

Ph.D. Degree Programme - Computational Social Science Concentration (Full-time)

Study Scheme Applicable to students admitted in 2023-24

1. Coursework Requirement

- (a) Excluding COMM 8200, SOSC 7010 and SOSC 7020, students are required to complete a minimum of 24 units of courses for graduation.

<u>Required Courses</u>		18 units
COMM 5220	Communication Theories I	
COMM 5250	Writing for Research and Publication	
COMM 5320	Quantitative Communication Research	
COMM 6220 [#]	Communication Theories II	
COMM 6320	Digital Research	
SOCI 6002	Advanced Methodology	

<u>Elective Courses [Choose at least two*]</u>		6 units
CMSC 5707	Advanced Topics in Artificial Intelligence	
CMSC 5733	Social Computing	
CMSC 5734	Network Science	
CSCI 5150	Machine Learning Algorithms and Applications	
CSCI 5350	Advanced Topics in Game Theory	
CSCI 5640	Natural Language Processing	
ECON 5150	Applied Econometrics	
ECON 5180	Economics and Data Science	
ENGG 5103	Techniques for Data Mining	
ENGG 5108	Big Data Analytics	
GISM 5065	Geospatial Big Data for Smart Urban Planning	
MMAT 5370	Social and Economic Networks: Theory, Modelling and Computations	

Students must achieve a minimum grade of C in the above elective courses. Students who have taken similar required or elective courses listed in the study scheme may apply for course/unit exemption. A maximum of 12 units of unit exemption can be granted upon approval of the Division Head.

Total: 24 units

[#] Students who have taken COMM 5120 should apply for course/unit exemption.

^{*} One elective course must be taken within two years from the admission date.

(b) Seminar Courses

Students are required to take SOSC 7010 Seminar (I): Computational Social Science every term in the 2nd year. Students are required to take SOSC 7020 Seminar (II): Computational Social Science every term from the 1st term of the 3rd year for up to four terms.

(c) COMM 8200 Thesis in Progress

Students are required to take COMM 8200 every term starting from the time of admission, throughout the preparation of thesis, until its completion. Students will gain the units each time they pass COMM 8200.

2. Qualifying Examination

(a) Qualifying examination

Advancement to Ph.D. candidature is conditional upon passing qualifying examinations. The examinations consist of two parts. Part I is on Theory and Quantitative Methodology, Part II is a Proposal Defense.

- (b) Every year we have a fixed timetable for Ph.D. students to take qualifying examinations. The examinations time cannot be changed unless for specific reasons.

- (c) A student will be discontinued from studies if s/he cannot pass the qualifying examination within 36 months. However, in special cases, the Graduate Council may on the recommendation of the Graduate Division concerned grant a student extension beyond the above maximum period.

3. Study plan

Students must submit a study plan, with the advice of the supervisor, for the approval of the Graduate Panel of

the Board of School of Journalism and Communication within six months after registration. The Division Head will help the student search for a supervisor within the first semester of study.

4. Thesis

- (a) Thesis proposal
Students must submit a thesis proposal by the end of the 1st term of the 4th year. Students are NOT allowed to change their thesis topic after the proposal defense. (unless under special circumstances)
- (b) Thesis supervisors
Students are NOT encouraged to change their supervisors after the 2nd academic year begins. (unless under special circumstances)
- (c) Students are required to submit a research thesis and pass an oral examination for graduation.
- (d) Thesis Monitoring Courses is listed below: COMM 8200.

5. Other Requirements

- (a) Students must fulfill the Term Assessment Requirement of the Graduate School. For details, please refer to Section 13.0 "Unsatisfactory Performance and Discontinuation of Studies" of the General Regulations Governing Postgraduate Studies which can be accessed from the Graduate School Homepage: <http://www.gs.cuhk.edu.hk>.
- (b) A student must achieve a cumulative grade point average (GPA) of at least 2.0 in order to fulfill the graduation requirement, unless special approval is granted by the Graduate Council.
- (c) Complete an Improving Postgraduate Learning (IPL) module on "Observing Intellectual Property and Copyright Law during Research". This will be an online module and relevant information can be accessed from the website: <http://www.cuhk.edu.hk/clear/prodev/ipl.html>.
- (d) Complete an IPL module on "Research Data Management Training". This is an online module and relevant information can be accessed from the website: <https://www.cuhk.edu.hk/clear/download/IPL-Researchskills.pdf>. Students are required to complete and pass the module in their first year of studies, with effect from the 2022-23 intake.
- (e) Students are required to complete an online Research Ethics Training (RET) module on "Publication Ethics" offered by the Office of Research and Knowledge Transfer Services (ORKTS) and obtain a valid Publication Ethics Certificate for graduation. Relevant information can be accessed from the RET website at <https://www.research-ethics.cuhk.edu.hk/web/>.
- (f) Students should at least have one refereed international conference presentation that requires submission of full paper (e.g. Annual Conference of the International Communication Association, Annual Conference of the Association for Education in Journalism and Mass Communication, National Communication Association Annual Convention or other equivalent conferences) and one single-authored or coauthored refereed Chinese or English-language journal article of any tier accepted/published before their graduation.

6. Unsatisfactory Performance

A student whose thesis/portfolio is not passed but re-submission is allowed and re-examination is required must re-write and re-submit the thesis/portfolio to the satisfaction of the Thesis/Assessment Committee before being recommended for the award of degree. Such re-submission must be made within twelve months from the date of the official notification of the result of the first examination and within the student's prescribed maximum period of study. Only one re-submission of thesis/portfolio is allowed.

7. Additional Requirements

PhD students in Computational Social Science concentration must fulfill additional requirements listed below. Failure to do so, students will be put on academic probation.

- (a) Completion of the equivalent of a publishable research paper, a first or solo authored manuscript by the 1st term of the 3rd year, accepted by the supervisor and endorsed by the Graduate Division Head.
- (b) Completion of a Computational Social Science concentration examination by the end of the 3rd academic year. This examination is similar to the qualifying examination, except that its focus has to be complementary to the qualifying examination and the topic should be approved by the student's supervisor. The procedure, format and evaluation will be similar to a qualifying examination.

8. Remarks

With the approval of the Division Head, in lieu of the courses on the elective course list, students can take other courses within and/or outside the Division of Communication.

修讀辦法
2023 至 2024 年度入學學生適用

一、課程要求

- (1) 除了 COMM 8200, SOSC 7010 和 SOSC 7020 外，學生須至少修畢 24 學分方可畢業。

必修科目：		18 學分
COMM 5220	傳播理論 (一)	
COMM 5250	研究寫作與出版	
COMM 5320	定量傳播研究	
COMM 6220 [#]	傳播理論 (二)	
COMM 6320	數碼研究	
SOCI 6002	方法論進階	

選修科目：[最少兩個*]		6 學分
CMSC 5707	人工智能高級專題	
CMSC 5733	社交計算	
CMSC 5734	網絡科學	
CSCI 5150	機器學習算法與應用	
CSCI 5350	博弈論高級專題	
CSCI 5640	自然語言處理	
ECON 5150	應用計量經濟學	
ECON 5180	經濟學與大數據	
ENGG 5103	數據挖掘技術	
ENGG 5108	大數據分析	
GISM 5065	空間大數據在智慧城市規劃中的應用	
MMAT 5370	社會和經濟網絡：理論、建模和計算	

研究生所修讀的選修科目成績必須達到丙級或以上。研究生若曾修讀相關的必修或選修科目，可向學部主任申請最多十二學分的學分豁免。

共 24 學分

曾修讀 COMM 5120 的學生，該向學部主任申請科目豁免。

* 必須於入學後兩年內修畢其中一門選修科目。

(2) 研討科目

哲學博士生必須在第二學年每學期修讀 SOSC 7010 研討會 (一)：計算社會科學課程。另外，哲學博士生必須在第三學年的第一學期起每學期修讀 SOSC 7020 研討會 (二)：計算社會科學課程，最多修讀四學期。

(3) COMM 8200 論文撰寫

哲學博士生在完成論文前，必須每學期修讀 COMM 8200 論文撰寫課程，每次修讀而獲及格成績，均可獲得學分。

二、資格考試

(1) 資格考試

研究生通過資格考試後，即獲得博士候選人資格。資格考試分為二部份：第一部份為理論及定量方法；第二部份為論文開題報告。

- (2) 學院會在每一年訂立資格考試的時間表，除非有特別理由，否則資格考試時間不可更改。

- (3) 研究生必須於 36 個月內通過資格考試，否則將被退學。研究院院務會只會在特殊情況下，且經相關學部通過後，批准學生的延期申請。

三、研讀計劃

研究生須於入學後六個月內，經論文導師指導完成研讀計劃，並提交予學部通過。在入學第一個學期，學部主任會協助同學選定論文導師。

四、 論文

- (1) 除非特殊情況，否則研究生在通過論文大綱的口試後，不得再更改論文主題。研究生須於第四學年的第一學期提交論文大綱。
- (2) 除非特殊情況，否則學部不鼓勵學生在第二學年或之後更換論文導師。
- (3) 研究生必須如期提交論文及通過口試，方可畢業。
- (4) COMM 8200 為輔導研究生撰寫論文的課程。

五、 其他要求

- (1) 學生必須滿足研究院的學期評估要求。詳情可參閱「研究生總學則」(General Regulations Governing Postgraduate Studies)第 13 條「成績低劣及退學」(Unsatisfactory Performance and Discontinuation of Studies)，此學則已上載於研究院網頁：<https://www.gs.cuhk.edu.hk/>。
- (2) 除非獲研究院院務會批准之特殊情況，研究生的累計平均積點須達到 2.0 或以上方可畢業。
- (3) 完成“Observing Intellectual Property and Copyright Law during Research”中的“Improving Postgraduate Learning (IPL)”單元。此單元及相關資訊：<http://www.cuhk.edu.hk/clear/prodev/ipl.html>。
- (4) 在 2022-23 年度或之後入學的研究生，均需要在第一年完成及通過“Research Data Management Training”中的“Improving Postgraduate Learning (IPL)”單元。此單元及相關資訊：<https://www.cuhk.edu.hk/clear/download/IPL-Researchskills.pdf>。
- (5) 完成“Research Ethics Training (RET)”中的“Publication Ethics”單元，並獲取相關證書，詳情可瀏覽網址：<https://www.research-ethics.cuhk.edu.hk/web/>。
- (6) 畢業前，學生必須於最少一個審稿制度而需要呈交全文的國際會議(例如 Annual Conference of the International Communication Association, Annual Conference of the Association for Education in Journalism and Mass Communication, National Communication Association Annual Convention 或其他同等水平的會議)中報告論文，以及出版(或已接納刊登)一份以中文或英文撰寫的獨著或合著論文。

六、 論文不獲通過

若同學的論文不獲通過，他／她必須在接獲通知的 12 個月內（而且必須是大學指定的最長修業期內），修改並重新提交論文予論文委員會評核，獲得通過後，方可畢業。每位同學只能重交論文一次。

七、 附加要求

計算社會科學專業的博士生必須滿足以下額外要求。否則，學生將被列為試讀生。

- (1) 在第三學年的第一學期或之前，以第一作者身份或單獨完成一份具發表水平的研究論文，並獲得論文導師及學部主任認可。
- (2) 在第三學年結束前完成計算社會科學專業考試。該考試與資格考試相似，其重點旨在補充資格考試的內容，題目必須獲得論文導師的批准。考試程序、形式和評估方法與資格考試相似。

八、 備註

如獲學部主任批准，哲學博士生可選讀學部以內/以外的其他科目，以取代選修科目。