

COURSE TITLE	AIRPORT MANAGEMENT & AVIATION SAFETY MANAGEMENT
COURSE CODE	04MB0122
COURSE CREDITS	4

Course Outcomes: After completion of this course, student will be able to:

- 1 Analyse the history of aviation, types of airports, and airlines to understand the fundamentals of the aviation industry.
- 2 Demonstrate roles and responsibilities in aviation, including ground staff, cabin crew, and airport administration functions.
- 3 Apply knowledge of Safety Management Systems (SMS) and hazards to promote safety in aviation operations.
- 4 Evaluate safety risk management processes and conduct accident investigations to enhance safety protocols in aviation
- 5 Synthesize aviation knowledge to develop comprehensive safety strategies for the industry

Pre-requisite of course: 1. Basic knowledge of aviation industry terminology and operations. 2. Familiarity with fundamental principles of business management.

Teaching and Examination Scheme

Theory Hours	Tutorial Hours	Practical Hours	ESE	IA	CSE	Viva	Term Work
4	0	0	50	30	20	0	0

Contents : Unit	Topics	Contact Hours
1	Introduction of Aviation, Types of Airports & Airlines History of Aviation, Map Reading Skills, Flight Structure: Exploring the history of aviation, developing map reading skills, and understanding the structure of flights., Domestic Airports, International Airports: Differentiating between domestic and international airports., Domestic & International Airlines, Theory of Flight: Introduction to domestic and international airlines and the fundamental theory of flight.	15

Contents : Unit	Topics	Contact Hours
2	Roles & Responsibility in Aviation, Ticketing Software, Airport Administration Ground Staff, Cabin Crew, Aviation Authorities: Understanding the roles and responsibilities of ground staff, cabin crew, and aviation authorities, Roles of States & Centers: Exploring the roles of states and aviation centers in the industry, Introduction of Ticketing Software, Airport Security: Familiarizing with ticketing software and airport security protocols., Airport Runway, Airport Taxiway, Maintenance, Airport Support System, Airport Cargo System: Exploring airport infrastructure, maintenance, support systems, and cargo operations.	15
3	Introduction, History, Principles & Hazards Introduction to SMS, SMS Documentation & Reports, History & Evolution of Safety: Introduction to Safety Management Systems (SMS), documentation, reports, and the evolution of safety standards, Quality management and various hazards, risks, controls, and taxonomies: Understanding quality management, hazards, risks, controls, and taxonomies in aviation safety	15
4	Process-Based Safety Risk Management/Safety Assurance & Managing the SMS, Accident Investigation Safety Risk Management & Safety Assurance processes, Purpose, Scope, Interfaces, responsibility, authority, procedure description/flow chart, regulatory oversight: Implementing safety risk management and assurance processes, regulatory oversight, and accident investigation procedures., Learning & Understanding the various incidents and accidents: Analyzing incidents and accidents to enhance learning and safety practices, The course of investigation through various case studies: Conducting accident investigations through case studies for practical insight	15
Total Hours		60

Textbook :

- 1 The Wright Brothers, David Mccullough, Simon & Schuster, 2020
- 2 Strategic Airport Planning, Robert E. Caves & Geoffrey D. Gosling, Elsevier Science Ltd., 2022

References:

- 1 Aviation Management “Global and National Perspective”, Aviation Management “Global and National Perspective”, Ratandeep Singh, Kanishka publisher, 2019

Suggested Theory Distribution:

The suggested theory distribution as per Bloom’s taxonomy is as follows. This distribution serves as guidelines for teachers and students to achieve effective teaching-learning process

Distribution of Theory for course delivery
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Remember / Knowledge	Understand	Apply	Analyze	Evaluate	Higher order Thinking / Creative
10.00	10.00	20.00	20.00	20.00	20.00

Instructional Method:

- 1 Case study, Powerpoint, Seminar