

AVIATION MANAGEMENT

VIII Semester: AE								
Course Code	Category	Hours / Week			Credits	Maximum Marks		
AAE019	Core	L	T	P	C	CIA	SEE	Total
		3	-	-	3	30	70	100
Contact Classes: 45		Tutorial Classes: Nil		Practical Classes: Nil			Total Classes: 60	
<p>OBJECTIVES:</p> <p>The students will try to learn:</p> <ol style="list-style-type: none"> I. The optimization techniques for the solution of airline scheduling planning and operations problems. II. The principles of marketing and the ways in which these principles can be applied in airline industry, air transport market and its environment. III. Various integral elements in the aviation industry with a focus on the multi-faceted approach to managing modern international airports IV. The business structure, management and administrative aspects of airlines, corporate flight operations and airport operations. V. The current strategies and plans that are being used in aviation industry. <p>COURSE OUTCOMES:</p> <p>CO1: Illustrate the principles of aircraft design performance with the operating characteristics.</p> <p>CO2: Identify issues relating to aviation safety as required by the federal aviation for occupational safety and health administration.</p> <p>CO3: Explain the concept of climb and descent performance and to conclude power for best climb and descent performance.</p> <p>CO4: Discuss about various financial & organizational strategies employed by airport management and the economic, social, and political impacts of airport development on the community.</p> <p>CO5: Explain the evolution of the global air freight industry including the development of the Integrated cargo carriers.</p> <p>CO6: Summarize various hazard identifications and risk management tools in safety and security program Management.</p> <p>CO7: Summarize the differences in safety and security policies and requirements existing between the General Aviation (GA) and Commercial Aviation airport and aircraft operations.</p> <p>CO8: Explain navigation aids VOR, ILS including traffic collision avoidance systems, inertial navigation and flight management systems for arrival, departure, and en-route flights.</p> <p>CO9: Describe the applications of core satellite constellations, navigation technology including satellite Systems, augmentations and avionics.</p> <p>CO10: Identify roles and functions of airline ground, flight, maintenance, and management department's Integration of airports, airspace, and air traffic control in managing the National Airspace System.</p> <p>CO11: Describe the historical foundations for the global air transport system including the various Conventions and agreements that govern international aviation.</p>								
UNIT-I	INTRODUCTION						Classes: 10	
<p>History of Aviation- organization, global, social & ethical environment-history of aviation in India-Major players in Airline industry-Swot Analysis of different Airline companies in India- market potential of Airline industry in India- new airport development plans-current challenges in airline industry- competition in Airline industry- Domestic & International from an Indian perspective</p>								

UNIT-II	AIRPORT INFRASTRUCTURE AND MANAGEMENT	Classes: 10
<p>Airport planning – Terminal planning design & operation -Airport operations – Airport functions- organization structure in an Airline – Airport Authority of India- comparison of global & Indian Airport management- Role of AAI -Airline privatization – Full privatization- Gradual privatization- partial privatization.</p>		
UNIT-III	AIR TRANSPORT SERVICES	Classes: 09
<p>Various Airport services- international air transport services – Indian Scenario- An overview of Airport in Delhi, Mumbai, Hyderabad & Bangalore. The role of private operators- Airport development fees, Rates & Tariffs.</p>		
UNIT-IV	INSTITUTIONAL FRAMEWORK	Classes: 09
<p>Role of DGCA-Slot allocation -Methodology followed by ATC & DGCA – management of bi-laterals – economic Regulations.</p>		
UNIT-V	CONTROLLING	Classes: 07
<p>Role of air traffic control- airspace & navigational aids- control process – case study in airline industry- Mumbai-Delhi airport privatization-Navi Mumbai airport tendering process- six cases in the airline industry.</p>		
Text Books:		
<ol style="list-style-type: none"> 1. Graham. A Managing airports - an International Perspective butter worth-heinemann, oxford 2001. 2. Wells. A. Airport Planning and Management, 4th edition McGraw-Hill, London 2000. 		
Reference Books:		
<ol style="list-style-type: none"> 1. Alexander t. wells, seth young, Principles of Airport management, McGraw-hill 2003Y. V. C. Rao, 2. Richard de neufille, Airport systems: Planning, Design & Management, McGraw-hill London 2007. 		
Web References:		
<ol style="list-style-type: none"> 1. https://memberfiles.freewebs.com/94/47/55224794/documents/airport%20planning%20and%20management.pdf 2. https://books.google.co.in/books?id=RYR6cu4YSBcC&dq=Planning%20and%20Design%20of%20Airports&source=gbs_similarbooks 		
E-Text Books:		
<ol style="list-style-type: none"> 1. https://accessengineeringlibrary.com/browse/airport-planning-and-management-sixth-edition 2. https://www.only4engineer.com/2014/10/planning-and-design-of-airports-by.html 		