**SCHOOL OF AVIATION, TOURISM AND HOSPITALITY MANAGEMENT(SATHM), DAVV**

**COURSE : Certificate In Airport Warehouse Coordinator**

**Duration :** 03 Months

**Scope :** The course covers job functions involved both in the area of airport warehouse as well as procurement functions In Airport Warehouse unit, how materials are received, quantity control is done, store in, inventory control, packing and dispatch is covered. Warehouse Coordinator, Cargo Handler, Logistics Coordinator, Inventory Control Manager, Supply Chain Manager are the major job functions.

**Eligibility :** 10 + 2 passed in any stream.

**Admission Process** : Direct

**Course Scheme**

**Certificate in Airport Warehouse Coordinator (03 Months)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S.NO.** | **Course Code** | **Subject** | **GEC(T)** | **SCC(P)** | **Total Credits** |
| 1 | CAWC-01 | Fundamental Of Aviation Security | 2 | 4 | 4 |
| 2 | CAWC-02 | Warehouse management principles | 2 | 4 | 4 |
| 3 | CAWC-03 | Aviation Law, Aircraft Rules & Regulations. | 2 | 4 | 4 |
| 4 | CAWC-04 | Computer Application in Aviation Industry | 2 | 4 | 4 |
| 5 | CAWC-05 | Field Visit/Expert Talk | 2 | 4 | 4 |
|  |  | **Total** | **10** | **20** | **20** |

**Fundamental Of Aviation Security**

* CO1: Understand the historical development and evolution of the aviation industry.
* CO2: Identify the key players and stakeholders in the aviation ecosystem.
* CO3: Analyse the economic impact of the aviation industry on the global and national levels.
* CO4: Explain the regulatory framework governing the aviation industry.
* CO5: Evaluate the various segments of the aviation industry and their interconnections.

1. **Introduction to Aviation:** Definition and scope of aviation, Historical development of aviation, Importance of aviation in the global economy, Different sectors of the aviation industry (commercial, general aviation, cargo, military, etc.)
2. **The Aviation Ecosystem:** Key players in the aviation industry (airlines, airports, air traffic control, aircraft manufacturers, etc.)**,** Structure of the aviation industry (value chain analysis)**,** Role of government and regulatory bodies**,** Aviation alliances and partnerships
3. **Economics of Aviation:** Economic impact of aviation on the global and national economy, Revenue models of airlines (passenger, cargo, ancillary services), Cost structure of airlines (fixed and variable costs), Pricing strategies in the aviation industry, Airline profitability and financial analysis, Current challenges in Airline Industry Completion in Airline Industry- IATA & ICAO, Certificated air carriers, Types of airlines, stakeholders of civil aviation in India.
4. **Aviation Safety and Security:** Importance of aviation safety and security, Role of regulatory bodies in ensuring safety, Aviation accidents and incident investigations, Counterterrorism measures in aviation, Passenger and baggage screening
5. **Aviation Regulations:** National and international aviation regulations, Air traffic management, Environmental regulations in aviation, Consumer protection in aviation, Aviation law and liability
6. **Emerging Trends in Aviation:** Impact of technology on the aviation industry (e.g., drones, artificial intelligence, automation), Sustainable aviation practices, Low-cost carriers and their business models, Challenges and opportunities in the aviation industry

# Suggested Text Books :

* **Airline Management: A Global Perspective** by Stephen J. Shaw and Len Berry
* **Aviation Management: An International Perspective** by John O. Grahl and Wolfgang Arlt
* **The Airline Business** by Richard L. Nolan
* **IATA Dangerous goods manual online at DGCA WEBSITE**

**Warehouse Management Principles**

CO1: Understand the evolution of aviation, from pioneers to commercial airlines, and its global impact.

CO2: Gain insights into the airline industry's history, types, operations, revenue models, and challenges.

CO3. Acquire knowledge of airport warehouse operations, organizational structures, and the role of technology.

Unit l: lntroduction to Aviation History: Early pioneers and inventors in aviation, Key milestones leading to the first powered flight by the Wright Brothers, The role of aviation during World War I and ll, Technological advancements and innovations in aircrafl during wartime, The impact of aviation on global geopolitics, Post-War developments in civil aviation and the emergence of commercial airlines, Development of air transportation in lndia.

Unit ll: lntroduction to Airline lndustry: Historical development and evolution of the airline industry, the signilicance of the airline industry in global transportation, Types of Airlines - Scheduled and NonScheduled Flights, Classification of airlines based on business models (fulFservice, low-cost, regional, etc.), Major players in Airline lndustry in lndia and world. Introduction about Ground Handling services and Ground Handling Agencies (GHA) in airport, Different functions of GHAFuelljng, catering, creaning procedures, ticketing, check-in, boarding, disembarkation processes, roading and unloading cargo and baggage, Marshalling and Towing, Ramp Operations,

Unit lll: lntroduction to Airport lndustry: History of Airports in world and lndia. Different types of airports and their classifications civil, Military etc. lntroduction to the role and responsibilities oiairport operators Different types of airport operators (public, private, ppp models). Maior airport operators in lndia The impact of airport size on operations and services. Daily operations at airports and thejr significance. understanding the organizationar srructure of airport managemenl. Roles and responsibilities of various departments within airport operator. Airports Fire and Rescue services. Key factors in designing airport facilities and terminals.

Unit V : lntroduction to various Types of Aircraft and classifications based Military, General Aviation, Basic components and characteristics of different aircraft types, Differentiating between narrow-body and wide-body aircraft, overview of regionar , Major manufacturers of aircrafts in the world, major engine manufacturers, lntroduction to long-haul and shortPage '13 of 52 haul aircraft, importance of understanding environmental implications and carbon footprint of modern aircraft.

Unit VI :Aviation Regulatory Bodies: Introduction to the essential definition and functions of aviation regulators. Understanding the pivotal role played by regulators in ensuring safety, security, and compliance within the aviation industry. lnternational Civil Aviation Organization (ICAO), Federal Aviation Administration (FAA), Airport Council lnternational, CivilAir Navigation Services Organisation (CANSO), Director General of Civil Aviation (DGCA), Bureau of Civil Aviation Security (BCAS), Airports Economic Regulatory Authority (AERA), Aircraft Accident lnvestigation Bureau (AAIB). case study on the Air rndia Express rx1344 crash in caricut in 2020.

**Text Books Of References:**

* 1. Airline operations and management: A management textbook by Gerald N.Cook & Bruce G. Billig.
  2. Airport Operations, Third Edition by Norman Ashford, Pierre Coutu and John Beasley
  3. lntroduction to Aviation l.4anagement by Andreas wald, Achim l. czerny, and christoph Briitzel
  4. Airline and Airport Operations by Edissa Uwayo.

**AVIATION LAW, AIRCRAFT RULES & REGUALTIONS**

UNIT – 1: CIVIL AVIATION REGULATIONS AUTHORITY DGCA-Introduction to Directorate General of Civil Aviation- DGCA functions- DGCA Organization-DGCA as Regulatory Authority

UNIT – 2: AIRCRAFT RULES 06 Hrs Aircraft Act 1934 -The Aircraft Rules 1937

UNIT – 3: NATIONAL LEGISLATION The Air corporations Act, 1953 (27 of 1953) -The Air Corporations (Transfer of Undertakings and Repeal) Ordinance, 1994(4 of 1994) -The Air Corporations (Transfer of Undertakings and Repeal) Act, 1994 (13 of 1994) -The International Airports Authority of India act, 1971 (43 of 1971) -The National Airports Authority of India, 1985 (64 of 1985) -The Airports Authority of India Act 1994 (55 of 1994) -The Carriage by Air Act, 1972 (69 of 1972) -The Tokyo Convention Act, 1975 (20 of 1975) -The Anti-hijacking Act, 1982 (65 of 1975) -The suppression of unlawful acts against safety of Civil Aviation Act, 1982 (66 of 1982)

UNIT – 4: CIVIL AVIATION REQUIREMENTS (CAR) Section 1-General -Section 2-Airworthiness - Section 3-Air Transport -Section 4-Aerodrome standards and Air Traffic Services -Section 5- Air Safety -Section 6-Design standards and type certification -Section7-Flight crew standards, training and licensing -Section 8-Aircraft operations

UNIT- 5: INTERNATIONAL CONVENTIONS The Chicago conventions, 1944 -The International Air Services Transit Agreement, 1944 -The International Air Transport Agreement, 1944 - The Warsaw Conventions, 1920 -The Geneva Convention, 1948 1952 -The Tokyo Convention, 1963.

**Text Books Readings –**

1. Aircraft Manual, C.A.R. Sec.II
2. Aviation and Airport Security - Kathleen Sweet -Pearson Education lnc.
3. Aviation in Crisis - Ruwantissa l.R. Abeyratne - Ashgate Publishing Ltd.
4. Aviation Safety Programs - Richard H. Wood - Jeppesen Sanderson lnc
5. ICAO Annexure 17- Aviation Security
6. ICAO Annexure 1g-Safety Management System

**Computer Application in Aviation Industry**

* 1. ***Introduction to Air Cargo and IT****: Overview of the air cargo industry: types of cargo, stakeholders, and the supply chain, Role of information technology in air cargo operations: enhancing efficiency, accuracy, and decision-making, Basic concepts of computer hardware and software relevant to cargo operations.*
  2. ***Cargo Handling Systems (CHS)****: Understanding the concept of CHS: definition, components, and benefits, Cargo acceptance and booking processes: data entry, validation, and storage, Warehouse management systems (WMS): inventory control, space utilization, and picking/packing, Cargo build-up and load planning: weight and balance calculations, cargo security, and compliance.*
  3. ***EDI:*** *Electronic data interchange (EDI) and its role in document exchange, Risk management and security compliance.*
  4. Introduction to Internet : WWW & Web Browsers, Basics of Computer Networks, Internet, Search Engines, URLs, How to use Web Browser,
  5. *Network & its types: Importance of Network in aviation industry, network functions and its types, Network services.*
  6. *Communication & Collaboration: Basics of E-Mail, How to use Email, Instant Messaging, Format Of E-mail, group mail, chatting.*
  7. ***Air Cargo Information Systems (ACIS):****Overview of ACIS: components, functionalities, and benefits, Data warehousing and business intelligence: generating reports and insights, Integration of ACIS with other systems: ERP, CRM, and TMS, Future trends in air cargo technology: automation, robotics, and artificial intelligence.*

***Suggested Reference Books:***

* ***Air Cargo Management*** *by Geoffrey Lipman (Kogan Page)*
* ***Logistics and Supply Chain Management*** *by Christopher, Martin (Pearson)*
* ***International Logistics*** *by David F. Rogers (McGraw-Hill)*
* ***Information Technology for Management*** *by Laudon and Laudon (Pearson)*

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