

COURSE TITLE	AIRLINE SCHEDULE MANAGEMENT – COMMERCIAL & CHARTER
COURSE CODE	04MB0123
COURSE CREDITS	4

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

- 1 Analyze corporate schedules, customer satisfaction, HR productivity, aircraft utilization, load factors, and connections in aviation scheduling
- 2 Demonstrate proficiency in fleet estimation, operations control, and ground operations for effective schedule planning in the aviation industry
- 3 Apply knowledge of slot problems, night curfew, regulations, and maintenance requirements to manage scheduling constraints in aviation operations
- 4 Evaluate different routing patterns and system designs to optimize route networks and improve airline scheduling efficiency.
- 5 Synthesize scheduling objectives, planning processes, constraints, and requirements to develop strategic solutions for efficient airline scheduling operations

Pre-requisite of course: Awareness of regulatory requirements and compliance in airline operations.

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 & Scheduling Objectives Understanding Corporate & Schedules Plan: Exploring corporate objectives and schedule planning in the airline industry., Customer Satisfaction: Emphasizing the importance of customer satisfaction in airline scheduling., Productivity of HR: Managing human resources efficiently to enhance productivity., Utilization of Aircraft: Maximizing the utilization of aircraft for optimal operational efficiency, Load factors & Frequency: Analyzing load factors and flight frequencies for effective scheduling., Connections & Timings: Managing flight connections and schedules to optimize passenger experience.	15

Contents : Unit	Topics	Contact Hours
2	Schedule Planning Process Importance of Schedule Planning: Recognizing the significance of thorough schedule planning in the airline industry, Fleet Estimation: Estimating fleet requirements based on operational needs, Operations Control: Implementing operational control measures to ensure smooth scheduling operations., Ground Operations & Cargo: Addressing ground operations and cargo logistics in schedule planning.	15
3	Scheduling Constraints Slot Problems: Dealing with slot allocation challenges in scheduling., Night Curfew: Managing scheduling constraints related to night curfews at airports, Industry Regulations: Adhering to industry regulations and standards in scheduling operations., Joint Venture: Exploring scheduling considerations in joint ventures with other airlines., Maintenance Requirements: Incorporating maintenance requirements into scheduling plans.	15
4	General Requirements Different Routing Patterns: Understanding the various routing patterns used in airline scheduling., Hub & Spoke System: Exploring the hub-and-spoke system and its implications for scheduling, Triangular System: Analyzing the triangular routing system in airline operations., Linear System: Understanding the linear routing system and its applications in scheduling	15
Total Hours		60

Textbook :

- 1 Aviation Management “Global and National Perspective”, Ratandeep Singh, Kanishka publisher, 2019
- 2 The Wright Brothers, David McCullough, Simon & Schuster, 2022

References:

- 1 Strategic Airport Planning, Strategic Airport Planning, Robert E. Caves & Geoffrey D. Gosling, Elsevier Science Ltd., 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					
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 Power Point, Case Study, Seminar, Workshop