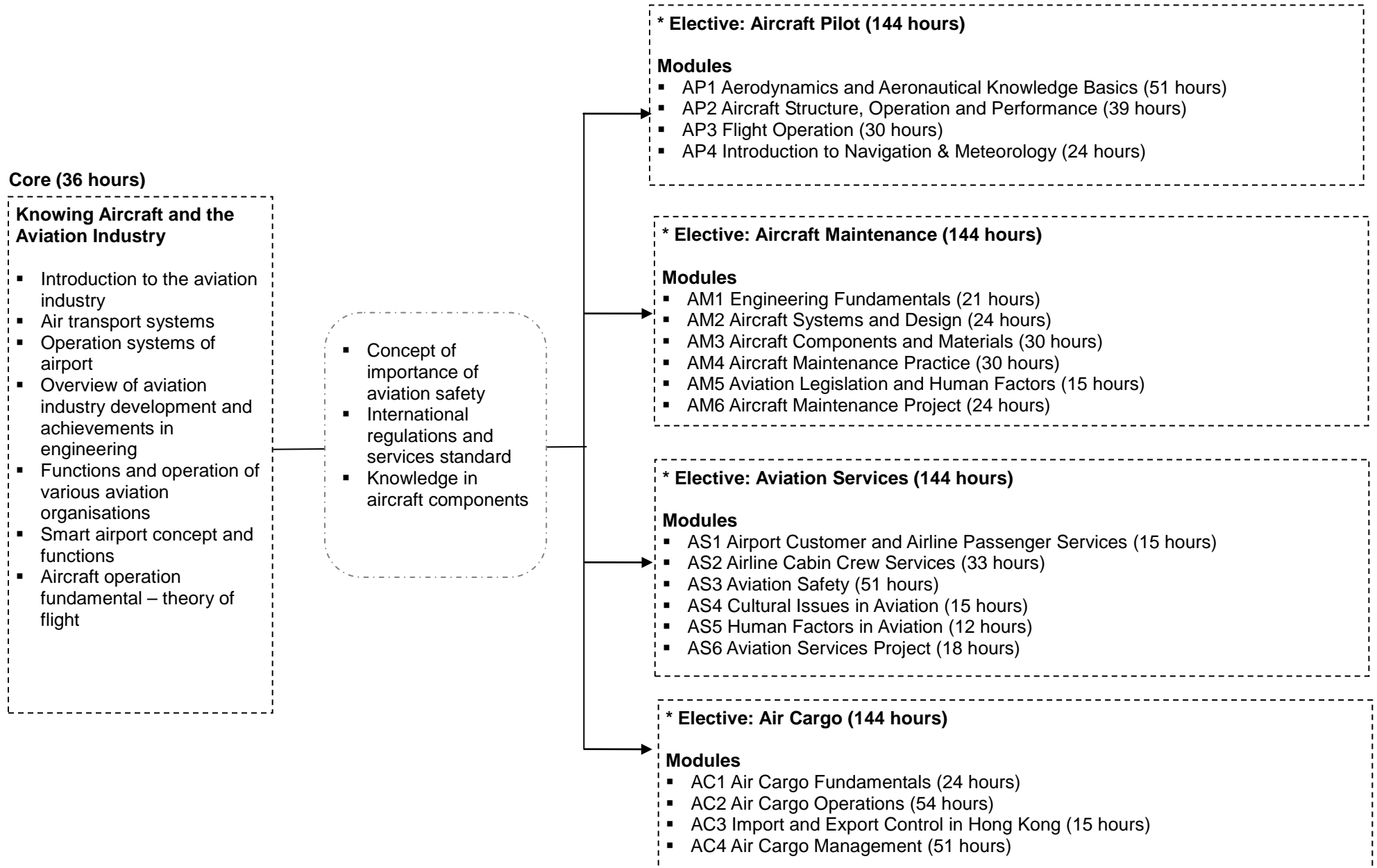


Applied Learning (Senior Secondary Level)**2019-21 Cohort**

Item	Description
1. Subject Title	Aviation Studies
2. Course Provider	School of Professional and Continuing Education, The University of Hong Kong
3. Area of Studies/ Course Cluster	Engineering and Production/Services Engineering
4. Medium of Instruction	Chinese or English (The course will be conducted in English for students taking “Aircraft Pilot elective”)
5. Learning Outcomes	<p>Upon completion of the subject, students should be able to:</p> <ol style="list-style-type: none"> (1) describe the functions and operation of various aviation organisations including airport authority and airlines; (2) describe international regulations and standard requirements in the aviation industry; (3) apply practical skills in the aviation industry; (4) demonstrate problem-solving skills through tackling aviation-related issues with multi-disciplinary knowledge; (5) appreciate the importance of teamwork and communication in the aviation industry; (6) appreciate the latest development and achievements in engineering in related fields; (7) describe the work ethics and demonstrate positive values and attitudes in the aviation industry; and (8) develop self-understanding for further studies and career development in the related field.

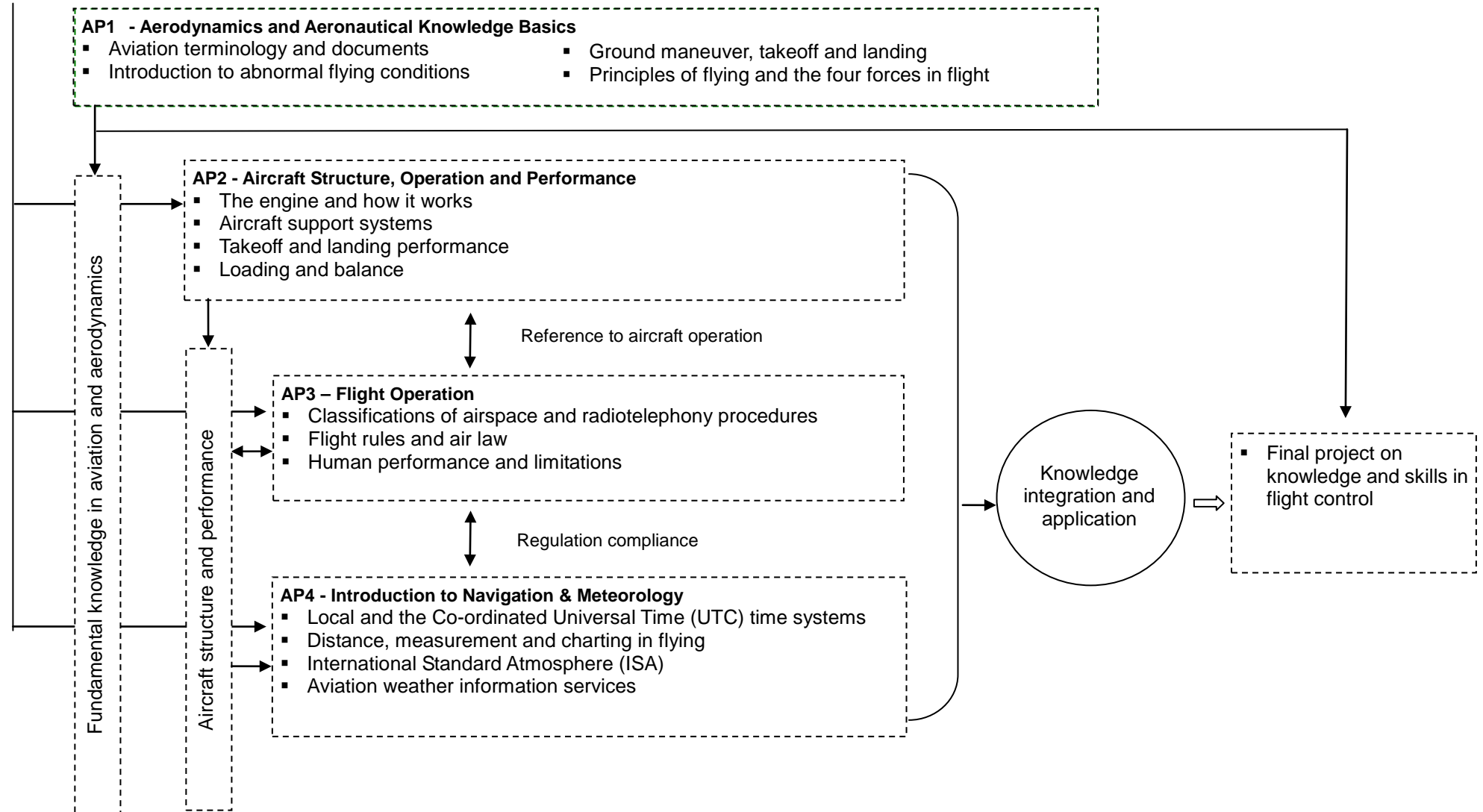
6a. Curriculum Map – Organisation and Structure (Aviation Studies – Overview)



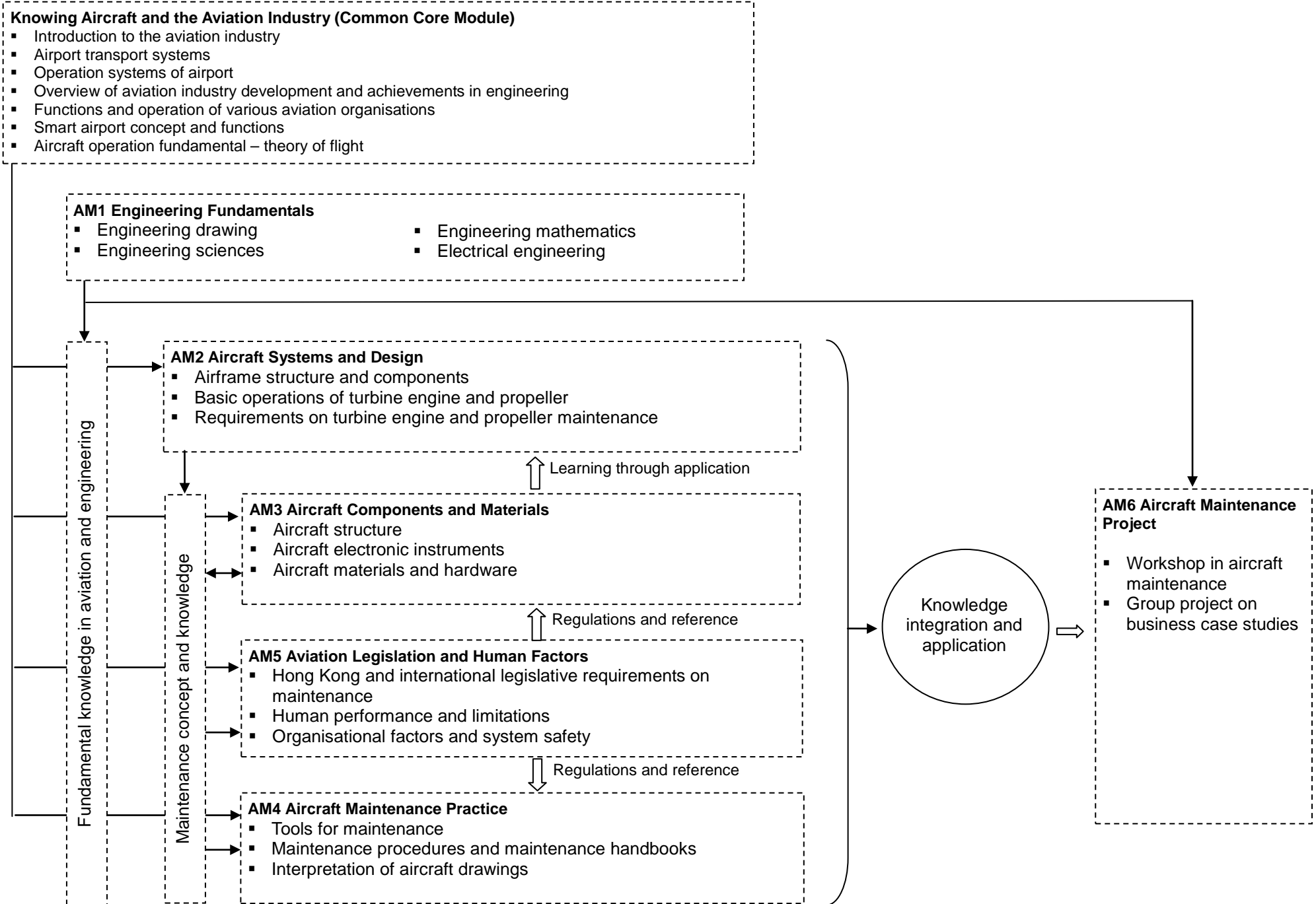
* Choose any one of the electives

6b. Curriculum Map – Organisation and Structure (Elective: Aircraft Pilot)

- Knowing Aircraft and the Aviation Industry (Common Core Module)**
- Introduction to the aviation industry
 - Airport transport systems
 - Operation systems of airport
 - Overview of aviation industry development and achievements in engineering
 - Functions and operation of various aviation organisations
 - Smart airport concept and functions
 - Aircraft operation fundamental – theory of flight



6c. Curriculum Map – Organisation and Structure (Elective: Aircraft Maintenance)



6d. Curriculum Map – Organisation and Structure (Elective: Aviation Services)

Knowing Aircraft and the Aviation Industry (Common Core Module)

- Introduction to the aviation industry
- Airport transport systems
- Operation systems of airport
- Overview of aviation industry development and achievements in engineering
- Functions and operation of various aviation organisations
- Smart airport concept and functions
- Aircraft operation fundamental – theory of flight

AS1 Airport Customer and Airline Passenger Services

- Airport customer behaviour
- Airport customer service features
- Airline guide and IATA manuals
- Passenger handling procedures

AS2 Airline Cabin Crew Services

- Personal essentials for cabin crew profession
- Customer interaction and communication
- Crew resources management
- Airline catering

AS3 Aviation Safety

- Responsibility for security control of people and items
- Procedures for handling restricted and dangerous articles
- Aviation first aid

AS4 Cultural Issues in Aviation

- Cultural impacts on customer service
- Cultural awareness and coping with cultural differences
- Regional culture

AS5 Human Factors in Aviation

- Human performance and limitations
- Human factors affecting performance
- Human factors assessment and indicators

Fundamental knowledge in aviation and customer service

Aviation services concept and knowledge

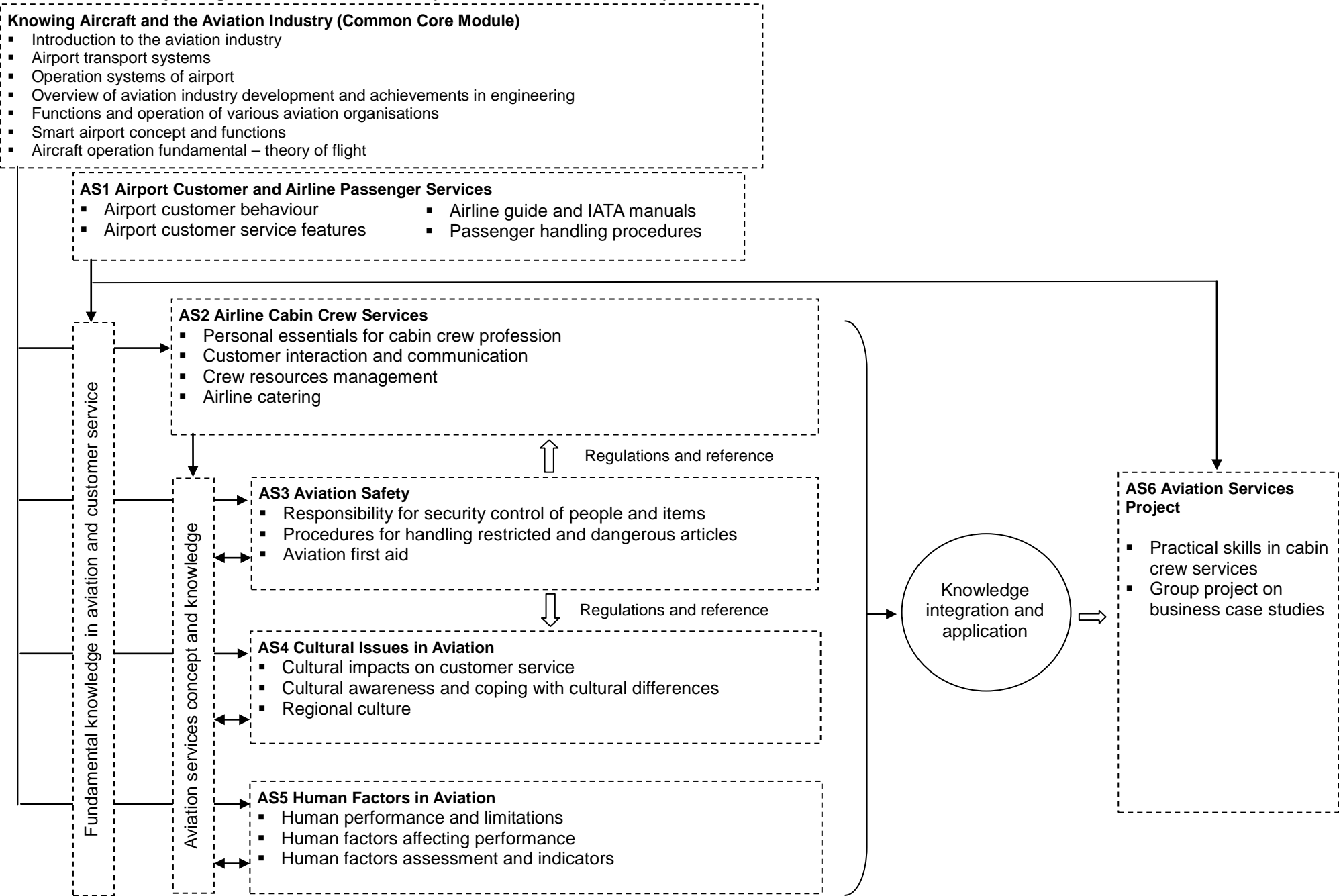
Regulations and reference

Regulations and reference

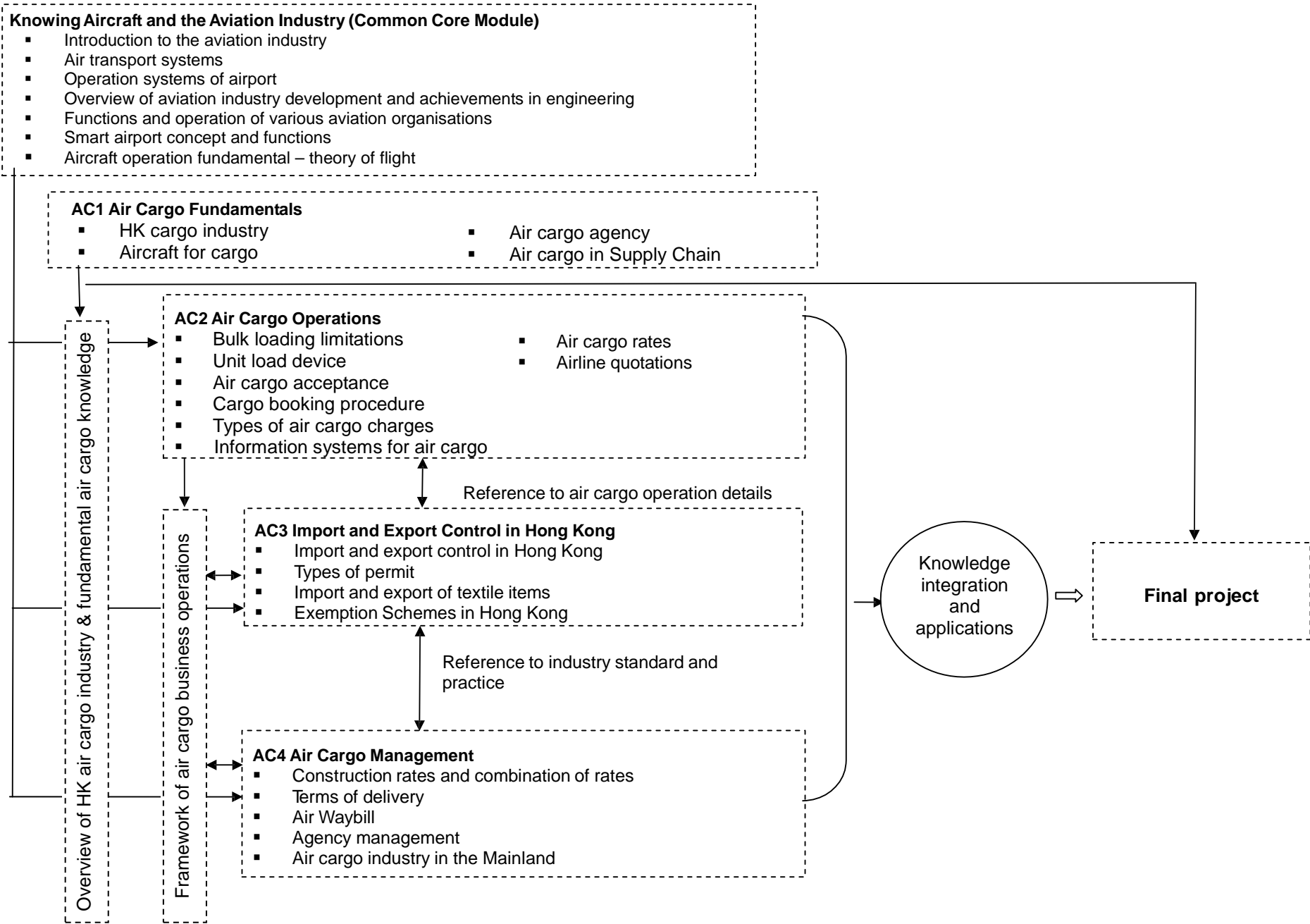
Knowledge integration and application

AS6 Aviation Services Project

- Practical skills in cabin crew services
- Group project on business case studies



6e. Curriculum Map – Organisation and Structure (Elective: Air Cargo)



7. Context

- The information on possible study and career pathways is provided to enhance students' understanding of the wider context of the specific Applied Learning course. Students who have successfully completed Applied Learning courses have to meet other entry requirements as specified by the institutions.
- The recognition of Applied Learning courses for admission to further studies and career opportunities is at the discretion of relevant institutions. The Education Bureau and the course providers of Applied Learning are exploring and seeking recognition related to further education and career development opportunities for students successfully completing the Applied Learning courses.

Possible further study and career pathways

Further studies

- e.g. aviation, engineering, tourism, human resources management, logistics, transportation

Career development

- e.g. aircraft cadet pilot, aircraft maintenance trainee, engineer in aircraft maintenance/aircraft manufacture, mechanical engineer, cabin crew, customer service officer, air cargo officer, ground handling and ramp service agent

Other qualification

- e.g. Aircraft Maintenance elective – Civil Aviation Department HKAR-66 Category A Aircraft Maintenance Licence qualification
- e.g. Aircraft Pilot elective – Private Pilot Licence.
(Note: Additional practical flying training is required in order to fully complete the qualification of Private Pilot Licence. The practical flying sessions are not included in this ApL curriculum and it is optional for students to attend the practical flying sessions. The Aircraft Pilot elective will focus on the theory of flight and practical exercises will mainly be computer-based flight simulation. HKU(SPACE) will provide students with the information on practical flying which will be conducted overseas, such as Adelaide or Brisbane in Australia. Extra expenses are required for the practical flying sessions.)
- e.g. Air Cargo elective – Membership of related professional association such as The Chartered Institute of Logistics and Transport in Hong Kong (CILTHK)
- e.g. Aviation Services elective - Airline Cabin Crew Training qualification as recognised by the International Air Transport Association (IATA)



Relations with core subjects and other elective subjects

Enhancing and enriching, e.g.

- enhance students' learning in **Information and Communication Technology** by enriching their IT skills through conducting research and data handling
- students taking **Design and Applied Technology** subject could further enhance their technology knowledge and skills through engineering related practical exercises at industry standard

Cross-fertilisation, e.g.

- the application of concepts and theories in **Physics** (e.g. force and motion, electricity and magnetism) enhances the learning in both subjects

- the application of concepts and theories in **Tourism and Hospitality** (e.g. customer relations and services) enhances the learning in both subjects

Expanding horizons, e.g.

- students taking **Personal, Social and Humanities Education** subjects could broaden their knowledge in aviation
- students taking **Science** subjects could broaden their knowledge in cultural issues in aviation



Cluster of professions/trades/industries related to the course

- e.g. aviation, engineering, logistics and services

Future global and local outlook

- the international aviation industry forecasts robust demand to continue over the next 20 years. Boeing commented that the economic growth, increasing consumer spending on services, growing middle classes in emerging markets, and evolving airline business models support this long-term outlook with a projection of the air travel market 2.5 times larger in 20 years and the global commercial aviation fleet to double in size by 2036
- according to the Hong Kong Airport Authority, the latest directly employed workforce in the airport is around 73,000 in 2017. The establishment of the airport third runway will induce more aviation job opportunities in the coming decades. It is projected that by 2030, with the 3rd runway establishment, the direct employment workforce in the aviation industry will reach 140,000. Diversified and well-trained talents are required to support the sustainable development of the local aviation industry

Beginners' skill set to facilitate entry to further studies and/or work

- describe the functions and general operation of various aviation organisations
- understand the international and local industry standard requirements
- use the terminologies of the aviation industry and communicate (mainly in English) at the industry standard
- apply basic technical skills in the aviation study
- develop the personal attributes essential to the aviation industry such as effective communication



Foundation knowledge developed in junior secondary education and Secondary 4

This subject is built upon the foundation knowledge students acquired in, e.g.

- Chinese Language Education and English Language Education** – verbal and written communication
- Mathematics Education** – data handling, measures and calculation
- Technology Education** – use of information technology
- Science Education** – force and motion
- Geography** – map reading
- Personal, Social and Humanities Education** – culture and its impact on customer service