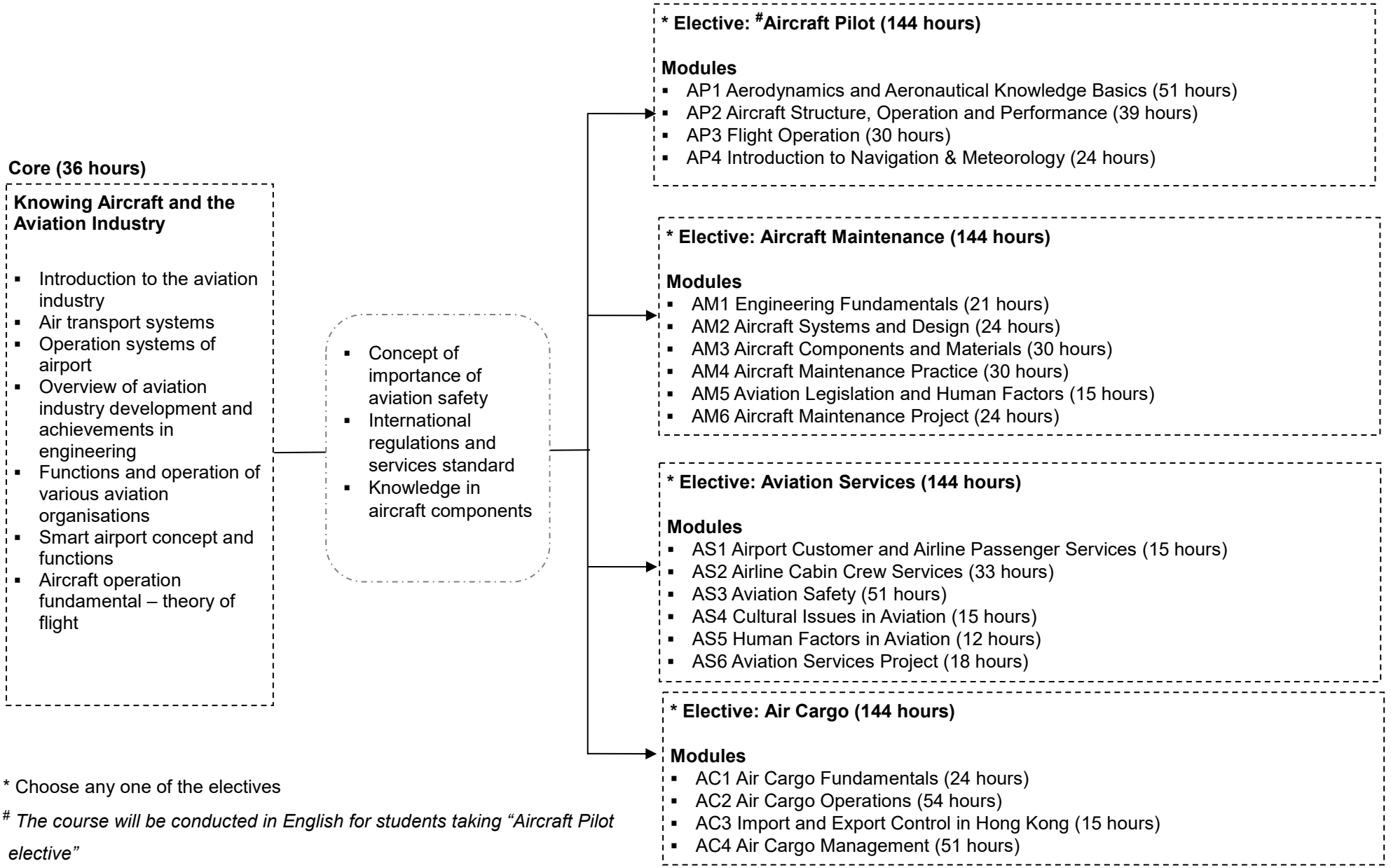
Applied Learning

2024-26 Cohort; 2026 HKDSE

Item	Description
1. Course 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
5. Learning Outcomes	Upon completion of the course, students should be able to: (i) describe the functions and operation of various aviation organisations including airport authority and airlines; (ii) describe international regulations and standard requirements in the aviation industry; (iii) apply practical skills in the aviation industry; (iv) demonstrate problem-solving skills through tackling aviation-related issues with multi-disciplinary knowledge; (v) appreciate the latest development and achievements in engineering in related fields; (vi) appreciate the importance of teamwork and communication in the aviation industry; (vii) describe the work ethics and demonstrate proper values and attitudes in the aviation industry; and (viii) enhance self-understanding and explore directions on further studies and career pursuits.

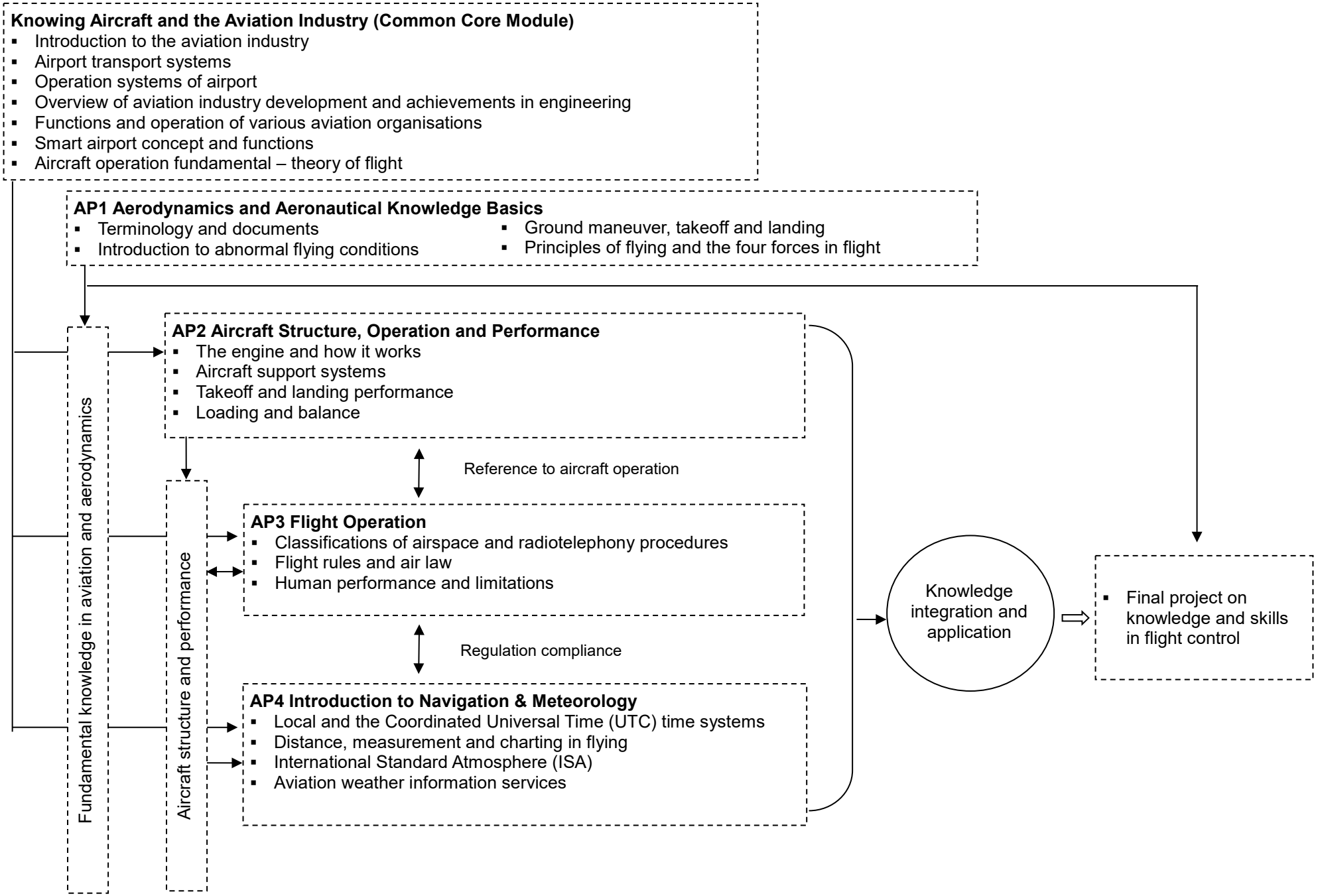
6. Curriculum Map – Organisation and Structure (Aviation Studies – Overview)



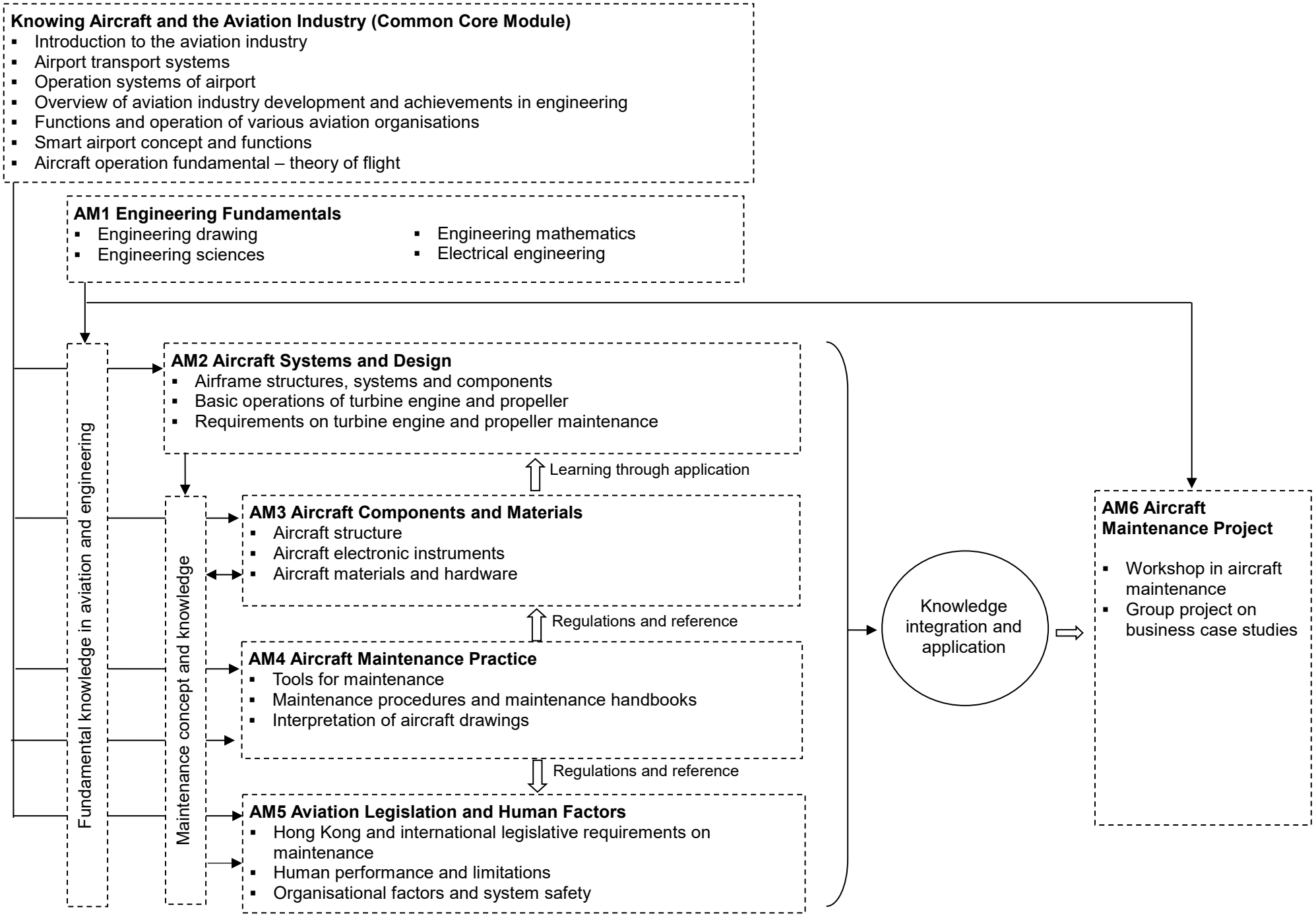
* Choose any one of the electives

The course will be conducted in English for students taking "Aircraft Pilot elective"

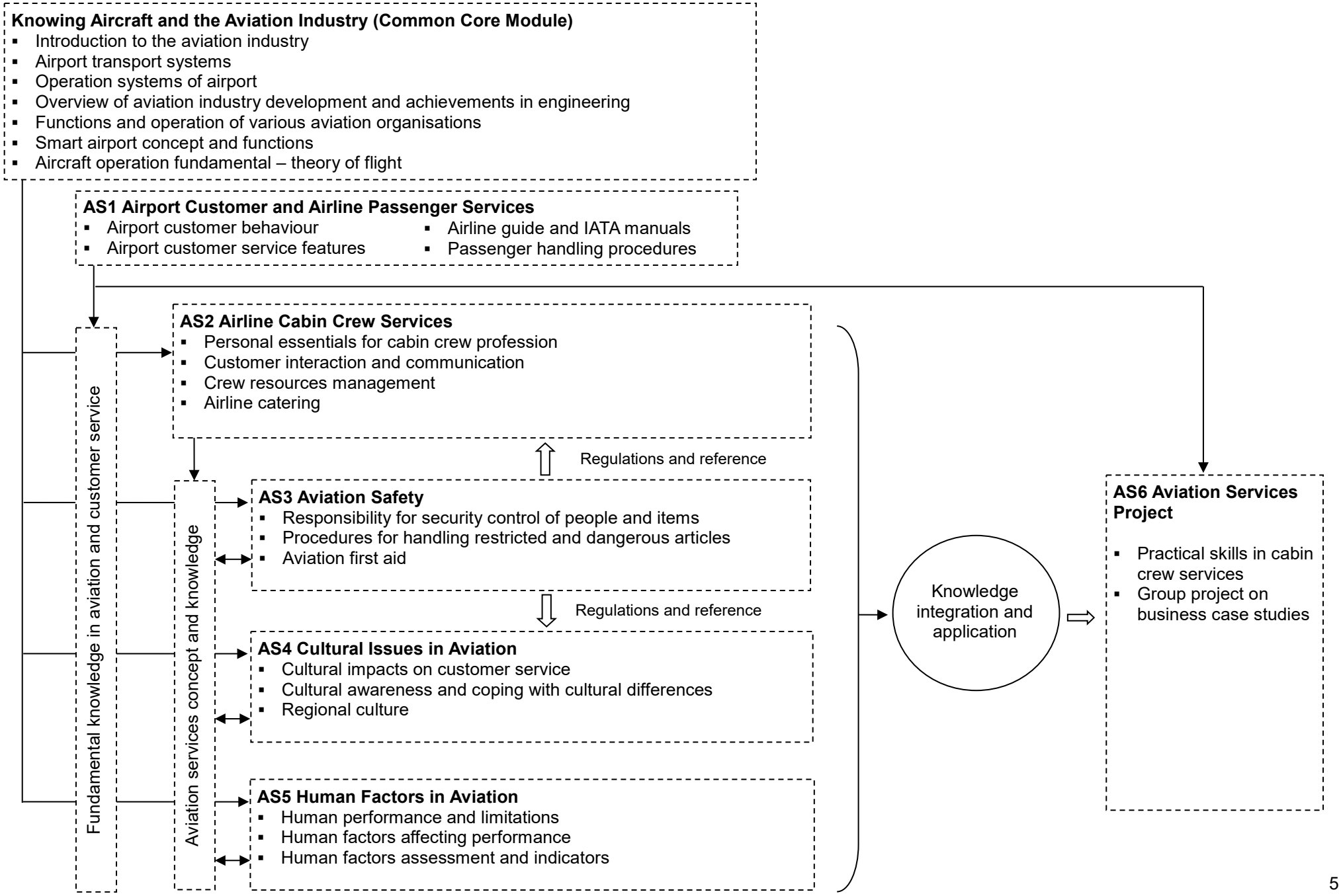
6. Curriculum Map – Organisation and Structure (Elective: Aircraft Pilot)[#] *The course will be conducted in English for students taking "Aircraft Pilot elective"*



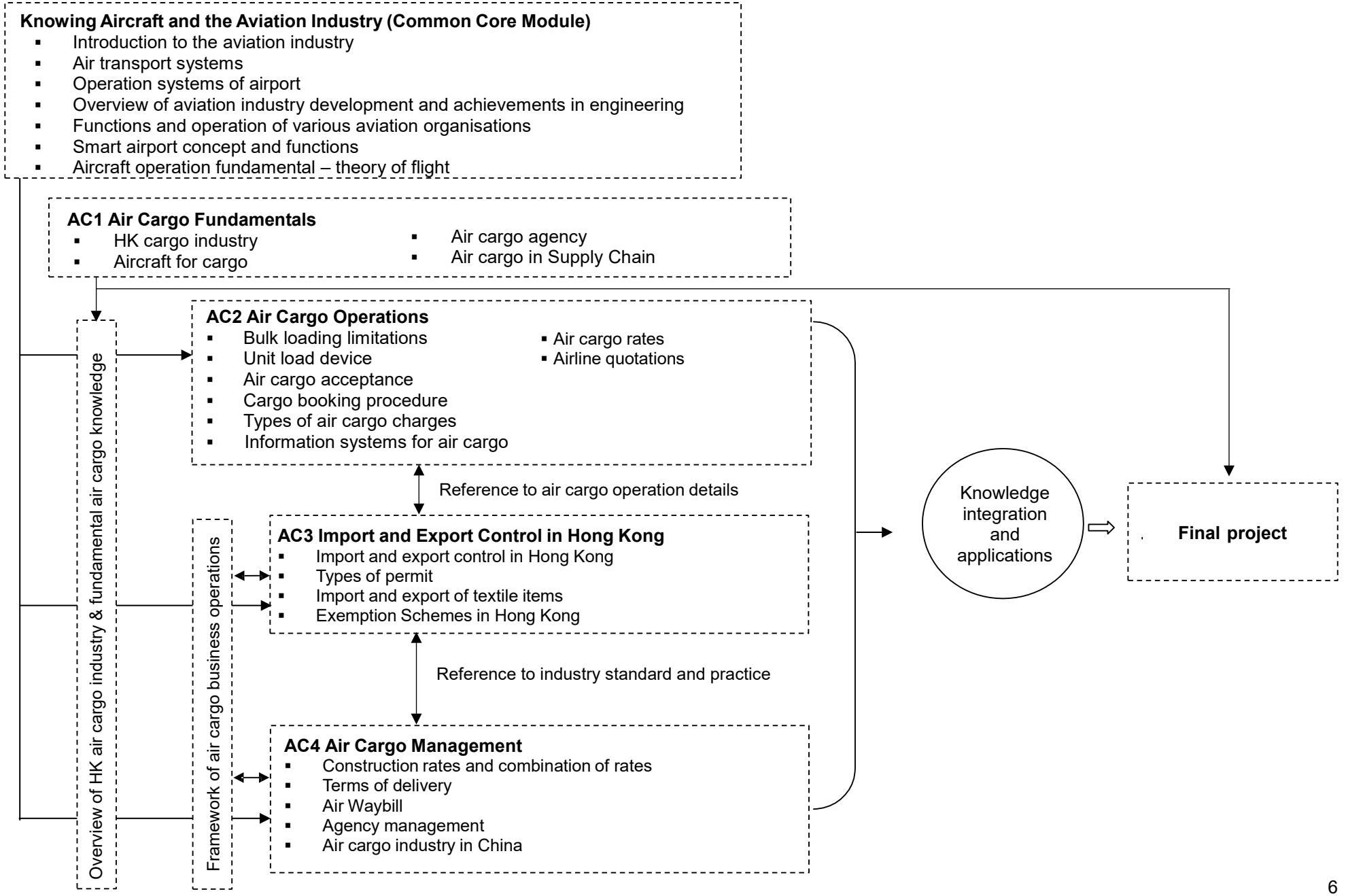
6. Curriculum Map – Organisation and Structure (Elective: Aircraft Maintenance)



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



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



7. The Context

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

Possible further study and career pathways

Further studies

- e.g. courses related to 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 qualifications (for Aircraft Pilot elective and Aircraft Maintenance elective)

- e.g. (Aircraft Maintenance elective) – Civil Aviation Department HKAR-66 Category A Aircraft Maintenance Licence qualification
- e.g. (Aircraft Pilot elective) – Private Pilot Licence. 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 the practical flying information which will be conducted in 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)

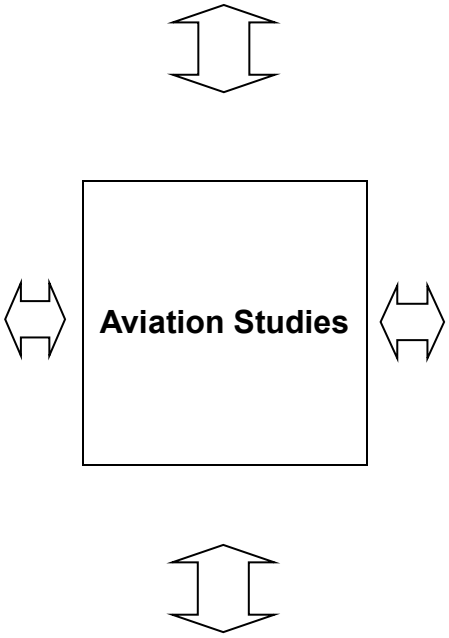
Complementarity with core subjects and other elective subjects

Enhancing and enriching**,** e.g.

- applying mathematical knowledge to solve operational problems in aviation (e.g. cargo loading) and information technology skills in data research and handling to strengthen students' learning in **Mathematics** and **Information and Communication Technology**

Expanding horizons**,** e.g.

- students taking **Design and Applied Technology** could further enhance their technology knowledge and skills through engineering related practical exercises at industry standard



Relations with other areas of studies/ courses of Applied Learning

e.g.

Business, Management and Law

- legislative requirements in maintenance

Services

- the concepts, values and attitudes underpinning service provision particularly for the unique operating environment and requirements in aviation service

Foundation knowledge developed in junior secondary education

The course 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

8. Learning and Teaching

In this course, student-centred learning and teaching activities are designed to enable students to understand fundamental theories and concepts, develop their generic skills, and address their career aspirations in the aviation industry.

Different modes of activities are employed to provide students with a systematic understanding about the context (e.g. lectures on the overview of the Hong Kong aviation industry) and eye-opening opportunities to experience the complexity of the context (e.g. visits to local aviation organisations, practical exercises at industry standard and sharing sessions and career talks by the aviation practitioners).

Students acquire an understanding of the requirements, fundamental knowledge and skills essential for further learning within the area through learning-by-practising opportunities in an authentic or near-authentic environment (e.g. workshops under simulated working environment with industry grade tooling at industry standard, and application of technology on teaching and learning such as Virtual Reality and flight simulation).

Students are also encouraged to develop and apply conceptual, practical and reflective skills to demonstrate entrepreneurship and innovation. Students are given opportunities to integrate the knowledge and skills acquired and consolidate their learning (e.g. case studies to evaluate the impact of the aviation industry on the local economy and analyse the operation of various aviation organisations. In the aviation projects, students investigated the authentic cases in aviation and suggested solutions. Students are expected to make use of the knowledge acquired and present their findings in a systematic way. In the process, students apply practical skills at industry standard, demonstrate problem-solving skills through tackling aviation-related issues with multi-disciplinary knowledge, and prepare reports and group presentation. During the project, students are also expected to demonstrate the proper values and attitudes required in the aviation industry).

9. Curriculum Pillars of Applied Learning

Through related contexts, students have different learning opportunities, for example:

(i) Career-related Competencies

- understand the future development trend of the local and global aviation industry through on-site visits and career talks by industry practitioners;
- explain the functions and operation of various aviation organisations; and
- enhance understanding of industry competency requirements through practical exercises which are set according to the industry standard.

(ii) Foundation Skills

- strengthen language ability through reading relevant information on local and international aviation regulations which is usually written in English;
- strengthen communication skills both in verbal and written forms through working on-site visits and project reports, presentation and role play practice;
- consolidate mathematical concepts and strengthen problem-solving skills by working on aviation related tasks; and
- strengthen information technology skills through doing research and information collection for assignments and projects.

(iii) Thinking Skills

- integrate knowledge from different aspects including Science, Mathematics, Geography and Citizenship and Social Development, as well as knowledge of Human Biology and Psychology covered in topics on aviation human factors;
- develop critical thinking skills and analytical skills through discussions on authentic aviation cases which will stimulate students' thinking and further understanding of the competency required in the aviation industry;
- enhance thinking skills through participation in regular class activities including role play, simulation exercises, presentations and site visits; and
- develop skills in problem-solving and decision-making through project works which require information search and filtering, results analysis and consolidation.

(iv) People Skills

- develop team building skills through participating in the establishment and operation of self-directed working teams;
- enhance concept of division of work through group projects and role play activities in class;
- develop skills in interpersonal communication and interaction through practicing simulated aviation operation procedures at industry standard; and
- develop self-management skills through practice under simulated aviation working environment where students are required to follow industrial regulations and guidelines.

(v) Values and Attitudes

- develop responsibility through understanding the high safety requirements in the aviation industry;
- develop concept of rights and obligations, and respect for safety of other people through experience sharing by lecturers and guest speakers from the industry; and
- develop self-confidence through successful completion of practical exercises under guidance of tutors.