

# **AEROSPACE STUDIES**

## **SENIOR SECONDARY AVIATION HIGH SCHOOL**

Queensland Studies Authority Status  
Authority Subject 0055 – Counts towards Overall Position.

Four (4) semesters of Sound Achievement contributes four (4) credits towards Queensland Certificate of Education (QCE).

### **PRE-REQUISITE**

The areas of study in Aerospace Studies are relatively wide, and in order to expect success in this subject, students should have a very sound background in Mathematics, Science and English at a Year 10 level. While it is not essential, it would be helpful to study Mathematics B which is both supportive of, and inter-related with, Aerospace Studies.

### **OVERVIEW**

The aerospace industry is characterised as a highly structured and ordered environment, and the Senior syllabus in Aerospace Studies provides students with an opportunity to gain an understanding of the underlying principles of aviation and aerospace, including the structure, management and regulation of aviation and aerospace businesses and enterprises.

Students will use our Flight Simulation facility to aid in learning the different aspects of the course content.

### **COURSE DETAILS**

#### **Topics Studied – Year 11 & 12**

The course consists of four required areas of study through a thematic approach, and various major and minor topics supporting each area of study.

#### **The four primary areas of study are:**

- Aeronautics and Astronautics
- Safety Management Systems
- The Business of Aviation and Aerospace
- Aviation Operations

#### **The four themes used to gain understanding of the four areas of study at Aviation High are:**

- Basic Aeronautical Knowledge and Private Pilot's License theory
- History of Aviation and Aerospace
- Construction and Design
- Business and profitability of the Aerospace Industry

Many aircraft are considered in detail during the course, but greater emphasis will be placed current generation Commercial Airline Jets, Military Technologies and UAV development.

### **PRIVATE PILOTS LICENCE**

In 2015 it is planned to integrate the ability for students to work towards gaining their Private Pilots Licence. This will be accomplished by delivering all of theory content needed to pass C.A.S.A. exam requirements for the licence and for the students to spend one day a week at a flight training facility to gain the required flying experience. It is proposed that by at the conclusion of year 11, the students will have attained their Recreation Pilot's Licences and by the end of year 12, the students will have attained their private pilot's licence. The cost of this will be met by the student; however this will be at a significantly lower price of doing this independently of the school.

### **EXCURSIONS**

Some field experience trips are planned to local and other sites which may involve travel costs. In some excursions the expenses may be covered by the industry partners and are aimed at giving students exposure to various aviation industries. These may incur an additional cost.

### **ASSESSMENT**

The assessment program includes written tests, extended written responses, research reports, responses to stimulus materials, non-written presentations and projects. These will be set in both Years 11 and 12.

### **STUDY REQUIREMENTS**

Homework is absolutely necessary in order to grasp the concepts and principles of this subject. Reading, exercises, questions and problems and practical and assignment write-ups form the bulk of this work.