2025 Fall CSE RPG Orientation
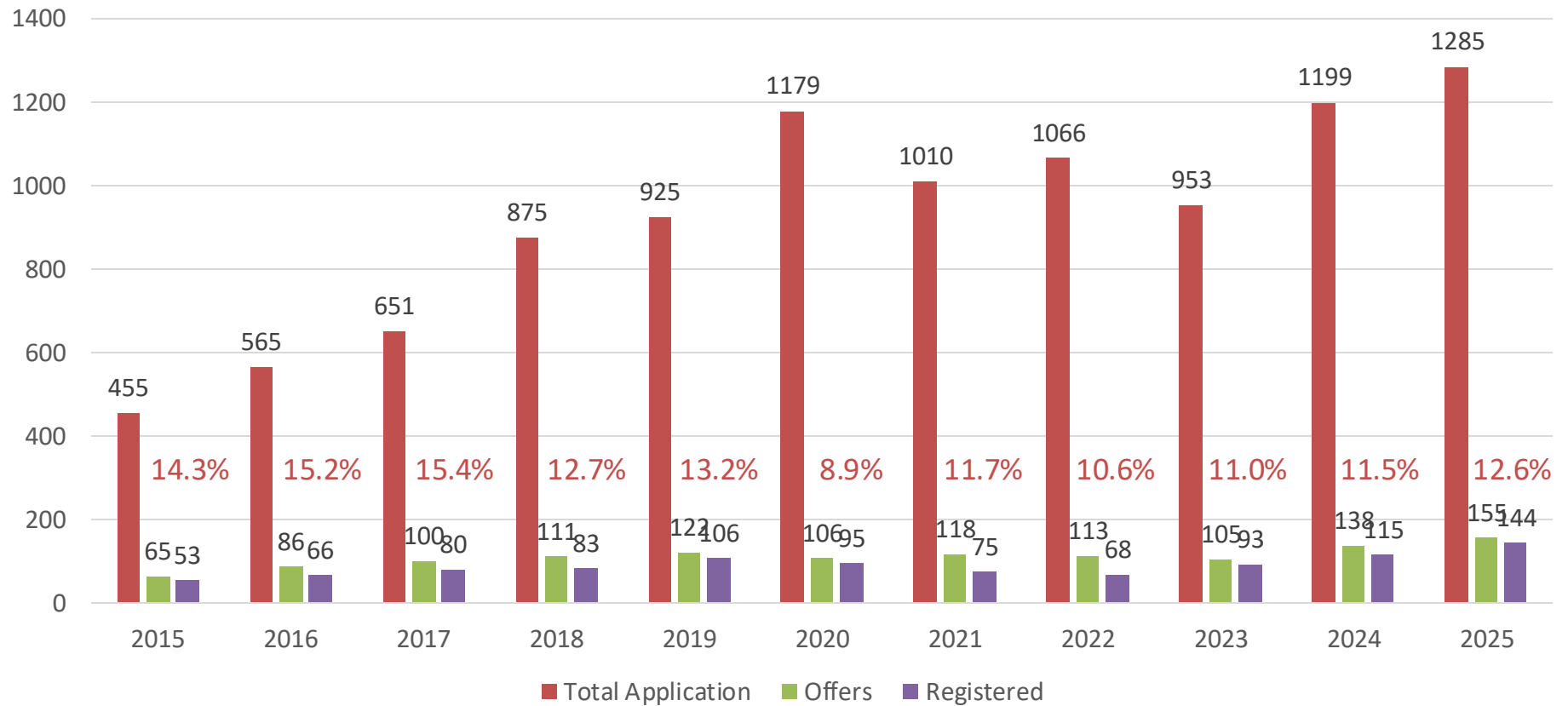
Department of Computer Science and Engineering
Sept 8, 2025

Agenda for Today

- Welcome

- Who We Are
- CSE PhD/MPhil Program Requirements
- TA Duty

- CS System Introduction
- CSE Communication Tutor Introduction

- Acting Department Head's Closing Remark

Congratulations!

Admission Statistics

Year	Total Application	Offers	Registered	%
2015	455	65	53	14.3%
2016	565	86	66	15.2%
2017	651	100	80	15.4%
2018	875	111	83	12.7%
2019	925	122	106	13.2%
2020	1179	106	95	8.9%
2021	1010	118	75	11.7%
2022	1066	113	68	10.6%
2023	953	105	93	11.0%
2024	1199	138	115	11.5%
2025	1285	155	144	12.6%

Total Application ■ Offers ■ Registered

Who We Are

- Admin Office
- PG Committee
- CS System
- TAC (PG student representatives)

- Need help? Send email to
  - pgadmin@cse.ust.hk (PG Admin Office)
  - cssystem@cse.ust.hk (CS System)
  - cstac@cse.ust.hk (TACs)

PG Admin Office Staff

- Ms. Connie Lau cswclau@cse.ust.hk
  - Admission, Enrollment, Studentship, TA, PG Office
- Ms. Athena Sit csathena@cse.ust.hk
  - Course Requirements, Final Thesis Defense, Graduation
- Mr. Dion Liu csctliu@cse.ust.hk
  - Admission, PQE, Proposal
- Ms. Sharon Chiu sharonchiu@cse.ust.hk
  - Course registration
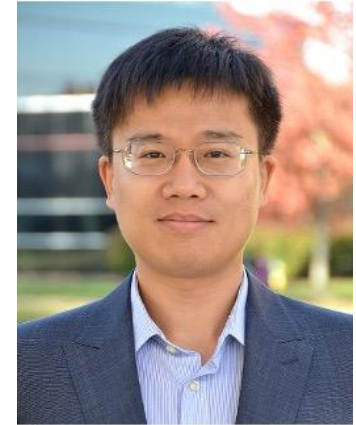- Ms. Lily Chan cslily@cse.ust.hk
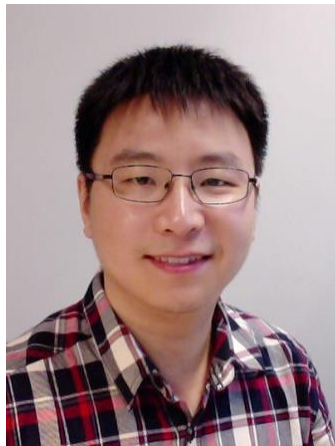 - Seminars (COMP 6911 & 6912)

CSE PG Committee

Shuai Wang
PG Coordinator/Chair

Pedro SANDER
Associate PG Coordinator

Yangqiu Song

Wei WANG

Hao Chen

Yi Ren Fung

Teaching Assistant Coordinators (TACs)

Yanbo Dai
(@ydai851)

Ruixuan Huang
(@rhuangbi)

Kunpeng Zhang
(@kzhangcl)

Liwen Wang
(@lwanged)

Zhantong Xue
(@zxueai)

7

Office Space

- It's very hard to accommodate all new PGs.
  - We have really tried our very best…

- Later this week, Athena will send out an email, asking new PGs to "draw lots" for fixed desks.
  - If you see your seniors who occupied a fixed desk but never used it, it's more proper for him/her to release it.
  - You can let me (research lab space chair) know such issues and we will handle it.

Regarding desk space allocation, please note that there are 2 options available:

1) A fixed desk space at RPg Hub (1001, 1007, 1008, LG4002, LG4003) or CSE Labs (rooms other than 1001, 1007, 1008, LG4002, LG4003)
2) Shared Desk space at Communal Lab (Rooms 4208 / 4209)

CSE RPG Program Requirements

See PG intranet:

https://cse.hkust.edu.hk/pg/hkust_only/

(This PPT will also be shared there)

1. MPhil/PhD Course Requirements
2. PhD Qualifying Exam
3. PhD Thesis Proposal
4. MPhil/PhD Thesis Defense

Also at RPG Handbook:

https://fytgs.hkust.edu.hk/academics/Academic-Regulations-and-Requirements/Handbook-for-Research-Postgraduate-Studies/preface

MPhil Course Requirements

- LANG 5000 if you fail ELPA*, for oral communication on campus
- LANG 5005, for academic study and research
- PDEV 6800, for GTA training
- CSE Seminar for 2 semesters (COMP6911+COMP6912)
  - Attend 7 (out of 12) seminars in two semesters, and sign the attendance sheet
- PDEV 6770 (1 credits)
- ENGG 6780 (1 credits) } Professional development courses

- 4 PG courses (12 credits)
  - Covering at least 3 areas
  - GGA must be at least 2.85
  - 7 credits must be earned at HKUST

*English Language Proficiency Assessment

PhD Course Requirements

- LANG 5000 if you fail ELPA
- LANG 5005
- PDEV 6800
- CSE Seminar for 2 semesters (COMP6911+COMP6912)
  - Attend 7 (out of 12) seminars in the Fall and Spring semesters, and sign the attendance sheet
- PDEV 6770 (1 credits)
- ENGG 6780 (1 credits)

- 5 PG courses (15 credits)
  - Covering at least 3 areas and 9 credits must be earned at HKUST
  - GGA must be at least 2.85

https://prog-crs.hkust.edu.hk/pgprog/2024-25/mphil-phd-cse

PhD Course Requirements

- \>= 3 PG-core courses (5000-level) covering 3 different areas (see next slide)

- Grade >= B for each of the 3 PG-core courses

- \>= 2 PG-core courses in the first year

- \>= 3 PG-core courses in the first **two** years

- \>= 1 PG course outside CSE (SENG requirement)

https://cse.hkust.edu.hk/pg/programs/pgcore/

Artificial Intelligence (AI)

- COMP 5211: Advanced Artificial Intelligence
- COMP 5212: Machine Learning
- COMP 5213: Introduction to Bayesian Networks
- COMP 5331: Knowledge Discovery in Databases (cross listed with Database*)

Data, Knowledge and Information Management (DB)

- COMP 5311: Database Architecture and Implementation
- COMP 5331: Knowledge Discovery in Databases (cross listed with Artificial Intelligence*)

Networking and Computer Systems (NE)

- COMP 5621: Computer Networks
- COMP 5622: Advanced Computer Communications and Networking

Software Engineering and Programming Languages (SEPL)

- COMP 5111: Fundamentals of Software Analysis
- COMP 5112: Parallel Programming
- COMP 5631: Cryptography and Security

Theoretical Computer Science (TH)

- COMP 5711: Introduction to Advanced Algorithmic Techniques
- COMP 5712: Introduction to Combinatorial Optimization
- COMP 5713: Computational Geometry

Vision and Graphics (VG)

- COMP 5411: Advanced Computer Graphics
- COMP 5421: Computer Vision

Outside-CSE Course

https://cse.hkust.edu.hk/pg/courses/non-comp/

- Courses co-listed with CSE do not count
- LANG courses do not count
- SHSS (Humanities and Social Science), SBM (Business and Management), SSCI (Science) courses may count
  - It is up to SENG whether the non-SENG courses will count or not

- MSc courses in programs offered (or jointly offered) by CSE do not count
  - MSc-IT
  - MSc-BDT
  - MSc-AI

Please note that this is a SENG requirement, and one would need to provide a specific course + course information after taking the course to seek SENG's consideration.

Outside-CSE Course (Cont.)

https://cse.hkust.edu.hk/pg/courses/non-comp/

- RE: the School Requirements, please note that the 3 credits may be satisfied by courses from other Schools upon approval. As the School Requirements aim to help students gain a wider exposure to multidisciplinary areas, and attain all-rounded learning by **broadening their knowledge base**, the course to be selected by the student should go in line with this rationale.

Justify 1) how it extends your knowledge, 2) why that cannot be offered by existing CSE courses

- The student may use the course from GZ campus to fulfil the program requirements, as long as it is in compliance with the CSE curriculum, based on the guiding principles just mentioned

Non-COMP PG Course List (under SENG)

PhD students are required to take at least a 3-credit course at 5000-level or above outside their programs offered by the School of Engineering (SENG).

The 3 credits may be satisfied by courses from other Schools upon approval. When you complete the course from other Schools, you have to submit the departmental request form and GR-27 form with endorsement from your supervisor(s) to CSE admin Office. The forms will be reviewed by the Department and SENG, and the final approval decision will be made by SENG.

In addition, the courses co-listed with CSE department and LANG courses should not be used to fulfill the School's requirements.

Student may use the PG course from GZ campus to fulfill the program requirements, as long as it is also in compliance with the CSE curriculum. However, kindly note that course co-listed with CSE should not be used by CSE students to fulfill the School Requirements, unless there are strong justifications subject to the approval by related authority.

The 3-credit or above non-COMP courses at 5000-level listed below are generally offered by other departments in SENG. The courses might not be offered in every Fall and Spring terms. You are advised to check the official timetable in ARO's webpage before the term commences. Should you have any questions, please send your enquiry to pgadmin@cse.ust.hk.

Filter Course [_____]   Expand all

> CENG 5100 - Advanced Reaction Engineering [3-0-0:3]   ❯

> CENG 5210 - Advanced Separation Processes [3-0-0:3]   ❯

> CENG 5220 - Numerical Methods for Chemical Engineers [3-0-0:3]   ❯

> CENG 5230 - Advanced Control and Data Science [3-0-0:3]   ❯

> CENG 5300 - Advanced Chemical Engineering Thermodynamics [3-0-0:3]   ❯

https://cse.hkust.edu.hk/pg/courses/non-comp/

16

Credit Transfer and Area Waiver

- At most 6 credits can be transferred from outside HKUST CSE
  - Transferred course must be at PG-level
  - If that PG course was taken during your UG study, that course must NOT have been used to satisfy the UG degree requirement
  - Applications must be made to students' department during their **first term after admission**

- No limit on area waiver
  - But the course taken must match one of the PG-core courses here

https://fytgs.hkust.edu.hk/academics/Academic-Regulations-and-Requirements/Handbook-for-Research-Postgraduate-Studies/course-substitution-and-credit-transfer

Pre-requisite UG courses for PhD

- Complete 2 out of 3 prerequisite UG courses for CSE PhD
  - Operating System (COMP3511)
  - Algorithms (COMP3711)
  - Theory of Computation (COMP3721)
- Grade >= B in the 2 courses you take
- Can apply for waiving
  - Hand in form to PGAdmin
  - Need to attach syllabus unless the course title matches above
  - COMP3511 handled by Prof. Bo Li & Prof. Wei Wang & Prof. Mo Li
    COMP3711 by Prof. Siu-Wing Cheng
    COMP3721 by Prof. Nevin Zhang

https://cse.hkust.edu.hk/pg/forms/

What if Courses are all full?

- PG courses typical have limited seats
  - Quota for CSE 5000-level courses: 60
  - Quota for ECE 5000-level PG courses: 30
  - Quota for CIVIL 5000-level PG courses: 32
- So you need to be early birds!
- What to do if you are late:
  - Stay on the waiting list, someone may drop
  - Take courses from outside-CSE department

PhD Qualifying Exam

- After passing 2 prerequisite UG courses
- **Must be taken within the first 22 months of study (Before your second summer)**
- At most 2 attempts
- Request of extension requires special approval with a strong justification
- One written survey and a public oral exam based on the survey
- You officially become a "PhD candidate" after passing the qualifying exam

PhD Qualifying Exam

- The written survey should normally be approximately 25 pages long, and the oral presentation should normally take approximately 30 minutes.

- The PQE committee must be set up at least **6** weeks before the date of the qualifying examination. The committee must consist of the supervisor(s) and a minimum of **2 additional** faculty members.

Thesis Proposal and Defense

Worry about them later…
(More info available in PG intranet)

Thesis Research Guidelines by FYTGS

- Guide on Thesis Supervision
- Guidelines on Thesis Preparation
- Guidelines on MPhil Thesis Examination Committees
- Guidelines on PhD Thesis Examination Committees
- Guidelines for Scheduling, Preparing for and Executing MPhil Thesis Examinations
- Guidelines for Scheduling, Preparing for and Executing PhD Thesis Examinations
- Guidelines on Conducting MPhil and PhD Thesis Examinations

https://cse.hkust.edu.hk/pg/hkust_only/

PG Studentship (PGS)

- Unless you are self-financed, you are paid 12-month PGS/HKPF no matter whether you are an RA or TA

- PGS: your advisor + (maybe) university

- You are now PG students, fully devoted to research:
  - Apply for leave to your advisor if you are an RA
  - Apply for leave to both your advisor and the instructor of the course if you are a TA

Teaching Assistant (TA) Duty

- Department Policy: **Once-per-year on-campus** for **ALL** in-time RPG students
  - Applies to HKPFS and Huawei Fellow students
- That means, PhDs have to TA 4 times and MPhils have to TA twice, _at least_.
- ~~If no PGS from university, your advisor decides whether you do TA or RA.~~ (somewhat confusing, ignore for now).
- In order to be TA, you must take PDEV6800 (unless if you are HKUST MPhil→PhD student)

Teaching Assistant (TA) Duty (Cont.)

- Due to the increasing COMP course demands, we need more TAs than before

- Treat your TA duty serious! Unsatisfactory TA performance reported by students/instructors will cause PGS suspension!

- Please DO communicate with your advisor in advance about your plan of taking (study/internship…) leave and inform the department (Connie) before the TA assignment exercises.

- Exempt from TAship due to leave requires strong justification and approval from your supervisor and department.
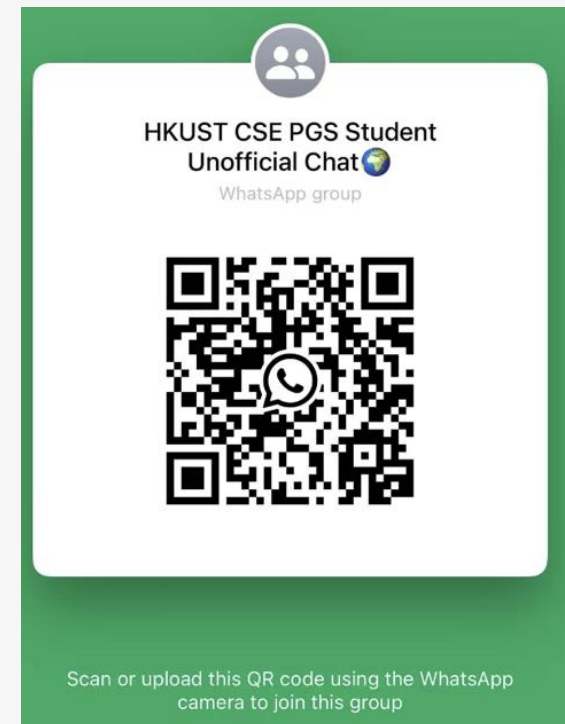
Some Tips for TA Work

- Read the guidelines at: https://cse.hkust.edu.hk/pg/ta/guideline/

1. Please put a tick next to the correct answers and a cross next to the incorrect ones. Don't leave any answers unmarked, because students might think you forgot to check their work. You can also circle the wrong answers and add short comments about them.

2. You can give partial credit for answers that are partly correct, but don't give full marks for partly correct or incorrect answers.

3. Please mark consistently. If students have similar answers, they should get the same marks. => fairness...

4. If you come across any special situations where the marking is different from the usual rules, note those down on the marking sheet so you can handle similar cases the same way in the future.

5. Also, please write down the scores you give to each student.

Other References

- **Academic Regulations Governing Postgraduate Studies 2025-26**
  - https://registry.hkust.edu.hk/resource-library/academic-regulations-governing-pg-studies

- **Postgraduate Program & Course Catalog**
  - http://prog-crs.ust.hk/pg

- **Handbook for Research Postgraduate Studies 2025-26**
  - https://fytgs.hkust.edu.hk/academics/Academic-Regulations-and-Requirements/Handbook-for-Research-Postgraduate-Studies/preface

Unofficial Group Chats

- All 2025/2026 CSE freshmen are welcome! Invite your friends if they are not here!

- Feel free to connect with your schoolmates, help each other, and share your life & thoughts there. TACs are also in the group to answer all types of questions you may have.

- Official affairs will still be announced via your *cse.ust.hk* email. => it's your responsibility to check emails on time.

- Discord: https://discord.gg/F8eCEyhx

- WhatsApp: https://chat.whatsapp.com/JV6Faa7d3B5FUAiGoOEsV7

HKUST CSE PGS Student Unofficial Chat🌐
WhatsApp group

Scan or upload this QR code using the WhatsApp camera to join this group

Introduction by CS System

Introduction by Communication Tutor

Closing Remark by Department Head

Thanks!

Work hard and enjoy your new life with us in HKUST!