9204 Aviation Operations (12C)

40S/40E/40M

A Pilot Ground School Course

# 9204 Aviation Operations (12C) 40S/40E/40M

### Course Description

Students develop an understanding of all sectors of the aviation industry, and focus on those sectors that they are interested in pursuing. They will have the opportunity to discover the aviation-related facilities in their area, such as air operators, airports and aerodromes, repair and maintenance facilities, and control towers and centres.

- **Goal 1:** Describe and apply appropriate **health** and **safety** practices.
  - **GLO 1.1:** Describe and apply appropriate **health** and **safety** practices.
    - SLO 12C.1.1.1 Demonstrate an understanding of safe practices.
    - SLO 12C.1.1.2 Adhere to safe practices.
    - SLO 12C.1.1.3 Demonstrate an understanding of health and safety practices as they pertain to specific sectors of the aviation industry.
- **Goal 2:** Demonstrate an understanding of **human factors** in aviation.
  - **GLO 2.1:** Demonstrate an understanding of **human factors** in aviation.
    - SLO 12C.2.1.1 Apply an understanding of human factors as they pertain to specific sectors of the aviation industry.
- **Goal 3:** Demonstrate the use and management of **materials**, **tools**, and **equipment**.
  - **GLO 3.1:** Demonstrate the use and management of **materials, tools,** and **equipment**.
    - SLO 12C.3.1.1 Demonstrate the appropriate use and management of materials, tools, and equipment.
- Goal 4: Demonstrate an understanding of flight and aerodynamics.
  - **GLO 4.1:** Demonstrate an understanding of **flight** and **aerodynamics**.

No applicable SLOs.

- **Goal 5:** Demonstrate an understanding of **engines**, **airframes**, **systems**, and **instruments**.
  - **GLO 5.1:** Demonstrate an understanding of **engines**, **airframes**, **systems**, and **instruments**.

No applicable SLOs.

- **Goal 6:** Demonstrate an understanding of **meteorology** and the atmosphere.
  - **GLO 6.1:** Demonstrate an understanding of **meteorology** and the atmosphere.

No applicable SLOs.

- **Goal 7:** Demonstrate an understanding of **navigation**, **aerodromes**, and **airports**.
  - **GLO 7.1:** Demonstrate an understanding of **navigation**.

No applicable SLOs.

- **GLO 7.2:** Demonstrate an understanding of **aerodromes** and **airports**.
  - SLO 12C.7.2.1 Apply knowledge related to the operation of aerodromes and airports.
- **Goal 8:** Describe and apply transferable **cross-curricular** knowledge and skills (of literacy, numeracy, and the sciences) as they apply to aviation.
  - **GLO 8.1:** Describe and apply **literacy** knowledge and skills related to aviation.
    - SLO 12C.8.1.1 Demonstrate the ability to read, understand, and communicate using language, signs, symbols, and images.
  - **GLO 8.2:** Describe and apply **numeracy** knowledge and skills related to aviation.
    - SLO 12C.8.2.1 Demonstrate the ability to apply numeracy skills and knowledge as they pertain to specific sectors of the aviation industry.

- **GLO 8.3:** Describe and apply knowledge and skills from the **sciences** that relate to aviation.
  - SLO 12C.8.3.1 Apply scientific skills and knowledge as they relate to specific sectors of the aviation industry.

## **Goal 9:** Demonstrate an understanding of the **ethical and legal standards** that pertain to aviation.

- **GLO 9.1:** Demonstrate an understanding of the **ethical standards** that pertain to aviation.
  - SLO 12C.9.1.1 Demonstrate an understanding of the ethical standards found in specific sectors of the aviation industry.
- **GLO 9.2:** Demonstrate an understanding of **air law**.
  - SLO 12C.9.2.1 Demonstrate an understanding of the security considerations in various aviation facilities.

#### Goal 10: Demonstrate employability skills.

#### **GLO 10.1:** Demonstrate basic **employability skills**.

- SLO 12C.10.1.1 Demonstrate regular and punctual attendance.
- SLO 12C.10.1.2 Communicate respectfully and effectively with others.
- SLO 12C.10.1.3 Take responsibility for own actions.
- SLO 12C.10.1.4 Demonstrate adaptability, initiative, and effort.
- SLO 12C.10.1.5 Demonstrate teamwork skills.
- SLO 12C.10.1.6 Stay on task and use time effectively.
- SLO 12C.10.1.7 Demonstrate the responsible use of wireless communication devices.

#### **GLO 10.2:** Demonstrate **critical thinking** skills.

- SLO 12C.10.2.1 Solve problems found in various sectors of the aviation industry.
- **GLO 10.3:** Demonstrate an understanding of **culture** in the workplace.
  - SLO 12C.10.3.1 Demonstrate an understanding of the workplace cultures related to various sectors of the aviation industry.
  - SLO 12C.10.3.2 Interact respectfully with people from a variety of cultures.

- **Goal 11:** Demonstrate an understanding of **sustainability** as it pertains to aviation.
  - **GLO 11.1:** Demonstrate an understanding of the impact of the aviation industry on **human sustainability** and on the health and well-being of aviation workers and passengers.
    - SLO 12C.11.1.1 Demonstrate an understanding of those human factors that have long-lasting health implications for workers in various sectors in the aviation industry.
  - **GLO 11.2:** Demonstrate an understanding of the aviation industry's sustainability practices and impact on the environment.
    - SLO 12C.11.2.1 Demonstrate an understanding of sustainability practices of specific sectors of the aviation industry, and their impact on the environment.
- **Goal 12:** Demonstrate an understanding of the **scope** of, and **education and employment opportunities** in, the aviation industry.
  - **GLO 12.1:** Demonstrate an understanding of the **scope** of the aviation industry.
    - SLO 12C.12.1.1 Describe the scope of all sectors in aviation at the local and regional levels.
    - SLO 12C.12.1.2 Describe the scope of aviation at the national and international levels.
  - **GLO 12.2:** Demonstrate an understanding of **education and employment opportunities** in the aviation industry.

No applicable SLOs.

- **Goal 13:** Demonstrate an understanding of the **evolution** of aviation, including its **technological progression and emerging trends**.
  - **GLO 13.1:** Demonstrate an understanding of the **evolution** of aviation, including its **technological progression and emerging trends**.
    - SLO 12C.13.1.1 Demonstrate an understanding of the evolution of certain sectors of the aviation industry, including their technological progression and emerging trends.