Supplementary Information for
6224 Bachelor of Arts and Sciences in Applied Artificial Intelligence

1. Impact of AI
AI empowers tools to impact our life in diverse aspects and reshape our future.

2. Definition of AI
Innovative algorithm-based computer programming that teaches machines to solve problems and perform tasks that humans normally do through data mining and learning.

3. Daily applications of AI

   Healthcare
   - making of artificial limbs
   - diagnosis of cancer with the AI deep learning and image recognition technologies
   - implant of artificial sensory organs
   - analysis of biostatistics – identify health problems, draw relevant data to perform analysis and formulate possible solutions
   - robot-assisted surgery

   Environment protection
   - conservation of biodiversity and ecosystem while addressing developmental needs, e.g. EarthCube

   E-commerce
   - analysis of users’ behaviors on the Internet and predict their consumption patterns, e.g. advertisements at Facebook
   - incorporation of visual hunt option for product-searching with the use of photos, e.g. Amazon

   Entertainment
   - adoption of open source model to improve product recommender system, e.g. Netflix
   - analysis on the pattern of music for generating personalized playlist based on the experience of listeners, e.g. Spotify
   - chess-playing, e.g. AlphaZero

   Digital personal assistant
   - chatbots
   - Speech recognition, e.g. Siri

   Others
- cuisine: recipe creation based on something the subscribers are craving
- translation: translating of obscure languages and across disparate domains
- transport: automated vehicles, e.g. Tesla
- Facial recognition

4. **Unique features of AI programmes**
   - New option for elite students: Provides formal academic training to elite students who wish to join the AI profession
   - Interdisciplinary training: Facilitates a coordinated approach to teaching and learning across different disciplinary fields with combined efforts of the Faculties of Science, Engineering, Social Sciences and Architecture
   - Supported by a wide range of courses in computer science, geography, mathematics, psychology, statistics, and urban studies which emphasise problem-based learning
   - Highlights AI applications in diverse areas so that students can develop the intellectual capacity essential to meeting new challenges
   - Provision of BASc Common Courses “Horizontals” in addition to the university-wide Common Core in order to provide a wider perspective for elite students

5. **Featured concentrations**
   Specializations in technology, AI in business and finance, AI in medicine, AI in smart city, or AI in neurocognitive science

6. **Career prospects**
   Connects the exploding demand of the AI market in diverse areas: science and technology, environmental protection, medical informatics, health care, business, banking, finance, urban development, neurocognitive science, etc.

7. **Collaborators**
   Intel AI Academy, NVIDIA AI Technology Center, Shenzhen Suoxinda Data Technology Co. Ltd., Wells Fargo & Company

8. **Alignment with Government policy**
   - Availability of funding from mainland government for high-tech and innovative research projects of universities in HK
   - Attract overseas expertise and nurture local experts in innovative technology
According to the 2018 Policy Address of the Government, new information and communications technology infrastructure is an indispensable part of smart city development. Besides reforming its cloud infrastructure by 2020, the Government will also develop a platform operating big data analytics and artificial intelligence application to enhance e-Government services. The Government will also earmark HK$10 billion to support the establishment of two research clusters, one on healthcare technologies and one on artificial intelligence and robotics technologies. Such clusters will pool and nurture more technology talent in Hong Kong by inviting the world's top scientific research institutions and technology enterprises to conduct midstream and downstream R&D projects in collaboration with local universities and scientific research institutions.

9. **Quota/ admissions requirements**
   - Quota: 15 places
   - Admissions requirements:
     - English Language: Level 5
     - Chinese Language: Level 3
     - Mathematics: Level 4
     - Extended Module 1 or 2 in Mathematics: Level 4
     - Liberal Studies: Level 2
     - Elective subjects: Level 3 in two subjects
   *Candidates with level 4 in English Language and good results in other HKDSE subjects will be exceptionally considered on a case by case basis. They will be required to take 6 additional credits in University English to complete their degree studies if admitted.*

10. **Links**
    - Video: [https://youtu.be/5KDwjNdhw58](https://youtu.be/5KDwjNdhw58)
    - Website: [https://saasweb.hku.hk/programme/ai.php](https://saasweb.hku.hk/programme/ai.php)