BEng in 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

- CS Professional Core
  - General Engg. Courses
  - CS Core Courses
  - CS Elective Courses
  - Final Year Project
  - Internship

- UG5 Requirements
  - Chinese Course
  - English Courses
  - CC Courses

- Credits:
  - 144 credits
  - 54 credits
  - 42 credits

- 42 ≥ x ≥ 36

- Flexibility
  - BEng(CompSc)
  - BEng(CompSc) + minor
  - BEng(CompSc) + 2 minors
  - BEng(CompSc) + BBA
  - BEng(CompSc) + 2nd major

- Credit Range:
  - 72 ≤ x < 96

- 2 Minors
- 2nd Major
- Minor
- Free Electives
- Double Degree
Minors & 2\textsuperscript{nd} majors

Minor

• Any minor \textbf{except}
  – Minor in CS

2\textsuperscript{nd} Major

• Any major \textbf{except}
  – Major in CS
  – Major in Computing & Data Analytics
  – Major with a total loading of 96 credits
    • E.g., Science Majors

Check this out: Academic Advising Office (http://aaao.hku.hk/)
Sample Study Plans

- BEng(CompSc)
- BEng(CompSc) with Minor in Finance
- BEng(CompSc) with Minor in Information Systems
- BEng(CompSc) with Minor in Mathematics
- BEng(CompSc) with Minor in Risk Management
- BEng(CompSc) with Minor in Computational & Financial Mathematics
- BEng(CompSc) with Minor in Japanese Language
- BEng(CompSc) with Major in Finance
- BEng(CompSc) with 2nd Major in Information Systems

The samples serve as illustrative purpose. Beware of the pre-requisite and time-tabling issues. Students who opt for a 2nd Major or Minor are responsible for planning for their own course of studies.
Final Year Projects

- Research and development projects
- Industrial / community based projects
Internship
Career – 2016 Graduate Statistics

Where did our 2016 graduates go?

Basic Salary of HKUCS Graduates
## Career – Graduate Statistics

<table>
<thead>
<tr>
<th>Positions</th>
<th>IT-related positions</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>94%</td>
<td>6%</td>
</tr>
<tr>
<td>2015</td>
<td>85%</td>
<td>15%</td>
</tr>
<tr>
<td>Examples</td>
<td>Business/System/Technical/Technology Analyst Consultant/Application Consultant IT Officer/Specialist/Technician Programmer/Developer/Software Engineer IT Engineer/Assistant System Engineer Android/Game/Mobile App Developer Research Assistant Web Developer</td>
<td>Graduate Trainee Program Coordinator Exempt Non-Officer</td>
</tr>
</tbody>
</table>
## Career – Graduate Statistics

<table>
<thead>
<tr>
<th></th>
<th>IT/Tech/Engg</th>
<th>Finance/Banking</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>53%</td>
<td>30%</td>
<td>17%</td>
</tr>
<tr>
<td>2015</td>
<td>46%</td>
<td>42%</td>
<td>12%</td>
</tr>
</tbody>
</table>

### Examples
- Accenture
- Alibaba Group
- ASM Pacific Technology
- China Mobile
- Hutchison Asia Telecom
- IBM China/Hong Kong
- Jardine OneSolution
- NetEase, Inc.
- PCCW Solutions
- Sensetime HK
- Transaction Technologies
- Works Applications
- Bank of America
- Bank of Tokyo
- BNP Paribas
- CASH Financial Services
- Credit Suisse Group AG
- Deloitte Touche Tohmatsu
- Deutsche Bank AG
- Goldman Sachs (Asia) LLC
- JPMorgan Chase & Co.
- KPMG
- Manulife Financial
- Société Générale
- UBS AG
- Family Learning Association
- Shopping Plus Limited
- OGCIO HKU
Career

• Major Career Paths
  – Designing and Implementing Software – Software Industry
    • Software Engineering
    • Software Quality Assurance
    • Project Management
    • Multimedia Content
    • Database Administration
  – Planning & managing organization technology infrastructure
    • IT Architecture
    • Service Management and Operation
    • Information Security
  – Further Study – Research

Source: http://computingcareers.acm.org/
Career – Useful References

• ACM Computing Careers Website
  – http://computingcareers.acm.org/

• Target Jobs – IT and Technology
  – Specialisms:
    • https://targetjobs.co.uk/career-sectors/it-and-technology/advice/specialisms
  – 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
Further information

• Academic Advisor of Computer Science department: Dr. Anthony Tam (atctam@cs.hku.hk).

• Computer Science program: http://www.cs.hku.hk/programme/

• To download this briefing note and study plans: http://www.cs.hku.hk/programme/beng-cs/advising/advising.jsp

• Or access this web page via the QR code