### AVIATION MANAGEMENT

VIII Semester: AE								
Course Code	Category	Hours / Week			Credits	Maximum Marks		
AAE019	Core	L	Т	P	С	CIA	SEE	Total
		3	-	-	3	30	70	100
Contact Classes: 45	Tutorial Classes: Nil	Practical Classes: Nil				Total Classes: 45		

### I. COURSE OVERVIEW:

The aim is to understanding of relevant international and national regulations and the ability to explain their effects on airport business, planning, design, operations and safety management decisions. A critical awareness of the key issues that affect users of airport facilities. And to identify, analyse and design solutions in order to address a given research problem within the context of airport planning and management, having regard to regulatory constraints and commercial and environmental imperatives.

# II. OBJECTIVES:

### The course should enable the students to:

- I. Understand about the history of aviation, major players 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.

# **III. COURSE OUTCOME:**

# After successful completion of the course, students should be able to:

- CO 1 **Illustrate** the major roles of airport authority of India, current challenges in Understand airline industry for air navigation service (ANS) at the airports, works under the ministry of civil aviation
- CO 2 **Demonstrate** strengths, weaknesses, opportunities, and threats, of Swot analysis at Understand different airline companies for the operations of three broad categories engineering and maintenance, flight operations, and sales and marketing.
- CO 3 **Select** various domestic services and International air transport services from an Indian perspective for most needs of the business aviation system and serve as essential transportationl
- CO 4 **Identify** the roles of the public sector and private sector operators and Apply development fees rates and tariffs for development by promoting rapid economic growth through infrastructure creation and expansion
- CO 5 Classify types of privatizations, navigation service provided tocivil aviation with Understand the very high frequency, omni range transmitters, ILS, management systems for the signals to en-route flight arrival and departure.
- CO 6 Utilize the methodology followed by ATC, economic Regulations, directorate general of civil aviation include for governing safety aspects of civil aviation, which include certification of airlines and aerodromes, airworthiness, licensing and surveillance of aircraft operations

# **IV. SYLLABUS:**

# 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

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

Classes: 10

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 FRAMEWWORK

Classes: 08

 $Role\ of\ DGCA-Slot\ allocation\ - Methodology\ followed\ by\ ATC\ \&\ DGCA-management\ of\ bi-laterals-economic\ Regulations.$ 

# UNIT-V CONTROLLING

Classes: 08

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:**

- 1. Graham. a "Managing airports an International Perspective" butterworth-heinemann, oxford 2001.
- 2. Wells. a. "Airport Planning and Management, Mcgraw-Hill, London, 4<sup>th</sup> Edition, 2000.

### **Reference Books:**

- 1. Alexander t. wells, seth young, "Principles of Airport management", Mcgraw-hill 2003.
- 2. Richard de neufille, "Airport systems : Planning, Design & Management", Mcgraw-hill London 2007.

### **Web References:**

- 1. https://memberfiles.freewebs.com/94/47/55224794/documents/airport%20planning%20and%20 management.pdf
- 2. https://books.google.co.in/books?id=RYR6cu4YSBcC&dq=Planning%20and%20Design%20of%20Airports&source=gbs\_similarbooks

# **E-Text Books:**

- 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

# **Course Home Page:**