

(For all students in the Program)

## Undergraduate Minor Program in Aeronautical Engineering

The Minor Program in Aeronautical Engineering is designed mainly for engineering students, but open to students with a science major, with a minimum CGA of 2.5 or above and sufficient background in mathematics (e.g. MATH 1013, MATH 1014 and MATH 2011), physics (e.g. PHYS 1112 or PHYS 1312) and/or fundamental mechanics (e.g. MECH 1907). Except for students with major in Aerospace Engineering, eligible students must declare their intention to enroll in the Minor Program no earlier than the first regular term of their second year of study but no later than the last day of the add/drop period in the first regular term of their final year of study. Students who wish to withdraw from the Minor Program should apply before the last day of the add/drop period in the last regular term of their study.

### Minor Requirements

To graduate with a minor in Aeronautical Engineering, students must have enrolled in the Minor Program and complete a minimum total of 18 credits and all of its requirements, as well as the requirements of the major program of study; and have attained an average grade point of at least 2.15 in courses taken within the minor program.

For credit transfer, students can transfer a maximum total of 6 credits to the Minor Program. Courses accepted for transfer credits must normally be at a level equivalent to HKUST courses of 1000-level or above.

Out of the total credits required by the minor program, at least 9 credits should be single-counted within the minor and are not used to fulfill any other requirements for graduation except the 120-credit degree requirement.

Students may use no more than 6 credits earned from courses offered in self-paced online delivery mode to satisfy the graduation requirements of a degree program. This 6-credit limit does not apply to credits obtained through the credit transfer procedures of the University.

### Required Course(s)

|      |      |  | <b>Credit(s)<br/>attained</b> |
|------|------|--|-------------------------------|
| MECH |      | Note: MECH 3640 <u>OR</u> MECH 3650 <u>OR</u> MECH 3660 <u>OR</u> MECH 3670 (3 courses out of 4) | 9                             |
| MECH | 3640 | Aerodynamics   | 3                             |
| MECH | 3650 | Aircraft Structural Analysis   | 3                             |
| MECH | 3660 | Gas Turbines and Jet Propulsion  | 3                             |
| MECH | 3670 | Aircraft Performance and Stability   | 3                             |

### Elective(s)

|         |      |  | <b>Minimum<br/>credit(s)<br/>required</b> |
|---------|------|--|---|
| SENG    |      | Technical Electives (Courses from the specified elective list, of which students may only use at most 1 course from Group B to count toward this requirement.) | 9   |
| Group A |      |  |   |
| MECH    | 4100 | Experiential Projects in Aerospace Engineering   | 3   |
| MECH    | 4350 | Indoor Air Quality in Buildings  | 3   |
| MECH    | 4430 | Materials Characterization   | 3   |

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|         |      |  |   |
|---------|------|--|---|
| MECH    | 4710 | Introduction to Robotics                                     | 3 |
| MECH    | 4720 | Introduction to Precision Engineering                        | 3 |
| MECH    | 4740 | Numerical Methods in Engineering                             | 3 |
| MECH    | 4750 | Vibration, Control and Programming                           | 3 |
| MECH    | 4830 | Introduction to Aerospace Computational Fluid Dynamics (CFD) | 3 |
| CIVL    | 4370 | Computer Methods of Structural Analysis                      | 3 |
| COMP    | 3111 | Software Engineering   | 4 |
| COMP    | 3511 | Operating Systems  | 3 |
| ELEC    | 3200 | System Modeling, Analysis and Control                        | 4 |
| IEDA    | 2200 | Engineering Management                                       | 3 |
| IEDA    | 2410 | Logistics and Freight Transportation Operations**            | 3 |
| Group B |      |  |   |
| MECH    | 1907 | Introduction to Aerospace Engineering                        | 3 |
| CENG    | 2210 | Chemical and Biological Engineering Thermodynamics           | 3 |
| CENG    | 2220 | Transport Phenomena I  | 3 |
| CIVL    | 2120 | Mechanics of Materials                                       | 3 |
| CIVL    | 2510 | Fluid Mechanics  | 3 |

**\*\*Remarks on course(s):**

- IEDA 2410: The course title will be changed to "Introduction to Modern Logistics" starting from Fall, 2025-26.