

# BANGALORE UNIVERSITY Jnanabharathi, Bengaluru- 560056

(According to NEP - 2020 Regulations)
Syllabus of 3rd and 4th Semesters
Bachelor of Business Administration (Aviation Management)

**2021-22 Onwards** 

# DEPARTMENT OF COMMERCE Jnanabharathi Campus, Bangalore University, Bengaluru- 560056 www.bangaloreuniversity.ac.in

# BANGALORE UNIVERSITY BBA (Aviation Management) PROGRAMME STRUCTURE

# **SEMESTER III**

SI No.	Course Code	Title of the Course	Category of courses	Teaching hours per week (L+T+P)	SEE	CIE	Total Marks	Credits
1	Lang.3.1	Language - I	AECC	3+1+0	60	40	100	3
2	Lang.3.2	Language - II	AECC	3+1+0	60	40	100	3
3	BBA 3.1	Airline Accounting	DSC	4+0+0	60	40	100	4
4	BBA 3.2	Air Traffic Control	DSC	3+0+2	60	40	100	4
5	BBA 3.3	Ground Handling Operations	DSC	4+0+0	60	40	100	4
6	BBA 3.4	Artificial Intelligence	SEC	2+0+0	30	20	50	2
7	BBA 3.5.1	Sports	SEC-VB	0+0+2	-	25	25	1
8	BBA 3.5.2	NCC/NSS/others (if any)	SEC-VB	0+0+2	-	25	25	1
9	BBA 3.6	Airport Customs Process	OEC	3+0+0	60	40	100	3
Sub	Sub - Total (C)				390	310	700	25

## **SEMESTER IV**

Sl No.	Course Code	Title of the Course	Category of courses	Teaching hours per week (L+T+P)	SEE	CIE	Total Marks	Credits
1	Lang.4.1	Language – I	AECC	3+1+0	60	40	100	3
2	Lang.4.2	Language - II	AECC	3+1+0	60	40	100	3
3	BBA 4.1	Elements and Methods of costing	DSC	4+0+0	60	40	100	4
4	BBA 4.2	Airline Marketing	DSC	3+0+2	60	40	100	4
5	BBA 4.3	Airline Finance	DSC	4+0+0	60	40	100	4
6	BBA 4.4	Constitution of India	AECC	2+0+0	30	20	50	2
7	BBA 4.5.1	Sports	SEC-SB	0+0+2	30	20	50	2
8	BBA 4.5.2	NCC/NSS/others (if any)	SEC-VB	0+0+2	ı	25	25	1
9	BBA 4.6	Cold Chain Logistics	OEC	3+0+0	60	40	100	3
Sub	Sub - Total (D)				390	310	700	25

#### Notes:

- Ø One Hour of Lecture is equal to 1 Credit.
- Ø One Hour of Tutorial is equal to 1 Credit (Except Languages).
- Ø Two Hours of Practical is equal to 1 Credit

## **Acronyms Expanded**

Ø AECC : Ability Enhancement Compulsory Course

Ø DSC © : Discipline Specific Core (Course)

Ø SEC-SB/VB : Skill Enhancement Course-Skill Based/Value Based

Ø OEC : Open Elective Course

Ø DSE : Discipline Specific Elective

Ø SEE : Semester End Examination

Ø CIE : Continuous Internal EvaluationØ L+T+P : Lecture+Tutorial+Practical(s)

**Note:** Practical Classes may be conducted in the Business Lab or in Computer Lab or in Class room depending on the requirement. One batch of students should not exceed half (i.e., 50 or less than 50 students) of the number of students in each class/section. 2 Hours of Practical Class is equal to 1 Hour

of Teaching, however, whenever it is conducted for the entire class (i.e., more than 50 students) 2 Hours of Practical Class is equal to 2 Hours of Teaching

Course Code: BBA(AM) 3.1

Name of the Course: Airline Accounting

Course Credits	No. of Hours per week	Total No. of Teaching Hours
4 Credits	4 Hrs	56 Hrs

Pedagogy: Classroom lecture, Tutorials, Group discussion, Seminar, Case studies, Fieldwork etc.,

## Course Outcomes: On successful completion of the course, the Students will be able to

• Learn and understand the Airline Accounting and Financial Procedure

# **Syllabus**

## Module No. 1: INTRODUCTION (10 Hrs)

Financial Performance of Airline Industry – Introduction – Deregulation – Airline Industry Before and After Deregulation – Airline Profitability – Airline Mergers and Bankruptcies – Financial Statement Analysis

## Module No. 2: ACCOUNTING ANALYSIS (12 Hrs)

Statement of Retained Earnings – Analysis of Financial Ratios – Asset Management Ratios – Profitability Ratios – Airline and Aviation Based Ratios – Time Value of Money – Present Value – Future value – Annuity – Amortization

## Module No. 3: ANALYSIS AND LEASING (10 Hrs)

Depreciation Analysis – Methodology – Using Spreadsheet for Depreciation Practices – Analysis for Break Even and Payback Period – Break Even analysis – Break Even Load Factor – Scenario Analysis – Aircraft Leasing – Types of Leases – Buy Versus Lease Analysis – Major Commercial Leasing Companies

#### Module No. 4: FUEL HEDGING AND STRUCTURE ( 12 Hrs )

Fuel Hedging – Financial Derivatives – Airline Industry and Fuel Hedging – Futures Market – Forward Market – Option Contracts

## Module No. 5: AIRLINE COST STRUCTURE (12 Hrs)

Airline Cost Structure – Cost Component – Operating Costs – Cost Cutting Measures – Low Cost Airlines – Business Model – Growth – Reason for Success – Cost Structure SKILL DEVELOPMENT: 1. A Research Study on Leasing Aircrafts from Foreign Countries 2. Assignment on Pricing Strategies of any Domestic Airlines 3. Write an essay on Future Market of Aviation Industry

# **Skill Developments Activities:**



#### **Reference Books:**

- Airline Accounting and Financing by Fly Sky Aviation, Edition 2020.
- IATA FINANCIAL MANAGEMENT
- Aircraft Leasing and Financing: Tools for Success in International Aircraft by By Vitaly S. Guzhva, Sunder Raghavan, Damon J. D'Agostino

Course Code: BBA(AM) 3.2

Name of the Course: Air Traffic Control

Course Credits	No. of Hours per week	Total No. of Teaching Hours
4 Credits	4 Hrs	56 Hrs

**Pedagogy:** Classroom lecture, Tutorials, Group discussion, Seminar, Case studies, Fieldwork etc.,

Course Outcomes: On successful completion of the course, the Students will be able to

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## **Syllabus**

## Module No. 1: History of Air Traffic Control (08 Hrs)

History of Air Traffic Control and Developments during 1903-1925, 1925-1934, 1934-1945, 1955, 1955-1965, 1965-1981, 1981-2001, 2001 +

## Module No. 2: Air Traffic Procedures & Operations (12 Hrs)

Separation responsibilities in controlled Airspace, Air Traffic control procedures, delegation of responsibilities, controller duties in air route, traffic control center, air traffic tower responsibilities, radio communication, communication procedures, additional communication phraseology, Control towers flight data-controlled duties, clearance delivery control duties, ground controller duties, local controller duties.

## Module No. 3: Air Space System (10 Hrs)

Overview of IFR flight, flight planning and IFR clearance, coded departure routes, alternative routes, phoenix air space, departure control in routes, separation delay techniques, approach control, local controls, VFR flight, VFR Operations.

## Module No. 4: Flight Information & Altering Services (12 Hrs)

Radar services, basic product terminology, primary & secondary performance checks, Radar separation procedures, development of pulse radar, receiver controls, transmitter controls, display controls, types of Air traffic control radar, Air traffic control radar beacon system, computerized radar system, radar separation-Aircraft identification transfer of Aircraft identification basic radar separations, radar arrivals & approaches.

## Module No. 5: Future of the National AirSpace System (14 Hrs)

Automated Air Traffic control procedural separation standards, Air traffic control modernization, current air traffic control initiatives departure delay program, in-route metering, enroute sector loading program, procedural changes, CNS improvements, communications system changes, required navigation performance, navigation security, surveillance system, Air traffic management, next generation Air traffic control, major components of next generation flexible air traffic control, collaborative air traffic management, improved air traffic separation, additional ADS functions enroute automation and modernization.

## **Skill Developments Activities:**

- Visit to Air Traffic Control and make a study report.
- Prepare a report on- a challenge faced by Air traffic control.
- Make a report on radar approach control facilities.
- Any other activities, which are relevant to the course.

# **Reference Books:**

- Air Traffic Control Michael S. Nolan
- Nextstep Institute of Logistics and Aviation guide-Paniraj Murthy & Shobha K.V
- ATCT / RAPCON Design Guide

Course Code: BBA(AM) 3.3

Name of the Course: Ground Handling Operations

Course Credits	No. of Hours per week	Total No. of Teaching Hours
4 Credits	4 Hrs	56 Hrs

Pedagogy: Classroom lecture, Tutorials, Group discussion, Seminar, Case studies, Fieldwork etc.,

## Course Outcomes: On successful completion of the course, the Students will be able to

- Acquire basic knowledge of Ground handling process and procedure at Airport
- Analysis of various responsibilities and measures taken for flight operations.
- Able to assess normal and special handling situations

## **Syllabus**

## **Module No. 1: Ground Support Equipment's (10 Hrs)**

Introduction to GSE, Aircraft Ground support equipment specification as per IATA (AHM), ground handling service category technical and operational standard for ground handling services, Sub contact activities, equipment handling agency, manpower agency, baggage handlers ramp operations, Inspection and Training for  $3^{\rm rd}$  Party service providers

## Module No. 2: Ground Handling Training & Certification (10 Hrs)

Types of training Induction, firefighting and safety training, dress code, SMS, DGR Handling process, refueling marshaling, Load & Trim, Flight Dispatch, Application for certification, issues of Technical Approval Certificate (TAC) Renewal of TAC, Display of Certificate and Policies. Ground Operation and Training as per IATA – AHM Standard.

# Module No. 3: GSE – Procedure for International Flight Operation (10 Hrs)

Airport Handling Manual, (AHM) IATA Procedures like Service License agreement (SLA), Various types of SLA, contract and agreements, Penalty clause, Internal and External audit by Various Civil aviation authorities.

## Module No. 4: Emergency Response & Disaster Management (14 Hrs)

Organization and Management, Emergency response Manual - Procedure lesion with external entity like MOCA, MOD, MOH, STATE GOVERNMENT Concern district Administrative authority, Civil defense authority, and State Police, Emergency Response drill and Exercises on Various type of emergency at Inside and Outside of Airport as per IATA Procedure.

## Module No. 5: Roles & Responsibilities of Ground Handling Team (10 Hrs)

Duties and Responsibilities of , Station Manager, Ramp Manager, Cargo Manager, Terminal Manager, Safety Manager, AOCC & Airline OCC, Duties and Responsibilities of 3<sup>rd</sup> Party Service Providers.

## **Skill Developments Activities:**

- Visit Domestic Airport to make a study report on Ground handling equipment & Procedures.
- Demonstrate the Firefighting & First Aid activity

Any other activities, which are relevant to the course.

# **Reference Books:**

- 1. IATA Manual
- 2. Nextstep Institute of Logistics & Aviation Guide Paniraj Murthy & Shobha K V
- 3. Civil Aviation Directive 6010 Ground Handling Book

Course Code: BBA(AM) 3.4 Open Elective Course (OEC)

Course Credits	No. of Hours per week	Total No. of Teaching Hours
3 Credits	3 Hrs	42 Hrs

Pedagogy: Classroom lecture, Tutorials, Group discussion, Seminar, Case studies, Fieldwork etc.,

## Course Outcomes: On successful completion of the course, the Students will be able to

- Gain knowledge of Airport customs & Exim policies in India
- Gain knowledge of customs procedures
- Understand the documentation of airport customs and Exim
- Understand the challenges faced by Exporters and importers with respect to air transportation

# **Syllabus**

## Module No. 1: INTRODUCTION TO CUSTOMS (12 Hrs)

Importance of customs, organization chart of customs Duties and Responsibilities of Customs officials at Airport functions and powers of customs officers Prohibited goods, notified goods, specified goods. Restricted imports. Provisions relating to Baggage

## Module No. 2: . INTRODUCTION TO CUSTOMS POLICIES (12 Hrs)

Special Economic Zones Scheme. EOU Scheme. EPCG Scheme, FTZ, Exim trade facility bodies, DGFT Functions, Exim Glossary, SVB SCHEME, Prohibited goods, EXIM BANK, Classification of Goods.

Immigration process, self declaration of Valuable goods, Exempted slabs for high value items, Goods unclaimed baggage, auctioning procedure of Sized / Unclaimed goods, HS Code, World Custom Organization ( WCO )

## Module No. 3: Documentation (10 Hrs)

BOE (Bill of Entry), Assessment process EDI (Electronic data interchange), SWIFT – Single Window Interface for Facilitating Trade, AEO – Authorized Economic Operators , BRO, LC, Shipping Bill, PO, Invoice, Packing list, Self-deceleration, Insurance, Type of Insurance, Insurance claim & Settlement process in the event of loss / Theft / Damage / Missing

## Module No. 4: Customs House Agent licensing process (08 Hrs)

How to get the License for rule 6, process procedure, G card and H Card process Importance of CHA activities, Renewal of License, Audit system, Difference between CHA and Freight forwarder activities

# **Skill Developments Activities:**

- Visit Customs office make study report on Customs process, documentation, new policies & Procedures,
- Visit any CHA Company to understand the workflow

## **Reference Books:**

1. Customs Law – Aviation

Course Code: BBA(AM) 4.1

Name of the Course: Elements and Methods of costing

C	Course Credits	No. of Hours per week	Total No. of Teaching Hours
	4 Credits	4 Hrs	56 Hrs

Pedagogy: Classroom lecture, Tutorials, Group discussion, Seminar, Case studies, Fieldwork etc.,

## Course Outcomes: On successful completion of the course, the Students will be able to

• acquaint the students with different perceptions of the elements of cost and costing techniques

# **Syllabus**

## Module No. 1: INTRODUCTION AND RECENT TRENDS IN COST ACCOUNTING (14 Hrs)

Meaning and Definition of Cost, Costing and Cost Accounting – Scope of Costing Accounting - Objectives of Costing – Pros and Cons of Costing - Comparison between Financial, Management and Cost Accounting - Installation of Cost Accounting System. Cost concepts and classifications – Cost Units – Cost Center – Elements of Cost – Preparation of Cost Sheet (Practical Problems) – Recent Trends in Cost Accounting: Cost Control and Cost Reduction – Target Costing – Value chain analysis – Activity based costing – Life Cycle cost analysis – Kaizen Costing – Enterprise resource planning – Cost audit

## Module No. 2: RECONCILIATION OF COST AND FINANCIAL ACCOUNTING (6 Hrs)

Need for Reconciliation – Reasons for differences in Profit or Loss shown by Cost Accounts and Profit or Loss shown by Financial Accounts – Preparation of Reconciliation Statement and Memorandum Reconciliation Account

## Module No. 3: ELEMENTS OF COSTING – MATERIAL ( 12 Hrs )

Meaning – Types: Direct Material, Indirect Material. Material Control – Purchasing Procedure – Store Keeping – Techniques of Inventory Control –Levels settings – EOQ – ABC Analysis – VED Analysis – Just In-Time – Perpetual Inventory System – Documents used in Material Accounting - Methods of Pricing Material Issues: FIFO, LIFO, Weighted Average Price Method and Simple Average Price Method - Problems.

## Module No. 4: ELEMENTS OF COSTING - LABOUR (12 Hrs)

Meaning – Types: Direct Labour, Indirect Labour - Timekeeping – Time booking – Idle Time – Overtime – Labour Turnover. Methods of Labour Remuneration: Time Rate System, Piece Rate System, Incentive Systems (Halsey plan, Rowan Plan & Taylor's differential Piece Rate System) – Problems

## Module No. 5: ELEMENTS OF COSTING – OVERHEAD (12 Hrs)

Meaning and Definition – Classification of Overheads – Procedure for Accounting and Control of Overheads – Allocation of Overheads – Apportionment of Overheads – Primary Overhead Distribution Summary – Secondary Overhead Distribution Summary – Repeated Distribution Method and DEPARTMENT OF COMMERCE, JNANABHARATHI CAMPUS, BENGALURU- 560 056. Page 32 BANGALORE UNIVERSITY, BENGALURU Simultaneous Equations Method – Absorption of Factory

Overheads – Methods of Absorption (Theory Only) – Machine Hour Rate – Problems on Machine Hour Rate

# **Skill Developments Activities:**

## **Reference Books:**

- 1. J Made Gowda, Cost and Management Accounting
- 2. M.V. Shukla, Cost and Management Accounting
- 3. N.K. Prasad, Cost Accounting HPH
- 4. M.L. Agarwal, Cost
- 5. S.P. Jain & Narang, Cost Accounting, Kalyani 6. M.N. Arora Cost Accounting HPH

**Course Code:** BBA(AM) 4.2 **Name of the Course:** Airline Marketing

Course Credits	No. of Hours per week	Total No. of Teaching Hours
4 Credits	4 Hrs	56 Hrs

Pedagogy: Classroom lecture, Tutorials, Group discussion, Seminar, Case studies, Fieldwork etc.,

Course Outcomes: On successful completion of the course, the Students will be able to

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# **Syllabus**

## Module No. 1: Fundamentals of Airline Marketing (10 Hrs)

Introduction, Definition of marketing, stages and applications of marketing principles to airline management, capital PESTLE analysis, political factors, marketing policies of deregulated Environment, types of airline customers, air freight market, market segmentation, air passenger market. Airline Market Current Vs Future.

# Module No. 2: Airline Business and Marketing Strategies (12 Hrs)

Marketing strategies, marketing planning, marketing effectiveness, customer philosophy, strategy orientation, efficient operations, marketing efficiency input, direct operational costs, indirect operational costs over-heads, distributing the product, promotional mix, advertising personal selling, sales promotion public relations

## Module No. 3: Product Analysis in Airline Marketing (10 Hrs)

What is Airline product, product lifecycle in airline industry, managing portfolio, balancing risk and opportunities of ANSOFF matrix, cabin configuration and classes of services, customer service, point of sales services, airport service, in-flight services.

## Module No. 4: Airline Brand and Sales Management (12 Hrs)

Introduction to brand management, brand building in airline industry, foundations of brand marketing and brand building process, brand strategies, Airline advertisement, functions of advertisement, sales planning, sales budget sponsorship policies, database marketing, media relations.

#### Module No. 5: Airline Pricing and Revenue Management (12 Hrs)

Automated Air Traffic control procedural separation standards, Air traffic control modernization, current air traffic control initiatives departure delay program, in-route metering, enroute sector loading program, procedural changes, CNS improvements, communications system changes, required navigation performance, navigation security, surveillance system, Air traffic management, next generation Air traffic control, major components of next generation flexible air traffic control, collaborative air traffic management, improved air traffic separation, additional ADS functions enroute automation and modernization.

## **Skill Developments Activities:**

• Make a strategic diagnosis of Emirates Airlines.

- Make a future analysis of Airline marketing industry
- Discuss case study of 2 successful airline industries
- Discuss case-study of Kingfisher and Jet Airways.
- Any other activities, which are relevant to the course.

## **Reference Books:**

- 1. Airline Marketing Management Stephen Shah
- 2. Nextstep Institute of Logistics and Aviation Paniraj Murthy & Shobha K.V
- 3. Airline Operations Management Bruce G. Billing

**Course Code:** BBA(AM) 4.3 **Name of the Course**: Airline Finance

Course Credits	No. of Hours per week	Total No. of Teaching Hours
4 Credits	4 Hrs	56 Hrs

Pedagogy: Classroom lecture, Tutorials, Group discussion, Seminar, Case studies, Fieldwork etc.,

 $Course\ Outcomes:\ On\ successful\ completion\ of\ the\ course,\ the\ Students\ will\ be\ able\ to$ 

**Syllabus** 

## Module No. 1:: Foundations of Airline Finance (10 Hrs)

Airline finance and overview, Introduction and historical background, accounting profit, economic profit, business organizational structure, comparison between business structure and financial markets, key financial issues in airlines, structure of airline cost control strategies.

## Module No. 2: Finance in Airline Industry (12Hrs)

Airline financial accounting practice, basic principle of accounting, difference in airline accounting, accounting treatment of frequent flier programs, financial ratio analysis, airline pacific financial ratio, airline industry benchmarking, predicting insolvency, financial risk analysis, capital asset pricing module (CAPM)

## Module No. 3: Airline Financial Planning and Appraisal (10 Hrs)

Equity finance foreign ownership limits, initial public offering (IPO), Airline privatization, types of privatization, start-up Airline business plan, working capital management, financial planning, budget preparation and control, aircraft leasing, types of leasing.

## Module No. 4:: Financial trend in Aviation Industry (14 Hrs)

Introduction to financial derivatives, hedging strategies for airline industry, accounting for airline industry, commercial and air traffic control, airport valuation, aircraft secured bond products, aircraft valuation.

#### **Module No. 5: Airline Finance Statement (10 Hrs)**

Introduction, Cash flow statement, Profit and Loss Accounts, Budget preparation control, working capital Management, Startup Airline Business Plan, Foreign exchange & Risk Business Management, Factor affecting Financial Result, Asset utilization, world Airline Financial results

## **Skill Developments Activities:**

- Review any 2 Airline company's financial statements
- Visit any Airline and make a finance flowchart

Any other activities, which are relevant to the course.

## **Reference Books:**

- 2. Nextstep Institute of Logistics and Aviation- Paniraj Murthy & Shobha K.V
- 3. Foundations of Airline Finance Bijan Vasigh

**Course Code:** BBA(AM) 4.4 Open Elective Course (OEC)

Name of the Course: Cold Chain Logistics

Course Credits	No. of Hours per week	Total No. of Teaching Hours
3 Credits	3 Hrs	42 Hrs

Pedagogy: Classroom lecture, Tutorials, Group discussion, Seminar, Case studies, Fieldwork etc.,

## Course Outcomes: On successful completion of the course, the Students will be able to

- Understand the Cold Chain Logistics Business, Method and Process of Cold Chain Logistics.
- Customer behavior with respect to Cold Chain Logistics

## **Syllabus**

## Module No. 1: Cold Chain Business (16 Hrs)

Introduction, Cold Chain Business, Cold Chain business in Global and India, New Trends in Cold chain Logistics, Market Statistics, Customers Behaviour in Cold Chain Business, History Cold storage, Efficient Cold storage management, Cold Chain Equipment, Electrical and non-electrical and solar equipment, Equipment's and types of vehicles used for Transportation.

## Module No. 2: . Importance of Cold Chain Business (14 Hrs )

Changing nature of Cold Chain Business, Future of Cold Chain Business Cold Chain Components Reefer Technology, Methods of temperature control units, Role of Warehouse in Cold chain Business, Cold Chain systems, Do's and Don'ts in Cold chain Business, Temperature monitoring system, real time, temperature monitoring mapping, distribution system, cold chain distribution management.

## Module No. 3: Operation methods of last mail connectivity (12 Hrs)

Cold Chain warehousing functions. Role of MIS Information Technology in Cold chain management New trends in Cold Chain Logistics Business.

# **Skill Developments Activities:**

- Visit the Cold chain warehouse and understand the procedure.
- Make a study report of the Temperature monitoring system.

#### **Reference Books:**

Cold storage, Cold Chain & Warehouse by - NPCS

- Nextstep Institute of Logistics & Aviation Guide Paniraj Murthy & Shobha K V
- Hand Book for Vaccine & Cold Chain Handlers MHRD