VELS

INSTITUTE OF SCIENCE, TECHNOLOGY & ADVANCED STUDIES (VISTAS)

(Deemed to be University Estd. u/s 3 of the UGC Act, 1956)

PALLAVARAM - CHENNAI

ACCREDITED BY NAAC WITH 'A' GRADE

Marching Beyond 30 Years Successfully

INSTITUTION WITH UGC 12B STATUS

M.B.A- AVIATION AND AIRPORT MANAGEMENT

Curriculum and Syllabus

Regulations 2024

Based on Choice Based Credit System (CBCS)

Effective from the Academic year

2024-2025

School Of Management Studies and Commerce

DEPARTMENT OF MBA-AVIATION AND AIRPORT MANAGEMENT

VISION

- To be a Centre of Excellence in Management Studies and Commerce, imparting and developing Managerial leadership and entrepreneurial skills to students and provide managers for the global market.

MISSION

1. To provide an accessible and inclusive learning environment for diverse group of students and other stakeholders to learn by synergizing education, research, innovation and outreach efforts.

2. To foster self-discipline, strong values, ethics and sense of duty among the students to make them good citizens, leaders, professionals and entrepreneurs.

3. To create the future business leaders through innovative and analytical ability, decision making capability and integration of technology in education.

4. To provide exposure to global business standards by design thinking, rational judgement and competencies necessary to manage global and multinational ventures.

PROGRAM EDUCATIONAL OBJECTIVES (PEOs):

PEO1: To provide exceptional quality education that prepares the students to meet global standards and competitive environment.

PEO2: To inculcate team spirit and develop leadership capabilities among students, empowering them to emerge as business leaders and contribute to organizational development.

PEO3: To impart ethical and moral values so as to inculcate the significance of Environmental, Social and Governance practices among students to create better citizens and society.

PEO4: To equip the students with technology proficiency, nurture entrepreneurial skills to think strategically by encouraging them to become professionals.

PEO5: To motivate students to participate in community development initiatives and participate Industry research projects.

PROGRAM OUTCOMES (POs):

PO1: Apply knowledge of management theories and practices to solve business problems.

PO2: Foster analytical and critical thinking abilities for data-based decision making.

PO3: Ability to develop value-based leadership ability

PO4: Ability to understand, analyse and communicate global, economic, legal, and ethical aspects of business

PO5: Ability to lead themselves and others in the achievement of organizational goals, contributing effectively to a team environment.

PROGRAM SPECIFIC OUTCOMES (PSOs):

PSO1: Develop an aptitude for creativity, innovation, and entrepreneurship within the aviation sector.

PSO2: Adapt to lifelong learning and professional development to enrich competencies, matching global opportunities and challenges in aviation.

PSO3: Conduct systematic inquiry into current issues such as diversity, equity, and sustainability in aviation business and management.

LIST OF BOARD OF STUDIES (BOS) MEMBERS

S.NO	NAME & ADDRESS	DESIGNATION
1.	**Dr. P. R. Ramakrishnan** Dean School of Management Studies & Commerce VISTAS	Chairperson
2.	**Dr. R. Magesh** Professor and Head Department of Management Studies Anna University, Chennai	External Expert
3.	**Mr. Prince Lazarus** Member- Confederation of Indian Industry CII, Chennai	CII Faculty
4.	**Dr. J. Balasubramanian** Head, Business Analytics, Ashok Leyland, Chennai	Industry Expert
5.	**Ms. Anitharaj Johnes George** Senior Talent Acquisition Analyst SPI global, Pondicherry	Alumni
6.	**Dr. S. Preetha** School of Management Studies, VISTAS	Professor
7.	**Dr. G. Rajini** School of Management Studies, VISTAS	Professor
8.	**Dr. P. G. Thirumagal** School of Management Studies, VISTAS	Associate Professor
9.	**Dr. G. Madhumita** School of Management Studies, VISTAS	Associate Professor
10.	**Dr. S. Sudha** School of Management Studies, VISTAS	Professor

VELS INSTITUTE OF SCIENCE, TECHNOLOGY AND ADVANCED STUDIES (VISTAS), CHENNAI

CHOICE BASED CREDIT SYSTEM (CBCS)

MBA- AVIATION AND AIRPORT MANAGEMENT

REGULATIONS 2024

(Applicable to all the candidates admitted from the academic year 2024-25 onwards)

1. DURATION OF THE PROGRAMME

1.1. Two years (Four semesters)

1.2. Each academic year shall be divided into two semesters. The odd semesters shall consist of the period from July to November of each year and the even semesters from January to May of each year.

1.3 There shall be not less than 90 working days for each semester.

2. ELIGIBILITY FOR ADMISSION

2.1. The details of Eligibility for Admission

Passed bachelor's degree of minimum 3 years duration.

Obtained at least 50% marks (45% marks in case of candidates belonging to reserved category) in the qualifying examination.

3. MEDIUM OF INSTRUCTION

The medium of instruction for all PG programme is English.

4. CREDIT REQUIRMENTS AND ELIGIBILITY FOR AWARD OF DEGREE

A Candidate shall be eligible for the award of Degree only if he/she has undergone the prescribed course of study in VISTAS for a period of not less than TWO academic years and passed the examinations of all the prescribed courses of FOUR Semesters earning a minimum of 102 credits as per the distribution given in the course structure.

5. COURSE

Each course / subject is to be designed under lectures / tutorials / laboratory or field work/seminar / practical training / Assignments / Term paper or Report writing etc., to meet effective teaching and learning needs.

6. COURSE OF STUDY AND CREDITS

The Course Components and Credit Distribution shall consist of:

The total number of subjects of study shall be 27 out of which 13 shall be core subjects, 10 will be Electives, 2 Practical & Internship in Third semester and Project Work in the Final Semester with a Viva-voce altogether.

Candidates shall take 7 subjects (6 Core Theory & 1 Practical) in the First semester, 8 subjects (7 Core Theory + 1 Practical) in the Second Semester, 8 subjects (7 Elective Theory + 1 Internship) in the Third Semester and 4 subjects (3 Elective Theory+1 Project work) in the Fourth Semester.

Internship: The students have to undergo an internship for thirty days in between the second and third semester. The maximum marks for Internship will be 100. The Internship will be evaluated through Viva voce Exam by the guide and an External expert.

Project: The students will do Project work for Four months in the Fourth Semester. The Maximum marks for Project Work will be 300. The project Work will be evaluated through Viva voce Exam by the guide and an External expert. The components of Project Work will be 100 marks for Dissertation and 200 marks for Viva voce.

To offer Elective Subjects to the students, a Minimum enrolment in the Elective Subjects shall be FOUR.

For each course, credit is assigned based on the following:

Contact hour per week CREDITS

1 Lecture hour - 1 Credit

1 Tutorial hour - 1 Credit

2 Practical hours - 1 Credit

(Laboratory / Seminar / Project Work / etc.)

7. REQUIREMENTS FOR PROCEEDING TO SUBSEQUENT SEMESTER

7.1. Eligibility: Students shall be eligible to go to subsequent semester only if they earn sufficient

attendance as prescribed therefore by the Board of Management from time to time.

7.2. Attendance: All Students must earn 75% and above of attendance to appear for the University

Examination. (Theory/Practical)

7.3. Condonation of shortage of attendance: If a Student fails to earn the minimum attendance (Percentage stipulated), the HODs shall condone the shortage of attendance on medical grounds up to a maximum limit of 10% (i.e. between 65% and above and less than 75%) after paying the prescribed fee towards the condonation of shortage of attendance. Students with attendance of less than 65 and more than 50% shall be condoned by VC on the recommendation of HODs on genuine grounds, will be permitted to appear for

the regular examination on payment of the prescribed condonation fee.

7.4. Detained students for want of attendance: Students who have earned less than 50% of attendance shall be permitted to proceed to the next semester and to complete the Program of study. Such Students shall have to repeat the semester, which they have missed by rejoining after completion of final semester of the course, by paying the fee for the break of study as prescribed by the University from time to time.

7.5. Transfer of Students and Credits: The strength of the credits system is that it permits interinstitutional transfer of students. By providing mobility, it enables individual students to develop their capabilities fully by permitting them to move from one Institution to another in accordance with their aptitude and abilities.

7.5.1. Transfer of Students is permitted from one Institution to another Institution for the same program with same nomenclature, provided, there is a vacancy in the respective program of Study in the Institution where the transfer is requested.

7.5.2. The marks obtained in the courses will be converted into appropriate grades as per the University norms.

7.5.3. The transfer students are not eligible for Ranking, Prizes and Medals.

7.5.4. Students who want to go to foreign Universities for up to two semesters or Project Work with the prior approval of the Departmental / University Committee are allowed to transfer of their credits. Marks obtained in the courses will be converted into Grades as per the University norms and the students are eligible to get CGPA and Classification.

8. EXAMINATION AND EVALUATION

8.1. EXAMINATION:

i) There shall be examinations at the end of each semester, for odd semesters in the month of October / November, for even semesters in April / May. A candidate who does not pass the examination in any course(s) shall be permitted to appear in such failed courses in the subsequent examinations to be held in October / November or April / May.

ii) A candidate should register for the first semester examination. If registration is not possible owing to shortage of attendance beyond condonation limit / regulations prescribed OR belated joining OR on medical grounds, the candidates are permitted to move to the next semester. Such candidates shall redo the missed semester after completion of the programme.

iii) The results of all the examinations will be published through the University Website. In the case of passed out candidates, their arrear results, will be published through University Website.

8.2 **To Register for all subjects:** Students shall be permitted to proceed from the First Semester up to Final Semester irrespective of their failure in any of the Semester Examination, except for the shortage of attendance programs. For this purpose, Students shall register for all the arrear subjects of earlier semesters along with the current (subsequent) Semester Subjects.

8.3. Marks for Continuous Internal Assessment (CIA) Examinations and End Semester Examinations (ESE)

8.3.1 There shall be no passing minimum for Continuous Internal Assessment (CIA) Examinations.

8.3.2 For the End Semester examination, passing minimum shall be 50% (Fifty Percentage) of the Maximum marks prescribed for the Course/Practical/Project and Viva-Voce.

8.3.3 In the aggregate (CIA and ESE) the passing minimum shall be 50%.

8.3.4. He / She shall be declared to have passed the whole examination, if he/she passes in all the courses wherever prescribed in the curriculum by earning 102 CREDITS.

9. **Question Paper Pattern** for End Semester Examination

Duration: 3 Hours Max. Marks: 100

Part A: 8 out of 10 questions (8 X 5 = 40)

Part B: 4 out of 6 questions (4 X 10 = 40)

Part C :1 Case Study or Problem is Compulsory (1 X 20= 20)

Total Marks for each subject 100 Marks

University Exam 60 Marks

Internal Assessment 40 Marks

10. SUPPLEMENTARY EXAMINATION: Supplementary Examinations are conducted for the students who appeared in the final semester examinations. Eligible criteria for appearing in the Supplementary Examinations are as follows:

10.1. Eligibility: A Student who is having a maximum of two arrear papers is eligible to appear for the Supplementary Examination.

10.2. Non-eligibility for those who completed the program: Students who have completed their Program duration but having arrears are not eligible to appear for Supplementary Examinations.

11. RETOTALLING, REVALUATION AND PHOTOCOPY OF THE ANSWER SCRIPTS:

11.1. Re-totalling: All PG Students who appeared for their Semester Examinations are eligible for applying for re-totalling of their answer scripts.

11.2. Revaluation: All current batch Students who have appeared for their Semester Examinations are eligible for Revaluation of their answer scripts. Passed out candidates are not eligible for Revaluation.

11.3. Photocopy of the answer scripts: Students who have applied for revaluation can download their answer scripts from the University Website after fifteen days from the date of publication of the results.

12. CLASSIFICATION OF SUCCESSFUL STUDENTS

12.1. CORE SUBJECTS, PRACTICAL, ELECTIVES COURSES AND PROJECT: Successful Students passing the Examinations and securing the marks

a) CGPA 9.00 to 10.00 shall be declared to have passed the examination in First class with Outstanding.

b) CGPA 7.50 to 8.99 shall be declared to have passed the examination in First class with distinction.

c) CGPA 6.00 to 7.49 shall be declared to have passed the examination in First Class.

d) CGPA 5.00 to 5.99 in the aggregate shall be declared to have passed the examination in the SECOND Class.

13. MARKS AND GRADES: The following table shows the marks, grade points, letter grades and classification to indicate the performance of the student:

13.1. Computation of Grade Point Average (GPA) in a Semester, Cumulative Grade Point Average (CGPA) and Classification

GPA for a Semester: = ∑iCiGi ÷ ∑iCi That is, GPA is the sum of the multiplication of grade points by the credits of the courses divided by the sum of the credits of the courses in a semester.

Where, Ci= Credits earned for course i in any semester,

Gi = Grade Points obtained for course i in any semester

n = Semester in which such courses were credited.

CGPA for the entire programme: = ∑n∑iCniGni ÷∑n∑iCni That is, CGPA is the sum of the multiplication of grade points by the credits of the entire programme divided by the sum of the credits of the courses of the entire programme

Grade Conversion Table- PG			
90-100	10	0	Outstanding
85-89	9	A+	Excellent
80 - 84	8	A	Very Good
75 - 79	7.5	B+	Good
70 - 74	7	B	Above Average
60 - 69	6	C	Average
50 - 59	5	D	Minimum for pass
0 - 49	0	RA	Reappear
		AAA	Absent

Overall Performance – PG		
CGPA	**GRADE**	**CLASS**
5.00 - 5.99	D	Second Class
6.00 - 6.99	C	First Class
7.00 - 7.49	B	
7.50 – 7.99	B+	First Class with Distinction*
8.00 - 8.49	A	
8.50 – 8.99	A+	
9.00 - 10.00	O	First Class - Outstanding*

13.2. Letter Grade and Class CGPA

The students who have passed in the first appearance and within the prescribed semester of the PG Programme (Major and Elective courses only) are eligible.

14. RANKING

• Students who pass all the examinations prescribed for the Program in the FIRST APPEARANCE ITSELF ALONE are eligible for Ranking / Distinction.

• In the case of Students who pass all the examinations prescribed for the Program with a break in the First Appearance are only eligible for Classification.

• Students qualifying during the extended period shall not be eligible for RANKING.

15. **MAXIMUM PERIOD FOR COMPLETION OF THE PROGRAMS TO QUALIFY FOR A**

DEGREE

15.1. A Student who for whatever reasons is not able to complete the programs within the normal period (N) or the Minimum duration prescribed for the programme, may be allowed two years period beyond the normal period to clear the backlog to be qualified for the degree. (Time Span = N + 2 years for the completion of programme)

15.2. In exceptional cases like major accidents and childbirth an extension of one year considered beyond maximum span of time (Time Span= N + 2 + 1 years for the completion of programme).

16. REVISION OF REGULATIONS, CURRICULUM AND SYLLABI

The University may from time-to-time revise, amend or change the Regulations, Curriculum, Syllabus and Scheme of examinations through the Academic Council with the approval of the Board of Management

Overall credit distribution / Course Components with credits

S.No	Semester	Total number of Subjects	Core / Elective / Lab / Internship / Project Work	Credit Distribution		Total Credits	Total Credits for the Semester
				Credits	No. of Subjects		
1	1	7	6 Core Theory	4	6	24	26
			1 Practical	2	1	2	
2	II	8	7 Core Theory	4	7	28	30
			1 Practical	2	1	2	
3	III	8	7 Elective Theory	3	7	21	27
			Internship	6	1	6	
4	IV	4	3 Elective theory	3	3	9	19
			1 Capstone Project	10	1	10	
						Total	**102**

MBA AVIATION AND AIRPORT MANAGEMENT - REGULATIONS 2024

SEMESTER I

Code	Course	Hour / Week			C	Maximum Marks		
		L	T	P		CA	SEE	Total
24CAAM11	Principles of Management and Organizational Behavior	4	0	0	4	40	60	100
24CAAM12	Aviation Industry Fundamentals	4	0	0	4	40	60	100
24CAAM13	Aviation Environment Management	4	0	0	4	40	60	100
24CAAM14	Marketing Management in Aviation	4	0	0	4	40	60	100
24CAAM15	Quantitative Methods for Business Analysis	3	1	0	4	40	60	100
24CAAM16	Communication Skills for Managers	3	1	0	4	40	60	100
24PAAM11	MOOC/Community Development Project	0	0	4	2	40	60	100
		22	**2**	**2**	**26**	-	-	-

SEMESTER II

Code	Course	Hour / Week			C	Maximum Marks		
		L	T	P		CA	SEE	Total
24CAAM21	Human Resource Management in Aviation	4	0	0	4	40	60	100
24CAAM22	Aviation Operations Management	4	0	0	4	40	60	100
24CAAM23	Financial Management in Aviation	4	0	0	4	40	60	100
24CAAM24	Strategic Management and Business Policy	4	0	0	4	40	60	100
24CAAM25	Aviation safety management	4	0	0	4	40	60	100
24CAAM26	Leadership in Aviation	4	0	0	4	40	60	100
24CAAM27	Revenue Management and Pricing Strategies	4	0	0	4	40	60	100
24PAAM21	Data Analysis for Business Decisions	0	0	4	2	40	60	100
		28	**0**	**4**	**30**	-	-	-

SEMESTER III

Code	Course	Hour / Week			C	Maximum Marks		
		L	T	P		CA	SEE	Total
24DAAM--	Elective –I	3	0	0	3	40	60	100
24DAAM--	Elective –II	3	0	0	3	40	60	100
24DAAM--	Elective –III	3	0	0	3	40	60	100
24DAAM--	Elective –IV	3	0	0	3	40	60	100
24DAAM--	Elective –V	3	0	0	3			
24DAAM--	Elective –VI	3	0	0	3	40	60	100
24DAAM--	Elective –VII	3	0	0	3	40	60	100
24IAAM31	Internship	0	0	12	6	40	60	100
		21	**0**	**12**	**27**	-	-	-

SEMESTER IV

Code	Course	Hour / Week			C	Maximum Marks		
		L	T	P		CA	SEE	Total
24DAAM--	Elective –VIII	3	0	0	3	40	60	100
24DAAM--	Elective –IX	3	0	0	3	40	60	100
24DAAM--	Elective –X	3	0	0	3	40	60	100
24RAAM41	Capstone Project	0	0	20	10	100	200	300
		9	**0**	**20**	**19**	-	-	-

TOTAL CREDITS: 102

LIST OF CORE COURSES						
	Code	**Course**	**L**	**T**	**P**	**C**
1	**24CAAM11**	**PRINCIPLES OF MANAGEMENT AND ORGANIZATIONAL BEHAVIOR**	**4**	**0**	**0**	**4**
2	**24CAAM12**	**AVIATION INDUSTRY FUNDAMENTALS**	**4**	**0**	**0**	**4**
3	**24CAAM13**	**AVIATION ENVIRONMENT MANAGEMENT**	**4**	**0**	**0**	**4**
4	**24CAAM14**	**MARKETING MANAGEMENT IN AVIATION**	**4**	**0**	**0**	**4**
5	**24CAAM15**	**QUANTITATIVE METHODS FOR BUSINESS ANALYSIS**	**3**	**1**	**0**	**4**
6	**24CAAM16**	**COMMUNICATION SKILLS FOR MANAGERS**	**3**	**1**	**0**	**4**
7	**24CAAM21**	**HUMAN RESOURCE MANAGEMENT IN AVIATION**	**4**	**0**	**0**	**4**
8	**24CAAM22**	**AVIATION OPERATIONS MANAGEMENT**	**4**	**0**	**0**	**4**
9	**24CAAM23**	**FINANCIAL MANAGEMENT IN AVIATION**	**4**	**0**	**0**	**4**
10	**24CAAM24**	**STRATEGIC MANAGEMENT AND BUSINESS POLICY**	**4**	**0**	**0**	**4**
11	**24CAAM25**	**AVIATION SAFETY MANAGEMENT**	**4**	**0**	**0**	**4**
12	**24CAAM26**	**LEADERSHIP IN AVIATION**	**4**	**0**	**0**	**4**
13	**24CAAM27**	**REVENUE MANAGEMENT AND PRICING STRATEGIES**	**4**	**0**	**0**	**4**

LIST OF ELECTIVE COURSES						
	Code	Course	L	T	P	C
1	24DAAM01	PROFESSIONAL ETHICS AND COMPLIANCE	3	0	0	3
2	24DAAM02	AVIATION TOURISM MANAGEMENT	3	0	0	3
3	24DAAM03	ENTERPRISE RESOURCE PLANNING	3	0	0	3
4	24DAAM04	BEHAVIOURAL OPERATIONS MANAGEMENT	3	0	0	3
5	24DAAM05	AVIATION LAW	3	0	0	3
6	24DAAM06	CROSS CULTURAL MANAGEMENT	3	0	0	3
7	24DAAM07	ADVANCED BUSINESS ANALYTICS FOR AVIATION	3	0	0	3
8	24DAAM08	AVIATION LEASING AND ASSET MANAGEMENT	3	0	0	3
9	24DAAM09	STRATEGIC MARKETING IN AVIATION	3	0	0	3
10	24DAAM10	BRAND MANAGEMENT IN AVIATION	3	0	0	3
11	24DAAM11	QUALITY MANAGEMENT SYSTEM IN AVIATION	3	0	0	3
12	24DAAM12	AIRPORT PLANNING AND DEVELOPMENT	3	0	0	3
13	24DAAM13	INNOVATION TECHNOLOGY MANAGEMENT	3	0	0	3
14	24DAAM14	GLOBAL BUSINESS PRACTICES IN AVIATION	3	0	0	3

LIST OF PRACTICAL COURSES						
	Code	Course	L	T	P	C
1	24PAAM11	MOOC/COMMUNITY DEVELOPMENT PROJECT	0	0	4	2
2	24PAAM21	DATA ANALYSIS FOR BUSINESS DECISIONS	0	0	4	2
3	24IAAM31	INTERNSHIP	0	0	12	6
4	24RAAM41	CAPSTONE PROJECT	0	0	20	10

SEMESTER I

PRINCIPLES OF MANAGEMENT AND ORGANIZATIONAL BEHAVIOUR

Subject Code	24CAAM11	CA			40
Number of Lecture Hours/Week	4	SEE			60
Total Number of Lecture Hours	60	**L**	**T**	**P**	**C**
Credits	4	4	0	0	4

COURSE OBJECTIVES:

This program will enable students to grasp the fundamental concepts and principles of management and organizational behaviour and develop skills to apply these principles effectively as managers and leaders invarious organizational contexts.

UNIT I	**INTRODUCTION TO MANAGEMENT**	**12 HOURS**

Definition, nature and scope and management- Importance and Functions of Management- Historical development of management theories- Scientific Management- Administrative Management- Human Relations Approach- Contemporary Management Approaches- Case Study: Google's Management Style

UNIT II	**PLANNING AND DECISION MAKING**	**12 HOURS**

Nature and Importance of Planning- Types of Plans- Planning Process- Decision Making Process- Types of Decisions- Decision-Making Tools and Techniques- Barriers to Effective Decision Making- Group Decision Making- Case Study: Starbuck's Strategic Planning

UNIT III	**ORGANIZING**	**12 HOURS**

Concept of Organizing- Organizational Structure- Principles of Organization- Departmentalization- Delegationof Authority- Centralization and Decentralization- Coordination- Formal and Informal Organizations- Informal organizations on formal structures- Case Study: Zappos' Organizational Structure

UNIT IV	**LEADING**	**12 HOURS**

Nature and Importance of Leadership- Leadership Theories- Leadership Styles- autocratic, democratic, and laissez-faire- Motivation- Communication in Leadership- Emotional Intelligence- Team Building- Conflict Resolution- Case Study: Transformational Leadership at GE

UNIT V	**CONTROLLING**	**12 HOURS**

Nature and Importance of Control- Control Process- Types of Control- Control Tools and Techniques- BalancedScorecard- Benchmarking- Quality Control- Total Quality Management (TQM) and Six Sigma- Control in Different Areas- Case Study: Ethical Decision Making at Volkswagen

TEXT BOOKS:

1. Koontz. (2022). ESSENTIALS OF MANAGEMENT. Tata McGraw-Hill Education
2. Robbins, S., Judge, T. A., Millett, B., & Boyle, M. (2023). Organisational Behaviour. Pearson Higher Education AU
3. Bateman, T., & Snell, S. (2020). Management: Leading and Collaborating in the Competitive

World with Connect Plus. McGraw-Hill/Irwin

4. Tripathi, P. C. (2022). Principles of Management. Tata McGraw-Hill Education.

REFERENCES:

1. The Effective Executive, Peter F. Drucker
2. Schein, E. H. (2020). Organizational Culture and Leadership. John Wiley & Sons
3. Kotter, J. P. (2022). Leading Change. Harvard Business Press.
4. Prasad, L. (2020). Principles and Practice of Management. Sultan Chand & Sons

WEB LINKS:

1. https://open.umn.edu/opentextbooks/textbooks/30

COURSE OUTCOMES

CO1:	Introduce the basic concepts, functions, and principles of management	**K 1**
CO2:	Provide a comprehensive understanding of organizational behaviour, including individual and group behavior	**K 2**
CO3:	Explore various management theories and their practical application in organization	**K 2**
CO4:	Examine the role of communication, motivation, leadership, and decision-making in management	**K 4**
CO5:	Understand the impact of organizational culture, structure, and change on organizational behaviour and performance.	**K 5**

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	**3**	**1**	**-**	**-**	**-**	**-**	**-**	**-**
CO2	**2**	**2**	**3**	**-**	**1**	**2**	**3**	**1**
CO3	**3**	**3**	**2**	**2**	**1**	**-**	**2**	**2**
CO4	**-**	**-**	**2**	**3**	**2**	**-**	**1**	**2**
CO5	**-**	**1**	**1**	**2**	**2**	**1**	**1**	**3**

AVIATION INDUSTRY FUNDAMENTALS					
Subject Code	24CAAM12	CA			40
Number of Lecture Hours/Week	4	SEE			60
Total Number of Lecture Hours	60	**L**	**T**	**P**	**C**
Credits	4	4	0	0	4

COURSE OBJECTIVES:

- To acquire the knowledge on the Historical evolution of aviation
- To learn the various stake holders in civil aviation
- To know the concepts of regulatory bodies in aviation
- To learn the importance of compliance aviation
- To learn about air crash investigation

UNIT I	**HISTORY OF AVIATION**	**12 HOURS**

Evolution of Aviation – Early stage and Later stage - International conventions: Paris Convention - Chicago Convention – ICAO and Annexures –Freedom of air – Phonetic Alphabet & Terminology – Introduction to World Time zone - Development of Air transportation in India- **Case Study:** The Evolution of Aviation

UNIT II	**INTRODUCTION TO AIRCRAFT SCIENCE**	**12 HOURS**

History of Aircraft – Difference between Aircraft and Airplane – Aircraft Manufacturers – Classification of Airplanes – Classification and Parts of an Aircraft – definitions – Basic Science behind the Flight – Mechanics of the Flight- **case study: Continuous Improvement**: Ongoing research and development are essential to improve aircraft performance and safety.

UNIT III	**STAKE HOLDERS IN CIVIL AVIATION**	**12 HOURS**

Airport – Classification: Organizational structure and functions – **Airline industry:** AOC, NSOP, classification, Permits and approval, Basic operation models, Hub and Spoke, Commercial Airlines, Military aviation, General Aviation – **Aerospace Company:** Design, Manufacturing and Maintenance – **MRO:** Aircraft Maintenance - Organization Structure – **ATC:** organizational structure - Roles, ATC units, Functions, Controlled Aerodrome – **GHA:** Roles and Functions-**case study:** Airlines are central to civil aviation, operating scheduled and charter flights to transport passengers and cargo discuss airlines role on it.

UNIT IV	**REGULATORY BODIES IN AVIATION**	**12 HOURS**

ICAO – IATA – MoCA – DGCA – AAIB – BCAS and CISF – AAI – Other regulatory bodies [EASA, FAA] Introduction, Responsibility and Functions-**case study:** Balancing safety with industry growth, adapting to technological advancements, and harmonizing global standards.

UNIT V	**AIRCRAFT INCIDENTS AND ACCIDENTS INVESTIGATION**	**12 HOURS**

Case studies and practical exercises on Air crash investigation – Introduction to Accident Investigation – Investigation techniques and methodology – Human factors in Accident investigation - Technical aspects of air crash investigation – Legal and ethical aspects-case study: KLM Flight 4805 and Pan Am Flight 1736, March 27, 1977

TEXT BOOKS:

1. Graham, A. (2021). Managing Airports, Oxford
2. Young, S. B., & Wells, A. T. (2023). Airport Planning & Management, Seventh Edition.
3. Kounis, L. (2020). Aviation and the Airline Industry
4. IATA Ground Operations Manual.

REFERENCES:

1. De Neufville, R., & Odoni, A. R. (2023). Airport Systems: Planning, Design, and Management. McGraw-Hill Professional Publishing.
2. Uwayo, E. (2022). Airline and Airport Operations", Notion Press; 1st edition

WEB LINKS:

1. https://www.iata.org/en/training/courses/airline-industry-introduction/talg50hlm/en/.

CO1:	Illustrate the history of aviation & developments over the years	**K 3**
CO2:	Explain the various stake holders in aviation	**K 2**
CO3:	Explain the various regulatory bodies in aviation	**K 2**
CO4:	Explain the importance of compliance aviation	**K 3**
CO5:	Illustrate the air crash investigation	**K 4**

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	3	1	2	1	1	2	-	-
CO2	2	3	1	2	-	-	2	2
CO3	1	1	2	3	3	2	1	3
CO4	1	2	2	-	3	1	2	-
CO5	-	3	2	2	2	-	2	3

AVIATION ENVIRONMENT MANAGEMENT					
Subject Code	24CAAM13	CA			40
Number of Lecture Hours/Week	4	SEE			60
Total Number of Lecture Hours	60	**L**	**T**	**P**	**C**
Credits	4	4	0	0	4

COURSE OBJECTIVES:

This course aims to equip students with a comprehensive understanding of aviation environmental management principles and practices. It focuses on integrating environmental sustainability into aviation operations and developing strategies to address environmental challenges in the aviation sector.

UNIT I	**INTRODUCTION TO AVIATION ENVIRONMENTAL MANAGEMENT**	**12 HOURS**

Definition and Scope of Aviation Environmental Management-Environmental Challenges in Aviation: Climate change, air quality, noise pollution - Regulatory Frameworks and International Standards: ICAO, FAA, EU regulations - Sustainability in Aviation: Principles and practices - **Case Study:** Environmental impact assessment of a major international airport expansion project

UNIT II	**ENVIRONMENTAL IMPACT ASSESSMENT IN AVIATION**	**12 HOURS**

Understanding Environmental Impact Assessment (EIA) in Aviation - Methods and Tools for Environmental Impact Assessment - Case Study: Environmental impact of aircraft emissions on local air quality - **Case Study:** Noise analysis and community response to airport operations.

UNIT III	**SUSTAINABLE PRACTICES IN AVIATION OPERATIONS**	**12 HOURS**

Sustainable Aviation Fuel (SAF) and Alternative Energy Sources - Green Airport Design and Operations -Carbon Offsetting and Reduction Schemes for International Aviation (CORSIA) - **Case Study:** Implementation of sustainable practices in a major airline.

UNIT IV	**AVIATION AND CLIMATE CHANGE**	**12 HOURS**

Aviation's Contribution to Climate Change - Mitigation Strategies: Technology advancements, operational efficiencies - Policy Implications and Carbon Pricing in Aviation - **Case Study:** The impact of CORSIA on global aviation emissions reduction.

UNIT V	**REGULATORY COMPLIANCE AND MANAGEMENT STRATEGIES**	**12 HOURS**

Compliance with Environmental Regulations - Environmental Management Systems (EMS) in Aviation - Strategic Environmental Planning and Management - **Case Study:** Implementation of EMS at a regional airport.
TEXT BOOKS:
1. Daley, B. (2020). Air Transport and the Environment. Routledge 2. Vasigh, B., & Fleming, K. (2020). Introduction to Air Transport Economics. Routledge 3. Agarwal, R. K. (2020). Environmental Impact of Aviation and Sustainable Solutions. BoD – Books on Demand
REFERENCES:
1. Flouris, T. G., & Oswald, S. L. (2022). Designing and Executing Strategy in Aviation Management. Routledge 2. Various ICAO and FAA publications on aviation environmental management.
WEB LINKS:
https://aviationbenefits.org/environmental-efficiency/aviations-impact-on-the-environment/

COURSE OUTCOMES

CO1:	Introduce the fundamental concepts of aviation environmental management.	**K 1**
CO2:	Analyse the environmental impacts of aviation operations.	**K 4**
CO3:	Evaluate strategies and practices for sustainable aviation management.	**K 5**
CO4:	Understand regulatory frameworks and international standards related to aviation environmental management.	**K 5**
CO5:	Apply theoretical knowledge to real-world aviation environmental management scenarios.	**K 3**

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	**3**	**1**	**3**	**1**	**1**	**-**	**2**	**2**
CO2	**3**	**2**	**1**	**1**	**3**	**-**	**2**	**0**
CO3	**1**	**2**	**1**	**2**	**2**	**-**	**-**	**1**
CO4	**2**	**-**	**-**	**3**	**1**	**1**	**2**	**-**
CO5	**2**	**-**	**-**	**3**	**-**	**1**	**1**	**1**

MARKETING MANAGEMENT IN AVIATION					
Subject Code	24CAAM14	CA			40
Number of Lecture Hours/Week	4	SEE			60
Total Number of Lecture Hours	60	**L**	**T**	**P**	**C**
Credits	4	4	0	0	4

COURSE OBJECTIVES:

- The objective of this course is to equip students with the knowledge in aviation industry
- Skills necessary to develop and implement effective marketing strategies in the aviation industry
- It aims to provide a comprehensive understanding of how marketing principles can be applied
- Provides and enhances airline competitiveness, customer loyalty, and profitability.

UNIT I	**INTRODUCTION TO MARKETING MANAGEMENT INAVIATION**	**12 HOURS**

Foundational Concepts of Aviation Marketing- Macro-Environmental Factors Affecting Aviation Marketing- Market Research and Consumer Behaviour in Aviation- Digital Marketing Strategies in Aviation- **Case StudyTopic:** Implementation of CRM Systems in a Global Airline

UNIT II	**AIRLINE PRODUCT AND SERVICE MANAGEMENT**	**12 HOURS**

Airline Product Development and Lifecycle Management- Pricing Strategies in Aviation- Revenue optimization practices and their impact- Distribution Channels in Aviation- Service Quality Management in Aviation- **Case Study Topic:** Launching a New Route: Strategic and Operational Considerations

UNIT III	**BRAND MANAGEMENT IN AVIATION**	**12 HOURS**

Building and Managing Airline Brands- airline brand identity- Brand positioning strategies- Corporate Identity and Reputation Management- Customer Relationship Management (CRM) in Aviation- **Case Study Topic:** Crisis Management and Brand Reputation in Aviation

UNIT IV	**MARKET ANALYSIS AND COMPETITOR INTELLIGENCE**	**12 HOURS**

Market Segmentation and Targeting in Aviation- Competitor Analysis in Aviation-Competitive positioning strategies and differentiation tactics- Strategic Alliances and Partnerships in Aviation- Joint marketing initiatives and co-branding opportunities in aviation- **Case Study Topic:** Analyzing Low-Cost Carriers' Impact on Full-Service Airlines

UNIT V	**STRATEGIC MARKETING PLANNING IN AVIATION**	**12 HOURS**

Strategic Marketing Planning Process- comprehensive marketing plan for airlines- Sustainable Marketing Practices in Aviation-initiatives and sustainability practices- Innovation in Aviation Marketing- Adoption of technology and digital platforms- **Case Study Topic:** Strategic Marketing Plan for Airline Expansion into Emerging Markets
TEXT BOOKS:
1. Shaw, S. (2020). Airline Marketing and Management. Routledge 2. Ambrose, S., & Waguespack, B. (2021). Fundamentals of Airline Marketing. Routledge.
REFERENCES:
1. "Hughes, V. (2020). Airline Governance. Routledge 2. Taneja, N. K. (2023). Strategic Airline Retailing and Solutions. Taylor & Francis
WEB LINKS: 1. https://www.iata.org/en/training/courses/airline-marketing/talm53hlm/en/

COURSE OUTCOMES

CO1:	Understand the fundamental concepts and theories of marketing management as applied to aviation.	**K 2**
CO2:	Analyze the marketing environment in the aviation industry, including regulatory, economic, and competitive factors	**K 4**
CO3:	Develop strategic marketing plans tailored to the unique needs of airlines and aviation service providers.	**K 6**
CO4:	Evaluate the impact of branding, product management, and customer relationship strategies on airlineperformance.	**K 5**
CO5:	Apply market analysis techniques to assess market opportunities, segment customers, and analyze competitors in aviation.	**K 3**

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	**2**	**2**	**1**	**2**	**1**	**2**	**1**	**3**
CO2	**1**	**3**	**1**	**2**	**-**	**2**	**-**	**1**
CO3	**1**	**2**	**2**	**3**	**1**	**1**	**2**	**2**
CO4	**3**	**1**	**3**	**2**	**2**	**1**	**2**	**3**
CO5	**-**	**3**	**3**	**2**	**3**	**3**	**1**	**1**

QUANTITATIVE METHODS FOR BUSINESS ANALYSIS					
Subject Code	24CAAM15	CA			40
Number of Lecture Hours/Week	4	SEE			60
Total Number of Lecture Hours	60	**L**	**T**	**P**	**C**
Credits	4	3	1	0	4

COURSE OBJECTIVES:

- To familiarize student with the use quantitative techniques in managerial decision making
- The primary objective of this course is to equip students with the quantitative tools and analytical techniques necessary to make informed business decisions.
- By the end of the course, students should be able to understand, apply, and critically evaluate various quantitative methods and models used in business analysis.

UNIT I	**QUANTITATIVE TECHNIQUES**	**12 HOURS**

Introduction - Meaning and Definition – Classification of QT -QT and other disciplines – Application of QT in business – Limitations

UNIT II	**TIME SERIES AND INDEX NUMBER**	**12 HOURS**

Meaning and Significance – Utility, Components of Time Series- Measurement of Trend: Method of Least Squares, Parabolic Trend and Logarithmic Trend- Index Numbers: Meaning and Significance, Problems in Construction of Index Numbers, Methods of Constructing Index Numbers – Weighted and Unweighted, Test of Adequacy of Index Numbers, Chain Index Numbers.

UNIT III	**CORRELATION AND REGRESSION ANALYSIS**	**12 HOURS**

Correlation: - Meaning, significance and types; Methods of Simple correlation - Karl Pearson‟s coefficient of correlation, Spearman‟s Rank correlation - Regression -Meaning and significance; Regression vs. Correlation - Linear Regression, Regression lines (X on Y, Y on X) and Standard error of estimate.

UNIT IV	**PROBABILITY**	**12 HOURS**

Concept of Probability—Meaning and Definition— Approaches to Probability Theorems of Probability—Addition Theorem— Multiplication Theorem—Conditional Probability—Inverse Probability—Bayes' Theorem - Sets Theory: Meaning of Set - Set Operation – Venn Diagrams.

UNIT V	**THEORETICAL DISTRIBUTION**	**12 HOURS**

Binomial Distribution – Basic Assumptions and Characteristics – Fitting of Binomial Distribution – Poisson Distribution – Characteristics - Fitting of Poisson Distribution – Normal Distribution – Features and Properties – Standard Normal Curve.
TEXT BOOKS:
1. Levin, R. I. (2018). Statistics for Management. Pearson Education India. 2. Gupta, S. (2021). Statistical Methods. Sultan Chand & Sons. 3. Gupta, S., & Kapoor, V. (2020). Fundamentals of Mathematical Statistics. Sultan Chand & Sons.
REFERENCES:
1. Sharma, J. (2018b). Business Statistics, 4th Edition. Vikas Publishing House 2. Anderson, D. R. (2024). Statistics for Business and Economics. 3. Levine, D. M., Krehbiel, T. C., & Berenson, M. L. (2003). Business Statistics
WEB LINKS:
1.https://www.wiley.com/en in/Quantitative+Methods%3A+An+Introduction+for+Business+Management-

COURSE OUTCOMES

CO1:	On completing the course students will be able to Understand and develop insights and knowledge base of various concepts of Quantitative Techniques	**K2**
CO2:	Develop skills for facilitates for forecasting and Planning, helps for understanding past behavior & facilitates comparison	**K3**
CO3:	students will be able to Understand and develop Correlation and Regression Analysis, the data concerned with two variables	**K5**
CO4:	On completing the course students will be able to Understand and develop insights and knowledge base of various Probability	**K2**
CO5:	Develop skills for facilitates for forecasting and Planning Theoretical Distribution	**K6**

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**
CO1	**2**	**2**	**2**	**1**	**-**	**1**	**2**	**-**
CO2	**2**	**3**	**1**	**-**	**2**	**2**	**-**	**1**
CO3	**1**	**2**	**-**	**2**	**-**	**1**	**1**	**2**
CO4	**2**	**2**	**2**	**-**	**2**	**1**	**3**	**-**
CO5	**3**	**2**	**-**	**1**	**2**	**-**	**2**	**1**

COMMUNICATION SKILLS FOR MANAGERS					
Subject Code	24CAAM16	CA			40
Number of Lecture Hours/Week	4	SEE			60
Total Number of Lecture Hours	60	**L**	**T**	**P**	**C**
Credits	4	3	1	0	4

COURSE OBJECTIVES:

This program will help students develop strong communication skills crucial for leadership and management roles. Students will learn how to communicate clearly, persuasively, and efficiently within an organizationalsetting.

UNIT I	**INTRODUCTION TO COMMUNICATION**	**12 Hours**

Definition, Nature, and Scope of Communication- Communication Process- Types of Communication- Verbal and non-verbal communication- Barriers to Effective Communication- Importance of Effective Communication in Management- Case Study: Analyse a real-life case study where communication failures led to organizational issues.

UNIT II	**INTERPERSONAL COMMUNICATION AND LISTENING**	**12 Hours**

Nature and Importance of Interpersonal Communication- Communication Styles- Active Listening- Feedback in Communication- Non-verbal Communication- Case Study: Develop a feedback plan for a team project

UNIT III	**COMMUNICATION IN GROUPS**	**12 Hours**

Dynamics of Group Communication - Group Decision Making- Conflict Resolution- Team Building- Meetings and Presentations- Case Study: Organize and conduct a mock meeting

UNIT IV	**ORGANIZATIONAL COMMUNICATION**	**12 Hours**

Nature and Importance of Organizational Communication- Communication Channels- Internal Communication- External Communication- Crisis Communication- **Case Study:** Create a crisis communication strategy for a company facing a public relations challenge.

UNIT V	**ADVANCED COMMUNICATION SKILLS**	**12 Hours**

Persuasive Communication- Negotiation Skills- Cross-Cultural Communication- Digital Communication- Communication Ethics- Case Study: Develop a comprehensive communication plan for an international project, considering cross-cultural communication challenges.

TEXT BOOKS:

1. Locker, K. O., & Kaczmarek, S. K. (2018). Business Communication
2. Guffey, M. E. (2021). Essentials of Business Communication. South Western Educational Publishing
3. Beebe, S. A., & Masterson, J. T. (2022). Communicating in Small Groups
4. Konar, N. (2021). COMMUNICATION SKILLS FOR PROFESSIONALS, Second Edition. PHI Learning Pvt. Ltd.

REFERENCES:

1." Locker, K., & Kaczmarek, S. (2022). Business Communication: Building Critical Skills. McGraw-Hill Higher Education

2. Guffey, M. E., & Loewy, D. (2021). Business Communication: Process & Product. Cengage Learning

WEB LINKS:

https://businesstrainingexperts.com/communication-skills-for-managers/

COURSE OUTCOMES

CO1:	Understand the fundamental principles of effective communication in management	**K 2**
CO2:	Develop skills to communicate effectively in individual and group settings	**K 6**
CO3:	Explore various communication theories and their practical applications in management	**K 6**
CO4:	Examine the role of verbal and non-verbal communication, active listening, and feedback in effective communication.	**K 4**
CO5:	Understand the impact of communication barriers and how to overcome them in a managerial context	**K 2**

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	**1**	**2**	**3**	**2**	**2**	**2**	**2**	**1**
CO2	**2**	**1**	**2**	**2**	**2**	**2**	**2**	**2**
CO3	**-**	**2**	**2**	**3**	**-**	**1**	**3**	**2**
CO4	**2**	**3**	**1**	**-**	**2**	**3**	**3**	**2**
CO5	**2**	**3**	**-**	**2**	**3**	**2**	**2**	**1**

MOOC					
Subject Code	24PAAM11	CA			40
Number of Practical Hours/Week	4	SEE			60
Total Number of Lecture Hours	-	**L**	**T**	**P**	**C**
Credits	2	0	0	4	2

COURSE OBJECTIVES:

The objective of this course is to take the best teaching learning resources to all to create a levelled platform. To make use of the Indian massive online to the aspiring youth of India

- The students will select a MOOC course from the Swayam platform.
- They will spend 2 hours per week undergoing this practical MOOC course under the guidanceof a faculty.
- Every course will have a minimum of 8 to a maximum of 12 assignments depending on theduration of the course.
- Assignments will be submitted as per the requirements of the course.
- The marks scored in the assignments will be taken for internal assessment marks.
- The students will appear for a final practical exam conducted by VISTAS.

COURSE OUTCOMES

CO1:	Understand the latest developments in the field of study	**K 2**
CO2:	Explain the students with latest information about the field of study	**K 6**
CO3:	Apply the skills in the business world	**K 6**
CO4:	List the various skills gained through this course	**K 4**
CO5:	Summarize the concepts for application	**K 2**

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**
CO1	**1**	**2**	**3**	**2**	**2**	**2**	**2**	**1**
CO2	**2**	**1**	**2**	**2**	**2**	**2**	**2**	**2**
CO3	**-**	**2**	**2**	**3**	**-**	**1**	**3**	**2**
CO4	**2**	**3**	**1**	**-**	**2**	**3**	**3**	**2**
CO5	**2**	**3**	**-**	**2**	**3**	**2**	**2**	**1**

SEMESTER II

HUMAN RESOURCE MANAGEMENT IN AVIATION					
Subject Code	24CAAM21	CA			40
Number of Lecture Hours/Week	4	SEE			60
Total Number of Lecture Hours	60	**L**	**T**	**P**	**C**
Credits	4	4	0	0	4

COURSE OBJECTIVES:

To familiarize student with the use the Human Resources management. This program will enable students to grasp the fundamental concepts and principles of management and organizational behavior and develop skills to apply these principles effectively as managers and leaders in various organizational contexts.

UNIT I	**INTRODUCTION TO HRM IN AVIATION**	**12 HOURS**

Overview of Human Resource Management (HRM) in Aviation- Introduction to HRM concepts and their application in aviation- Importance of HRM in the aviation Industry- Strategic Role of HRM in Aviation Organizations- Strategic HR planning aligned with aviation business objectives- Role of HRM in enhancing of HRM in enhancing.

Case Study: Analyzing HRM practices during a major international airline merger

UNIT II	**RECRUITMENT AND SELECTION IN AVIATION**	**12 HOURS**

Recruitment process: sourcing, screening, and selection- Challenges and strategies for recruiting aviation personnel- Pilots, Cabin Crew, Ground staff- Selection Methods and Techniques for Aviation Personnel- Assessment centers, interviews, and psychometric tests- Legal and ethical considerations in selection processes in aviation- Diversity Management in Aviation Workforce- Managing diversity in aviation teams: cultural sensitivity, inclusion practices.

Case Study: Recruitment challenges for a global airline expanding into new markets

UNIT III	**TRAINING AND DEVELOPMENT IN AVIATION**	**12 HOURS**

Training Needs Analysis in Aviation - Identifying training needs: skills gaps analysis, regulatory requirements- Training methods and techniques for aviation personnel: simulator training, e-learning- Design and Delivery of Training Programs for Aviation Personnel- Developing effective training programs: content creation, delivery methods- Evaluating training effectiveness and ROI in aviation training- Career Development and Succession Planning in Aviation- Succession planning for critical aviation roles- Career paths and development opportunities in aviation.

Case Study: Implementing a competency-based training program for air traffic controllers.

UNIT IV	**PERFORMANCE MANAGEMENT AND**	**12 HOURS**

	COMPENSATION IN AVIATION	
Performance Appraisal Systems in Aviation- Performance Appraisal Systems in Aviation- Performance management challenges in aviation: remote teams, shift work- Compensation and Benefits Management in Airlines and Airports- Salary structures and incentives in aviation: pilot pay scales, bonus schemes- Benefits management: health insurance, travel perk- Employee Relations and Labor Laws in Aviation- Understanding labor laws and regulations specific to aviation- Managing employee relations: grievances, disciplinary procedures. Case Study: Managing performance and compensation during economic downturns in the aviation industry		
UNIT V	**SAFETY, COMPLIANCE, AND EMPLOYEE RELATIONS IN AVIATION SAFETY MANAGEMENT SYSTEMS (SMS) IN AVIATION**	**12 HOURS**
Implementing SMS: safety culture, risk management- Safety training and awareness programs in aviation- Regulatory Compliance and HRM in Aviation- Regulatory requirements: ICAO standards, FAA regulations- HRM's role in ensuring compliance and safety in aviation operations- Employee Relations and Conflict Resolution in Aviation- Handling employee conflicts and disputes in aviation settings- Strategies for maintaining positive employee relations. Case Study: Handling safety incidents and employee relations issues at a major international airport		

TEXT BOOKS:

1. Taneja, N. K. (2020). 21st Century Airlines. Routledge
2. Eaton, J. (2021). Globalization and Human Resource Management in the Airline Industry. Routledge.
3. Deb, T. (2022). Managing Human Resource And Industrial Relations. Excel Books India

REFERENCES:

1. Kaps, R. W., Hamilton, J. S., & Bliss, T. J. (2020). Labor Relations in the Aviation and Aerospace Industries. SIU Press
2. Various IATA and FAA publications on HRM and safety in aviation.

WEB LINKS:

1. https://org/people-leadership-and-strategic-hr-management-program-iim-

COURSE OUTCOMES

CO1:	Introduce the basic concepts, functions, and Human Resources Management	**K2**

CO2:	Provide a comprehensive understanding of organizational behaviour, including individual and group behaviour	**K2**
CO3:	Explore various management theories and their practical applications in Human resources management.	**K3**
CO4:	Examine the role of HRM, motivation, leadership, and decision-making in management.	**K2**
CO5:	Understand the impact of organizational culture, structure, and change on organizational behavior and performance in HRM	**K6**

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**
CO1	**2**	**2**	**-**	**2**	**-**	**1**	**1**	**-**
CO2	**2**	**3**	**1**	**-**	**2**	**-**	**2**	**1**
CO3	**1**	**-**	**3**	**1**	**-**	**2**	**1**	**-**
CO4	**2**	**-**	**2**	**-**	**2**	**1**	**2**	**-**
CO5	**1**	**2**	**3**	**-**	**2**	**2**	**-**	**2**

AVIATION OPERATIONS MANAGEMENT					
Subject Code	24CAAM22	CA		40	
Number of Lecture Hours/Week	4	SEE		60	
Total Number of Lecture Hours	60	L	T	P	C
Credits	4	4	0	0	4

COURSE OBJECTIVES:

- To provide students with a comprehensive understanding of the key principles, functions, and challenges involved in managing aviation operations. Students will gain knowledge of airport and airline management, regulatory environments, logistics, and emerging trends in technology.

UNIT I	INTRODUCTION TO AVIATION OPERATIONS MANAGEMENT	12 Hours

Overview of the Aviation Industry- Key stakeholders- Role of the stakeholders- Principles of Aviation Operation Management- Definition and Scope- Functions and Responsibilities- Aviation Regulatory Environment- Aviation regulations- Key regulatory bodies- Airline Business Model- Current Trends and Future Directions in Aviation- **Case Study:** The Rise of Emirates Airline

UNIT II	AIRPORT OPERATIONS MANAGEMENT	12 Hours

Airport Planning and Design- Capacity Designing & Planning- Airport Operations- Ground Handling- Airport Security and Safety- Emergency Planning- Crisis Management- Revenue Sources- Cost Management- **Case Study:** Changi Airport's Excellence in Airport Management

UNIT III	AIRLINE BUSINESS MANAGEMENT	12 Hours

Airline Business Models- Full Service Models Vs Low Cost Carriers- Revenue Management and Pricing Strategies- Flight Operations- Scheduling- Performance Metrics- Safety and Security in Airline Operations- Customer Service in Airlines- **Case Study:** Southwest Airlines' Operational Efficiency

UNIT IV	AVIATION LOGISTICS & SUPPLY CHAIN	12 Hours

Role of logistics in aviation- Air cargo operations- Supply Chain in Aviation- Inventory management and control- Supplier relationship management- Technology in Aviation Logistics- Automation and digitization- Future trends in aviation logistics- Risk Management in Aviation Logistics- **Case Study:** FedEx’s Air Cargo Operations

UNIT V	STRATEGIC MANAGEMENT IN AVIATION	12 Hours

Strategic Planning and Analysis- Strategic management process- SWOT, PESTEL- Competitive strategies- Leadership styles and their impact- Organizational culture- Change management- Role of innovation- Managing technological change- Future challenges and opportunities- Impact of global trends- **Case Study:** Delta Airlines' Strategic Turnaround
TEXT BOOK:
1. Meijer, G. (2020). Fundamentals of Aviation Operations. Routledge. 2. Cook, G. N., & Billig, B. (2019a). Airline Operations and Management. Taylor & Francis. 3. Ishrat, S. I., Khan, Z. A., & Siddiquee, A. N. (2023). Introduction to Aviation Operations Management. CRC Press
REFERENCE BOOKS:
1. " Hughes, V. (2020b). Airline Governance. Routledge
WEBLINK: **https://www.iata.org/en/training/courses/flight-operations-management/talp03/en/**

COURSE OUTCOMES

CO1:	Understand the role of stakeholders their functions and responsibilities	**K 2**
CO2:	Understand about the operational strategies of the airport and their management	**K 2**
CO3:	Know about the management and pricing strategies of the airlines	**K 4**
CO4:	Understand how the supply chain and logistics of an aviation industry works	**K 2**
CO5:	Understand about the Strategic planning and innovative thinking	**K 2**

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	**-**	**2**	**2**	**2**	**3**	**1**	**1**	**1**
CO2	**1**	**-**	**3**	**2**	**1**	**2**	**2**	**3**
CO3	**1**	**1**	**2**	**2**	**-**	**1**	**3**	**1**
CO4	**2**	**3**	**3**	**1**	**2**	**2**	**1**	**2**
CO5	**1**	**3**	**2**	**3**	**1**	**3**	**3**	**2**

FINANCIAL MANAGEMENT IN AVIATION					
Subject Code	24CAAM23	CA			40
Number of Lecture Hours/Week	4	SEE			60
Total Number of Lecture Hours	60	**L**	**T**	**P**	**C**
Credits	4	4	0	0	4

COURSE OBJECTIVES: To provide students with an understanding of the fundamental principles of financial management with a specific focus on their applications to the airline business

UNIT I	**THEORETICAL ASPECTS OF AIRLINE FINANCE**	**12 Hours**

Role of finance in the airline industry - introduction, historical background, international nature of airline industry-financial objectives of airlines - financial markets - Airline Cost classification - start-up costs - production costs - fixed & variable costs - marginal costs - using cost function in managerial decisions - structure of airline costs - Airline cost re-balancing and restructuring-Time value of money – future value - present value - compounding interest - annuities - perpetuities - Amortization-Risk & Return – Expected rate of return; risk analysis- financial risk preferences- Risk diversification; risk in the airline industry.

UNIT II	**AIRLINE ACCOUNTING & FINANCE**	**12 Hours**

Financial & Managerial accounting; Differences in airline accounting - International trade and IATA Clearing Houses - Accounting issues pertaining to the airline business - Revenue recognition - International operations - Airline consolidation - Consolidation in the US, European and Asian airline industry - Airline Financial Statements – Balance sheet - Depreciation -Common size income statement -Statement of retained earnings -cash flow statement - Financial statement analysis – Financial ratio analysis; airline specific ratios-predicting insolvency-Frequent flyer program award accounting-Airline Valuation – valuation of intangible assets – traffic rights - airport slots - Valuation of tangible assets - Valuation of the airline as a who

UNIT III	**AIRLINE CAPITAL BUDGETING**	**12 Hours**

Airline capital budgeting – capital budgeting & cash flows - project classifications - payback period - discounted payback period - Net Present Value (NPV) - Internal Rate of Return (IRR) - Profitability Index - Break-even analysis-Sources of Finance - Airline capital structure and cost of capital – Equity financing - cost of equity - bonds - airline debt - cost of debt - Weighted Average Cost of Capital - Airline debt and equity - CAPM and its estimate - Business risk vs Financial risk - cost of capital and capital budgeting Airline privatization – full privatization through floatation - gradual privatization and acquisition - re-nationalization.

UNIT IV	WORKING CAPITAL AND CURRENT ASSET MANAGEMENT	12 Hours
Airline financial planning and appraisal – budget preparation and control - Working capital policy in the airline business - cash management - account receivable - current liabilities management - inventory control models.		
UNIT V	**PRACTICAL APPLICATIONS OF AIRLINE FINANCE**	**12 Hours**
Fuel hedging & Risk management – introduction to financial derivatives and options - fuel hedging in airline industry - Aircraft Leasing – finance lease; operating lease; wet and dry lease-sale and lease back - accounting for finance and operating leases-Aircraft securitization concept - principles and issues Airline bankruptcy – study of examples from different parts of the world; entry of new airlines, exit and consolidations and financial implications - Future of airline industry's finance – traffic and financial forecasts – capital		
TEXT BOOKS:		
1. Vasigh, B. (2020). Foundations of Airline Finance. Routledge. 2. Shah, D. (2019). Aircraft Financing and Leasing in India Challenges & Opportunities		
REFERENCES:		
1. Morrell, P. S. (2021). Airline Finance. Routledge. 2. IATA Manuals; Revenue Accounting manual		
WEB LINKS: https://www.iata.org/en/training/courses/airline-financial-management/talf01/en/		

COURSE OUTCOMES

CO1:	Provide an understanding of the role of finance in the airline industry, cost classification in airline business, time value of money, and the concept of risk and return in the airline	**K2**
CO2:	Provide an understanding of managerial accounting in airline business; airline financial statements and their analysis; valuation of airlines and their tangible and intangible assets.	**K 2**
CO3:	Provide an understanding of airline capital budgeting and sources of finance.	**K 2**
CO4:	Provide an introduction to airline financial planning, budgeting, and control; explore the issues and challenges of working capital and current asset management in the airline business.	**K 1**
CO5:	Explore some practical applications of airline finance – fuel hedging; aircraft leasing; aircraft securitization; airline entry, consolidation, and bankruptcy; future of airline finance.	**K 4**

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	1	2	2	3	1	3	-	1
CO2	2	-	1	3	-	1	3	-
CO3	-	1	3	3	2	1	-	3
CO4	1	3	-	2	-	3	-	2
CO5	1	1	-	3	3	2	3	2

STRATEGIC MANAGEMENT AND BUSINESS POLICY					
Subject Code	24CAAM24	CA			40
Number of Lecture Hours/Week	4	SEE			60
Total Number of Lecture Hours	60	**L**	**T**	**P**	**C**
Credits	4	4	0	0	4

COURSE OBJECTIVES:

- The primary objective of this course is to equip students with the knowledge and skills necessary to develop and implement effective strategies in the aviation industry.
- By the end of this course, students will be able to analyze the internal and external environments of aviation organizations, formulate strategic plans, and implement and evaluate strategic initiatives.
- Students will also explore contemporary issues and future trends in strategic management within the context of aviation, preparing them for leadership roles in the industry.

UNIT I	**EXTERNAL ENVIRONMENT ANALYSIS**	**12 Hours**

Definition and importance of strategic management- Levels of strategy: corporate, business, and functional- Strategic leadership skills and styles- Developing vision and mission statements- Setting strategic objectives- Aligning vision, mission, and objectives with organizational goals- **Case Study:** Strategic Turnaround at Southwest Airlines

UNIT II	**INDUSTRY ANALYSIS**	**12 Hours**

Industry Analysis- Porter's Five Forces analysis- PESTEL Analysis- Market Analysis and Customer Insights- Market segmentation in aviation- Analyzing customer needs and preferences- Competitive benchmarking- **Case Study**: Market Entry Strategy of Emirates Airlines

UNIT III	**INTERNAL ENVIRONMENT ANALYSIS**	**12 Hours**

Optimization Techniques- Network Optimization- Scheduling- Simulation Methods- Discrete-Event Simulation Principles- Decision Analysis: Decision Trees- Influence Diagrams- Scenario Analysis- Sensitivity Analysis- Case Study: Optimizing Flight Schedules at Southwest Airlines

UNIT IV	**STRATEGY FORMULATION AND IMPLEMENTATION**	**12 Hours**

Strategic Formulation- SWOT Analysis- TOWS Matrix for strategy formulation- Corporate-Level Strategies- Growth strategies- Stability and retrenchment strategies- Strategic alliances and joint ventures- Business-Level Strategies- Cost leadership, differentiation, and focus strategies- Blue Ocean Strategy- Implementation of Strategies- Translating strategy into action plans- Resource allocation and capability building- **Case Study:** Strategic Alliance between Boeing and Airbus

UNIT V	**STRATEGIC EVALUATION AND CONTROL**	**12 Hours**

Strategic Evaluation- Key Performance Indicators (KPIs) and metrics- Balanced Scorecard approach- Strategic Control- Monitoring and adjusting strategies- Feedback mechanism- Contemporary Issues

and Future Trends- Digital transformation and technology trends in aviation- Sustainability and green strategies- **Case Study:** Digital Transformation at Lufthansa

TEXT BOOKS:

1. David, F. R. (2020). Strategic Management. Prentice Hall.
2. Johnson, G., Scholes, K., & Whittington, R. (2019). Exploring Corporate Strategy. Pearson Education
3. Grant, R. M. (2021). Contemporary Strategy Analysis. John Wiley & Sons
4. Rao, C. B. (2021). Strategic Management. Notion Press.

REFERENCES:

1. Collins, J. C. (2021). Good to Great. Random House
2. Christensen, C. M. (2022). The Innovator's Dilemma with Award-Winning Harvard Business Review Article ?How Will You Measure Your Life?? (2 Items). Harvard Business Review Press
3. Kim, W. C., & Mauborgne, R. A. (2019). Blue Ocean Strategy with Harvard Business Review Classic Articles "Blue Ocean Leadership" and "Red Ocean Traps" (3 Books). Harvard Business Press

WEB LINKS:

https://www.investopedia.com/terms/s/strategic-management.asp

COURSE OUTCOMES

CO1:	Understand the fundamental concepts of strategic management and business policy	**K 2**
CO2:	Analyze the internal and external environments affecting aviation organizations.	**K 4**
CO3:	Develop strategic objectives and formulate strategic plans.	**K 6**
CO4:	Implement and evaluate strategic initiatives.	**K 3**
CO5:	Explore contemporary issues and future trends in strategic management in the aviation industry	**K 2**

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	**2**	**-**	**2**	**3**	**1**	**3**	**1**	**2**
CO2	**1**	**2**	**2**	**2**	**2**	**3**	**2**	**3**
CO3	**2**	**3**	**-**	**2**	**-**	**3**	**3**	**2**
CO4	**-**	**1**	**2**	**1**	**2**	**2**	**2**	**3**
CO5	**3**	**3**	**3**	**-**	**3**	**-**	**3**	**-**

AVIATION SAFETY MANAGEMENT					
Subject Code	24CAAM25	CA			40
Number of Lecture Hours/Week	4	SEE			60
Total Number of Lecture Hours	60	**L**	**T**	**P**	**C**
Credits	4	4	0	0	4

COURSE OBJECTIVES:

- To enable students, develop a strong foundation on Aviation Concepts, Functions and Environmental Factors
- To supplement apprehension on Human Factors in Aviation Safety, Motivation, Training
- To elaborate functioning of Aviation Safety Programs, Safety Committees
- To support evidential literature on Aircraft Maintenance Safety
- To assimilate role of Safety Criteria and Documentation

UNIT I	**INTRODUCTION TO AVIATION SAFETY AND REGULATORY FRAMEWORKS AVIATION SAFETY**	**12 HOURS**

Fundamentals of Aviation Safety-**:** Importance of aviation safety- Overview of current safety challenges- Historical developments and key milestones- Regulatory Bodies and Standards- International Civil Aviation Organization (ICAO)- Federal Aviation Administration (FAA)- European Union Aviation Safety Agency (EASA)- Other national and regional regulatory frameworks-

Case Study: Impact and challenges of Regulation on Aviation Operation

UNIT II	**SAFETY MANAGEMENT SYSTEMS (SMS)**	**12 HOURS**

Components of SMS- Overview of SMS principles, Core components- Core components: Safety policy, Safety risk management, Safety assurance, and Safety promotion- Implementation of SMS in aviation organizations- Monitoring and Measuring Safety Performance- Safety performance indicators (SPIs)- Safety performance targets (SPTs)- Tools and techniques for safety performance monitoring.

Case Study: Case studies on successful SMS implementation.

UNIT III	**RISK MANAGEMENT IN AVIATION**	**12 HOURS**

Principles of Risk Management- Identifying and assessing risks- Risk mitigation strategies- Risk Assessment Techniques- Hazard identification methods- Quantitative and qualitative risk assessment- Tools for risk analysis and decision-making- Lessons learned from past incidents and accidents-, Best practices in risk mitigation

Case Study: Risk Factor involving in Aviation

UNIT IV	**HUMAN FACTORS AND SAFETY CULTURE**	**12 HOURS**

Introduction to Human Factors – Definition and importance of human factors in aviation- Human error

and its impact on safety- Models of human error- Mitigating Human Error- Strategies for reducing human error- Training and education programs- Crew Resource Management- Building a Safety Culture- Building a Safety Culture Building a Safety Culture- Role of leadership in promoting safety, **Case study:** of organizations with strong safety cultures		
UNIT V	**ACCIDENT INVESTIGATION AND EMERGING TRENDS**	**12 HOURS**
Accident Investigation Process- Data collection and analysis- Role of accident investigation bodies-. Learning from Accidents- Implementation of safety recommendations- Impact on regulations and industry practices- Emerging Trends and Technologies in Aviation Safety- Advances in safety technology- Advances in safety technology- Future challenges and opportunities.		
TEXT BOOKS:		
1. Stolzer, A. J. (2019). Safety Management Systems in Aviation. Routledge 2. Icao. (2013). SAFETY MANAGEMENT MANUAL (SMM) DOC 9859.		
REFERENCES:		
1. FAA (2021) Safety Management System (SMS) Manual 2. EASA. (2019) Safety Publications and Guidance Materials.		
WEB LINKS:		
1 https://www.icao.int/safety/SafetyManagement/Pages/default.aspx-		

COURSE OUTCOMES

CO1:	To understand the concepts of overall aviation safety and security and the causes of accidents	**K2**
CO2:	To Analyst overall aviation safety and security and the causes of accidents	**K2**
CO3:	To interpret different type's Risk Management in Aviation	**K3**
CO4:	To learn about to Human Factors and Safety Culture in India	**K2**
CO5:	To contrast different types Accident Investigation and Emerging Trends	**K6**

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	**2**	**1**	**-**	**2**	**-**	**1**	**2**	**-**
CO2	**2**	**3**	**1**	**-**	**2**	**-**	**-**	**1**
CO3	**1**	**2**	**-**	**1**	**2**	**-**	**1**	**-**
CO4	**2**	**-**	**2**	**-**	**1**	**2**	**-**	**2**
CO5	**1**	**2**	**-**	**2**	**-**	**2**	**-**	**1**

LEADERSHIP IN AVIATION					
Subject Code	24CAAM26	CA			40
Number of Lecture Hours/Week	4	SEE			60
Total Number of Lecture Hours	60	**L**	**T**	**P**	**C**
Credits	4	4	0	0	4

COURSE OBJECTIVES:

To Provide a comprehensive knowledge about the leadership qualities and leadership styles in aviation industry and the challenges that are being faced by a leader, how to think and plan accordingly during toughertimes and innovatively.

UNIT I	**INTRODUCTION TO LEADERSHIP IN AVIATION**	**12 HOURS**

Overview of Leadership Theories- Trait Theory- Behavioral Theory- Contingency Theory- Transformational and Transactional Leadership- Leadership Styles and Practices in Aviation- Situational Leadership- Servant Leadership- Challenges in Aviation Leadership- Cultural Diversity- Crisis Management- Ethical Decision-Making- **Case Studies**: Case study on a famous aviation leader's approach during a crisis

UNIT II	**ORGANIZATIONAL BEHAVIOR IN AVIATION**	**12 HOURS**

Organizational Culture and Climate in Aviation- Building and Sustaining an Effective Organizational Culture- Team Dynamics- Effective Team Building- Conflict Resolution- Communication in Aviation- Communication Barriers and Overcoming Them- Enhancing Interpersonal Communication Skills- **Case Studies:** Case study on organizational culture and its impact on an airline's performance.

UNIT III	**STRATEGIC LEADERSHIP IN AVIATION**	**12 HOURS**

Strategic Thinking and Planning- Vision, Mission, and Goal Setting- Strategic Decision-Making Processes- Leadership in Change Management- Leading Organizational Change- Resistance to Change- Innovation and Leadership- Promoting Innovation in Aviation- Managing Innovative Project- **Case Studies:** Case study on strategic leadership during a major airline merger

UNIT IV	**SAFETY LEADERSHIP IN AVIATION**	**12 HOURS**

Safety Culture in Aviation- Building and Sustaining a Safety Culture- Safety Leadership Practices- Risk Management- Identifying and Assessing Risks- Implementing Risk Mitigation Strategies- Human Factors and Safety- Understanding Human Factors in Aviation Safety- Strategies to Improve Safety through Human Factors Management- **Case Studies:** Case study on the implementation

of a successful safety culture in an airline.		
UNIT V	**GLOBAL LEADERSHIP IN AVIATION**	**12HOURS**
Globalization and Aviation- Impact of Globalization on Aviation- Leading in a Global Environment- Cross- Cultural Leadership- Managing Cross-Cultural Teams- Cultural Intelligence and Competence- Sustainability and Ethical Leadership- Sustainability Practices in Aviation- Ethical Leadership and Corporate Social Responsibility- **Case Studies:** Case study on cross-cultural leadership in a multinational aviation company.		
TEXT BOOKS:		
1. Lumpe, M. P. (2019). Leadership and Organization in the Aviation Industry. Routledge" **2.** Kearns, S. K., Mavin, T. J., & Hodge, S. (2019b). Engaging the Next Generation of Aviation Professionals. Routledge		
REFERENCES:		
1.Hanlon, J. P. (2017). Global Airlines. Routledge. **2.**Rahman, N. a. A., & Nur, N. M. (2023). Women in Aviation. Springer Nature		
WEB LINKS:		
https://onetomanyleadership.com/leadership-in-industry/why-leadership-is-important-in-the-aviation- industry/		

COURSE OUTCOMES

CO1:	Understand and apply various leadership theories and practices in the aviation context.	**K 2**
CO2:	Analyze and improve organizational behavior and team dynamics within aviation organizations.	**K 4**
CO3:	Develop strategic leadership skills for planning, change management, and innovation.	**K 3**
CO4:	Lead and promote a strong safety culture and implement effective risk management strategies.	**K 3**
CO5:	Navigate the complexities of global aviation leadership, including cross-cultural managementand sustainability initiatives	**K 5**

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	**2**	**3**	**-**	**2**	**3**	**3**	**2**	**2**
CO2	**1**	**1**	**2**	**2**	**2**	**-**	**2**	**1**
CO3	**2**	**2**	**1**	**-**	**1**	**2**	**1**	**3**
CO4	**2**	**2**	**2**	**2**	**2**	**1**	**2**	**3**
CO5	**3**	**1**	**2**	**1**	**-**	**2**	**-**	**1**

REVENUE MANAGEMENT AND PRICING STRATEGIES					
Subject Code	24CAAM27	CA			40
Number of Lecture Hours/Week	4	SEE			60
Total Number of Lecture Hours	60	**L**	**T**	**P**	**C**
Credits	4	4	0	0	4

COURSE OBJECTIVES:

This program will enable students to grasp the fundamental concepts of revenue management and pricing strategies, develop skills to analyze market conditions, forecast demand, and optimize pricing to enhance revenue and profitability in aviation businesses.

UNIT I	**INTRODUCTION TO REVENUE MANAGEMENT**	**12 HOURS**

Overview of Revenue Management- History and Evolution- Fundamental Concepts- Revenue Management Systems- Key Performance Indicators (KPIs) Case Study: The Evolution of Revenue Management at American Airlines

UNIT II	**MARKET ANALYSIS AND DEMAND FORECASTING**	**12 HOURS**

Market Analysis- Demand Forecasting- Seasonality and Trends- Data Analytics- Capacity Management Case Study: Southwest Airlines' Approach to Demand Forecasting and Market Analysis

UNIT III	**PRICING STRATEGIES AND TECHNIQUES**	**12 HOURS**

Pricing Strategies and Techniques- Dynamic Pricing- Price Discrimination- Competitive Pricing- Promotional Pricing. Case Study: Ryanair's Dynamic Pricing Model and Competitive Strategy

UNIT IV	**REVENUE MANAGEMENT TOOLS AND TECHNIQUES**	**12 HOURS**

Inventory Control - Fare Class Management- Revenue Optimization Models- Ancillary Revenue Management- Ancillary Revenue Management. Case Study: Delta Air Lines' Use of Technology in Revenue Management

UNIT V	**STRATEGIC REVENUE MANAGEMENT AND FUTURE TRENDS**	**12 HOURS**

Strategic Revenue Management - Customer Relationship Management (CRM)- Ethical Considerations- Globalization and Revenue Management- Future Trends- Block Chain Technology- Big Data and Advanced Analytics- Sustainability and Environmental Considerations- Advanced Revenue Management Systems- -Centric Revenue Management.

Case Study: The Strategic Integration of Revenue Management at Emirates Airlines

TEXT BOOKS:
1. Hayes, D. K., Hayes, J. D., & Hayes, P. A. (2021). Revenue Management for the Hospitality Industry. John Wiley & Sons 2. Cross, R. G. (2017). Revenue Management. Broadway 3. Schwind, M. (2019). Dynamic Pricing and Automated Resource Allocation for Complex Information Services. Springer Science & Business Media
REFERENCES:
1. Talluri, K. T., & Van Ryzin, G. J. (2019). The Theory and Practice of Revenue Management. Springer Science & Business Media. 2. Phillips, R. L. (2021). Pricing and Revenue Optimization. Stanford University Press
WEB LINKS:
1 https://pros.com/learn/airlines-blog/airline-revenue-management-strategies-for-other-industries

COURSE OUTCOMES

CO1:	Understand the fundamental principles of revenue management and pricing strategies	**K2**
CO2:	Analyze market conditions and customer behavior to forecast demand and set optimal prices	**K4**
CO3:	Explore various revenue management techniques and tools used in the aviation industry	**K4**
CO4:	Develop and implement dynamic pricing strategies to maximize revenue	**K6**
CO5:	Evaluate the impact of revenue management and pricing strategies on organizational performance	**K5**

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	**2**	**1**	**2**	**-**	**2**	**-**	**1**	**2**
CO2	**2**	**3**	**1**	**2**	**-**	**1**	**2**	**-**
CO3	**1**	**1**	**2**	**-**	**3**	**2**	**2**	**1**
CO4	**2**	**1**	**-**	**2**	**-**	**2**	**-**	**1**
CO5	**2**	**1**	**1**	**2**	**-**	**2**	**1**	**-**

DATA ANALYSIS FOR BUSINESS DECISIONS					
Subject Code	24PAAM21	CA			40
Number of Practical Hours/Week	4	SEE			60
Total Number of Lecture Hours	60	**L**	**T**	**P**	**C**
Credits	2	0	0	4	2

COURSE OBJECTIVES:

- To understand the fundamentals of descriptive analysis.
- To be able to use SPSS output to produce scientifically sound research reports

S.No.	Exp. No.
1	Descriptive Statistics
2	Inferential statistics
3	Spread Sheet Modelling
4	Hypothesis – Parametric &Non-Parametric Variable
5	Multivariate Analysis - Correlation, Regression, ANOVA etc
6	Business Analytics using R language and R Studio
7	LPP, Transportation Model
8	Financial Modelling with e-Views etc

COURSE OUTCOMES

CO1:	To understand basic function of descriptive statistics.	**K2**
CO2:	To study fundamentals of business analytics lab.	**K4**
CO3:	To understand the concepts of financially modelling.	**K4**
CO4:	Visualize the data using different plots	**K6**
CO5:	Analyse data using parametric and non-parametric tests.	**K5**

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**
CO1	**2**	**1**	**2**	**-**	**2**	**-**	**1**	**2**
CO2	**2**	**3**	**1**	**2**	**-**	**1**	**2**	**-**
CO3	**1**	**1**	**2**	**-**	**3**	**2**	**2**	**1**
CO4	**2**	**1**	**-**	**2**	**-**	**2**	**-**	**1**
CO5	**2**	**1**	**1**	**2**	**-**	**2**	**1**	**-**

SEMESTER III

INTERNSHIP					
Subject Code	24IAAM31	CA			40
Number of Lecture Hours/Week	0	SEE			60
Total Number of Lecture Hours	0	**L**	**T**	**P**	**C**
Credits	6	0	0	12	6

COURSE OBJECTIVES:

The internship module aims to provide the student with:

• A practice-oriented and 'hands-on' working experience in the real world and aviation industry, and to enhance the student's learning experience.

• An opportunity to develop a right work attitude, self-confidence, interpersonal skills and ability to work as a team in a real organizational setting.

• An opportunity to further develop and enhance operational, customer service and other lifelong knowledge and skills in a real-world work environment.

• Pre-employment training opportunities and an opportunity for the company or organization to assess the performance of the student and to offer the student an employment opportunity after his/her graduation if it deems fit.

COURSE OUTCOMES

CO1:	Understanding the application of knowledge and skill sets acquired from the course and workplace in the assigned job function/s.	**K 2**
CO2:	Applying real life challenges in the workplace by analyzing work environment and conditions and selecting appropriate skill sets acquired from the course	**K 3**
CO3:	Create critical thinking and problem-solving skills by analyzing underlying issue/s to challenges	**K 6**
CO4:	Understanding the ability to harness resources by analyzing challenges and considering opportunities.	**K 2**
CO5:	Understanding appreciation and respect for diverse groups of professionals by engaging harmoniously with different company stakeholders	**K 2**

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**
CO1	**1**	**-**	**-**	**3**	**1**	**-**	**2**	**1**
CO2	**3**	**1**	**-**	**2**	**2**	**-**	**3**	**2**
CO3	**-**	**2**	**3**	**0**	**1**	**3**	**-**	**1**
CO4	**1**	**-**	**-**	**3**	**1**	**-**	**2**	**1**
CO5	**1**	**-**	**-**	**3**	**1**	**-**	**2**	**1**

SEMESTER IV

CAPSTONE PROJECT					
Subject Code	24RAAM41	CA			100
Number of Lecture Hours/Week	20	SEE			200
Total Number of Lecture Hours	0	**L**	**T**	**P**	**C**
Credits	10	0	0	20	10

COURSE OBJECTIVES:

1. The Aim of the final year project is to develop student's knowledge for solving societal problem.
2. It enables students to develop problem solving, analysis, synthesis and evaluation skills

COURSE OUTCOMES

CO1:	Create and develop deep understanding of the interaction.	**K 6**
CO2:	Analyze and solve problems on an executive level and demonstrating critical.	**K 4**
CO3:	Design the general (core) management skills in the chosen area of specialization.	**K 6**
CO4:	Design strategies to solve business problems and pursue opportunities	**K 6**
CO5:	Interpret a variety of ways to engage in experiential learning	**K 5**

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**
CO1	**1**	**-**	**3**	**-**	**2**	**1**	**1**	**3**
CO2	**2**	**2**	**1**	**1**	**3**	**1**	**2**	**3**
CO3	**1**	**-**	**3**	**-**	**2**	**1**	**1**	**3**
CO4	**1**	**-**	**3**	**-**	**2**	**1**	**1**	**3**
CO5	**1**	**3**	**2**	**-**	**2**	**2**	**1**	**2**

DISCIPLINE SPECIFIC ELECTIVES

PROFESSIONAL ETHICS AND COMPLIANCE					
Subject Code	24DAAM01	CA		40	
Number of Lecture Hours/Week	3	SEE		60	
Total Number of Lecture Hours	45	L	T	P	C
Credits	3	3	0	0	3

COURSE OBJECTIVES:

This program will enable students to comprehend the importance of professional ethics and compliance, develop theability to identify and address ethical issues, and ensure compliance with relevant laws and regulations in their professional activities.

UNIT I	INTRODUCTION TO PROFESSIONAL ETHICS	9 Hours

Definition and Scope of Professional Ethics- Ethical Theories and Principles- utilitarianism, virtue ethics, and their applications- Code of Ethics- Ethical Decision-Making Models- Ethical Leadership- **Case Study**: Analysis of Enron'sEthical Failures and Lessons Learned

UNIT II	REGULATORY ENVIRONMENT AND COMPLIANCE REQUIREMENTS	9 Hours

Overview of Regulatory Environment-The role of regulatory bodies and agencies- Compliance Requirements- Risk Management and Compliance- Compliance Programs- Audit and Monitoring- **Case Study**: Volkswagen Emissions Scandal and Compliance Failures.

UNIT III	CORPORATE GOVERNANCE AND INTERNAL	9 Hours

Definition and Importance of Corporate Governance- Corporate Governance Frameworks- Board of Directors- InternalControls- Whistleblowing and Reporting Mechanisms- **Case Study**: The Role of Corporate Governance in the Collapse of Lehman Brothers

UNIT IV	ETHICAL ISSUES IN BUSINESS	9 Hours

Common Ethical Issues in Business-conflicts of interest, insider trading, bribery, and corruption- Corporate Social Responsibility (CSR)- Sustainability and Ethics- Diversity and Inclusion- Globalization and Ethics- **Case Study**: Nike's Labor Practices and Ethical Issues in Global Supply Chains.

UNIT V	ETHICS AND COMPLIANCE IN PRACTICE	9 Hours

Developing an Ethical Culture- Ethics and Compliance Training- Measuring Ethical Performance- Tools and techniques for measuring and assessing ethical performance in organizations- Ethics and Technology- Future Trends in Ethics andCompliance- **Case Study:** Google's Ethical Challenges

with AI and Data Privacy
TEXT BOOKS
1. Ferrell, & Fraedrich, J. (2021). Business Ethics. Cengage Learning. 2. Tricker, B., & Tricker, R. I. (2019). Corporate Governance. Oxford University Press, USA 3. Wunnicke, B. (2019). Ethics Compliance for Business Lawyers. John Wiley & Sons. 4. Naagarazan, R. (2007). A Textbook On Professional Ethics And Human Values. New Age International.
REFERENCE BOOKS
1. Rezaee, Z. (2018). Corporate Governance and Ethics. John Wiley & Sons 2. Hosmer, L. T. (2019). The Ethics of Management. McGraw-Hill Medical Publishing. 3. Singh, N., & Bussen, T. J. (2019). Compliance Management. Bloomsbury Publishing USA
WEBLINKS
https://www.bacb.com/wp-content/uploads/2020/05/BACB-Compliance-Code-english_190318.pdf

COURSE OUTCOMES

CO1:	Understand the fundamental principles of professional ethics and compliance.	**K 2**
CO2:	Analyze ethical dilemmas and develop strategies for ethical decision-making.	**K 4**
CO3:	Explore the regulatory environment and compliance requirements in different industries.	**K 5**
CO4:	Examine the role of corporate governance and internal controls in ensuring compliance	**K 4**
CO5:	Understand the impact of ethical behavior and compliance on organizational reputation and success.	**K 2**

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**
CO1	**2**	**3**	**1**	**2**	**1**	**3**	**2**	**1**
CO2	**2**	**2**	**2**	**3**	**1**	**3**	**3**	**2**
CO3	**-**	**1**	**3**	**-**	**2**	**2**	**1**	**2**
CO4	**1**	**3**	**2**	**2**	**2**	**2**	**1**	**2**
CO5	**3**	**-**	**2**	**3**	**-**	**1**	**2**	**3**

AVIATION TOURISM MANAGEMENT					
Subject Code	24DAAM02	CA		40	
Number of Lecture Hours/Week	3	SEE		60	
Total Number of Lecture Hours	45	L	T	P	C
Credits	3	3	0	0	3

COURSE OBJECTIVES:

- To provide a comprehensive understanding of the aviation tourism industry and its components.
- To equip students with knowledge of airline and airport operations.
- To develop skills in designing and managing aviation tourism products and services.
- To analyze current trends and challenges in aviation tourism.
- To apply real-world case studies to enhance learning and practical understanding.

UNIT I	INTRODUCTION TO AVIATION TOURISM	9 Hours

History and Development of Aviation Tourism- Evolution of air travel- Milestones in aviation tourism- Aviation Tourism Industry Overview- Key players and stakeholders- Economic impact of aviation tourism- Regulatory Framework- International aviation organizations- National aviation authorities and regulations- **Case Study**: Evolutionof a Major Airline

UNIT II	AIRLINE OPERATIONS AND MANAGEMENT	9 Hours

Airline Business Models- Full Service Carriers Vs Low Cost Carriers- Charter Airlines- Airline Scheduling and Route Planning- Flight scheduling process- Hub-and-spoke vs. point-to-point networks- Airline Marketing and Sales- Marketing strategies in aviation- Distribution channels- **Case Study:** Successful Low-Cost Carrier

UNIT III	AIRPORT OPERATIONS AND SERVICES	9 Hours

Airport Management and Operations- Airport layout and design- Passenger and cargo operations- Airport Services andFacilities- Passenger services- Ground handling services- Safety and Security in Airports- Security protocols and regulations- Emergency response and management- **Case Study:** Major Airport Hub Operations

UNIT IV	AVIATION TOURISM PRODUCTS AND SERVICES	9 Hours

Tour Packages and Itineraries- Designing aviation-based tour packages- Popular aviation tourism destinations- In-Flight Services- Onboard service management- Passenger experience and satisfaction- Special Interest Aviation Tourism- Airshows and exhibitions- Adventure tourism- **Case Study:** Development of a Unique Aviation Tourism Product

UNIT V	CURRENT TRENDS AND FUTURE DIRECTIONS IN AVIATION TOURISM	9 Hours

Technological Innovations- Impact of technology on aviation tourism- Future trends- Challenges and Opportunities- Case Studies and Best Practices- Successful aviation tourism models- Lessons learned from global aviation tourism trends- **Case Study:** Impact of COVID-19 on the Aviation Tourism Industry

TEXT BOOK:

1. Goeldner, C. R., & Ritchie, J. B. (2019). TOURISM PRINCIPLES, PRACTICES, PHILOSOPHIES, 10TH ED. John Wiley & Sons
2. Cook, G. N., & Billig, B. G. (2018). Airline Operations and Management. Routledge
3. Suseelan, S. (2019). Airline Airport & Tourism Management. Notion Press.

REFERENCE BOOKS:

1. Graham, A., Papatheodorou, A., & Forsyth, P. (2019). Aviation and Tourism. Routledge.
2. Duval, D., & Lohmann, G. (2021). Tourism and Transport. Goodfellow Publishers Ltd.

WEBLINK:

1. https://simpleflying.com/how-aviation-and-tourism-are-intrinsically-linked/

COURSE OUTCOMES

CO1:	Demonstrate an understanding of the history and development of aviation tourism.	**K 1**
CO2:	Analyze the operations and management of airlines and airports.	**K 4**
CO3:	Design effective aviation tourism products and itineraries.	**K 4**
CO4:	Evaluate the impact of technological innovations and sustainability in aviation tourism.	**K 5**
CO5:	Apply best practices and lessons from case studies to real-world aviation tourism scenarios	**K 3**

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**
CO1	**3**	**1**	**1**	**1**	**-**	**-**	**-**	**1**
CO2	**3**	**3**	**2**	**1**	**1**	**-**	**2**	**-**
CO3	**2**	**1**	**3**	**-**	**3**	**1**	**1**	**-**
CO4	**2**	**-**	**2**	**1**	**-**	**2**	**-**	**2**
CO5	**-**	**1**	**-**	**1**	**3**	**-**	**-**	**2**

ENTERPRISE RESOURCE PLANNING					
Subject Code	24DAAM03	CA			40
Number of Lecture Hours/Week	3	SEE			60
Total Number of Lecture Hours	45	**L**	**T**	**P**	**C**
Credits	3	3	0	0	3

COURSE OBJECTIVES:

- To understand the fundamental concepts and principles of Enterprise Resource Planning (ERP) systems.
- To analyze the benefits and challenges associated with implementing ERP systems in organizations.
- To explore the integration of business processes facilitated by ERP systems.
- To examine various ERP modules and their functionalities.
- To evaluate different ERP implementation strategies and methodologies.
- To assess the role of ERP in enhancing organizational efficiency and competitiveness.
- To analyze case studies of successful and unsuccessful ERP implementations.

UNIT I	**INTRODUCTION TO ERP**	**9 HOURS**

Introduction to ERP, Evolution of ERP, Reasons for the growth of ERP, Scenario and Justification of ERP in India, Evaluation of ERP, Core and Extended Modules of ERP, Functionalities and features of each module, Advantage of ERP.

UNIT II	**OVERVIEW OF ENTERPRISE RESOURCE PLANNING**	**9 HOURS**

An overview of Enterprise, Integrated Management Information, Business Modelling, ERP for Small Business, ERP for make to order companies, Business Process Mapping for ERP Module Design, Hardware Environment, and its Selection for ERP Implementation.

UNIT III	**ERP AND RELATED TECHNOLOGIES**	**9 HOURS**

ERP and Related Technologies, Business Process Reengineering (BPR), Management Information System (MIS), Executive Information System (EIS), Decision support System (DSS), Supply Chain Management (SCM) - Cloud-based ERP solutions - Mobile ERP applications - Industry-specific ERP solutions and trends.

UNIT IV	**ERP MARKETS**	**9 HOURS**

ERP Market, Introduction, SAP AG, Baan Company, Oracle Corporation, People Soft, JD Edwards World Solutions Company. Criteria for selecting ERP vendors - Negotiating contracts with ERP vendors - Service level agreements (SLAs) and support arrangements.

UNIT V	ERP IMPLEMENTATION	9 HOURS
ERP implementation lifecycle, troubleshooting common ERP issues, pre-evaluation screening, package evaluation, project planning phase, gap analysis, reengineering, configuration, implementation, team training, testing, going live, end-user training, post implementation (Maintenance mode) - Best practices for effective ERP system customization.		
TEXT BOOKS:		
1. Bradford, M. (2019). Modern ERP: Select, Implement, and Use Today's Advanced Business Systems. Lulu.com 2. Leon, A. (2019). ERP Demystified. Tata McGraw-Hill Education		
REFERENCES:		
1. Hossain, L., Patrick, J. D., & Rashid, M. A. (2021). Enterprise Resource Planning: Global Opportunities and Challenges. IGI Global 2. Ganesh, K., Mohapatra, S., Anbuudayasankar, S. P., & Sivakumar, P. (2019). Enterprise Resource Planning. Springer		
WEB LINKS:		
1 http://www.enhelion.com/courses-info/60/certificate-aviation-law -		

COURSE OUTCOMES

CO1:	To validate how the air law is developed periodically in the world and how the Air Act 1934 and Aircraft rules established in British India	**K1**
CO2:	To comprehend on how the commercial air transportation commenced in India and the impact of Paris convention	**K4**
CO3:	To learn about airlines liability in case of accident	**K2**
CO4:	To learn about privatization of airlines and airport and open sky policy in India	**K2**
CO5:	To be informed and learn about air route, airport security and ground navigational aids	**K2**

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	-	1	-	2	2	1	-	-
CO2	-	2	1	2	-	-	-	1
CO3	3	2	-	1	-	-	-	2
CO4	3	1	1	-	-	1	-	-
CO5	1	2	-	-	-	-	1	-

BEHAVIOURAL OPERATIONS MANAGEMENT

Subject Code	24DAAM04	CA			40
Number of Lecture Hours/Week	3	SEE			60
Total Number of Lecture Hours	45	**L**	**T**	**P**	**C**
Credits	3	3	0	0	3

COURSE OBJECTIVES:

- To understand the Behavioural concepts in Operations Management
- To learn about the Behavioural concepts in production and service context.

UNIT I	**INTRODUCTION**	**9 HOURS**

Behavioural Operations Management – Definition – The study of Behavioural Operations – History and the Contemporary Knowledge Base – Virtuous Cycles of Experimental Learning.

UNIT II	**PRODUCTION AND SERVICE CONTEXTS – I**	**9 HOURS**

Synch and Swim: Managing and Mismanaging Process Constraints and Variability – The role ofhuman behaviour in scheduling – process control - Process and Perception: Kristen's Cookie Company from a Behavioral Point of View.

UNIT III	**PRODUCTION AND SERVICE CONTEXTS – II**	**9 HOURS**

The Wait or Buy Game: How to Game the System That's Designed to Game You Back Sharing the Load: Group Behavior and Insights into Simulating Real-World Dynamics.

UNIT IV	**SUPPLY CHAINS**	**9 HOURS**

Sharing the Risk: Understanding Risk – Sharing Contracts from the Supplier's Perspective – Supply Chain Negotiator: A Game of Gains, Losses, and Equity- Incorporation of behavior in decision making in business simulation games.

UNIT V	**ENTERPRISE RESOURCE PLANNING**	**9 HOURS**

Dynamic Pricing in Revenue Management – Intertemporal choices in Project based organizations – Impulsiveness and Emotions – Behaviour Assessment Test on Conflict Management – Kicking the mean Habit – A chain of hands.

TEXT BOOKS:

1. Bendoly, E., Van Wezel, W., & Bachrach, D. G. (2019). The Handbook of Behavioral Operations Management. Oxford University Press, USA
2. Donohue, K., Katok, E., & Leider, S. (2020). The Handbook of Behavioral Operations. John Wiley & Sons
3. Bhattacharya, S. (2021). OPERATIONS MANAGEMENT. PHI Learning Pvt. Ltd.

REFERENCES:
1. Loch, C. H., & Wu, Y. (2017). Behavioral Operations Management. Now Publishers Inc
WEB LINKS:
https://www.slideshare.net/priyasharmma/organizational-behavior-6858461 https://www.slideshare.net/Kadirikjs24/operations-management-69329225

COURSE OUTCOMES

CO1:	Understand the fundamental production in Behavioural concepts.	**K2**
CO2:	Explain the Process Constraints and Variability Understand the consumer behavioural implications in making the wait-or-buy decision.	**K4**
CO3:	Identify the Group Behaviour and Real world simulations.	**K3**
CO4:	Gain knowledge about the implementation of Supply Chain.	**K3**
CO5:	Evaluate the Impulsiveness and Emotions.	**K5**

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**
CO1	**2**	**-**	**-**	**2**	**2**	**-**	**2**	**1**
CO2	**1**	**1**	**1**	**2**	**1**	**1**	**2**	**3**
CO3	**-**	**-**	**3**	**1**	**1**	**-**	**1**	**-**
CO4	**3**	**1**	**1**	**3**	**3**	**-**	**2**	**2**
CO5	**3**	**3**	**-**	**1**	**1**	**2**	**2**	**2**

AVIATION LAW					
Subject Code	24DAAM05	CA			40
Number of Lecture Hours/Week	3	SEE			60
Total Number of Lecture Hours	45	**L**	**T**	**P**	**C**
Credits	3	3	0	0	3

COURSE OBJECTIVES:

- Understand the basic principles of aviation law
- Familiarize with international aviation treaties and conventions.
- Analyze the role and functions of aviation regulatory bodies
- Examine legal issues related to air carrier liability, safety, and security
- Evaluate case studies to apply legal concepts in practical scenarios

UNIT I	**INTRODUCTION TO AVIATION LAW**	**9 HOURS**

Introduction to Aviation Law - Role of international conventions treaties- Paris Convention on Air Navigation 1919- Birth of Indian Air Companies- Aircraft Act 1934- Aircraft Rules 1937- Nationalization of Air Services- International Airport Authority in India

UNIT II	**INTERNATIONAL AIR TRANSPORTATION**	**9 HOURS**

Chicago conference- Rules for Air Navigation- Liberalization of International Air- Bermuda Agreement transportation- Application of GATT Principles to International AirTransportation- Environmental Protection Measures-India and Bilateral Services Agreement.

UNIT III	**AVIATION LIABILITY**	**9 HOURS**

Liability of the Carrier under the Indian Carriage by Air Act 1972- Warsaw Convention 1929- International Carriage- Hague Protocol 1955- Montreal Interim Agreement 1966- Guatemala City Protocol 1971

UNIT IV	**AIRLINES OWNERSHIP**	**9 HOURS**

Introduction– Privatization- Privatization -Policy issues- Current Situation- Air Space Management in India-, Regulatory Compliance- Air Space Management in India

UNIT V	**AVIATION IN INDIA**	**9 HOURS**

Past - present - Future Overview – Air law and Aviation Policy in India- Air Routes and Aerodromes in India - Aviation Security- Development of Civil Aviation and Air law and Policy in India- Development of Aviation in India- Future Outlook for National Airlines

TEXT BOOKS:
1. Speciale, R. C. (2020c). Fundamentals of Aviation Law. McGraw Hill Professional. 2. Bartsch, R. (2018b). International Aviation Law. Routledge
REFERENCES:
1. Pearson, M. W., & Riley, D. S. (2019). Foundations of Aviation Law. Routledge 2. Larsen, P. B., Sweeney, J., & Gillick, J. (2022b). Aviation Law: Cases, Laws and Related Sources. Martin Publishers.
WEB LINKS:
1 http://www.enhelion.com/courses-info/60/certificate-aviation-law -

COURSE OUTCOMES

CO1:	To validate how the air law is developed periodically in the world and how the Air Act 1934 and Aircraft rules established in British India	**K1**
CO2:	To comprehend on how the commercial air transportation commenced in India and the impact of Paris convention	**K4**
CO3:	To learn about airlines liability in case of accident	**K2**
CO4:	To learn about privatization of airlines and airport and open sky policy in India	**K2**
CO5:	To be informed and learn about air route, airport security and ground navigational aids	**K2**

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**
CO1	**-**	**1**	**-**	**2**	**2**	**1**	**-**	**-**
CO2	**-**	**2**	**1**	**2**	**-**	**-**	**-**	**1**
CO3	**3**	**2**	**-**	**1**	**-**	**-**	**-**	**2**
CO4	**3**	**1**	**1**	**-**	**-**	**1**	**-**	**-**
CO5	**1**	**2**	**-**	**-**	**-**	**-**	**1**	**-**

CROSS CULTURAL MANAGEMENT

Subject Code	24DAAM06	CA			40
Number of Lecture Hours/Week	3	SEE			60
Total Number of Lecture Hours	45	**L**	**T**	**P**	**C**
Credits	3	3	0	0	3

COURSE OBJECTIVES:

1.Develop a deeper understanding about the theoretical frameworks on cross cultural management.
2. Understand the spheres of culture along with its strategies.

UNIT I	**INTRODUCTION**	**9 HOURS**

Overview of Cross-Cultural Management-Importance and relevance in global business-Understanding culture and its dimensions-Cultural frameworks (e.g., Hofstede, Trompenaars)-Impact of cultural differences on management practices-Cultural intelligence (CQ) and its significance-Developing cultural sensitivity and awareness

UNIT II	**COMMUNICATION ACROSS CULTURE**	**9 HOURS**

Business communication across cultures – Barriers to intercultural communication – Strategies for effective cross-cultural communication-Negotiating Internationally Intro to diversity in organizations-Paradigms for engaging a diverse workforce-Leading diversity in organizations-Inclusion in organizations-Creativity and innovation in diverse organizations.

UNIT III	**ORGANIZATIONAL CROSS CULTURE**	**9 HOURS**

Organizational cross culture – International culture - Leadership - Motivation – behavioral dynamics – Inter-culture exposure – religion – caste; sub-caste methods – superstitious procedures Equal employment opportunities (EEO) Meaning-EEO Practices in India.

UNIT IV	**CROSS CULTURAL TEAM MANAGEMENT**	**9 HOURS**

Working with International teams – Groups processes during international encounters – Conflicts and cultural difference – Understanding and dealing with conflicts – Developing Intercultural relationships.

UNIT V	**CULTURE AND BEHAVIOUR**	**9 HOURS**

Culture and behaviour - An effect of culture on behavior, Adjusting to the New Culture, Cultural relativity of management Theory, Competencies for Global Manager - Cultural competence – Value orientations and Dimensions – Reconciling cultural dilemmas. Value orientations and Dimensions – Reconciling cultural dilemmas

TEXT BOOKS:

1. Shobhana Madhavan, Cross-Cultural Management, Oxford University press, 2nd edition, 2019.
2. Bhattacharyya, D. K. (2020). Cross-cultural Management. PHI Learning Pvt. Ltd

REFERENCES:

1. Guffey, M. E., Rogin, P., & Rhodes, K. (2021). Business Communication. Scarborough, Ont. : Nelson Thomson Learning.
2. Hitt, M. A., Black, J. S., & Porter, L. W. (2019). Management. Pearson Education

WEB LINKS:

1.https://www.slideshare.net/SherinThomas34/crosscultural-communication-67734980

2.https://www.slideshare.net/uaestallion/cross-culture-presentation-22234554

COURSE OUTCOMES

CO1:	Identify the key issues raised by international business cases in cross-cultural management.	**K3**
CO2:	Apply analytical and theoretical frameworks to cross-cultural management.	**K3**
CO3:	Analyze the interacting spheres of culture including organizational culture, professional culture, national culture, and industry culture.	**K4**
CO4:	Design various strategies for effective cross-cultural management	**K6**
CO5:	Discuss the various competencies for global manager	**K6**

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	**3**	**3**	**-**	**-**	**-**	**3**	**-**	**3**
CO2	**3**	**3**	**-**	**-**	**-**	**3**	**-**	**3**
CO3	**2**	**2**	**1**	**1**	**1**	**2**	**1**	**2**
CO4	**2**	**2**	**3**	**3**	**3**	**-**	**3**	**-**
CO5	**2**	**2**	**3**	**3**	**3**	**-**	**3**	**-**

ADVANCED BUSINESS ANALYTICS FOR AVIATION					
Subject Code	24DAAM07	CA			40
Number of Lecture Hours/Week	3	SEE			60
Total Number of Lecture Hours	45	**L**	**T**	**P**	**C**
Credits	3	3	0	0	3

COURSE OBJECTIVES:

This program will enable students to understand and apply advanced analytical methods to solve complex problems in the aviation industry, leveraging data for strategic and operational decision-making.

UNIT I	**INTRODUCTION TO BUSINESS ANALYTICS IN AVIATION**	**9 Hours**

Overview of Business Analytics: Definition and Scope of Business Analytics- Types of Analytics: Descriptive Analytics- Predictive Analytics- Prescriptive Analytics- Types of Data in Aviation- Data Collection and Storage- Data Cleaning and Preprocessing- Analytical Tools and Techniques: Statistical Tools- Data Visualization Tools- Big Data Technologies-

Case Study: Implementation of Data-Driven Decision Making at Delta Airlines

UNIT II	**PREDICTIVE ANALYTICS AND MACHINE LEARNING**	**9 Hours**

Fundamentals of Predictive Analytics- Predictive Modelling Process and Lifecycle- Applications of Predictive Analytics in Aviation- Statistical Methods: Regression Analysis: Linear Regression- Logistic Regression- Multiple Regression- Time Series Analysis- ARIMA (Auto Regressive Integrated Moving Average- Exponential Smoothing- Machine Learning Techniques- Unsupervised Learning Clustering- Ensemble Methods- Model Evaluation and Validation-

Case Study: Predictive Maintenance at Lufthansa using Machine Learning

UNIT III	**PRESCRIPTIVE ANALYTICS AND OPTIMIZATION**	**9 Hours**

Optimization Techniques- Network Optimization- Scheduling- Simulation Methods- Discrete-Event Simulation Principles- Decision Analysis: Decision Trees- Influence Diagrams- Scenario Analysis- Sensitivity Analysis. **Case Study:** Optimizing Flight Schedules at Southwest Airlines

UNIT IV	**DATA VISUALIZATION AND REPORTING**	**9 Hours**

Fundamentals of Data Visualization- Types of Data Visualizations- Advanced visualizations- Tools and Technologies- Dashboards and Interactive Reports- Designing Effective Visualizations- Storytelling with Data- Reporting and Communication- Communicating Insights to Stakeholders-

Case Study: Enhancing Operational Efficiency at Emirates Airlines with Data Visualization

UNIT V	**ADVANCED TOPICS AND FUTURE TRENDS**	**9 Hours**

Text Analytics and Sentiment Analysis- Geo-Spatial Analytics- Deep Learning Applications in Aviation- Real- time Analytics- Tools and Frameworks for Real-time Analytics- Ethical Considerations: Data Privacy and Security- Ethical Implications of Advanced Analytics- Future Trends in Business Analytics- Block chain Technology in Data Management and Analytics- The Role

of IoT in Aviation Analytic- **Case Study**: Implementing AI for Customer Experience Enhancement at Singapore Airlines
TEXT BOOKS:
1. Albright, S. C., & Winston, W. L. (2017). Business Analytics 2. Davenport, T. H., & Harris, J. G. (2019). Competing on Analytics. Harvard Business Press. 3. Forum, M. C. M. S. O. (2019). Big Data, Analytics, and the Future of Marketing and Sales. Createspace Independent Pub. 4. Basu, A., & Basu, S. (2018). A User's Guide to Business Analytics. CRC Press.
REFERENCES:
1. Siegel, E. (2019). Predictive Analytics. John Wiley & Sons. 2. Provost, F., & Fawcett, T. (2018a). What You Need to Know about Data Mining and Data-analytic Thinking. 3. Kimball, R., & Ross, M. (2019). The Data Warehouse Toolkit. John Wiley & Sons.
WEB LINKS:
1. https://www.boeing.com/privacy-and-cookie-policy#cookiesandtracers

COURSE OUTCOMES

CO1:	Develop a comprehensive understanding of advanced business analytics concepts and techniques	**K 2**
CO2:	Apply statistical and machine learning methods to aviation data for predictive and prescriptive analytics.	**K 3**
CO3:	Utilize data visualization and reporting tools to communicate insights effectively	**K 3**
CO4:	Integrate business analytics into strategic decision-making processes in aviation.	**K 3**
CO5:	Evaluate and implement advanced analytics solutions to optimize aviation operations and performance.	**K 5**

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**
CO1	**2**	**1**	**2**	**2**	**2**	**3**	**2**	**2**
CO2	**1**	**2**	**2**	**3**	**2**	**2**	**-**	**2**
CO3	**1**	**3**	**-**	**1**	**1**	**-**	**2**	**1**
CO4	**3**	**-**	**2**	**-**	**-**	**1**	**2**	**3**
CO5	**2**	**1**	**3**	**1**	**3**	**2**	**1**	**-**

AVIATION LEASING AND ASSET MANAGEMENT					
Subject Code	24DAAM08	CA			40
Number of Lecture Hours/Week	3	SEE			60
Total Number of Lecture Hours	45	**L**	**T**	**P**	**C**
Credits	3	3	0	0	3

COURSE OBJECTIVES:

This program will enable students to understand the intricacies of aviation leasing and asset management, develop skills to negotiate and manage lease agreements, and implement effective asset management strategies to maximize the value and performance of aviation assets.

UNIT I	**INTRODUCTION TO AVIATION LEASING**	**9 HOURS**

Overview of Aviation Leasing- Key stakeholders involved in aviation leasing -Types of Leases- characteristics of Aircraft Lease-Lease- Advantages and disadvantages of each type of lease -Structures- Components of a lease agreement- Key Terms and Concepts- Market Dynamics.

Case study: Analysis of Air Lease Corporation's Business Model and Market Strategy

UNIT II	**FINANCIAL ASPECTS OF AVIATION LEASING**	**9 HOURS**

Financial Evaluation of Leasing - Financial metrics used in lease evaluation- Lease Accounting- Impact of lease accounting on financial statements- Tax Implications- Lease Financing- Structure of lease financing transactions- Risk Management- Risk Management.

Case Study: Financial Analysis of a Lease vs. Purchase Decision for a Major Airline

UNIT III	**LEGAL AND REGULATORY FRAMEWORK**	**9 HOURS**

Regulatory Environment- Key regulations and compliance requirements -Lease Contracts- International Conventions- Benefits and challenges of the convention -Dispute Resolution- Role of arbitration and mediation Insurance and Liability- Managing liability and indemnity in lease agreements.

Case Study: Legal Dispute Analysis: A Case Study of Aircraft Lease Termination and Repossession.

UNIT IV	**ASSET MANAGEMENT STRATEGIES**	**9 HOURS**

Asset Lifecycle Management- Strategies for maximizing asset value- Maintenance and Technical Management- Asset Valuation- Factors influencing asset value- Remarketing of Aircraft- Role of brokers and lessors in the remarketing process- End-of-Life Management.

Case Study: Strategic Asset Management: How Singapore Airlines Manages Its Fleet for Optimal Performance

UNIT V	**STRATEGIC IMPLICATIONS OF LEASING AND ASSET MANAGEMENT**	**9 HOURS**

Impact on Airline Operations- Strategies for aligning leasing decisions with operational goals- Competitive Advantage- Sustainability and ESG Considerations- Strategic Partnerships- Strategic Partnerships: Role of strategic partnerships- successful partnerships between lessors and airlines.

Case Study: The Strategic Role of Leasing in Ryanair's Growth and Market Dominance

TEXT BOOKS:

1. Guzhva, V., Raghavan, S., & D'Agostino, D. J. (2024). Aircraft Leasing and Financing
2. Murphy, R. (2022). Aircraft Financing. Bloomsbury Publishing.
3. Vasigh, B. (2019). Foundations of Airline Finance. Routledge

REFERENCES:

1. Pearson, M. W., & Riley, D. S. (2020b). Foundations of Aviation Law. Routledge
2. Jorge-Calderón, D. (2014). Aviation Investment. Ashgate Publishing

WEB LINKS:

1. https://www.icao.int/training/Documents/GAT_Catalogue.pdf.pdf-

COURSE OUTCOMES

CO1:	Understand the fundamentals of aviation leasing, including types of leases and key terms	**K2**
CO2:	Analyze the financial aspects of leasing and asset management in aviation	**K4**
CO3:	Explore the legal and regulatory framework governing aviation leasing and asset management	**K2**
CO4:	Develop strategies for effective asset management, including maintenance, valuation, and remarketing of aviation assets	**K4**
CO5:	Evaluate the impact of leasing and asset management on the overall performance and competitiveness of aviation businesses	**K5**

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**
CO1	**2**	**1**	**-**	**3**	**-**	**1**	**1**	**-**
CO2	**1**	**3**	**1**	**3**	**1**	**-**	**-**	**1**
CO3	**-**	**2-**	**1**	**1**	**-**	**1**	**-**	**2**
CO4	**2**	**-**	**1**	**2**	**-**	**3**	**2**	**-**
CO5	**3**	**2**	**3**	**1**	**-**	**2**	**-**	**1**

STRATEGIC MARKETING IN AVIATION					
Subject Code	24DAAM09	CA			40
Number of Lecture Hours/Week	3	SEE			60
Total Number of Lecture Hours	45	**L**	**T**	**P**	**C**
Credits	3	3	0	0	3

COURSE OBJECTIVES:

- This program will enable students to understand and apply strategic marketing concepts and techniques in the context of the aviation industry
- Students will learn how to analyze market trends, develop marketing strategies, and implement effective marketing plans to drive growth and profitability in aviation businesses
- By the end of the course, students should be able to understand, apply Strategic Marketing in Aviation and critically evaluate

UNIT I	**INTRODUCTION TO STRATEGIC MARKETING IN AVIATION**	**9 HOURS**

Introduction - Definition and Scope of Strategic Marketing- Marketing Environment in Aviation- Market Segmentation and Targeting- Positioning in the Aviation Market- Marketing Mix in Aviation Case Study: Analysis of Southwest Airlines' Market Positioning and Competitive Strategy

UNIT II	**MARKET RESEARCH AND CONSUMER BEHAVIOR IN AVIATION**	**9 HOURS**

Market Research Techniques- Methods and tools for conducting market research in the aviation industry- Collecting and analyzing data to inform marketing decisions- Consumer Behavior in Aviation- Understanding the factors influencing consumer behavior and decision-making in the aviation market- Customer Journey Mapping-Analyzing the customer journey from awareness to post-purchase in the aviation industry- Identifying touchpoints and opportunities for engagement- Customer Relationship Management (CRM)- Predictive Analytics and Big Data.

Case Study: Emirates Airline's Customer-Centric Approach and Use of Big Data

UNIT III	**STRATEGIC PLANNING AND MARKETING STRATEGY DEVELOPMENT**	**9 HOURS**

Strategic Planning Process- Steps involved in developing a strategic marketing plan for aviation businesses- Setting marketing objectives and goals- Competitive Analysis- Tools and techniques for analyzing competitors in the aviation industry. Marketing Strategy Formulation- Integrating

marketing strategies with overall business strategy- Brand Management in Aviation- Pricing Strategies in Aviation- Pricing Strategies in Aviation- Pricing Strategies in Aviation.

Case Study: Delta Air Lines' Strategic Marketing Plan and Competitive Positioning

UNIT IV	DIGITAL MARKETING AND EMERGING TECHNOLOGIES IN AVIATION	9 HOURS

Digital Marketing Overview- Importance of digital marketing in the aviation industry- Social Media Marketing- Leveraging social media platforms for marketing and customer engagement in aviation- Content Marketing- Content marketing strategies for aviation businesses- Search Engine Optimization (SEO)- Search Engine Marketing (SEM)- Emerging Technologies- Exploring the impact of emerging technologies

Case Study: Singapore Airlines' Use of Digital Marketing and Emerging Technologies

UNIT V	CUSTOMER EXPERIENCE AND BRANDING IN AVIATION	9 HOURS

Customer Experience Management- Understanding the importance of customer experience in aviation marketing- Strategies for enhancing customer satisfaction and loyalty- Service Quality in Aviation- Importance of service quality in customer retention- Branding Strategies- Developing strong aviation brands- Importance of branding in creating a competitive edge- Reputation Management- Strategies for managing and protecting the reputation of aviation businesses- Sustainability and Corporate Social Responsibility (CSR)- Integrating sustainability and CSR initiatives into aviation marketing strategies.

Case Study: Virgin Atlantic's Branding and Customer Experience Strategies

TEXT BOOKS:

1. Kotler, P., Keller, K., Brady, M., Goodman, M., & Hansen, T. (2019). Marketing Management. Pearson UK.
2. Halpern, N., & Graham, A. (2021). Airport Marketing. Routledge
3. Mason, R. L. K. J. (2019b). Aviation Marketing.
4. Sahaf, M. A. (2019). STRATEGIC MARKETING : MAKING DECISIONS FOR STRATEGIC ADVANTAGE, SECOND EDITION. PHI Learning Pvt. Ltd

REFERENCES:

1. Digit Kingsnorth, S. (2022). Digital Marketing Strategy. Kogan Page Publishers
2. Gil, C. (2021). The End of Marketing. Kogan Page Publishers
3. Neumeier, M. (2019b). The Brand Gap. Peachpit Press.

WEB LINKS:

1. https://mediaboom.com/news/aviation-marketing/#:~:text=Aviation

COURSE OUTCOMES

CO1:	On completing the course students will be able to Understand and develop insights and knowledge base of various concepts of Quantitative Techniques.	**K6**
CO2:	Develop skills for facilitates for forecasting and Planning, helps for understanding past behavior & facilitates comparison	**K5**
CO3:	students will be able to Understand and develop Correlation and Regression Analysis, the data concerned with two variables	**K2**
CO4:	On completing the course students will be able to Understand and develop insights and knowledge base of various Probability	**K5**
CO5:	Develop skills for facilitates for forecasting and Planning Theoretical Distribution	**K6**

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**
CO1	**2**	**1**	**2**	**2**	**1**	**-**	**1**	**-**
CO2	**2**	**1**	**2**	**-**	**2**	**1**	**2**	**-**
CO3	**1**	**2**	**2**	**-**	**1**	**2**	**1**	**2**
CO4	**2**	**1**	**-**	**2**	**-**	**2**	**-**	**2**
CO5	**1**	**2**	**-**	**2**	**-**	**2**	**2**	**-**

BRAND MANAGEMENT IN AVIATION					
Subject Code	24DAAM10	CA			40
Number of Lecture Hours/Week	3	SEE			60
Total Number of Lecture Hours	45	**L**	**T**	**P**	**C**
Credits	3	3	0	0	3

COURSE OBJECTIVES:

This course aims to provide students with an understanding of the principles and practices of brand management in the aviation industry. It will cover the development, implementation, and evaluation of brand strategies, focusing on how airlines and aviation-related companies create, maintain, and enhance their brands. Through case studies and practical examples, students will learn to apply theoretical concepts to real-world situations.

UNIT I	**INTRODUCTION TO BRAND MANAGEMENT IN AVIATION**	**9 HOURS**

Definition and importance of brand management - Overview of the aviation industry- Historical development of major aviation brands- Elements of a strong brand- Analyze the components that contribute to a successful aviation brand- Identify the unique challenges of branding in the aviation sector- **Case Study**: Analysis of how Southwest Airlines established its brand identity and customer loyalty

UNIT II	**BRAND POSITIONING AND DIFFERENTIATION**	**9 HOURS**

Market segmentation and targeting- Positioning strategies for airlines- Differentiation through service quality, customer experience, and innovation- Competitive analysis- Competitive Analysis- effective brand positioning strategies- **Case Study:** Emirates Airlines: Examination of Emirates Airlines' differentiation strategy through luxury and service excellence.

UNIT III	**BRAND COMMUNICATION AND MARKETING STRATEGIES**	**9 HOURS**

Integrated Marketing Communications (IMC) in Aviation- Digital Marketing and Social Media Strategies- Advertising, Public Relations, and Sponsorships- Crisis Communication and Reputation Management **Case Study:** Singapore Airlines: Review of how Singapore Airlines uses exceptional customer service to drive brand loyalty.

UNIT IV	**CUSTOMER EXPERIENCE AND BRAND LOYALTY**	**9 HOURS**

The Role of Customer Experience in Brand Building- Loyalty Programs and Frequent Flyer Initiatives- Customer Relationship Management (CRM) in Aviation- Measuring and Enhancing Customer Satisfaction. **Case Study**: Delta Airlines: Study of how Delta Airlines managed brand communication and customer relations during a crisis		
UNIT V	**BRAND EQUITY AND EVALUATION**	**9 HOURS**
Measuring Brand Equity in the Aviation Sector - Brand Audits and Performance Metrics- Financial Impact of Brand Management- Global Brand Management and Cultural Considerations- Brand audits to evaluate performance- **Case Study**: Lufthansa**:** Analysis of how Lufthansa measures and manages its brand equity across different markets		
TEXT BOOKS:		
1. Keller, K. (2020). Strategic Brand Management, Fourth Edition 2. Aaker, D. A. (2021). Building Strong Brands. Simon and Schuster.		
REFERENCES:		
1. Industry reports and articles on aviation brand management 2. Online resources and case studies from reputable business and aviation journals.		
WEB LINKS:		
1.https://www.scribd.com/presentation/447254585/Chapter8-Brands-Management-Airline-Marketing		

COURSE OUTCOMES

CO1:	To validate how to Analyze the components that contribute to a successful aviation brand.	**K2**
CO2:	To comprehend on how the Conduct market and competitive analysis for brand positioning	**K2**
CO3:	Manage brand reputation and handle communication during crises	**K3**
CO4:	To learn about Implement strategies to improve customer experience	**K2**
CO5:	To be informed and learn about Understand the financial implications of brand strategies	**K6**

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	**2**	**1**	**2**	**2**	**-**	**1**	**1**	**-**
CO2	**2**	**3**	**1**	**-**	**2**	**-**	**2**	**1**
CO3	**1**	**-**	**2**	**1**	**2**	**-**	**1**	**2**
CO4	**2**	**-**	**2**	**2**	**-**	**2**	**2**	**-**
CO5	**1**	**2**	**2**	**-**	**2**	**-**	**2**	**-**

QUALITY MANAGEMENT SYSTEM IN AVIATION					
Subject Code	24DAAM11	CA			40
Number of Lecture Hours/Week	3	SEE			60
Total Number of Lecture Hours	45	**L**	**T**	**P**	**C**
Credits	3	3	0	0	3

COURSE OBJECTIVES: The objective of a Quality Management System (QMS) in aviation is to ensure the highest levels of safety, reliability, and efficiency in aviation operations. Specifically, the objectives of a QMS in aviation include

UNIT I	**INTRODUCTION TO QUALITY MANAGEMENT IN AVIATION**	**9 Hours**

Overview of quality management systems - Importance of quality management in aviation - Key quality standards (ISO 9001, AS9100, etc. - Historical development and evolution of QMS in aviation - Case Study on Analysis of a successful QMS implementation in an airline - **Case study** on the impact of quality management on aviation safety.

UNIT II	**QMS STANDARDS AND GUIDELINES**	**9 Hours**

Detailed study of ISO 9001 and AS9100 standards - Regulatory requirements and compliance - Quality manuals and documentation - Role of International Civil Aviation Organization (ICAO) in quality management - **Case Studies**: Case study on a company's journey to achieve AS9100 certification - Analysis of regulatory compliance issues in an aviation organization

UNIT III	**PROCESS MANAGEMENT AND IMPROVEMENT**	**9 Hours**

Process mapping and analysis - Key performance indicators (KPIs) in aviation - Techniques for process improvement (Six Sigma, Lean, etc.) - Risk management and mitigation in aviation processes **Case Studies** - Case study on Six Sigma implementation in an airline - Analysis of a Lean project in an aviation maintenance organization

UNIT IV	**AUDITING AND PERFORMANCE EVALUATION**	**9 Hours**

Internal and external audits of QMS - Audit planning, execution, and reporting - Performance evaluation methods - Continuous improvement strategies (PDCA cycle, Kaizen, etc.) - **Case Studies** - Case study on a successful audit and its impact on an aviation company - analysis of continuous improvement initiatives in an aviation organization.

UNIT V	**QUALITY CULTURE AND LEADERSHIP**	**9 Hours**

Building a quality culture in aviation - Role of leadership in quality management - Training and

development for quality assurance - Future trends and challenges in aviation quality management - **Case Studies** – Case study on leadership's role in fostering a quality culture - Analysis of quality training programs in a leading airline
TEXT BOOKS:
1." Jones, E. (2014). Quality Management for Organizations Using Lean Six Sigma Techniques. CRC Press
REFERENCES:
1. Quality Assurance Manual for Flight Procedure Design: Flight procedure design quality assurance system. (2019b) 2. Tricker, R. (2020). Quality Management Systems. Routledge.
WEB LINKS: https://www.iata.org/en/training/courses/caa-quality-management/tcvg22/en/

COURSE OUTCOMES

CO1:	Understand the principles and practices of quality management systems (QMS) in the aviation industry.	**K 2**
CO2:	Implement QMS standards and guidelines specific to aviation.	**K 2**
CO3:	Analyze and improve aviation processes to enhance quality and safety.	**K 4**
CO4:	Evaluate the effectiveness of QMS through audits and continuous improvement strategies.	**K 5**
CO5:	Apply knowledge of QMS to solve real-world aviation problems through case studies	**K 3**

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**
CO1	**2**	**1**	**-**	**1**	**-**	**1**	**1**	**-**
CO2	**3**	**1**	**1**	**3**	**3**	**2**	**1**	**-**
CO3	**-**	**1**	**2**	**3**	**1**	**3**	**1**	**1**
CO4	**3**	**1**	**-**	**2**	**3**	**3**	**-**	**2**
CO5	**3**	**3**	**-**	**1**	**-**	**3**	**-**	**2**

AIRPORT PLANNING AND DEVELOPMENT					
Subject Code	24DAAM12	CA	40		
Number of Lecture Hours/Week	3	SEE	60		
Total Number of Lecture Hours	45	**L**	**T**	**P**	**C**
Credits	3	3	0	0	3

COURSE OBJECTIVES:

This program will enable the student to understand why Airport planning and Marketing have become a specialized skill and field of study for those aspiring to become managers in the aviation industry. This program aims to provide a solid foundation of understanding of all elements of planning and marketing of modern airports.

UNIT I	**INTRODUCTION TO AIRPORTS AND THEIR IMPORTANCE**	**9 HOURS**

Growth of air transportation (in India and worldwide) - A brief history of the development of airports - Economic, political and Social role of airports - Airport development policies of the government of India - Number and types of airports in India - Case studies: The development of Changi Airport, Singapore - The transformation of Delhi Airport under the PPP model

UNIT II	**AIRPORT DEVELOPMENT PLANNING PROCESS**	**9 HOURS**

Airport Development Planning process: ICAO guidelines - Airport Master Plan - IATA guidelines on the Airport Master Plan - Socio-economic factors; Demography; Disposable personal income per capita; Economic activity and status of industries - Geographic factors; Forecasting for airport Master plan - Aircraft operations - Airport layout plan - Case Studies: 1. Understanding the layout of Beijing Capital International Airport; 2. Understanding the layout of Mumbai International Airport.

UNIT III	**AIRPORT DESIGN AND FACILITIES**	**9 HOURS**

Airside Design Site selection – factors that impact site selection; The components of an airport; Runways – Runway clearances; Runway sight distances; types of runways; taxiways - Apron Design - Types of aircraft parking – Design of Terminals –Case studies: 1. Design features of Bangalore International Airport; 2. Design features of Hartsfield-Jackson Atlanta International Airport (the busiest airport globally)

UNIT IV	**NEED FOR AIRPORT MARKETING**	**9 HOURS**

Evolution of airport marketing-Airport Strategic Marketing planning –BCG matrix - Ansoff Matrix - growth strategies based on market dominance - Porter's five-forces model; Applying Porter's generic strategy framework for marketing airports - Case study: Emerging trends in airport marketing strategy

UNIT V	THE AIRPORT MARKETING MIX AND RELATED STRATEGIES	9 HOURS
The airport product - Airport Pricing and Incentives - Case study – A comparative study of airport charges and their regulation in India and UK - Airport Distribution - Airport Promotional Mix - Airport Digital Marketing		
TEXT BOOKS:		
1. Young, S., & Wells, A. (2021). AIRPORT PLANNING AND MANAGEMENT 6/E. Mcgraw-hill 2. Lakshmanan, R. (2023). Fundamentals of Airport Planning. Taylor & Francis		
REFERENCES:		
1. Jarach, D. (2019). Airport Marketing. Routledge. 2. Halpern, N., & Graham, A. (2021a). Airport Marketing. Routledge		
WEB LINKS: https://www.tutorialspoint.com/aviation_management/aviation_management_airport_		

CO1:	Provides an insight into how aviation has grown (in India and worldwide) over the years and how airports have transformed from being simple public utilities to modern for-profit, enterprises and play a key role in the development of a country.	**K1**
CO2:	Provides an introduction to the Airport planning process, international regulations and guidelines for airport planning, the airport master plan and factors that influence the development of the airport master plan	**K 2**
CO3:	Provides a foundational knowledge of airport design. Explores the different elements of Airside design, Apron Design, landside design and the impact of capacity	**K 2**
CO4:	Provides an introduction to the evolution of airport marketing.. Provides an understanding of airport customers and their segmentation, the airport strategic planning process and development of business growth strategies	**K 1**
CO5:	Explores the Airport Marketing Mix and price distribution and promotional strategies of airports and an introduction to the digital media in airport marketing	**K 4**

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	**3**	**1**	**2**	**-**	**1**	**2**	**1**	**1**
CO2	**2**	**2**	**3**	**2**	**1**	**3**	**2**	**-**
CO3	**3**	**2**	**-**	**-**	**2**	**1**	**3**	**1**
CO4	**2**	**-**	**3**	**-**	**2**	**2**	**1**	**3**
CO5	**1**	**1**	**1**	**3**	**2**	**2**	**-**	**3**

INNOVATION TECHNOLOGY MANAGEMENT					
Subject Code	24DAAM13	CA		40	
Number of Lecture Hours/Week	3	SEE		60	
Total Number of Lecture Hours	45	**L**	**T**	**P**	**C**
Credits	3	3	0	0	3

COURSE OBJECTIVES:

1. Identify the conscious choices of technical models of analysis and other theoretical tools designed for the challenges faced in companies' markets face.
2. To enable the students to understand the upgraded technologies related to business.
3. To provide students with the knowledge, skills, and perspectives necessary to understand and effectively manage innovation in technology-driven environments.

UNIT I	**INTRODUCTION TO TECHNOLOGY MANAGEMENT**	**9 HOURS**

Concept and Meaning of Technology and Technology Management- Technology; Technology management, Evolution and Growth of Technology, Role and Significance of Technology Management, Impact of Technology on Society and Business- Technology and competition; Key issues in managing technological innovation, Forms of Technology- Process technology; Product technology.

UNIT II	**INNOVATION BASED TECHNOLOGIES AND KNOWLEDGE MANAGEMENT**	**9 HOURS**

Knowledge Based Technology and Techniques - Knowledge based technology process; Tools and techniques, Role of Artificial Intelligence Techniques, Knowledge Management Techniques for Technology Management - Rogers' diffusion of innovations theory - Innovation ecosystems - Role of government policies and regulations - Incubators, accelerators, and innovation hubs - Resilience and adaptability in innovation management.

UNIT III	**TECHNOLOGY GENERATION AND DEVELOPMENT**	**9 HOURS**

Technology Generation- Process; , Technology Development, Importance of Technology Generation and Development, Need for Technology Strategy, Importance of Research and Development (R&D)- R&D project management methodologies - Intellectual property management - Collaboration and partnerships in R&D; Production costs and R&D; Translation of R & D efforts to technology.

UNIT IV	**TECHNOLOGY STRATEGY AND COMPETITIVENESS**	**9 HOURS**

Technology Strategy-Technology strategy and management; Elements of an accessible technology strategy, Innovation Management, Competitive Advantage- Components of competitive advantage; Creating competitive advantage using value chain, Technology Management Evaluation or Assessment - Future Trends in Innovation Technology Management - Implications of AI and automation on innovation management - Ethical and societal considerations in future innovation

UNIT V	**SOCIAL ISSUES IN TECHNOLOGY MANAGEMENT**	**9 HOURS**

Social Issues, Technological Change and Industrial Relations- Implementation of rationalization and automation in India; Impact of technological change, Technology Assessment and Environmental Impact Analysis- Environmental impact analysis process- Guidelines on the scope of EIA; Issues in preparation of EIA report; Elements of the environmental problem.

TEXT BOOKS:

1. Ries, E. (2021). The Lean Startup. Crown Business.
2. Gaubinger, K., Rabl, M., Swan, S., & Werani, T. (2020). Innovation and Product Management. Springer
3. Papaioannou, T. (2029). Inclusive Innovation for Development. Routledge
4. Tidd, J., & Bessant, J. R. (2021). Managing Innovation. John Wiley & Sons.

REFERENCES:

1. Shah, K., Gorty, V. R. L., & Phirke, A. (2021). Technology Systems and Management. Springer Science & Business Media.
2. Kim, H. (2021). Advances in Technology and Management. Springer Science & Business Media
3. Tidd, J., & Bessant, J. R. (2020b). Managing Innovation. John Wiley & Sons
4. Mayle, D. (2019). Managing Innovation and Change. SAGE

WEB LINKS:

1. http://soskin.info/userfiles/file/2015/1-2_1_2015/Obradovic_Ebersold_Obradovic.pdf
2. https://courses.lumenlearning.com/wm-introductiontobusiness/chapter/ethical-and-social-issues/
3. https://link.springer.com/chapter/10.1057/9780230582361_4

COURSE OUTCOMES

CO1:	Explain various types of innovation (e.g., incremental, disruptive) and their implications for technology-driven industries.	**K2**
CO2:	Analyze strategies for managing resistance to change during technology adoption.	**K4**
CO3:	Design and implement innovation strategies in organizations, corporate foresight andtechnology for evaluating and selecting R&D proposals.	**K3**
CO4:	Demonstrate that the effective management of technological innovation requires theintegration of people, processes and technology	**K2**
CO5:	Evaluate the impact of incubators, accelerators, and innovation hubs on fostering innovation.	**K5**

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1	**2**	**-**	**-**	**3**	**1**	**-**	**2**	**1**
CO2	**2**	**2**	**1**	**1**	**3**	**1**	**2**	**3**
CO3	**3**	**1**	**-**	**2**	**2**	**-**	**3**	**2**
CO4	**2**	**-**	**-**	**3**	**1**	**-**	**2**	**1**
CO5	**1**	**3**	**2**	**-**	**2**	**2**	**1**	**2**

GLOBAL BUSINESS PRACTICES IN AVIATION					
Subject Code	24DAAM14	CA			40
Number of Lecture Hours/Week	3	SEE			60
Total Number of Lecture Hours	45	**L**	**T**	**P**	**C**
Credits	3	3	0	0	3

COURSE OBJECTIVES: The objective of this curriculum is to equip students with specialized knowledge and skills in global business practices within the aviation industry. By examining key aspects such as strategic management, operational efficiency, financial sustainability, risk management, and sustainable practices, students will develop a comprehensive understanding of the challenges and opportunities in aviation management.

UNIT I	**GLOBAL AVIATION INDUSTRY OVERVIEW**	**9 Hours**

Overview of the aviation ecosystem: airlines, airports, aircraft manufacturers, and service providers- Historical evolution and growth of the global aviation industry - Key stakeholders and their roles in the aviation value chain - Role and functions of regulatory bodies such as the International Civil Aviation Organization (ICAO) and the Federal Aviation Administration (FAA) - Impact of regulations on aviation operations - safety standards - and environmental policies - International agreements and treaties influencing global aviation practices,

UNIT II	**STRATEGIC MANAGEMENT IN AVIATION**	**9 Hours**

Fundamentals of Strategic Management-Strategic planning process: vision, mission, objectives, and strategy formulation-Tools and frameworks for strategic analysis: SWOT analysis - PESTEL analysis - Porter's Five Forces - Competitive Strategies in Aviation - Types of competitive advantage: cost leadership, differentiation, and focus strategies - Strategic positioning and market segmentation in the aviation industry - Strategic Decision Making - Decision - making models and techniques relevant to aviation management - Case studies on strategic decisions in response to market dynamics and competitive pressures.

UNIT III	**AVIATION OPERATIONS AND LOGISTICS**	**9 Hours**

Aviation Operations Management - Overview of aviation operations: ground handling, maintenance, flight operations, and airport management - Role of operations management in ensuring safety, efficiency, and compliance with regulatory standards - Logistics and Supply Chain Management - Challenges in aviation logistics: global supply chain networks, perishable goods handling, and inventory management - Technology applications in aviation logistics: RFID, blockchain, and real-

time tracking systems - Airport Operations and Infrastructure - Airport planning and design considerations: capacity management, passenger flow optimization, and terminal operations - Case studies on airport expansions, infrastructure upgrades, and operational challenges.		
UNIT IV	**AVIATION FINANCE AND RISK MANAGEMENT**	**9 Hours**
Financial Management in Aviation - Financial structure and sources of funding for airlines and aviation-related businesses - Financial metrics: profitability ratios, liquidity ratios, and leverage ratios specific to the aviation industry - Risk Management and Insurance -Types of risks in aviation: operational risks, market risks, regulatory risks, and geopolitical risks - Risk assessment methodologies and strategies for risk mitigation - Financial Planning and Analysis - Budgeting and financial forecasting techniques in aviation - Case studies on financial crises, recovery strategies, and financial performance analysis. Case Study: Boeing vs. Airbus		
UNIT V	**SUSTAINABLE PRACTICES IN AVIATION**	**9 Hours**
Environmental Challenges in Aviation - Impact of aviation on climate change: carbon emissions, noise pollution, and air quality issues - Regulatory frameworks and initiatives for environmental sustainability in aviation - Corporate Social Responsibility (CSR) in Aviation - CSR practices: community engagement, ethical business practices, and stakeholder relations - Case studies on CSR initiatives in aviation companies and their impact on brand reputation - Sustainable Aviation Fuels (SAF) - Types of SAF: biofuels, synthetic fuels, and hydrogen based fuels - Adoption challenges, technological advancements, and future prospects of SAF in aviation.		

TEXT BOOKS:

1. Flouris, T. G., & Lock, D. (2020). Aviation Project Management. Routledge.
2. Khurana, K. C. (2021). Aviation Management. Global India Publications

REFERENCES:

1. Ashford, N. J., Coutu, P., & Beasley, J. R. (2021). Airport Operations, Third Edition. McGraw Hill Professional

WEB LINKS:

https://www.icao.int/Meetings/FutureOfAviation/Pages/default.aspx

COURSE OUTCOMES

CO1:	Understand the global aviation industry's structure, stakeholders, and regulatory frameworks.	**K 2**
CO2:	Apply strategic management principles to analyze competitive dynamics and formulate strategies in aviation.	**K 3**

CO3:	Evaluate operational efficiency and logistics management practices in aviation operations.	**K 5**
CO4:	Assess financial management strategies and risk mitigation techniques specific to aviation.	**K 3**
CO5:	Analyze sustainability initiatives and their impact on corporate social responsibility and environmental stewardship in aviation.	**K 4**

MAPPING OF COURSE OUTCOMES TO PROGRAM OUTCOMES

	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PSO1**	**PSO2**	**PSO3**
CO1	**-**	**2**	**2**	**3**	**1**	**2**	**1**	**-**
CO2	**3**	**2**	**3**	**1**	**-**	**-**	**2**	**3**
CO3	**1**	**2**	**2**	**3**	**1**	**2**	**1**	**3**
CO4	**-**	**2**	**3**	**2**	**-**	**3**	**1**	**-**
CO5	**3**	**2**	**-**	**3**	**1**	**3**	**-**	**3**