

# BEng in Computer Science

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2023/24 Briefing

香港大學計算機科學系



THE UNIVERSITY OF HONG KONG

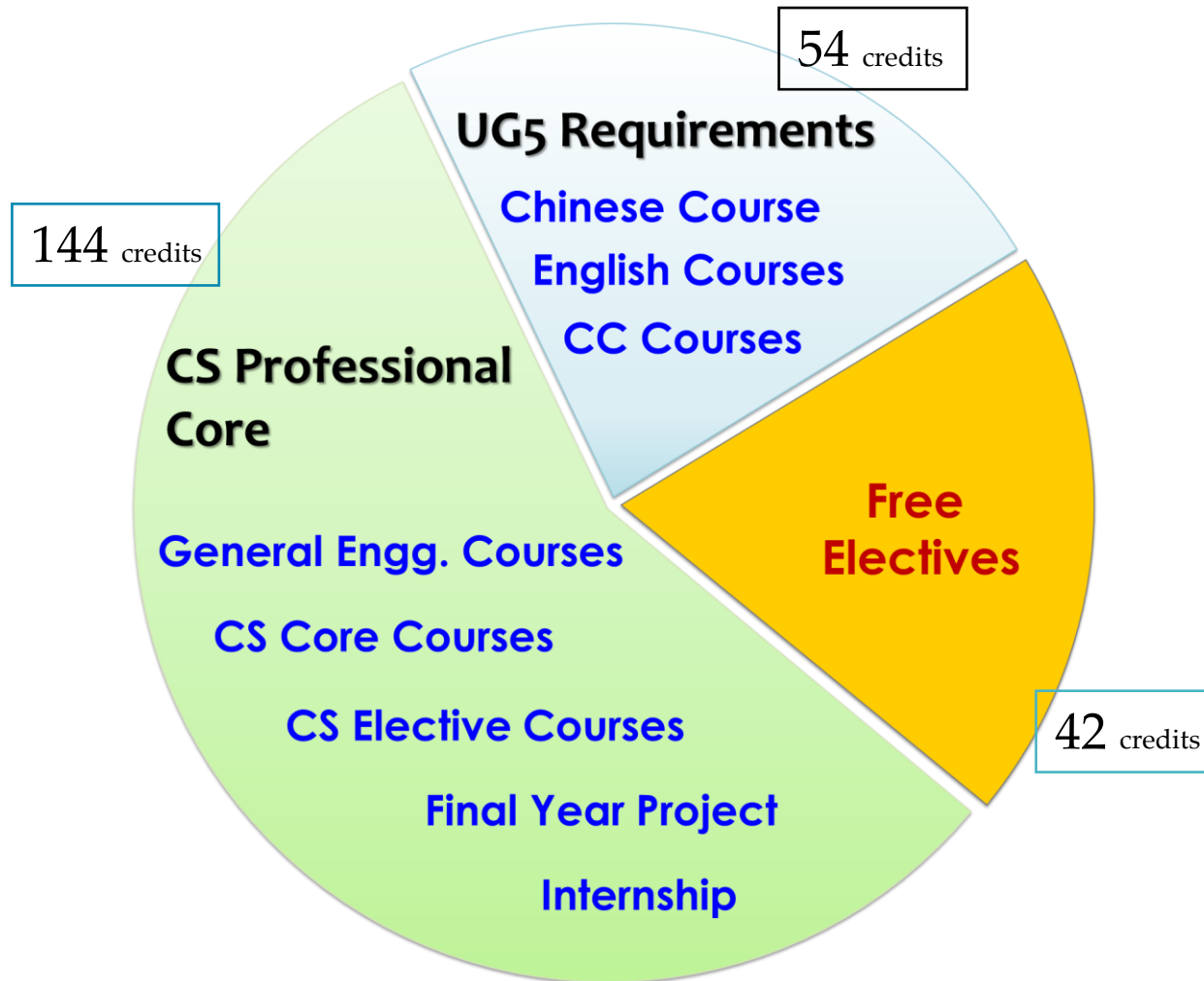
DEPARTMENT OF  
**COMPUTER SCIENCE**

# What is Computer Science?

- Computer science is **not just about programming** and studying the computers, but rather it is about **problem solving** – *the study of algorithms and information representation to solve real-life problems.*

“Almost every major challenge facing our world is turning to computing for a solution, from conquering disease to eliminating hunger, from improving education to protecting the environment.” by Prof. Eric Roberts of Stanford University, the co-Chair of ACM’s Education Board at 2007

# Programme Structure



## Flexibility

BEng(CompSc)

BEng(CompSc) + minor

$FE \geq 36$  credits

BEng(CompSc) + 2 minors

$72 \text{ credits} \leq FE < 90$  credits

BEng(CompSc)+ 2nd major

$72 \text{ credits} \leq FE < 90$  credits

(GEBP)

BEng(CompSc)+ BBA

$FE \geq 54$  credits

# Minors & 2<sup>nd</sup> majors

## Minor

- Any minor **except**
  - Minor in CS & DSE

## 2<sup>nd</sup> Major

- Any major **except**
  - Major in CS
  - A major with a total loading of 96 credits
    - E.g., Science Majors, QFin

Check this out: Academic Advising Office (<http://aao.hku.hk/>)

# Computer Science Focus Areas

## Theoretical Computer Science

Compiler, Functional programming, Quantum computing, Game theory, Cryptography, Advanced algorithm

## AI & Robotics

AI, Machine learning, Deep learning, Computer vision, Robotics, Hands-on AI

## Big Data Analytics

Statistical learning, AI, Machine learning, Adv DB, Data Mining, Bioinformatics

## Cyber Security

Cyber security, Cryptography, Cyber attack and defense, Digital forensics

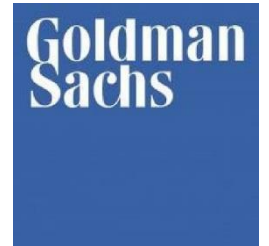
## Financial Computing

Blockchain, Crypto-currency, E-payment, Ecommerce, Web technologies, Data mining

## Systems & Networking

Computer architecture, Web technologies, Mobile app design, Distributed computing, Scientific computing, Software systems

# Internship



HONG KONG MONETARY AUTHORITY  
香港金融管理局



# FYP Project Awards

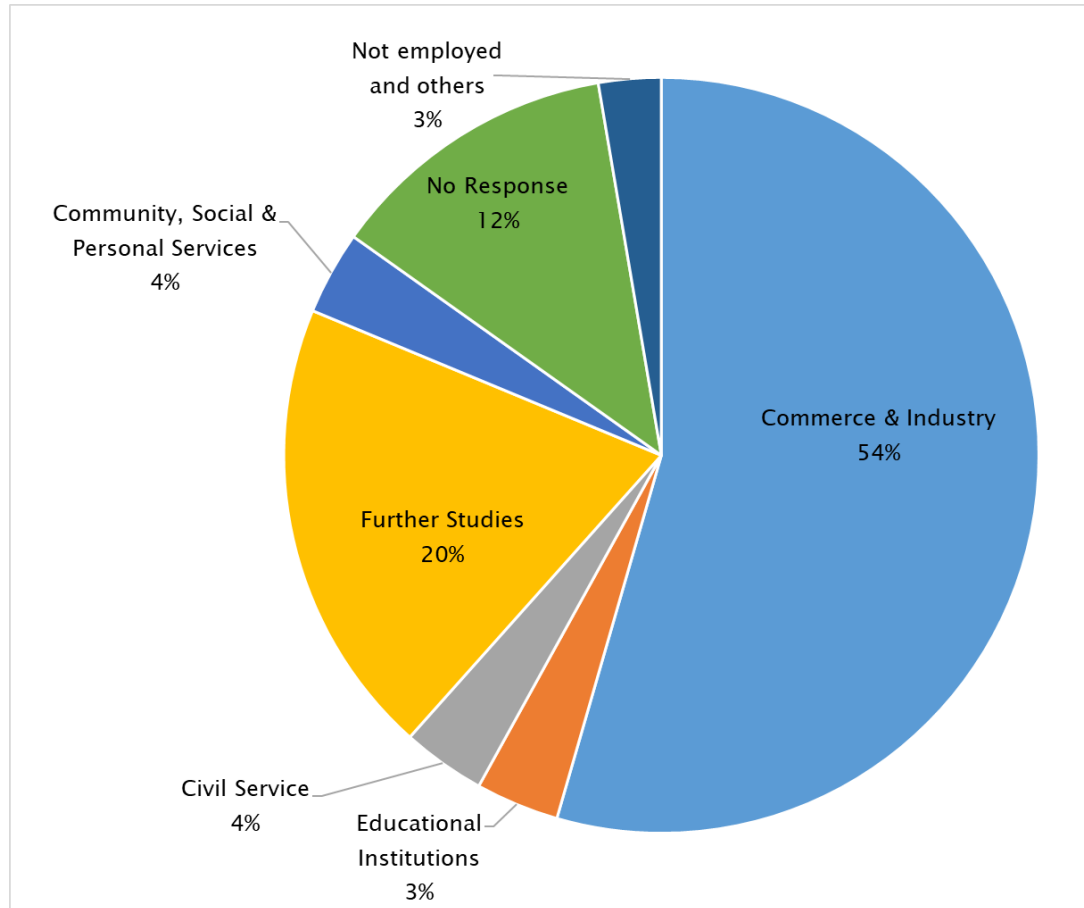


2nd runner-up of 2022 Esri Young Scholars Award - Group Application

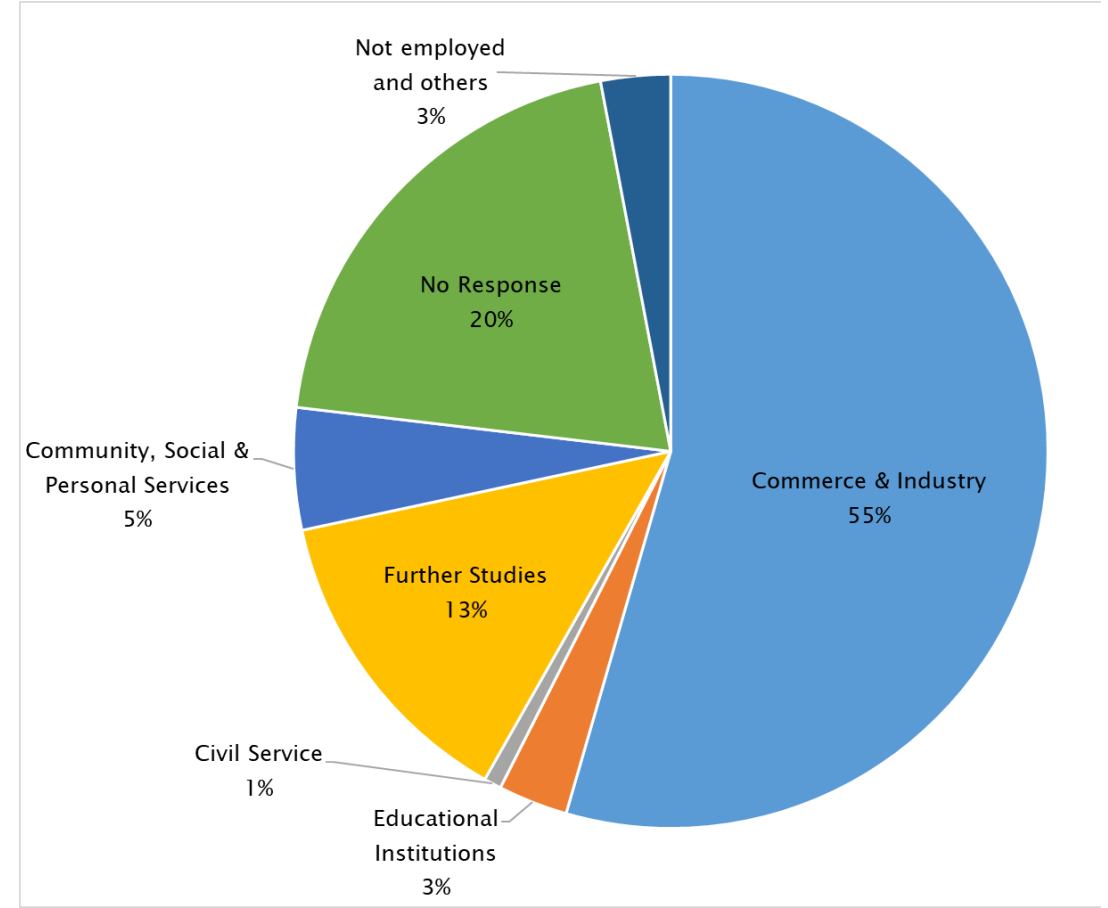


CS FYP Won Silver Award

# Career – Graduate Statistics



Where did our 2021 graduates go?

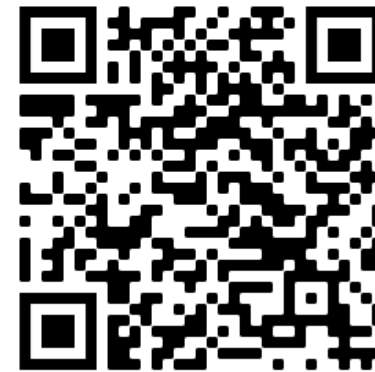


Where did our 2022 graduates go?



# Further information

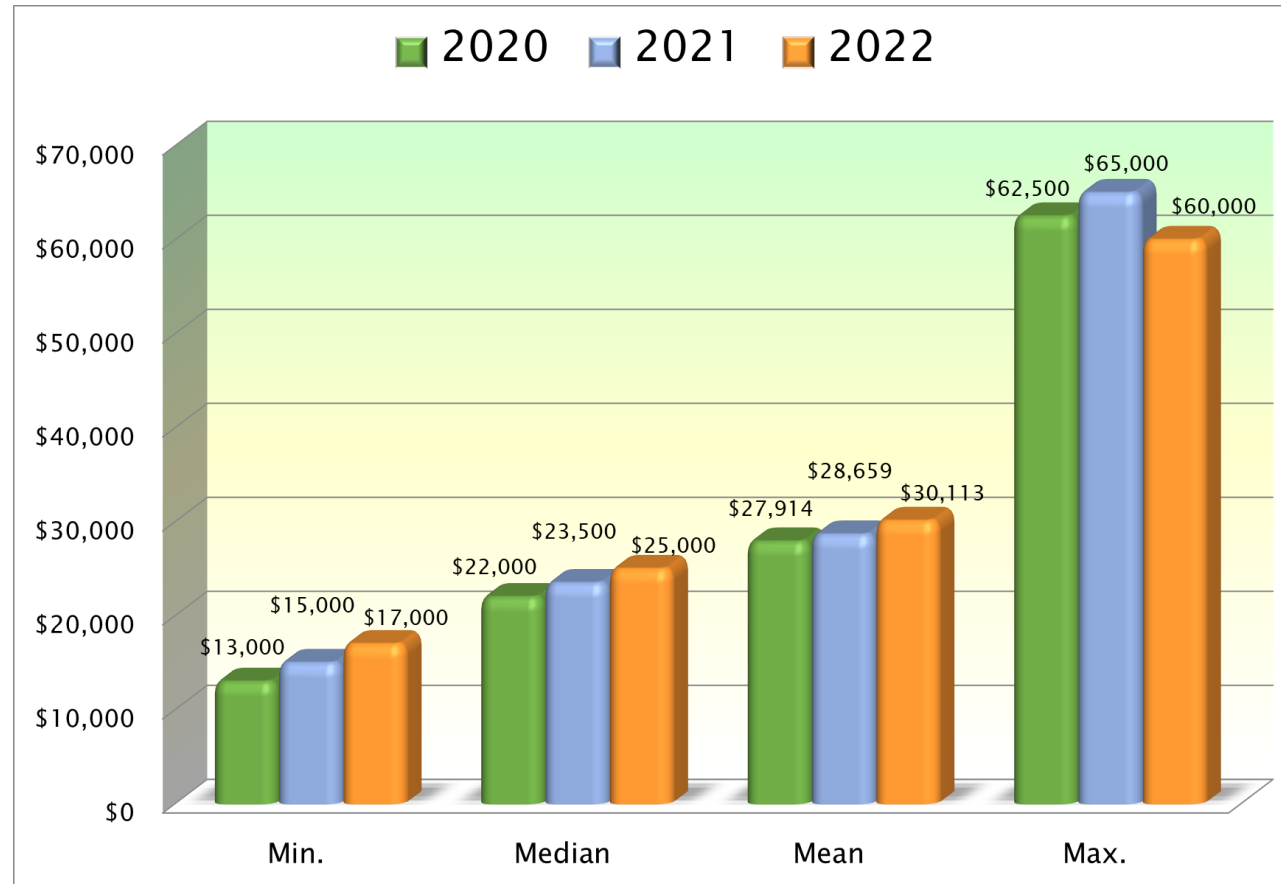
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Dr. Anthony Tam ([atctam@cs.hku.hk](mailto:atctam@cs.hku.hk)).
- Computer Science program: <http://www.cs.hku.hk/programme/>
- To download this briefing note and study plans:  
<https://www.cs.hku.hk/programmes/beng-compssc/academic-advising>
- Or access this web page via the QR code





# **More Information**

# Career – Graduate Statistics



Basic Salary of HKUCS Graduates

# Career – Graduate Statistics

## Positions

	IT-related positions	Others
2021	97%	3%
2022	90%	10%
Examples	IT/Data/Technical/Technology Analyst IT Officer/Specialist/Consultant Programmer/Developer/Software Engineer IT/Cloud/System Engineer Android/Game/Mobile App Developer Blockchain /Smart Contract Engineer UX Designer & Developer Web/Full Stack Developer Quantitative Researcher	Graduate/Management Trainee Business Development Manager Financial Consultant Officer Teacher

# Career – Graduate Statistics

## Companies

	IT/Tech/Engg	Finance/Banking	Others
2021	50%	35%	15%
2022	47%	31%	22%
Examples	Accenture Alibaba Bloomberg ByteDance CLP Power HK ESRI GoGoVan Google Huawei IBM China/Hong Kong Microsoft OOCL Tencent	Bank of America Merrill Lynch BNP Paribas Credit Suisse Group AG Deloitte Touche Tohmatsu Goldman Sachs (Asia) LLC KPMG Morgan Stanley JP Morgan HSBC	HK Jockey Club Hospital Authority HK Economic Times Ltd Cathay Pacific Airways Limited OGCIO HKU Swire Group

# Career – Useful References

- Ten typical jobs graduates can do in IT:
  - <https://targetjobs.co.uk/career-sectors/it-and-technology/advice/286189-ten-typical-jobs-graduates-can-do-in-it>
- IT Career Paths
  - <https://www.itcareerfinder.com/it-careers.html>
- ACM Career and Job Center
  - <https://jobs.acm.org/>