

## **Masters of Science in Aviation Safety and Accident Investigation**

### **Study Programmes**

The MSc in Aviation Safety and Accident Investigation allows you to receive an internationally recognized qualification in the field of the aircraft accident investigation. The program is also offered and encouraged for the **servicing professionals in different fields of aviation, Occupational Health and Safety Administrations (OSHA), Road, Railway and Naval Accident Investigators, Industrial Safety Professionals**. Students will join this course with the intention of receiving a qualification that will allow them to further their career development in accident investigation or other safety-related areas of the aviation sector. An important aspect of this course is the use of hands-on workshops and simulations to develop the practical skills required as an investigator. This is complemented by sessions and modules that enable you to conduct rigorous research and scientific analysis, along with technical writing, investigation and interviewing techniques. This institute offers a range of library and support facilities to support studies. This enables students to complete this qualification whilst balancing work/life commitments.

### **Educational Objectives**

In view of global necessity for aviation sector, MSc in Aviation Safety & Accident Investigation (ASI) program will play an important role to meet the demand of experts on aviation safety and accident investigation. The national and international requirement of professionals in this field is increasing day by day. From this perspective, it is of vital importance to offer post graduate level high quality education to the next generation of aviation professionals. The Master's program in Aviation Safety & Accident Investigation is designed with an objective to offer students with deep knowledge and functional skills of aviation safety and accident investigation to meet the national and global demand.

### **List of Courses**

MSc in Aviation Safety and Accident Investigation program consists of four semesters of course activities including research work and viva-voce. The program covers a wide spectrum of subjects which are divided into 02 broad categories:

- a. Core Courses
- b. Elective Courses

### **Core Courses (Compulsory for all students)**

- |    |          |   |  |
|----|----------|---|--|
| a. | ASI 6101 | - | Applied Aerodynamics                         |
| b. | ASI 6103 | - | Applied Accident Investigation               |
| c. | ASI 6105 | - | Applied Aircraft Accident Investigation      |
| d. | ASI 6107 | - | Material Failures for Accident Investigation |
| e. | ASI 6201 | - | Aviation Safety Management                   |
| f. | ASI 6203 | - | Human Factor in Aviation                     |
| g. | ASI 6301 | - | Crisis Management                            |
| h. | ASI 6401 | - | Research Methodology                         |
| j. | ASI 6300 | - | Thesis                                       |

## Elective Courses

- a. ASI 6051 - Flight Data Monitoring and Analysis
- b. ASI 6053 - Safety Assessment of Aircraft Systems
- c. ASI 6055 - Introduction to Aircraft Structural Crashworthiness
- d. ASI 6057 - Legal Skills for Accident Investigators
- e. ASI 6059 - Bird Aircraft Strike Hazard
- f. ASI 6061 - Aviation Physiology

## Detailed Course Plan of MSc in Aviation Safety and Accident Investigation

The programme includes 9 theory courses including a Thesis/ Project and 4 elective courses covering 48 credit hours in 4 semesters.

### Term Wise Distribution of Courses

The MSc in Aviation Safety and Accident Investigation (ASI) course must undertake the following course schedule, the term-wise distribution of which is given below:

#### Semester 1

Course Code	Course Title	Credit
ASI 6101	Applied Aerodynamics/ Any offered Elective Course	3
ASI 6103	Applied Accident Investigation	3
ASI 6105	Applied Aircraft Accident Investigation	3
ASI 6107	Material Failures for Accident Investigation	3
TOTAL		12

#### Semester 2

Course Code	Course Title	Credit
ASI 6201	Aviation Safety Management	3
ASI 6203	Human Factor in Aviation	3
ASI 6401	Research Methodology	3
	Elective-1	3
TOTAL		12

#### Semester 3

Course Code	Course Title	Credit
ASI 6301	Crisis Management	3
	Elective-2	3
ASI 6300	Thesis	6
TOTAL		12

#### Semester 4

Course Code	Course Title	Credit
	Elective-3	3
	Elective-4	3
ASI 6300	Thesis	6
TOTAL		12

