

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 course should enable the students to:</p> <ol style="list-style-type: none"> I. Understand about the history of aviation, major player's airline industry, current trends and challenges. II. Impart the knowledge on airport planning, airport operation and various authorities involved in airport management. III. Understand and gain the knowledge on the meteorological services, environmental regulation and airport fee, rates and charges. IV. Gain the in depth knowledge on safety regulation, economic regulation and aviation security. V. Understand about the air traffic control, air space and navigational aid. <p>COURSE OUT COMES(COs):</p> <p>CO1: Gain knowledge about Airline industry and Analysis of different market potential.</p> <p>CO2: Understand Airport planning different types of privatizations.</p> <p>CO3: Understand the importance and role of private operators.</p> <p>CO4: Identify the methodology followed by ATC & DGCA.</p> <p>CO5: Understand the role of air traffic control and the navigational aids.</p> <p>COURSE LEARNING OUTCOMES (CLOs):</p> <ol style="list-style-type: none"> 1. Provide knowledge on history of aviation industry. 2. Understand airport system planning, airport master plan, airport lay out plan. 3. Demonstrate governmental requirements on non-passenger related airport authority functions. 4. Explain Air Traffic Services Describe the history and development of Air Traffic Services (ATS). 5. Differentiate between private airports and public use airports, commercial service airports and primary commercial service airports. 6. Discuss and identify the economic, political and social role of airports. 7. Describe airport layout incorporating its different features navigation Explain air traffic rules and procedures. 8. Explain construction of runway and taxiway and aprons as per geometric design for all parameters. 9. Define the requirements of terminal area as per drawing, design and describe the visual aids for air traffic control system. 10. Explain various elements of Heliports and its planning aspects. 11. Understanding the Various Airport services- international air transport services – Indian Scenario 12. Understand the role of private operators- Airport development fees, Rates & Tariffs. 13. Understanding the role DGCA from the certification 14. Knowledge on the role of air traffic control in airspace & navigational aids with live examples 15. Understanding different cases in airline industry. <p style="padding-left: 40px;">Explore the use of learning about how airports work, especially about airport safety and international aviation laws.</p>								

UNIT-I	INTRODUCTION	Classes: 10
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		
UNIT-II	AIRPORT INFRASTRUCTURE AND MANAGEMENT	Classes: 10
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.		
UNIT-III	AIR TRANSPORT SERVICES	Classes: 09
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.		
UNIT-IV	INSTITUTIONAL FRAMEWORK	Classes: 09
Role of DGCA-Slot allocation -Methodology followed by ATC & DGCA – management of bi-laterals – economic Regulations.		
UNIT-V	CONTROLLING	Classes: 07
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.		
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 neuffille, 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=RYP6cu4YSBcC&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 		