exercise the overall academic and operational responsibility for the programme and its development within defined policies, procedures, and regulations. The Programme Committee will meet at least twice a year, and additionally at the request of the Chairman or one-third of its membership or the Chairman of the School/College Board. If deemed necessary, subgroups can be set up under the Programme Committee to deliberate on specific programme matters. It will meet approximately twice a year.

Part 5: Subject Syllabi

The subject offering departments, in consultation with the administrative host department, reserve the right to revise and update the syllabi whenever appropriate and deemed necessary.