



Physics Foundation for an Intelligent Future



About AP

The Department of Applied Physics (AP) was founded in 1987, and we are devoted to become a world-class physics department. We brought in high-caliber scholars and researchers with diverse expertise to enrich our curriculum and scientific innovations, with a strong focus on the development of cutting-edge technologies such as new materials, artificial intelligence, big data and optoelectronics. Over the years, AP has nurtured talents with fundamental and applied scientific knowledge, skills, and innovative mindset. Our graduates are welcomed by employers and have made significant contributions to the industries and the community. We achieved remarkable results in various University rankings.

51st

Best Universities for Optics
2023 U.S. News & World Report

98th

Leading 200 institutions in physical sciences
Nature Index 2022 Big 5 science nations

101-125th

Physical Sciences
Times Higher Education (THE) World University Rankings 2023 by subject

*Big 5 science nations: USA, China, Germany, England and Japan

5 Major Research Areas

- Energy Materials & Devices
- Nanomaterials & Microelectronic Devices
- Smart Materials & Devices
- Photonics, Plasmonics & Optoelectronics - Materials & Devices
- Theoretical & Computational Physics

Research and Innovation

AP is well-equipped with more than 30 world-class research laboratories for teaching and research purpose, including a joint AI laboratory with Huawei, University Research Facility in Materials Characterization and Device Fabrication, as well as Cleanroom facilities. Students with outstanding academic performance results are actively recruited to join research projects led by our academic staff, working on forefront topics like photovoltaics, biosensor for virus detection and new energy materials.



BSc (Hons) in Physics with a Secondary Major in Artificial Intelligence and Data Analytics (AIDA) or Innovation and Entrepreneurship (IE)

#JS3030

133 credits

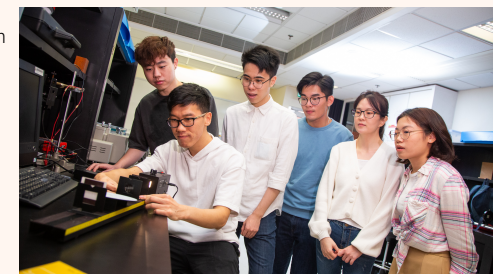
25 Intakes 4 years Full time UGC funded

30 GUR + 67 + 36 subjects Physics AIDA/IE

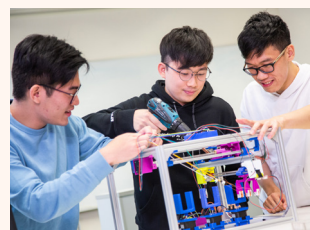
Acquire a Major with a Secondary Major degree in 4 years

Students enrolled to our Physics programme follow a common curriculum in the first year, before they choose a Secondary Major in either AIDA or IE in Year Two, according to their own preference. They will graduate with one of the following degrees upon successful completion of the corresponding graduation requirements:

- Bachelor of Science (Honours) in Physics with a Secondary Major in Artificial Intelligence and Data Analytics
- Bachelor of Science (Honours) in Physics with a Secondary Major in Innovation and Entrepreneurship



Programme Highlights



An Application-oriented approach

The learning experience is supported by well-equipped laboratories and research opportunities. Collaborations with renowned universities, research institutions and industry partners provide excellent internship and exchange opportunities for students.



Multidisciplinary Nature

The combination of physics and AIDA/IE provides students with both solid scientific knowledge and practical skillsets, opening them to a wide range of career paths such as innovation, health care and industry.

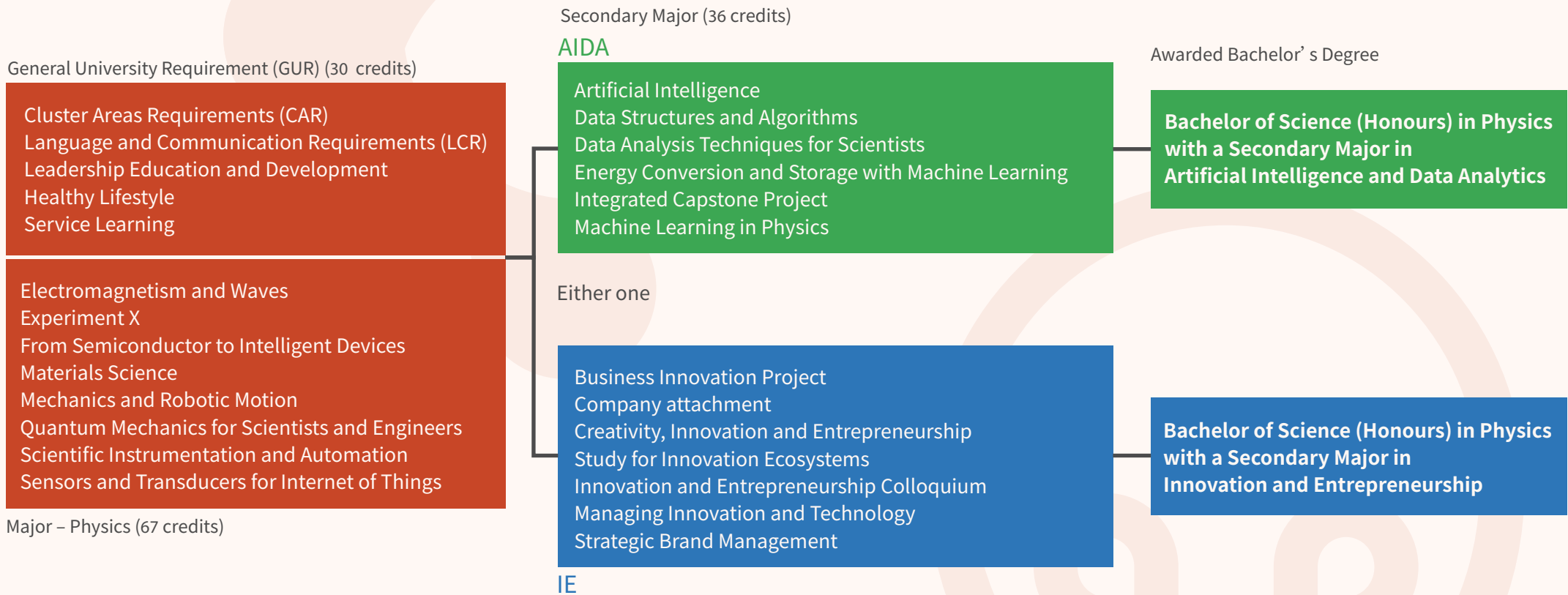


All-rounded Development

The learning pedagogies are designed to develop students' "soft skills", such as lateral thinking, communication skills, creativity, critical thinking and problem-solving skills, which are critical assets for our future leaders.

Subject List

Highlight of subjects in our 4-year curriculum.



Career Prospects

Equipped with interdisciplinary scientific knowledge, skills, and innovative mindset, our graduates are well-prepared to work in various industries or pursue further studies.

Tech-related	Industry-related	Medical Services-related	Research & Development-related	Financial Services-related
Data Scientist AI Software Engineer System Architect System Analyst Analyst Programmer IT Consultant	Technology Consultant Engineer System Developer	Medical Physicist Lab Manager Quantitative Researcher	Researcher Materials Engineer R&D Engineer Scientific/Technology Officer	Quantitative Researcher Data Scientist Quant Developer