



# INDIAN MARITIME UNIVERSITY

(A Central University, Ministry of Ports, Shipping and Waterways, Government of India)

**Master of Business Administration (M.B.A)**

**in**

**Port and Shipping Management**

## Regulations & Syllabus



2022-2023

[www.imu.edu.in](http://www.imu.edu.in)

# Regulations

# Regulations for MBA Programme

(With effect from 2022 -23)

## 1. Scope

These Regulations shall apply to MBA programme in Port and Shipping Management of the University. These shall come into force with effect from the academic year 2022-23.

## 2. Definitions

- i. In these Regulations, unless the context otherwise requires,
- ii. '**School**' means School of Maritime Management (SMM) of Indian Maritime University.
- iii. '**Programme Structure**' means a list of courses (core, elective) that deals with an academic programme, specifying the duration of the programme, admission criteria, syllabus, Credits, hours of teaching, the pattern of evaluation (internal/external), end semester examination schemes, minimum marks passing for the course and a minimum number of credits required for successful completion of the programme.
- iv. '**Academic Programme**' means an entire course of study comprising of programme structure, evaluation schemes, etc. designed to be taught and evaluated in MBA in the University.
- v. '**Credit**' means the value assigned to a course which indicates the level of instruction; 15 Lecture hours/30 practical hours/ 45 field hours would constitute One Credit,
- vi. '**Course**' means a segment of a subject that is part of an Academic Programme.
- vii. '**Core Course**' means the compulsory subjects offered to the students during the programme.

- viii. **'Elective Course'** means students can choose to study courses that interest them from the list of optional courses offered in the school.

### **3. About the University:**

The Indian Maritime University (IMU) was established through an Act of Parliament (No. 22 of 2008) on 14<sup>th</sup> November 2008. As a Central University, it is poised to play a key role in the development of required human resources for the maritime sector. The IMU, being the first of its kind in the country will cater to the educational requirement of the maritime fraternity. IMU has a panel of dedicated and experienced faculty members, state-of-the-art infrastructure, and efficient administration. IMU's strength and uniqueness lie in its ability to integrate theories and practices and its commitment to providing quality maritime education, training, and consultancy. The headquarters of IMU is located in Chennai and regional campuses are in Chennai, Mumbai, Kolkata, Visakhapatnam, and Cochin.

### **4. MBA Programmes:**

The Indian Maritime University offers two unique MBA Programmes under the School of Maritime Management, since the academic year 2009-10 viz., MBA in Port and Shipping Management and MBA in International Transportation and Logistics Management. The duration of the MBA programme is two academic years with each academic year divided into two semesters. The odd semester functions from August to January and the even semester from February to June each year. There shall be not less than 90 working days in each semester. The University also encourages the enrolment of candidates sponsored by government / private organizations to pursue the full-time program.

**MBA in Port & Shipping Management** is designed to provide the students with adequate skills and knowledge in functional areas of the Port and Shipping sector. It also gives a holistic understanding of the sector integrating various aspects viz. Port management, Maritime business environment, and Shipping economics apart from a thorough grounding in

general managerial skills.

**MBA in International Transportation & Logistics Management** is a unique program to train students in the management of domestic and international transport in the rapidly changing business environment. Logistics management assumes palpable significance as commercial activities related to the movement of cargo play a vital role in fast-paced competitive businesses. Students are thoroughly exposed to principles of Supply chain, Warehousing, Containerization, and Strategic sourcing in business. The Logistics and Transport sector is on a fast track to growth and the students gear up to match the requirement of the industry.

### 5. Entry Requirements:

- a. A degree from a recognized University with a minimum of **50% marks** in aggregate. A relaxation of **5%** ineligibility marks to **SC/ST** candidates is given.
- b. A minimum of **50% marks in English** subject. (Secondary/Higher Secondary/ UG degree). The relaxation of 5% will not apply to English Marks
- c. A valid IMU-CET (Common Entrance Test) score secured in that academic year. IMU CET is being conducted every year in the month of May/June for admission to the MBA Programmes.

Candidates who have appeared for their UG final examinations and are awaiting results may be provisionally admitted, subject to their producing evidence of successful qualification at the time of confirmation of the admission.

- d. Admission of students shall be done by the University, in the order of merit, subject to the reservation policy adopted by the University from time to time, verification of credentials of the applicant as per the following documents/certificates to be produced in original at the time of counseling:
  - i. Documents relating to entrance test - Hall ticket, Scorecard. etc.

- ii. Qualifying Degree Certificate or Provisional Certificate
- iii. Consolidated mark statement of qualifying degree
- iv. Transfer / Migration Certificate from the institution last attended
- v. Conduct Certificate issued from the institution last attended
- vi. Community Certificate/Non-Creamy layer / Economically Weaker Section (EWS) certificate issued by the Competent Authority not earlier than six months from the date of counseling.
- vii. Any other documents/certificates as may be stipulated from time to time by the University.

## 6. Core Course

Core courses are mandatory courses students must study to meet the 70 credits of the programme.

## 7. Elective Course

Students may choose 4 elective courses from the list offered in the III semester with a minimum of 15 students across the campus. The Head / Head i/c of the School shall nominate a faculty member as 'Faculty Advisor' for every batch. The students shall be guided by the 'Faculty Advisor' to select Elective Courses from the list available to them. The student shall fill up the Course Registration Form, either as a hard copy or as an electronic copy, and submit the form two weeks before the completion of the II Semester examination for the approval of the Head of the School.

## 8. Credit Systems:

The University follows the "Credit System" for both the MBA programmes. Each lecture-based core course and an elective course in this programme carry 4 credits and 2 credits respectively. The fieldwork-based Project work and Internship and practical carry 8, 4 and 2 credits respectively. For the successful completion of the programme, a minimum of "**90 credits**" would be essential.

## 9. Attendance:

All students must put in a **minimum of 85%** of attendance in order to appear for the university end-semester examinations (theory and practical). The minimum percentage of attendance will be calculated only in terms of the total working days in the semester and not in terms of classes or subject-wise.

## 10. Condonation Fee:

Students whose class attendance is below 85% have to pay condonation fee prescribed by the University from time to time. If a student has put in **less than 85% but has above or equal to 75%** of attendance, owing to reasons such as medical, bereavement, or any other legitimate reason, the Campus Director / Principal is empowered to condone the shortage of attendance subject to the collection of prescribed Condonation Fee for Attendance as per the University norms.

## 11. Break-in-Studies:

A student who has put in **less than 75%** attendance will not be permitted to write the University's end semester examination and further **will not be permitted to move to the next semester**. It will be treated as a case of "Break-in-Studies" and he/she will be required to repeat the incomplete semester in the next academic year. However, such students are permitted to write the arrear examinations of previous semesters. Before rejoining the programme, he/she must obtain due permission from the Vice-Chancellor after which he is required to remit the following fees:

- (i) The condonation fee for Break in Studies as prescribed by the university.
- (ii) The semester fees for the concerned semester once again where he/she is repeating an incomplete semester.

## 12. Programme Completion:

Students, enrolled for an MBA programme shall complete the same within a maximum of 4 years duration, from the date of enrolment to the respective programme.

## 13. Continuous Internal Assessment:

Each course faculty will continuously assess the students based on their performance viz. Case study discussion, Paper presentation, Quiz, Written/Oral Test, and Assignments. The case method as a pedagogical tool is adopted for all courses. The maximum internal assessment mark for each course is 40. **There is no minimum pass mark in the internal assessment.** The internal marks obtained by the student will be carried over for the computation of total marks. Each teacher shall maintain a Course Diary with details on student attendance, achievement in Continuous Assessment, etc., shall be awarded to indicate the performance of the student

The breakup of internal assessment marks will be as follows:

a. Internal Tests (2 tests) -	30 Marks
b. Class participation -	05 Marks
c. Individual assignment & presentation -	05 Marks

Total. **40 Marks**

## 14. Internship

The internship shall be treated as an elective 4 credits course, for which the teacher shall perform the role of a Guide / Supervisor. Each student is required to undergo an individual internship for a period of forty-five (45) days during their summer break of the first year. The students are attached to a reputed port/ shipping/logistics-related company as an intern and prepare a report about the learnings undertaken during the period. After completion of the internship, they are required to submit an individual

Internship report to the school. This report will be assessed jointly by two examiners (Internal and External) for a maximum of 75 marks. The Viva-Voce examination will be conducted jointly by the two examiners for a maximum of 25 Marks.

#### **15. Project work:**

The Project work shall be treated as a core course of 8 credits; each student shall be required to carry out an individual project at the beginning of the IV semester. These projects shall be completed under the guidance of faculty members within the University. The respective guide shall be responsible for certification of the data and shall guide the student in drafting the final report.

The students are required to submit their project proposal at the end of the third semester well before the winter break commences and get the same approved by the School. The students may choose to work on projects related to port/shipping/logistics areas and conduct appropriate studies/research before submission of findings in the form of a research report. A student has to submit two copies of the project research report to the guide on or before the specified date. The Project report will be evaluated jointly by two Examiners (Internal and External) for a maximum of 200 Marks (150 for Project report +50 for Viva Voce). The student may retain one copy after due certification by the Guide and the Head, SMM. The guide shall retain one copy and send it to the library after the Viva Voce Examination. The student who fails to submit his/her project report at the end of the respective academic year shall be permitted to submit the same only in the subsequent semester.

#### **16. University Examinations:**

The University examinations will be held towards the end of each semester for a duration of three hours per course for a maximum of 60 marks with a passing minimum of 30 marks. Question papers are set with an aim to test the skill sets of the students with regard to interpretation, analysis, critical thinking, and problem-solving abilities. The answers of t

evaluated with the help of a 'scheme of evaluation' consisting of distribution of marks for each of the key skillset shown by the student in her/his answer and becomes a basis to award the marks by the evaluator.

### **17. Passing Minimum:**

The internal assessment component does not have any passing minimum. The passing minimum is **50%** of the University examination in each course. The overall passing minimum (for 100 marks) is computed by totaling the internal assessment marks and the University examination marks obtained by each student.

### **18. Question Paper and Evaluation:**

The question paper for all the courses will be set for a maximum mark of 60 and will have three sections. Section A, Section B and Section C. Questions in each section will be taken evenly from each unit of the prescribed syllabus.

#### **SECTION-A (10 x 1 = 10 Marks)**

Section A will comprise 10 multiple choice questions, all of which will have to be answered and evaluated for 1 mark each.

#### **SECTION-B (5 x 2 = 10 Marks)**

This section will consist of 5 compulsory questions. Answers to these questions should not exceed 200 words each. Each answer will be evaluated for 2 marks.

#### **SECTION-C (5 x 8 = 40 Marks)**

This section will consist of seven questions, and the student may answer any five. The answer shall not exceed 500 words and will be assessed for 8 marks each.

### **19. Arrear paper:**

A student getting an 'R' (Repeat) grade in a Core course can repeat the papers along with the subsequent semester examinations. A student repeats the same course with arrears in such cases, the internal marks obtained by the student will be carried over for computation of total ma

## 20. Classification of Marks:

The weighted average of grade points earned by a student in a semester is known as Semester Grade Point Average (SGPA). Whereas, the same calculated for each student for the entire programme is called Cumulative Grade Point Average (CGPA). The calculation may be done as follows:

$$SGPA = (G_1 \times C_1 + G_2 \times C_2 + \dots + G_n \times C_n) / (C_1 + C_2 + \dots + C_n) = \sum (G_i \times C_i) / \sum C_i$$

where  $G_i$  refers to the grade point of the course  $i$  and  $C$  is the credit assigned to that course.

CGPA = Average of SGPAs of 4 Semesters, i.e.,

$$CGPA = SGPA_1 + SGPA_2 + SGPA_3 + SGPA_4 / 4$$

**The respective values and grade points denoting the letter grades are given below:**

The criteria adopted for converting the Marks to Grade for each subject.

$$\text{Class Difference (K)} = \frac{\text{Highest marks scored (X)} - \text{Minimum pass marks (50)}}{\text{No. of Classes (7)}} = \frac{X-50}{7}$$

Range of marks	Range Of marks in %	Rounded Range marks in %	Number of Students	Percentage	Letter Grade
X to (X-K) +1					O
(X-K) to (X-2K) +1					A+
(X-2K) to (X-3K) +1					A
(X-3K) to (X-4K) +1					B+
(X-4K) to (X-5K) +1					B
(X-5K) to (X-6K) +1					C
(X-6K) to 50					P
Below 50					Ab/R

Based on the overall performance, the University shall decide the highest grade to be given in each course. The rest of the grades shall be awarded relatively by arriving at the class difference (K) which is arrived at by dividing 'highest mark-pass mark' by the number of remaining grades to be awarded (Y).

That is,  $K=(X-50)/Y$ . If K has fractions, the fractions 0.5 and above shall be converted into the next higher digit, and fractions below 0.5 shall be converted into the previous lower digit. For the purpose of calculation of grades, the grade distribution shall start from the highest grade. This relative grading shall be relative to the highest performer in the class.

Calculation of grade points secured by students in each subject.

Grade	Value	Grade Point
O	Outstanding	10
A+	Excellent	9
A	Very Good	8
B+	Good	7
B	Above Average	6
C	Average	5
P	Pass	4
R	Repeat	0
Ab	Absent	0

While following a 10-point scale 7 grading system, the University shall decide on the number of grades to be awarded.

The general structure of the MBA programme is given below:

The normal duration of the programme	Four semesters (15 weeks X 4) / Two Academic Years
One semester	90 instructional days
One Credit	15/30/45-hour - Theory/ practical / field study
Required Credits from Core Courses	70 Credits
Required Credits from Elective Courses including internship and Project	20 Credits
The minimum attendance required for each Course	85 %
Accumulated minimum Credits for successful completion of the programme	90 Credits (Core + Elective)

## 21. Consolidated Grade Cards:

The consolidated Grade Cards indicating grade scored in all the courses will be issued when the students pass all the courses of the respective MBA programme.

Consolidated Grade Cards indicating the courses successfully completed by the student, together with course codes, Credits, Grades, and CGPA shall be issued to the students upon the completion of the final semester of the programme.

## 22. Rank Certificate:

The top scorer certificates shall be awarded to three students completing the programme with the highest CGPA, in each MBA programme, certificates indicating the position of students in the rest of the class will be issued to the students upon request.

Divisions of the Degree into Classes: The MBA Degree may be classified based on CGPA obtained into various classes as follows:

Division	CGPA
First Class with Distinction	9.00 and above
First Class	Between 7.00 and below 9.00
Second Class	Between 5.00 And below 7.00

## 23. Provisional Certificate:

For those who are declared qualified for the Master of Business Administration degree, a Provisional Degree certificate will be issued in person or sent by post after the publication of the results.

## 24. Award of Degree:

Students who have successfully completed the programme within the stipulated period will be awarded the degree of Master of Business Administration in the respective specialization. For those declared

qualified for the MBA degree, the convocation form will be issued. The degree certificate will be issued to the students only if they apply for the same in the prescribed convocation form, along with the fee specified in the application form. The degree will be conferred in person or in absentia as requested.

# **Syllabus**

(3<sup>rd</sup> Revision)

# INDEX

Sl. No.	Code	Course Title	Credits	Exam Hrs	Marks Distribution		Max. Marks	Passing Minimum	Page No.
					IA	UE			
<b>Semester I - PSM</b>									
1	PG21T3101	Principles and Practices of Management	4	3	40	60	100	50	18
2	PG21T3102	Accounting for Managers	4	3	40	60	100	50	21
3	PG21T3103	Managerial Economics	4	3	40	60	100	50	24
4	PG21T3104	Quantitative Techniques	4	3	40	60	100	50	26
5	PG21T3105	Marketing Management	4	3	40	60	100	50	29
6	PG21T3106	Managerial Communication	4	3	40	60	100	50	32
<b>Semester II - PSM</b>									
7	PG21T3201	International Trade and Documentation	4	3	40	60	100	50	35
8	PG21T3202	Maritime Law and Insurance	4	3	40	60	100	50	38
9	PG21T3203	Port and Shipping Management	4	3	40	60	100	50	41
10	PG21T3204	Logistics and Supply Chain Management	4	3	40	60	100	50	44
11	PG21T3205	Management Information Systems	4	3	40	60	100	50	47
12	PG21T3206	Research Methodology	4	3	40	60	100	50	50
<b>Semester III – PSM</b>									
13	PG21T3301	Maritime Economics	4	3	40	60	100	50	52
14	PG21T3302	Chartering Practices	4	3	40	60	100	50	55
15	PG21T3303	PPP in Port Development	4	3	40	60	100	50	58
16	PG21T3304	Maritime Logistics	4	3	40	60	100	50	60
17		Elective I	4	3	40	60	100	50	-
18		Elective II	4	3	40	60	100	50	-
19		Elective III	4	3	40	60	100	50	-
20		Elective IV	4	3	40	60	100	50	-
21	PG21P3301	Internship	4		25	75	100	50	-
<b>Semester IV - PSM</b>									
22	PG21T3401	Entrepreneurship & Strategic Management	4	3	40	60	100	50	83
23	PG21P3401	Data Analysis Through Software (Practical)	2	-	40	60	100	50	86
24	PG21P3402	Project Work	8	-	50	150	200	100	-
		<b>Total</b>	<b>90</b>						

**Pedagogy:** Lectures, Case studies, Videos, Live business situational analysis, Group discussion/Debate/ Role plays, and Team presentation.

Sl. No	Code	List of Electives for Specializations:(2 Credit Courses- 30 Hours)	Credits	Exam Hrs.	Marks Distribution		Max. Marks	Passing Minimum	Page No
					IA	UE			
1	PG21T3305	Technology in Port Operations	2	3	40	60	100	50	62
2	PG21T3306	Shipping Finance	2	3	40	60	100	50	64
3	PG21T3307	Hazardous Cargo and IMDG Code	2	3	40	60	100	50	66
4	PG21T3308	Port Pricing	2	3	40	60	100	50	68
5	PG21T3309	Warehouse Management	2	3	40	60	100	50	70
6	PG21T3310	Air Cargo Management	2	3	40	60	100	50	73
7	PG21T3311	Business Consultancy and Analytics	2	3	40	60	100	50	75
8	PG21T3312	Supply Chain Analytics	2	3	40	60	100	50	77
9	PG21T3313	Freight Derivatives and Risk Management in Shipping	2	3	40	60	100	50	79
10	PG21T3314	Operations Research	2	3	40	60	100	50	81

## MBA - PSM

### Semester I

<b>Course Title</b>	<b>Principles &amp; Practices of Management</b>
<b>Course Code</b>	<b>PG21T3101</b>

**60 hrs.**

**Objective:** This course presents thorough and systematic coverage of management theory and contemporary practice from a global perspective. It focuses on the basic roles, skills, and functions of management.

**Learning Outcomes:** After this course, the students will be able to apply the concepts learned to real-life managerial decision-making and grasp the nuances of the role of a manager. They can comprehend the dynamics of international management in a global environment.

#### **Unit I** **Global Management - Managing Diversity and Change** (12 hrs.)

Management-theory, and practice- Management and society- Functions of Managers- Social responsibility of Managers- Ethics in managing- International management – MNCs- Country alliances- Cultural differences- Porter’s competitive advantage of Nations – Global advantage through TQM. Managing Diversity & Change - Workplace diversity- Concepts of DEI (Diversity, Equity, and Inclusivity) - Managing change – Resistance to change – Contemporary issues in managing change – Stimulating innovation.

#### **Unit - II** **Planning and Decision-making** (12 hrs.)

Planning: Essentials of planning- Types- Planning process- Objectives- Management by Objectives – Strategies- Policies and Procedures- Planning premises- Tows matrix- Blue ocean strategy - Portfolio matrix- Premising and forecasting. Decision Making: Importance- Limitations of rational decision making- Evaluation of alternatives- Selection of alternative– Three approaches- Programmed and non-programmed decisions- Group decision making - Creativity and Innovation.

**Unit III****Organizing & Managing Human Resources**

(12 hrs.)

Organizing: Nature- Formal and informal organization- Entrepreneurial and Reengineering Organization structure-process – Departmentation- Strategic Business Units (SBU) - Line/Staff authority – Empowerment- Functional authority – Decentralization- Delegation- Effective organizing- Avoiding conflict by clarification- Organizational culture (only the concept) Managing Human Resources: HRM Process - Staffing function- Definition- Recruitment and Selection- The selection process – Orientation- Formulating a career strategy- Training of Managers.

**Unit IV****Leadership and Motivation**

(12 hrs.)

Leading: Definition- Approaches to Leadership- Leadership Styles-Trait theories- Committees, Teams, and Group decision making – Personality – Perception- Individual and group behavior- Cognitive dissonance theory- Effective Communication in an organization. Motivation: Human factors and motivation- Theories of Motivation- McGregor's theory X and theory Y- Maslow's hierarchy of needs theory- ERG theory- Herzberg's theory- Expectancy theory- Equity theory- McClelland's needs theory- Motivational Techniques-Job enrichment.

**Unit V****Controlling and Control techniques**

(12 hrs.)

Controlling function- Basic control process- Critical control points- Standards- Control as a feedback system- Control of overall performance- Profit & Loss Control-Control through ROI-Management Audits-Balanced score card-effective control. Control techniques: Budget as a control Device-Time-event Network analysis- analytics in Managing-Use of computers in handling information- Digital economy, e-commerce, and m-commerce –CRM- Improving productivity by supply chain and value chain management- Operations Management System

**Text Books:**

1. Harold Koontz, Heinz Weihrich, Mark V. Cannice, Essentials of Management - An International, Innovation and Leadership Perspective, 11<sup>th</sup> edition (New Delhi, Tata McGraw Hill, 2020).
2. Stephen P. Robbins, Mary A. Coulter, Management, 15<sup>th</sup> edition, (New Jersey, USA, Pearson, 2021).

**Reference Books:**

1. V. S. P. Rao, Management: Text & Cases, 2<sup>nd</sup> edition, (Chennai, Excel books, 2012).
2. Dr. L.M. Prasad, Principles and Practice of Management, 10<sup>th</sup> edition (New Delhi, Sultan, Chand & Sons, 2020)

**Case Studies:** (can be chosen from the text and reference books by Faculty) Further case study and teaching notes can be accessed from <https://www.thecasecentre.org/> and <https://icmrindia.org/>

## MBA - PSM

### Semester I

<b>Course Title</b>	<b>Accounting for Managers</b>
<b>Course Code</b>	<b>PG21T3102</b>

**60 hrs.**

**Objective:** To impart a basic understanding of financial transactions of a business entity, comprehend fundamentals of accounting and the dynamics of financial decisions including working capital management

**Learning outcomes:** The course enables students to develop decision-making skills by analysis of financial data and gaining insight into the nuances of financial decisions; including investment and dividend policies.

#### Unit I

#### **Fundamentals of Financial Accounting**

(10 hrs.)

Introduction-objectives, the scope of Financial Accounting-Accounting Terms- Concepts & Conventions- International and Indian Accounting Standards, Generally Accepted Accounting Principles (GAAP) - Double Entry System - Journal - Ledger- Subsidiary books-Trial Balance.

#### Unit II

#### **Preparation of Final Accounts**

(10 hrs.)

Preparation of Final Accounts: Trading, Profit & Loss Account and Balance Sheet - Income statement and Balance sheet in vertical form as per the Companies Act 2013 with adjustments. Depreciation Accounting: Meaning, objects, causes, and factors affecting depreciation- Accounting treatment - Methods - Fixed and Witten- Down-Value (WDV) methods.

#### Unit III

#### **Financial Decision**

(10 hrs.)

Sources of long term-finance, analysis of leverage, capital structure- Planning and policy - Determinants of capital structure and theories of capital structure- Net

Income–Net Operating Income-Traditional Approach, Cost of capital– Concept, and computation of different costs of capital- Cost of Debt- Cost of Preference Capital - Cost of Equity capital-Weight Average Cost of Capital (WACC).

## Unit IV

### Investment Decision

(15 hrs.)

Investment Decision – Nature, concepts, importance, and types of investment decision- Investment evaluation criteria - Payback period method, Accounting Rate Return (ARR), Discounted cash flow methods- Net Present Value (NPV), Profitability Index (PI), Discounted Payback method and Internal Rate Return(IRR)- Project appraisal under Risk and Uncertainty - Conservative methods and modern methods of Risk analysis.

## Unit V

### Dividend Decision and Working Capital Management (15 hrs.)

Dividend Decision – Nature and concept of dividend decision, types of dividends, Dividend theories – Walter’s Model, Gordon’s Model, The Miller- Modigliani (MM) Hypothesis, the relevance of Dividend policy under market imperfections-objectives of Dividend Policy– Forms of dividend–bonus shares-stock split-buyback of shares. Working Capital Management: Concepts of working capital- Operating and cash conversion cycle-Permanent and variable working capital – Determinant of working capital-issues in working capital management- Estimating working capital needs-sources of working capital.

#### Text Books:

1. Grewal T.S., Introduction to Accounting, edition, S. Chand and Co 2020.
2. Maheshwari S.N., Financial Accounting, edition, Vikas Publication 2018.
3. Pandey I.M., Financial Management, edition, Vikas Publication, 2018.
4. Gupta,R.L. and V.K. Gupta, Principles and Practice of Accountancy, edition, Sultan Chand and Sons.

**Reference Books:**

1. Tulsian P.C. Financial Accounting, edition, Tata Mc Graw Hill, 2018.
2. Reddy T.S. and Hari P.R., Financial and Management Accounting, edition, Margham Publications
3. Gupta R.L. and Radhasamy, Financial Accounting Intermediate ICWA, edition, Sultan Chand and Sons.
4. Goyal B.K. Financial Accounting, edition, Modern Publications.
5. Jain S.P. and K.L. Narang, Advanced Accounting, edition, Kalyani Publishers.

**Websites:**

1. <http://www.accountingcoach.com/>

## MBA - PSM

### Semester I

<b>Course Title</b>	<b>Managerial Economics</b>
<b>Course Code</b>	<b>PG21T3103</b>

**60 hrs.**

**Objective:** To impart concepts of demand and supply, production theories and costs, market structures and different pricing strategies adopted by the firms, and to introduce economic information including the role of government in market failures.

#### **Learning outcomes**

Students will be able to analyze basic concepts of managerial economics, production & cost analysis, markets & pricing strategies, and enable them to learn the part played by the government to correct the market failure. It helps them adopt the concepts of Managerial Economics in decision-making and forward planning of an organization.

#### **Unit I**

#### **Fundamentals of Managerial Economics.**

(12 hrs.)

Introduction- Fundamentals of managerial economics, Demand- Demand Shifters- Supply- Supply Needs-Supply shifters- Market Equilibrium- Price Restrictions and Market Equilibrium – Elasticity- Own Price Elasticity- Elasticity and Total Revenue- Cross Price Elasticity- Income Elasticity- Obtaining Elasticities from demand function

#### **Unit II**

#### **The Production Process and Costs**

(10 hrs.)

Production function- Short Run Vs Long-Run Decisions-Measures of Productivity- Role of the Manager in the Production Process – Isoquants- Is cost lines- Optimal Input Substitution- Cost Function- Short Run Costs- Long Run Costs- Economies of Scale- Economies of Scope.

#### **Unit III**

#### **Pricing Strategies**

(12 hrs.)

Basic Pricing Strategies- Price Discrimination- Two Part Pricing- Block Pricing- Commodity bundling- Peak Load Pricing- Cross Subsidies- Transfer Pricing- Price Matching- Inducing Brand Loyalty- Randomised Pricing.

**Unit IV****Nature of Industry and Market Structure**

(14 hrs.)

Market Structure- Industry Concentration- Pricing Behaviour- Integration and Merger activity- Perfect Competition – Monopoly- Monopolistic Competition – Oligopoly- Sweezy and Cournot Oligopoly- Game Theory- Prisoners Dilemma.

**Unit V****Fundamentals of Macro-Economics**

(12 hrs.)

Overview of macroeconomics- Measuring economic activity- Gross Domestic Product (GDP) - Gross National Product (GNP) - National Income (NI) - Balance of Payment (BoP) - Balance of Trade (BoT) - Foreign Exchange - Consumption and Investment- Business cycles and Aggregate demand, Unemployment and Foundations of Aggregate Supply- Inflation - Monetary policy and the economy- Fiscal Policy, Economic Growth- Challenge of economic development

**Text Books**

1. Baye R. Michael and Jeffrey T. Prince, Managerial Economics and Business Strategy, 10<sup>th</sup> edition, (New York: McGraw Hill-Irwin, 2022).
2. Samuelson, P.A., and Nordhaus, W. D., Economics, 20<sup>th</sup> edition, (New York: McGraw Hill, 2021).
3. Managerial Economics, William F. Samuelson Et al. 9th edition, Wiley 2021

**Reference Books:**

1. Mankiw, G., Principles of Economics, 10<sup>th</sup> edition, (New York: Worth Publishers, Macmillan Learning, 2019).
2. Salvatore, Dominick and Siddhartha K. Rastogi, Managerial Economics, 8<sup>th</sup> edition, (New Delhi: OUP, 2016).

**Websites**

1. <https://www.economicnetwork.ac.uk/teaching/Case%20Studies/Managerial%20and%20Business%20Economics>
2. [https://www.icmrindia.org/casestudies/Case\\_Studies.asp?cat=Economics](https://www.icmrindia.org/casestudies/Case_Studies.asp?cat=Economics)

## MBA - PSM

### Semester I

<b>Course Title</b>	<b>Quantitative Techniques</b>
<b>Course Code</b>	<b>PG21T3104</b>

**60 hrs.**

**Objective:** To introduce statistical concepts to the students and to train them in techniques of statistics to provide solutions to business problems in decision making.

**Learning Outcome:** On completing the course students gain proficiency to analyze data using quantitative techniques in business decision making.

<b>Unit I</b>	<b>Descriptive Statistics</b>	(15 hrs.)
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Introduction to Statistics: Data, Frequency Distribution, Bar Chart, Pie Chart, Dot Plot, Histogram, Cumulative Distribution (Ogive), Scatter Diagram, and Cross Tabulation. Measures of Central Tendency: Mean, Weighted Mean, Median, Mode, Geometric Mean, Harmonic Mean, Percentile, and Quartile, Measures of Variance: Range, Variance and, Standard Deviation, Coefficient of Variation, Skewness, Kurtosis.

<b>Unit II</b>	<b>Probability and Hypothesis Testing</b>	(15 hrs.)
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Introduction to probability: Basic Theorems, Conditional and Bayes Theorems, Discrete Probability distributions; Binomial Probability distribution, Poisson probability distribution, Continuous Probability distribution, Normal Probability Distribution. Introduction to sampling. Hypothesis Tests: Introduction, Developing Null and Alternative hypotheses: Type 1 and Type II errors – Statistical inference about means and proportions with two populations. Inference about two population variance – Z test, T-Test, One-tailed and Two-tailed test. Introduction to Statistical quality control, Statistical Process Control.

**Unit III****Correlation and Regression Analysis**

(10 hrs.)

Concept of Covariance and Correlation – Pearson product-moment correlation – Spearman rank-order correlation – Regression – Difference between Correlation and Regression – Regression Equation – Least Squares Method – Regression lines, Residual analysis – Sum of Squares due to Error (SSE), Sum of Squares due to Regression (SSR), and Total Sum of Squares of Error (SST).

**Unit IV****Time Series Analysis and Index Numbers**

(10 hrs.)

Time Series Patterns: Horizontal Pattern, Trend Pattern, Seasonal Pattern, Trend and Seasonal Pattern, Cyclical Pattern – Moving Average and Smoothing – Index numbers – Laspeyres Index – Paasche Index – Fisher's Ideal Index – Consumer Price Index; Uses and Limitations. Ideal Index – Consumer Price Index- Uses and Limitations- Quantify Index Numbers-Tests of the adequacy of Index Number Formulae.

**Unit V****Analysis of Variance (ANOVA)**

(10 hrs.)

Analysis of Variance (ANOVA): One-way ANOVA, Two-way ANOVA, Analysis of Categorical Data: Chi-Square- Test of Independence, Test of Goodness of Fit.

**Text Books**

1. Anderson, D. R et. al, Statistics for Business and Economics, 13<sup>th</sup> edition, (New Delhi, Cengage Learning India Pvt. Ltd., Year 2019).
2. Gupta S. P., Statistical Methods, 46<sup>th</sup> edition, (New Delhi: Sultan Chand and Sons, 2021).

**Reference Books**

1. Vohra N.D., Quantitative Techniques in Management, (New Delhi: McGraw Hill Education, 2013).
2. Levin and Rubin, Statistics for Management, 7<sup>th</sup> edition, (New Delhi: Prentice-Hall of India, 2007).

3. Anderson, Sweeney and Williams, Statistics for Business and Economics, 11<sup>th</sup> edition, (New Delhi, Cengage Learning India Pvt, 2010).
4. Srivastava T. N., and Shailaja Rego, Statistics for Management, 2<sup>nd</sup> edition, (New Delhi, McGraw Hill Education, 2017).

### **Websites**

1. <http://stattrek.com/descriptive-statistics/variables.aspx?Tutorial=Stat>
2. [http://www.tutorialspoint.com/statistics/arithmetic\\_median.htm](http://www.tutorialspoint.com/statistics/arithmetic_median.htm)

## MBA - PSM

### Semester I

<b>Course Title</b>	<b>Marketing Management</b>
<b>Course Code</b>	<b>PG21T3105</b>

**60 hrs.**

**Objective:** To orientate the students towards the significance of marketing tools and market research to sustain themselves in a challenging and competitive business environment.

**Learning outcome:** After this course, the students will have developed a managerial approach to the marketing function by the ability to assess market conditions and take appropriate decisions on issues related to price, promotion, logistics, and customer retention.

#### Unit I

#### Introduction to Marketing.

(12 hrs.)

Organization goals – the role of marketing function - Role of marketing in providing Competitive Advantage-strategic fit between corporate strategy and marketing strategy - Comparison between Sales and Market Orientations - The Marketing Mix – Factors influencing External Marketing Environment: PESTEL factors - The changing marketing environment - Concentration of buying power - The fragmentation of consumer markets -Consumer Behaviour & Shift - The service-sensitive customer - Responsible marketing.

#### Unit II

#### Analyzing Marketing Opportunities & creating Customer value (12 hrs.)

Business Marketing on the Internet - Major Categories of Business Customers - Business versus Consumer Markets - Types of Business Products - Business Buying Behavior - Segmenting and Targeting Markets: Steps in a Marketing Research Projects - Marketing Research Aggregators - The Impact of the Internet on Marketing Research - Competitive Intelligence - Defining customer service -The components of customer service -Managing the processes that drive the perfect order – Understanding the Role of Value-Defining customer value -The transition from brand value to customer value

-Developing a market-driven logistics strategy .-Basics of retailing, E- commerce, digital marketing .

### **Unit III** **Global issues in marketing and managing marketing logistics** (12 hrs.)

Global Issues in Branding and Packaging - The New Product Development Process - Global Issues in New-Product Development - Product Life Cycles - Glimpse of marketing strategies -The nature and importance of services - The marketing of services - Classification of services - Developing marketing strategies for services - Service Quality - Marketing Mixes for Services - Global Issues in Services Marketing - Marketing Channels - Channel Intermediaries and Their Functions - Channel Structures -Distribution strategies - Types of Channel Relationships - Managing Channel Relationships - Channels and Distribution Decisions for Global Markets and services - Developing a global logistics strategy.

### **Unit IV** **Pricing Decisions and Serving the global customer** (12 hrs.)

Pricing Objectives - Demand Determinant of Price - The Cost and other Determinants of Price - Approaches in setting Price on a Product or Service - The Legality and Ethics of Price Strategy -Pricing during Difficult Economic Times- Developing a global logistics strategy - Global logistics information systems - Questions of sustainability in global marketing- Global logistics information systems - Questions of sustainability in global marketing From functions to processes - From products to customers - From profit to performance.

### **Unit V** **Relationships Marketing** (12 hrs.)

Building customer relationships – Managing Customer Relationships - Developing Relationships in Consumer and Business Markets- Customer retention strategies - Relationships as partnerships - Managing relationships in the marketing channel - Quality and Value: The Keys to Developing Customer Relationships. Understanding the Role of Quality - Delivering Superior Quality. Customer Service versus Efficiency Customer Satisfaction: Understanding Customer Expectations Satisfaction versus

*Ala. Hyslop*

Quality versus Value - Customer Satisfaction and Customer Retention -Customer Satisfaction Measurements- Customer profitability analysis.

**Text Books:**

1. Philip Kotler, Kevin Lane Keller, SweeHoon Ang, Chin Tiong Tan, Siew Meng Leong, Marketing Management: A South Asian Perspective, 14<sup>th</sup> edition, (New Delhi: Pearson, 2017), Names are incomplete
2. Charles W. Lamb, Joe F. Hair, Carl Mc Daniel, Marketing, 13<sup>th</sup> edition, (New York: Cengage Learning, 2016). Names are incomplete
3. Martin Christopher And Helen Peck, Marketing Logistics, 2<sup>nd</sup> edition, (London: Routledge, 2015).

**Reference Books:**

1. Kotler, P., and Armstrong, G., Principles of Marketing, 11<sup>th</sup> edition (Harlow: Pearson Education, 2021).
2. Saxena, R., Marketing Management, 6<sup>th</sup> edition, (New Delhi: Tata-McGraw Hill, 2019).
3. Mccarthy, E.J., Basic Marketing: A Managerial Approach, 18<sup>th</sup> edition, (New York, 2011).
4. Kotler, P., Marketing Management: Analysis, Planning, Implementations and Control, 12<sup>th</sup> edition, (London: Pearson Education, 2005).
5. Stanton, W. J., Fundamentals of Marketing, 4<sup>th</sup> edition, (Sydney: Mc-Graw Hill, 2000).
6. Etzel, M.J., Walker, B.J. and Stanton, W. J., Marketing Concepts and Cases: Special Indian Edition, 14<sup>th</sup> edition, (Boston: Tata Mc-Graw Hill, 2007).
7. Stanton, Etzel, and Walker, Fundamentals of Marketing, 14<sup>th</sup> edition (New Delhi: Tata-McGraw Hill, 2007).
8. Mccarthy, and Perreault, Basic Marketing: A Global Marketing Approach, 15<sup>th</sup> edition, (Boston: Tata Mc-Graw Hill, 2005).

**Websites:**

1. <http://www.salesandmarketing.com/>
2. <http://abeuk.com/mm.php>
3. <http://ocw.mit.edu/courses/sloan-school-of-management/15-812-marketing-management-fall-2002>.

## MBA - PSM

### Semester I

<b>Course Title</b>	<b>Managerial Communication</b>
<b>Course Code</b>	<b>PG21T3106</b>

**60 hrs.**

**Objective:** The course is designed to develop the speaking and writing skills of the students, prepare them for today's communication challenges and help develop their interpersonal and presentation skills.

**Learning outcomes:** After this course the students are likely to become active listeners and good debaters, they will be adequately equipped to grasp the contemporary communication technology including social media terminology.

#### Unit I

#### **Introduction to Business Communication.**

(10 hrs.)

Introduction: Communication in Business - Importance of Communication- Effective business- Communication-formal and Informal communications- Grapevine communication at work place -using technology to improve business communication- Concept of knowledge management-Mastering listening skills – Improving non- verbal communication skills-Communicating in Teams-Interpersonal skills- Management by walking around, - Importance of Feedback – Positive and negative feedback practising effective feedback, Cross-cultural communication challenges in a global field.

#### Unit II

#### **Writing Process, Messages and Meetings**

(10 hrs.)

Writing Process: planning, analysing the situation-gathering information- Selecting the right medium- Adapting to the audience- First draft –Revision –Editing and review-usage of technology- Proof reading- Creating brief messages – Writing routine and positive messages- Drafting negative messages- Writing persuasive business messages- Developing marketing & sales messages- Drafting effective email messages- Creating effective business blogs - Creating podcasts- Distribution of blog and podcast content- Meeting-drafting of Notice, Agenda and Minutes.

**Unit III****Proposals & Reports.**

(15 hrs.)

Planning informational reports- Analytical reports- Planning proposals- Composing reports – Drafting based on style /tone to suit the audience- Helping readers- Use of technology in reports/ proposals- Revising reports and proposals- Submitting proposals. Research Reports: The written research report- Executive summary, introduction, methodology, findings, and conclusions- Writing the draft- Oral presentation preparation, delivery, and audio-visuals, presenting results and report writing precautions for report writing- Norms for using tables, charts, diagrams- appendix norms for using Index and Bibliography- Format of Business documents.

**Unit IV****Communication Skills.**

(15 hrs.)

Oral presentation: audience analysis- Composing presentation - Preparation to speak- Overcoming anxiety- Handling questions responsively- Communicating across cultures- Enhancing presentations with slides and other visuals- Creating effective handouts- Practicing the delivery- Designing a visual communication - Identifying points to illustrate- Visual design principles- Presenting information/ concepts/ideas.

**Unit V****Developing CVs & Attending Interviews.**

(10 hrs.)

Organizing approach to employment process- Planning a Resume'- Writing a resume- Writing application letters- Follow ups- Understanding the interview process— Common types of interviews- Preparing for a job interview- Interviewing for success- Interviewing across borders- Following up Letter of acceptance- Letter declining an offer- Avoiding miscues.

**Text Books:**

1. Kothari, C. R. & Gaurav Garg, Research Methodology, 4<sup>th</sup> edition New Age International Publishers, 2019.
2. Geraldine Hynes, Managerial Communication: Strategies and Applications, Tata Mc Graw Hills 2017
3. Bovée, C. L., John V. Thill and Barbara E. Schatzman, Business Communication Today, 6<sup>th</sup> edition, (New Delhi: Prentice Hall 2008)

## Reference Books:

1. Jennifer R. Veltsos, Managerial Communication: Strategies and Application Sage Publications 2021.
2. Mary, M. and Lynn, H., Guide to Managerial Communication, 10<sup>th</sup> edition, (New Delhi: Prentice Hall, 2013).
3. Carol, M. L., and Debbie D. D., Business Communication, 16<sup>th</sup> edition, (New Delhi: Cengage Learning, 2010).
4. Robbins, S. P., and David, A. Decenzo, Fundamentals of Management: Essential Concepts and Applications, 6<sup>th</sup> edition, (New Delhi: Pearson Education, 2009).
5. Mary, E. G., Essentials of Business Communication, (New Delhi: Cengage Learning: 2010).

## Web Resource Links:

1. [http://www.managementstudyguide.com/business\\_communication.htm](http://www.managementstudyguide.com/business_communication.htm)
2. <http://hbswk.hbs.edu/topics/communication.html>
3. <http://www.kellogg.northwestern.edu/>

## Case Studies:

1. Communication Challenges in Conducting Primary & Secondary Research focusing on drawing conclusions, making recommendations, and managing information
2. Communication Etiquette in Workplace
3. Conflict Resolution Skills (<https://www.coursera.org/lecture/conflict-resolution-skills/case-study-communicating-and-understanding-N89w5>) Skills the student Learn Active Listening, Communication, Management, Collaboration.

## MBA - PSM

### Semester II

<b>Course Title</b>	<b>International Trade and Documentation</b>
<b>Course Code</b>	<b>PG21T3201</b>

**60 hrs.**

**Objective:** The course aims to explain to management students the rudiments of global trade, international business, and regional cooperation of nations. In this context, India's foreign trade and the various documentation involved in export and import is outlined.

**Learning Outcomes:** Ideally the students get a big picture understanding of how multinational firms leverage their capabilities and competencies in international and global markets. After this course, students will be able to apply their understanding of conceptual insight of international trade in real-life practical projects that includes export and import processes, handling Forex, and manage the documentation involved in international transactions.

#### Unit I

#### **International business and Environment**

(12 hrs.)

Globalization – MNE`s – International Trade – Overview – Theories –Terms of Trade – World economic and trading situation-WTO- GATT- Uruguay Round- WTO Agreements -Multilateral trade negotiation/agreement, bilateral trade agreement, Barriers to trade-Counter trade – Financing of international Trade- IMF - World Bank- International Development Association (IDA)- International Finance Cooperation (IFC)- Asian Development Bank (ADB)- United Nations Conference on Trade and Development (UNCTAD)- United Nations Industrial Organization (UNIDO)- TRIPS – International Monetary System – International Investments - Foreign money and capital markets- Regional money and capital markets.

#### Unit II

#### **Regional Economic Integration and Cooperation**

(12 hrs.)

Regional economic integration- economic union – Customs union - Monetary union- Regional blocs- EU – NAFTA- The Andean community – ASEAN- APEC nations- Trade

Blocs in Africa- South-South Cooperation: Problems Facing the South- Economic Cooperation among Developing Countries (ECDC)- Global System of Trade Preferences (GSTP)- South Asian Association for Regional Cooperation (SAARC)- South Asian Preferential Trade Agreement (SAPTA)- Indo-Lanka Free Trade Agreement - Indo-pacific cooperation- QUAD and the AUKUS- Strategic alliances- China and its strategic partners. (Foreign policies, white papers and published working papers can be discussed).

### Unit III

### Export- Import Procedures

(16 hrs.)

**IMPORT PROCEDURE:** Introduction - Registration with regional licensing authority and obtaining IEC code -Selecting the overseas supplier- Negotiation -Finalizing the terms of import - Mode of payment - Customs clearance of imported goods-Role and Obligation of CHA-Classification of customs tariff and levy of customs duty - Warehousing of imported goods –Paperless procedures -Digitalization in transportation documentation for end to end value chain– Incoterms – UCP 600 – ICE Gate – EXIM Schemes.

**EXPORT PROCEDURE**-Preliminaries for starting export-Regulatory framework for exporters-Register with export promotion council-Negotiation-Sales agreement – Terms of payment and other components-Export license - Export credit insurance - Finance for exports-Exchange rates & risk management - Procuring /manufacturing goods for export - Their statutory inspection- Labelling – Packaging - Packing & marking goods - Excise and customs procedure - Exporting through export houses - Role of Clearing & Forwarding – Customs Clearance (Export & Import) – Cargo Insurance - Unmanifested Cargo: Short landing, Excess Landing- INCO Terms - Paperless procedures - Digitalization in transportation documentation for end to end value chain.

### Unit IV

### Regulatory framework in International Trade

(10 hrs.)

FEMA and RBI rules for Import-General guidelines issued by the RBI for importers; Form A-1; Import licenses - Obligation of purchaser of foreign exchange - Time limit for settlement of import payments - Advance remittance - Interest on import bills – limits set by RBI- Remittances against replacement –Imports - C

replacement import - Import bills/documents - Evidence of import and issue of acknowledgement - Verification and preservation of evidence of import - Understanding the procedure for duty drawback in India- Concept and rationale - Monitoring authority – Multimodal Transport Document (MTD).

## Unit V

## India's Foreign Trade Policy and Foreign exchange (10 hrs.)

A brief on India's trade policy- Economic scenario in India; India's external sector - an overview - Trends in India's exports and imports, Trade balance - Degree of openness to trade - composition and direction of India's trade - Institutional framework for export promotion in India- Foreign Trade Policy (2015-20)- Export promotion in India- GSP-Export Promotion organization - Analysis of India's Export and Import trade- BoP and HS Code - Goods Shipment - Payment – Inspection – Excisable goods –Foreign Exchange – Regulation – Determination of the exchange rate- FOREX market – Functions – Significance-FERA- FEMA.

### Textbooks:

1. Ram Singh, Export and Import Management: Text and Cases, (New Delhi: Sage Publications Pvt. Ltd., 2020).
2. Francis Cherunilam, International Trade and Export Management, 21<sup>st</sup> Revised Edition, (Mumbai: Himalaya Publishing House, 2021).
3. Simon Collinson, Rajneesh Narula, and Alan M. Rugman, International Business, 8<sup>th</sup> edition, (USA: Publishers, 2020).

### Reference Books:

1. Charles W L Hill, G Tomas M Hult, International Business: Competing in the Global Marketplace, 12<sup>th</sup> edition, (Place: Publishers, 2021).
2. Cherunilam, Francis, International Business: Text and Cases, edition, (New Delhi: PHI Learning, Year).

**MBA - PSM**  
**Semester II**

<b>Course Title</b>	<b>Maritime Law and Insurance</b>
<b>Course Code</b>	<b>PG21T3202</b>

**60 hrs.**

**Objective:** This paper brings out the Law & Policy Dimensions of National and International Maritime Governance, on which the Contemporary Maritime Trade exists, hence providing insight into Maritime Business Ecology.

**Learning Outcome:** After completing this paper student are equipped to define Maritime Law and underscore the significance of Maritime Insurance. Students will understand about the basics of International Maritime law and law of contracts.

<b>Unit I</b>	<b>International Maritime Law.</b>	(14 hrs.)
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Sources of International Maritime Law- Origin and Source of Law- Division of Law – National Law and International Law – Private Law and Public Law- Law of Torts – Various types of Torts- Tort of Negligence in Shipping- Remedies in Tort. An overview of IMO conventions – SOLAS - HTCW LLMC– ISM code –IMDG code. Marine Pollution & Legal Control: Sources of Marine Pollution - Prevention of operational pollution – Oil cargo pollution –MARPOL- CLC 1992- The Fund Convention – Port state control, Flag State Control. The Major Port Authorities Act 2021- Salient Features of Merchant Shipping Act.

<b>Unit II</b>	<b>Law of Contract.</b>	(12 hrs.)
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Law of Contract: Definition –General Principles of Contract- Agreements not declared as Void-Types of Contracts, Void, Voidable and illegal Contracts -Contingent Contracts Contract of Indemnity and Guarantee Quasi Contracts. Performance of Contract- Specific Performance- Breach of Contract- Remedies for Breach of Contract – Exclusion Clauses - Privity of Contract and Exceptions.

**Unit III****Law of Agency and Bailment.**

(12 hrs.)

Law of Agency: Definition of agent and principal, classification of agents – Relationship of principal and Agent – Duties and liabilities of principal – Lien – Types of Lien – Maritime Lien- Delegation of authority, relations of principal with third parties and termination of agency. Bailment: Definition, essential, requisites of bailment, classification of bailment, rights and duties of Bailor and Bailee, termination of bailment. Standard Liner Agency Agreement.

**Unit IV****Marine Insurance.**

(10 hrs.)

History and Practice of Under Writing- Marine Insurance –Fundamental Principles of Marine Insurance – Insurable Interest- Form and Content of Marine policies- Institute Cargo Clauses- Maritime Peril Nature and duration of Risk – Passing of property and risk – Warranties - Actual total Loss – Constructive total loss – Subrogation & Reinsurance – General Average & Particular Average, Protection, and Indemnity Practice – P & I Clubs.

**Unit V****Carriage of Goods by Land, Sea and Air.**

(12 hrs.)

Carriage of goods by land: Classification of carriers- Carriage by rail- Carriage by Sea – Law of carriage by Sea - Hague-Visby Rules,1968- Hamburg Rules,1978- The Rotterdam Rules, 2009- MTO Act, 1992 – International Carriage by Air- The Montreal Convention,1999- Charter Parties – kinds of charter parties – Bill of lading- Kinds of bill of lading, Mate `receipt – Delivery of goods.

**Text Books**

1. Susan Hodges and Chris Hill, Principles of Maritime Law, Informa Pub, 2002.
2. Kapoor, N. D., Elements of Mercantile Law, 38<sup>th</sup> revised edition, Sultan Chand & Sons, 2020.

3. Sir Dinshaw Fardunji Mulla, The Indian Contract Act 1872, 15<sup>th</sup> edition, (India: Lexi Nexis, 2018).
4. Sarah Sullivan (Consultant Editor), Leif Ollivierre (Consultant Editor), Costas Lambrou (Editor), Jurgen Verreet (Editor), Andrew Lansdale (Editor), Richard Sayer (Foreword), Jacamar (Designer), Danny Cornilissen (Cover Design) Legal Principles in Shipping Business, 2014 new edition , (India Institute of Chartered Shipbrokers, 2014).
5. Institute of Chartered Shipbrokers, Shipping Law, 2011, 2012 Edition, (London: Institute of Chartered Shipbrokers, 2014).

### Reference Books

1. Francis D. Rose, Gerard McMeel, and Stephen Watterson, Marine Insurance: Law and Practice, 2<sup>nd</sup> edition, (London: Lloyd's Shipping Law Library Informa Law, 2012).
2. Prabhakaran Paleri, Marine Environment: Management and People's Participation, 2009<sup>th</sup> edition, (New Delhi: K W Publishers Pvt. Ltd. and National Maritime Foundation, 2009).
3. Sankar, U., Environmental Economics, edition, (New Delhi: Oxford University Press, 2009).
4. Anthony W Gallagher, Maritime Environmental Management: Principles and Practice, 2014 edition, (London: Routledge, 2014).
5. Hanley Nick J. F., Shogren and Ben White, Introduction to Environmental Economics, 2<sup>nd</sup> edition, (London: Oxford University Press, 2013).
6. Karpagam M., Environmental Economics, 2007 revised edition, (New Delhi: Sterling Publishers, 1998)

### Websites

<http://www.lloydsmaritimeacademy.com>

<http://www.maritimeindustries.org/improving-the-Business-Environment>

<http://www.maritimeuk.org/2013/09/uk-developing-most-attractive-environment-for-business-mcloughin/>

**MBA - PSM**  
**Semester II**

<b>Course Title</b>	<b>Port and Shipping Management</b>
<b>Course Code</b>	<b>PG21T3203</b>

**60 hrs.**

**Objective:** To study the numerous processes that one involved in the Port and shipping business.

**Learning Outcomes:** To understand the entire functions and complex structure of shipping and ports in the global supply chain.

<b>Unit I</b>	<b>Port and its unique Character.</b>	(12 hrs.)
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Importance and role of the Port sector – Challenges faced by Port Management –Port governance and institutional structure – Definition of Port demand & supply – Ports and Logistics; Connected ports - Mega Ports - Smart Ports (Industry 4.0), Key developments in seaborne trade – factors affecting demand and supply of Port services – Economics of scale in the Port sector.

<b>Unit II</b>	<b>Operation, Finance and technology of Port</b>	(12 hrs.)
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Operational and Financial Performance in the Port business – Perspective of Port performance – Assessing port performance (KPI) – Yard Planning; Vessel Planning - Port pricing technology and the port sector – Characteristics and cargo handling systems of Port terminals – Impact of growing ship size – Role of port technology and artificial intelligence –Port safety and the human factor-Disaster management.

<b>Unit III</b>	<b>Marketing aspects of Port Industry.</b>	(12 hrs.)
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Competition in the Port industry – Scale and intensity and perspective of competition – Assessing the competition – competitiveness and competitive advantage of Ports – Transshipment Ports - Sustainable Green Ports - Port marketing and customer management- Market structure and contestability in the Port Sector.

**Unit IV****Functions of Shipping.**

(12 hrs.)

Type of ships – Tank & Liner World seaborne trade and merchant fleet – challenges facing the shipping industry in the twenty-first century – Main features of hull and machinery – Types and methods of tonnage measurement – Ship productivity – general principles and factors influencing designs, type and size of ship safety and other regulations.

**Unit V****Ship Management.**

(12 hrs.)

Main Ship Management models – Fleet Management, Machinery, Technical, Financial, purchasing, investment aspects of Ship Management – Ship Management legal disciplines – Risk Management in the modern shipping industry.

**Text Books:**

1. Business and Economics of Port Management, Wei Yim Yap, Routledge, London & New York 2021
2. ICS.2011/12, Ship Operations and Management. London, UK.

**Reference Books:**

1. Business and Economics of Port Management – Wei yim yap Routledge, London & New York 2021
2. JOHN.W. DICKE.2014, Reeds 21<sup>st</sup> Century Ship Management. Bloomsbury Publishing, UK.
3. LUNY. H.V., LAIK.-H., CHENGT.C.E. CHENG, 2010, Shipping and Logistics Management.” Springer, U.K.
4. PROSHANTOK.MUKHERJEE, MARK BROWN RIGG (2013), Farthing on International Shipping, 4<sup>th</sup> edition, Springer.

**Websites**

1. [www.consulting.xerox.com/case-studies/...shipping-co/enus.html](http://www.consulting.xerox.com/case-studies/...shipping-co/enus.html)  
(InternationalShippingCompanyCaseStudy)
2. [www.sugarcrm.com/industry/shipping-and-transport/case-](http://www.sugarcrm.com/industry/shipping-and-transport/case-)

study(CRMShippingandTransportCaseStudies)

3. [http://businesscasestudies.co.uk\(ShippingSector-CaseStudies\)](http://businesscasestudies.co.uk(ShippingSector-CaseStudies))
4. [www.tcs.com](http://www.tcs.com)>Home>Resources>Case Studies(TCS Resources: Case Study Leading Indian Shipping)
5. <http://www.sbaglobal.com>(SBAGlobalLogisticsServices –Case Studies)
6. [www.ellenmacarthurfoundation.org/case\\_studies/maersk](http://www.ellenmacarthurfoundation.org/case_studies/maersk)(Maersk Line – Case Studies)
7. <http://www.imo.org/en/KnowledgeCentre/Pages/Default.aspx>(Maritime Knowledge Centre –International Maritime University)

**MBA - PSM**  
**Semester II**

<b>Course Title</b>	<b>Logistics and Supply Chain Management</b>
<b>Course Code</b>	<b>PG21T3204</b>

**60 hrs.**

**Objective:** To study the concepts related to Logistics and supply chain management, examine the various processes for creating agile supply chain management.

**Learning Outcome:** After this course, the student comprehends the supply chain risk and complexity, the importance of strategic lead-time, and the role of information in the virtual supply chain.

**Unit I** **Introduction to SCM.** (12 hrs.)

Scope of Supply Chain Management (SCM) – SCM vs. Logistics Management – Domestic Vs International logistics- SCM and competitive advantage – SCM in organizational value chain - The mission of logistics management - The changing competitive environment- Decision Phases in a Supply Chain- Process Views of a Supply Chain- Competitive and Supply Chain Strategies-Achieving Strategic fit - Expanding Strategic Scope- Challenges to Achieving and Maintaining Strategic Fit – Gati Shakti - Recyclable social and Environmental Criteria in Logistics.

**Unit II** **Types of supply chains & Supply chain integration.** (12 hrs.)

Drivers and enablers of the supply chain. Various types of supply chains are based on Demand and Supply uncertainties. Push, Pull, and Hybrid supply chains and their applications. Concept of Lean six sigma supply chain -JIT in supply chain management- Impact of lead time-demand drove strategies- Impact of internet on supply chain strategies – Vendor Management Inventory (VMI).

**Unit III** **Supply Chain design and risk pooling.** (12 hrs.)

Managing inventory in various stages of the supply chain- Relationship between

service levels and inventory- Continuous review policy- Service level optimization- Various inventory procurement approaches like VMI-CCPFR-ECR-QR - Risk pooling- Centralized vs decentralized systems - Risk pooling - Centralized vs decentralized systems.

#### Unit IV

#### Global Logistics & Risk Management.

(12 hrs.)

The impact of globalization on supply chain networks-Total cost of offshoring decision - Tactics to meet international tastes -Global market forces - Technological, cost, political- Economic forces- Issues in international supply chain management- Regional differences in logistics - International Vs regional products - Risk management- Managing global risks - Evaluation of global supply chain design decisions under uncertainty - Managing the risk from known- Unknown to unknown - Unknown-requirements for global strategy implementation. Logistic Engineering - KPI (Key Performance Indicator) of Logistics

#### Unit V

#### Procurement & Distribution strategies.

(12 hrs.)

Outsourcing benefits -Framework for buy/make decisions - Procurement strategies- E-procurement - Distribution strategies- Intermediate inventory storage point Strategies-Traditional warehousing- Cross-docking- Inventory pooling - Transshipment-end-to-end value chain. Supply chain issues for SMEs- Humanitarian logistics - Organized retail in India - Reverse logistics- Sustainable supply chain - Supply chain case studies in the Indian context.

#### Text Books

1. Sunil Chopra, Peter Meindl, Supply Chain Management: Strategy, Planning and Operation, 7<sup>th</sup> edition, Pearson Education, 2019.
2. Bowersox, Supply Chain Logistics Management 4<sup>th</sup> edition, McGraw Hill, 2018.
3. David Simchi Levi, Designing and Managing the Supply Chain, 3<sup>rd</sup> edition, McGraw Hill, 2008.

4. Martin, Christopher, Logistics and Supply Chain Management, 5<sup>th</sup> edition,(New Delhi: Pearson, 2016).
5. Agrawal, D. K., Textbook of Logistics and Supply Chain Management, 1<sup>st</sup> edition, (New Delhi: TRINITY, 2018).

### **Reference Books**

1. State of Logistics Report, Council for Supply Chain Management Professionals.2019.
2. Christopher, M. andHolweg, M., ‘Supply Chain 2.0: Managing Supply Chains in the Era of Turbulence’, International Journal of Physical Distribution and Logistics Management, Vol. 41, No. 1, 2011.
3. Whyte, C., ‘Motorola’s Battle with Supply and Demand Complexity’, Supply and Demand Chain Executive, 12 August 2004.
4. Simhan, N., Schoenherr, T. and Sandor, J., ‘Profiles in Supply Management’, Supply Chain Management Review, July/August 2013.
5. Chopra, S. and Sodhi, M.S., ‘Reducing the Risk of Supply Chain Disruptions ’MIT Sloan Management Review, Springer, 2014, pp. 73–80.

### **Websites:**

- 1.[www.inboundlogistics.com/cms/digital/](http://www.inboundlogistics.com/cms/digital/)
- 2.[www.cargotalk.in/](http://www.cargotalk.in/)
- 3.<http://fiata.com/> (Federation of Freight Forwarders Association)
- 4.[www.fonasba.com/](http://www.fonasba.com/) (Federation of National Association of Ship Broking and Chartering)
- 5.[www.iata.org/](http://www.iata.org/) (International Air Transport Association).

**MBA - PSM**  
**Semester II**

<b>Course Title</b>	<b>Management Information Systems</b>
<b>Course Code</b>	<b>PG21T3205</b>

**60 hrs.**

**Objective:** To help the students to know about the fundamentals of Information Management and Technology, to understand Data management and Cyber security issues, and helps to familiarize the students with the system development and Ethical Issues in Information technology

**Learning outcomes:** After this course, the student can be able to know how to identify and use the correct technology for decision-making incritical situations.

**Unit I** → **Digital Transformation, Data Management Networks.** (12 hrs.)

Doing Business in the On-Demand Economy - Business Process Improvement and Competition - IT Innovation and Disruption- IT and You - IS Concepts and Classification - IT Infrastructure, IT Architecture, and Enterprise Architecture - Data Centers and Cloud Computing - Virtualization and Virtual Machines. Data Management-Networks.

**Unit II** → **Cyber security, Business Intelligence.** (12 hrs.)

**Cyber security:** Data Privacy Concerns and Regulations - Extent and Cost of Cyber-Attacks and Cyber Threats – Cyber-attack Targets and Consequences - Regulatory Controls, Frameworks, and Models - **Business Intelligence:** Business Intelligence and Data Science - Big Data and Advanced Data Analytics - Predictive and Prescriptive Data Analytics Methods and Techniques. Functional Business Systems - Functional and Cross-Functional Business Processes - Production and Operations Management Systems - Sales and Marketing Management Systems - Accounting, Finance, and Regulatory Compliance Systems - Human Resource Information Systems (HRIS).

**Unit III****Enterprise Systems-System Development and Project. (12 hrs.)**

Enterprise systems: Intro to Enterprise Systems - Enterprise Resource Planning - Supply Chain Management - Customer Relationship Management - Communicating and Collaborating with Knowledge Management, Content Management, and Enterprise Social Platforms. Systems Development and Project, Program and Portfolio Management-Systems Development - Software Development Methodologies - Project, Program, and Portfolio Management - Initiating, Planning, and Executing Projects.

**Unit IV****Social Media, AI and IT Strategy****(12 hrs.)**

Social Media: Web 2.0—The Social Web Technologies, Social Web Tools and Applications, Using Search Technology for Business Success, Omni-channel Retailing, E-commerce, and Mobile Commerce Technology: Omni-channel Retailing, In-Store Retail Technology, E-commerce—Online Retailing, Mobile Commerce, Mobile Payment, and Financial Services, Artificial Intelligence, Robotics, and Quantum Computing Technology: How AI Works, Types, AI Applications in Business and Society, AI and Society (Ethics), Robotics, Quantum Computing (QC).

**Unit V****IT Strategy, Trends, IT Ethics, Sustainability****(12 hrs.)**

IT Strategy and Competitive Advantage, IT Strategic Planning, Process, and Tools, IT Sourcing Strategies and IT Service Management, Strategic Technology Trends. IT Ethics: An Introduction to Ethics, ICT and Local Sustainability, ICT and Global Sustainability – Cyber fraud.

**TEXTBOOKS:**

1. Efraim Turban, Carol Pollard, and Gregory Wood, Information Technology for Management: Driving Digital Transformation to Increase Local and Global Performance, Growth and Sustainability, International Adaptation, 12<sup>th</sup> Edition, John Wiley & Sons, 2021.

2. James A. O'Brien, George M. Marakas, and Ramesh Behl, Management Information Systems, 10<sup>th</sup> Edition, Special Indian Edition, McGraw-Hill Education, 2013.

### REFERENCE BOOKS:

1. Kenneth C. Laudon, and Jane P. Laudon, Management Information Systems: Managing the Digital Firm, 17<sup>th</sup> Edition, Global Edition, (New York: Pearson, 2021).
2. Kenneth C. Laudon, and Jane P. Laudon, Essentials of MIS, 14<sup>th</sup> Edition, (New York: Pearson, 2021).
3. S. Sadagopan, Management Information Systems, 2<sup>nd</sup> Edition, (New Delhi: PHI Learning, 2014).
4. Kenneth J. Sousa, and Effy Oz, Management Information Systems, 7<sup>th</sup> Edition, (US: Cengage Learning, 2014).

### WEBSITES:

1. [https://www.tutorialspoint.com/management\\_information\\_system/management\\_information\\_system.htm](https://www.tutorialspoint.com/management_information_system/management_information_system.htm)
2. <https://courses.lumenlearning.com/santaana-informationsystems/>
3. <https://www.studytonight.com/dbms/overview-of-dbms.php>

### CASE STUDIES:

Faculty may decide on the case(s) to discuss for the subject and the following are the suggested.

1. **Case Name:** ERP Implementation at BPCL - **Case Code:**ITSY005\_  
<https://www.icmrindia.org/free%20resources/casestudies/IT%20and%20Systems%20freecasestudy1.htm>
2. **Case Name:** The Indian Internet Banking Journey - **Case Code:** ITSY003.  
<https://www.icmrindia.org/free%20resources/casestudies/banking1.htm>
3. **Case Name:** SciQuest.com's B2B E-Marketplace - **Case Code:** ITSY008  
<https://www.icmrindia.org/free%20resources/casestudies/it%20&%20sys1.htm>

**MBA - PSM**  
**Semester II**

<b>Course Title</b>	<b>Research Methodology</b>
<b>Course Code</b>	<b>PG21T3206</b>

**60 hrs.**

**Objective:** Research Methodology is a detailed study of a particular problem using scientific methods. An in-depth analysis of information helps to understand the problem deeply and explore the unknown and unlock new possibilities.

**Learning Outcome:** Students may get specific knowledge, skills, or expertise from a learning activity, such as a training session, seminar, course, or program.

<b>Unit I</b>	<b>Introduction to Research Methodology.</b>	(5 hrs.)
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Research – Meaning, Scope and Significance - Types of Research – Research process – Characteristics of good research – Scientific method – Problems in research – Identifying research problem – Objectivity in research - Review of Literature – Need, purpose and procedure- Sources of literature.

<b>Unit II</b>	<b>Planning and Formulation of Research.</b>	(10 hrs.)
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Planning of research – Selection and formulation of Problem-Hypothesis – Meaning – Sources – Types – Features of good design measurement – Meaning, need, errors in measurement, tests of sound measurement, techniques of measurement. Scaling techniques – Meaning, types of scales, scale construction techniques – Sampling design – Meaning. Concepts, steps in Sampling – Criteria for good sample design – Types of sample designs, probability, and non-probability sample.

<b>Unit III</b>	<b>Data Collection Methods.</b>	(10 hrs.)
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Meaning and Importance of Data – Sources- Data Collection – Types of data – Tools for data collection, methods of data collection, constructing questionnaire – Pilot studies and Pre-tests – Case study – Data processing Editing – Coding and

classification – Tabulation of data – Graphs/charts/diagrams–Data analysis.

#### Unit IV

#### Analyzing data: Using statistical tools

(20 hrs.)

Test of significance – Assumptions about parametric and nonparametric tests. Parametric tests – chi-square, t-Test, F Test, Z Test. Introduction to ANOVA, One way, Two way, and three-way classification. Statistical Applications – Correlation and Regression Analysis – Analysis of Variance- Multivariate analysis – Hypothesis Testing – Tests of Significance – Time series analysis.

#### Unit V

#### Report Format

(15 hrs.)

Interpretation – Meaning, Techniques of interpretation -Research Reports – planning, format, principles, Structure and Components of Research Report– Types of Report, Characteristics of Good Research Report. Norms for using Index and Bibliography- Evaluation of a research report.

#### Text Book

1. Kothari C.R., Research Methodology: Methods and Techniques, Wiley Eastern Ltd 2020
2. Panneerselvam, R., "Research Methodology, 2<sup>nd</sup> edition, (New Delhi: Prentice Hall of India, 2004).

#### Reference Book

1. Dr. S. Sachdeva, Research Methodology, Laxminarayan Agarwal Publishing 2022
2. Mildred L. Patten and Michelle Newhart, Understanding Research Methods: An Overview of the Essentials, 10<sup>th</sup> edition, (New York and London: Routledge publication,2017).

**MBA - PSM**  
**Semester III**

<b>Course Title</b>	<b>Maritime Economics</b>
<b>Course Code</b>	<b>PG21T3301</b>

**60 hrs.**

**Objective:** To understand the relationship between global economies, maritime transport and to comprehend the organization of the shipping economics that drive the market

**Learning Outcome:**

Develop the ability to explain core Maritime economic terms, concepts, and theories. Explain the function of market and prices as allocative mechanisms. Apply the concept of Maritime Economics. Identify key macroeconomic indicators and measures of economics change, growth, and development.

<b>Unit I</b>	<b>Port &amp; Maritime Shipping</b>	(12 hrs.)
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Introduction to Port Economics-Maritime Shipping and International Trade- Ports and Maritime Supply Chains- Ports and Container Shipping- Ports and Distribution Networks-Inter-oceanic Passages-The Port Competition Concept- Intra-Port Competition- Benefits of Intra-Port Competition-Port Marketing- Port Pricing- Entry Barriers in Seaports

<b>Unit II</b>	<b>Port Development and Policy</b>	(12 hrs.)
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Ports Policies-Ports and Economic Development-Port Planning and Development-Contemporary Ports-The Changing Geography of Seaports- Port Hinterlands, Regionalization and Corridors- A New Role for Inland Terminals- The Digital Transformation of Ports- The Greening of Supply Chains.

**Unit III Demand and supply of shipping**

(12 hrs.)

Definitions of economics and maritime economics-Micro economic theory of shipping and macro- Economic factors affecting international trade and shipping- How the demand for shipping arises-Basic measures of derived demand, elasticity of demand and the relevance of elasticity-Demand measurement- Factors influencing the supply of shipping-Trends in development of the world fleet, new buildings and scrapping.

**Unit IV Shipping Market Economics**

(12 hrs.)

Shipping Market Cycles- Introducing the shipping cycle-Characteristics of shipping market cycles - Shipping cycles and shipping risk - Overview of shipping cycles Lessons from two centuries of cycles- Prediction of shipping cycles- Supply, Demand and Freight Rates- The freight rate mechanism- Four Shipping Markets.

**Unit V Seaborne Trade and Transport system**

(12 hrs.)

Geography of Maritime Trade-The value added by seaborne transport - Oceans, distances and transit times - The maritime trading network and connectivity - The Principles of Maritime Trade-The building blocks of sea trade - The countries that trade by sea -The role of sea transport in trade.

**Text Book**

1. Talley Wayne K., Port Economics, 2<sup>nd</sup> edition, (New York: Routledge Maritime Masters, 2018).
2. Martin Stopford, Maritime Economics, 3<sup>rd</sup> edition, (London: Routledge, 2009).
3. Theo Nottoboom, Port Economics, Management and Policy, 1<sup>st</sup> edition, (London: Routledge, 2022).

## Reference Book

1. Wei Yim Yap Business and Economics of Port Management: An Insider's Perspective, 1<sup>st</sup> edition (London: Routledge Maritime Masters, 2020).
2. Wayne K. Talley, The Blackwell Companion to Maritime Economics, 1<sup>st</sup> edition, (West Sussex, UK: Wiley-Blackwell, 2012).
3. Pablo Coto-Millán , Miguel Angel Pesquera , Juan Castanedo, Essays on Port Economics, 1<sup>st</sup> edition, (Berlin: Physica Publication, 2010)

## Websites:

1. Port Economics, Management and Policy | Port Economics, Management and Policy ([porteconomicsmanagement.org](http://porteconomicsmanagement.org))
2. New website online - Maritime Economics & Logistics
3. Maritime Economics & Logistics | palgrave.

**MBA - PSM**  
**Semester III**

<b>Course Title</b>	<b>Chartering Practices</b>
<b>Course Code</b>	<b>PG21T3302</b>

**60 hrs.**

**Objective:** To provide in-depth understanding of Ship Chartering to the student community.

**Learning Outcome:** At the end of lectures students should be able to take business decisions during the negotiations of Charter party – clauses considering the law applicable thereto. Students will be able to know how to solve the legal problems arising from the breach of duties of the parties involved.

**Unit I** **Principles of Chartering**

(12 hrs.)

Introduction to Chartering: Chartering - Voyage Charter-Time Charter - Chartering Negotiations - Chartering and the internet-Charter Parties-Construction of voyage charter parties - Loading place and cargo-Loading rates-Lay days and cancelling date-Cost of loading and discharge-Bill of lading-Terminology and abbreviations- Time charter-The agents influence upon the charter-The port agents' role in charter party negotiations.

**Unit II** **Dry Cargo Chartering**

(12 hrs.)

Dry Cargo Trades & Ships- Dry Cargo ship tonnages, Load line, Dimensions and cargo – Propulsion – Cargo—Ship Documents and Classification – Classification- Freight Markets and Market Practice - The Baltic Exchange - Methods of ship employment - Chartering negotiations - Offering and countering - Charter parties- Subjects – Freight Derivatives for Dry cargo.

**Unit III****Tanker Chartering**

(12 hrs.)

Tanker Chartering Trade & Ships – Geography for tanker chartering – The Market structure - Origin and use of world scale - Average freight rate Assessment – Factors influencing the Freight Markets – Oil Demand – New building Activity – Tanker Scrapping – Chartering Market Practice – Cargo Description - World scale hours terms and conditions – Production of charter party – Demurrage and dispatch – Contract of Affreightment - Tenders.

**Unit IV****Financial Elements of Dry Cargo Charter Parties.**

(12 hrs.)

Voyage Chartering - Cargo size - Alternative means of calculating freight - Dead freight – Freight Taxes – Commissions and Brokerages – International Brokers Commission Contract – Time Chartering – Voyage Estimating – Computerization- Estimate form - Itinerary- Cargo quantity – Expenses – Income – Result - Time Charter Estimating - Smaller tonnage.

**Unit V****Financial Elements of Tanker Charter Parties**

(12 hrs.)

Freight - Demurrage – Commissions - Methods of Freight Payment – Arbitration – Warranty of Authority – Bills of lading – Freight Futures for Tankers – Voyage Estimating – Route-Port Time – Bunkers - Port Disbursements - Insurance and Crew Expenses - Lump sum rate – Time charter.

**Text Books:**

1. Plomaritou Evi Et al., Ship-broking and Chartering Practice, Lloyd's Practical Shipping Guides, 8<sup>th</sup> edition, 2017
2. ICS (2014) Dry Cargo Chartering, 2014 edition.
3. ICS (2014) Tanker Chartering, 2016 edition

**Reference Books:**

1. METAXAS, B.N. *The Economics of Tramp Shipping*, Athlone Press.
2. LARSGORTON, *Shipbroking and Chartering Practice*, Seventh Edition, Llyods
3. GORTON, IHRE, SANDERVARN & HILLENIOUS, *Shipbroking and Chartering Practice*, 6<sup>th</sup> Edition.
4. PHILIPWOOD, *Tanker Chartering*, (Witherby & Co. Ltd.)
5. *Principles of Chartering: Third Edition* Third Edition by Photis M. Panayides, PhD.

**MBA - PSM**  
**Semester III**

<b>Course Title</b>	<b>PPP in Port Development</b>
<b>Course Code</b>	<b>PG21T3303</b>

**60 hrs.**

**Objectives:** This paper is aimed at familiarising the student to the concept of Public Private Participation and defining its role in infrastructure building. It aims to capture the international PPP experiences in Port infrastructure and context of concessions in Indian Ports through micro case studies.

**Learning outcome:** The student on completion of this course is expected to grasp the nuances of what constitutes Public Private Partnership at a global level and in the Indian context. They understand the unique characteristics, models, institutional, financial and legal framework for PPP projects and the challenges it throws up. The learning can be applied to the Port sector to help identify the unique Port functions which are feasible under PPP mode.

**Unit I**

**PPP Models & Financial framework**

(15 hrs.)

Need for private sector investment- Public Private Partnership – Objectives- PPP Models – Global and Indian PPP Scenario –Implementation Procedures - Institutional structure - Stumbling Blocks – Recent changes in PPP policy-Priority sectors for PPP in India – PPP Port under the old and new Schemes.

**Unit II**

**Risk sharing and Financing**

(10 hrs.)

Risk Identification and sharing-Risk Mitigation - Financial Approach- Deciding determinants - Financial involvements - Sources and tools - Cost components and financing sequence- Case studies of Financing Port PPPs.

**Unit III**

**Contractual & Legal Framework**

(10 hrs)

Contractual Framework: Process of PPP bidding and awarding-RFP & RFQ– Model Concession Agreement (MCA) - Recent changes in MCA for Ports -Critical issues -

Contractual Structure-Unsolicited proposals - Legal Framework – Infirmities- Two case studies of PPP contracts in Port sector.

#### Unit IV

#### Regulatory Framework

(10 hrs.)

Regulatory body Functions - Contracting out - Regulation by contract- Indian Scenario - Independent regulators- Need for empowered regulatory authority- Climate smart PPPs-How to design an effective Regulatory framework- Case studies in Port sector for Regulatory functions.

#### Unit V

#### PPP and Port Infrastructure

(15 hrs.)

Salient Features of Port projects - Port infrastructure requirements -PPP concessions in Major Ports- Indian Ports-Case studies in India- International Port projects by PPP -Critical Success Factors of PPP in Ports – Model Concession Agreement.

#### Text Books

1. R.N. Joshi., Public Private Partnership in Infrastructure: Perspectives, Principles and Practices, edition, (New Delhi: Vision Books, 2013).
2. Asian Development Bank, Public - Private Partnership Operational Plan 2012 – 2020, (Manila: ADB, 2012).
3. Author, Public Private Partnership Projects in India, Compendium of Case Studies, Infrastructure Division, Department of Economic Affairs, Ministry of Finance, Government of India -June 2015, (Place: Publisher, year).

#### References

1. World Bank, PPI Database: Port Reform Tool Kit, edition, (Washington: World Bank, 2021).

#### Websites

1. <http://www.pppinindia.com/> (Public Private Partnership in India)
2. <http://ppp.worldbank.org/> (World Bank - PPP Project Case Studies)
3. <https://ppp.worldbank.org/public-private-partnership/sector/transportation/ports>

**MBA - PSM**  
**Semester III**

<b>Course Title</b>	<b>Maritime Logistics</b>
<b>Course Code</b>	<b>PG21T3304</b>

**60 hrs.**

**Objectives:** This subject is designed to give an overview of maritime logistics operations. The role of shipping, ports and logistics will be discussed.

**Learning outcomes:** After the course the students will demonstrate an understanding of the basic concept of logistics and supply chain management. Analyze the major logistics issues concerning maritime organization.

<b>Unit I</b>	<b>Introduction</b>	(12 hrs.)
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Significance of Maritime Logistics – Maritime Transport and Logistics as a trade – International maritime trade and logistics – Hinterland Logistics and global supply chain – Human elements in Maritime Logistics.

<b>Unit II</b>	<b>Shipping Logistics.</b>	(12 hrs.)
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Intermodal freight transport and Logistics – Global maritime networks in container shipping – Supply chain integration of shipping companies – Logistics strategy in container shipping Tanker shipping logistics – Dry bulk shipping logistics – LNG – LPG Transportations – Various Choke points of Maritime transportations.

<b>Unit III</b>	<b>Port Logistics.</b>	(12 hrs.)
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Intermodal terminal facilities – Container Hub parts in concept and Practice – Business models and strategies of multi-nationalizing container parts – Public-Private partnerships and port logistics performance – Port and Logistics chains – Logistics performance and supply chain – Oriented parts.

**Unit IV****Maritime Container Transportation Chain (MCTC)**

(12 hrs.)

Global container trade – The past and future Maritime Container transportation chain  
– History and usage of containers in logistics and beyond. Empty container logistics.

**Unit V****Integration of MCTC into global SCM**

(12 hrs.)

Global SCM and resulting shipper's requirements – Advanced benchmarking and market intelligence – A key instrument on optimizing container logistics procurement  
– Formation of a shipper council to improve data quality and share best practices – IoT solution in maritime logistics value in the business – Industry trends and opportunities in maritime logistics

**Text Books:**

1. Edited by Rolf Neise., Container Logistics and Maritime Transport 2021 - Role of the container in the supply chain.
2. Edited by Dong – Wook Sang, Kogan Page Publication, Maritime Logistics – A Guide to Contemporary Shipping and Sort Management, 2015

**Reference Books**

1. Dong- Wook Song, Photis Panayides, Maritime Logistics: A guide to contemporary shipping and port management, Kogan Page 3<sup>rd</sup> edition 2021
2. C. Jotin Khisty B. Kent Lall, Transportation Engineering, Pearson Education, 3<sup>rd</sup> edition 2017.
3. Aylin Caliskan and Yucel Ozturkoglu, Maritime Logistics, IGI Global 2016

**Website**

1. <https://bit.ly/MaritimeLogisticsBook>
2. [https://unctad.org/system/files/official-document/rmt2021\\_en\\_0.pdf](https://unctad.org/system/files/official-document/rmt2021_en_0.pdf)
3. <https://maritimetransport-india.com/>

### Semester III

Elective	
<b>Course Title</b>	<b>Technology in Port Operations</b>
<b>Course Code</b>	<b>PG21T3305</b>

**30 hrs.**

**Objectives:** To provide guidance to the students on smart ports with new technology cyber-physical system

**Learning outcome:** Students able to understand the concepts description, development, applications including cyber-Physical system, digital middle-office, Block chain, Artificial Intelligence, machine vision and digital monitoring and diagnosis

#### Unit I

#### Introduction to Smart Ports

(8 hrs.)

Introduction- Revolution of New Technologies – Development of Smart port. Ecological of Smart port – Cyber-Physical System: Introduction, Development, Application of Cyber-Physical System Digitalization

#### Unit II

#### Middle office, Block-chain, AI in Smart Port

(12 hrs.)

Middle office Development and Applications, Block chain concept- Development and Applications, Artificial Intelligence Concept, Development and Applications, Machine Vision traffic, technology.

#### Unit III

#### Virtual Reality and Digital Monitoring and Machine Learning

(10 hrs.)

Virtual Reality facility, 3D visualization Interactive Simulation, and AR Technology. Machine Learning Digital Monitoring and Diagnosis, Conditions- Real-time conditions, Remote Monitoring.

**Text Books:**

1. Weijian Mi, Yuan Liu – “Smart Ports” – Springer 2020 shanghai China
2. Soren Ehlers Et al., Maritime Port Technology and Development, CRC press 2015

**Reference Book:**

1. Ning Zhao, Yuan Liu, Weijian Mi, YifanShen, Mengjue Xia “Digital Management of Container Terminal Operations” 1<sup>st</sup> ed. 2020

**Website**

1. <https://www.porttechnology.org/editions/page/2/>

### Semester III

Elective	
<b>Course Title</b>	<b>Shipping Finance</b>
<b>Course Code</b>	<b>PG21T3306</b>

**30 hrs.**

**Objective:** To provide a complete reading on ship financing, mortgage terms, conditions, and mortgagee's rights, including a full description of documentation, legislation and registration procedures required.

#### Learning Outcomes:

It is designed to provide the individual with a developing understanding of the importance of shipping finance in the shipping business and enables students to describe how people identify and analyze the sources of finance for shipping businesses under different circumstances.

#### Unit I

#### Introduction.

(10 hrs.)

The shipping cycle - Shipping cycle and loan finance decision - Main sources of shipping finance - Issue of shares- Types of shares- Listing of shares in international stock exchanges. International element - Ship registration - Different types of Registry- Bareboat charter registration.

#### Unit II

#### Financing, Sale, and Purchase of Second-hand Ship. (10 hrs.)

Second-hand ships: Types of lenders - Loan and guarantee facilities - International element - Loan agreement provisions - Execution - Standard security in ship financing - Registration of security - Equity - Mezzanine finance - Islamic finance, options. Sale and Purchase - Introduction - MOA and delivery - Standard forms of MOA - Norwegian Sale form - Standard documents.

New buildings: Financing options–Government support – OECD and the EU – SUECS – Promissory note – Letter of commitment – Letter of guarantee. Shipping market – Assessing shipping risk – Choice of finance for ship owners – Term sheet and risk analysis. Basic principles of good lending – documentation of guarantee – Sources of security and guarantee for loan. Financial products: Meaning – Interest rate hedging products- Currency hedging products – Bunker hedging - Freight hedging products – Tying in hedging products to a ship finance facility– Accounting issues.

**Text Books:**

1. Simon Norton, Shipping Finance, (London: Institute of Chartered Shipbrokers, 2021).
2. Stephenson Harwood, Shipping Finance, 3<sup>rd</sup> edition (London: Euro money Institutional Investor, 2006).

**Reference Books:**

1. Schinas, Orestis, Grau, Carsten, Johns, and Max, HSBA Handbook on Ship Finance, (Verlag: Berlin Heidelberg, Springer, 2015).
2. Manolis G. Kavussanos Et al., The International Handbook of shipping finance: Theory and practice, Palgrave Macmillan 2016.

**Websites**

1. [www.ics.org.uk](http://www.ics.org.uk)
2. [www.ibc-academy.com](http://www.ibc-academy.com)
3. [www.utas.edu.au](http://www.utas.edu.au)

### Semester III

Elective	
<b>Course Title</b>	<b>Hazardous Cargo and IMDG Code</b>
<b>Course Code</b>	<b>PG21T3307</b>

**30 hrs.**

**Objectives:** The aim of this course is to give an in-depth idea on IMDG code and knowledge on material handling.

**Learning Outcome:** Students will be able to understand the classification of IMDG code and its application in the real life situation.

#### **Unit I** → **Unit I: Hazardous Material & Introduction to IMDG Code** (10 hrs.)

Nature and risk of Hazardous Material History of implementation of IMDG code and its necessity- Fire triangle – Identify and prevent exposure to hazardous material.

#### **Unit II** → **IMDG Code Classification** (10 hrs.)

Cases of Accidents with DG cargo - IATA Dangerous Goods Regulations- IMDG code Classification- Identifying hazardous materials based on marking, packaging labelling- Packing requirements for IMDG cargo – Documentation and Stowage requirements - Use of Dangerous Goods List of IMDG Code Volume Amendments to IMDG code – SOLAS and RED tariff.

#### **Unit III** → **Unit III: Operational requirements for IMDG cargo** (10 hrs.)

Material Safety Data Sheet (MSDS) and its sections –Booking and acceptance of IMDG cargo – Clearance from vessel Operators, DG desks, Port of Origin, Transshipment ports, Destination, Declarations from shippers, DG list, Excepted and Limited Quantities – Relevance of Marine First Aid Guide (MFAG) – Practical exercises in using DG list – Packaging Placarding and SOLAS.

**Text Book:**

1. International Maritime Organisation, IMDG code: International Maritime dangerous goods code, IMO 2015

**References:**

1. IMDG code Amendment 40 – 20 Books Volume 1 and 2, Exis Technology, 2021
2. IMDG Code – Volume 1 & 2 – Published by IMO
3. Marine First Aid Guide (MFAG) – Supplement to IMDG Code

**Websites:**

1. <https://law.resource.org/pub/us/cfr/ibr/004/imo.imdg.1.2006.pdf>

## Semester III

Elective	
<b>Course Title</b>	<b>Port Pricing</b>
<b>Course Code</b>	<b>PG21T3308</b>

**30 hrs.**

### Objective:

This course aims to introduce fundamental concepts on Port Pricing to beginners and outlines the functions of a manager.

### Learning outcome:

The learners will be able to apply concepts learned to the role of a manager and hence understand the scope of their specializations better.

#### Unit I

#### Introduction.

(5 hrs.)

Port Pricing – Strategic issues in port pricing – Port - objectives – Functions - Administrative structure - Port authorities and its financial status. Constraints of port Pricing - Port services to Users - Standard port tariffs – Comparative pricing – Pricing Theory –Source of Finance – Revenue requirements – Financial Objectives and performance measures – Cash Flow analysis.

#### Unit II

#### Cost & Forecasting

(15 hrs.)

Costs for Existing Assets-Return on Assets-Resale Value-Net Income-Operating and Maintenance-Designing Cost Based Tariff Items-Performance based Tariffs-Forecasting Port Revenues and Expenditures-Marketing Analysis-Designing Demand Based Tariffs – Activity based Costing.

#### Unit III

#### Pricing and Revenue

(10 hrs.)

Pricing – Various systems - Objective of strategic port pricing - Pricing and Asset Utilization – Pricing and Customer Management – Pricing Incentives for Port Customers - Port Pricing by Port Authorities – Structures of Port Chares - Port Tariffs

- Type of port charges - Assessment of port charges – Factors Influencing the level of Port Charges- Requirements of pricing structure - Satisfying pricing constrain. Pricing Alternatives – Economic approach – Financial approach – Impact Pricing approach. Responsibility for paying port Charges-Unit of Measure-Rate Segmentation- Comparative Pricing-Competitive Ports-Extension to Cost Comparison- Limits of Comparative Pricing-Pricing Theory-Marginal Cost Pricing-Revenue Requirements- Sources of Finance-Financial Objectives and Performance Measure- Revenue Targets.

### **Text Book:**

1. Esra Bennathan, A.A. Walters, Port Pricing and Investment Policies Policies for Developing Countries, 1<sup>st</sup> edition, (World Bank Research Publications) (London, OUP, 1979).

### **Reference:**

1. Fhwa, Operations Support Port Peak Pricing Program Evaluation, 1<sup>st</sup> edition, (United States: D.Federal Highway Administration, 2009).
2. UNCTAD, Port Pricing, 1<sup>st</sup> edition, (Geneva: UNCTAD, 1975).
3. <https://porteconomicsmanagement.org/pemp/contents/part5/port-pricing/>  
<https://www.slideshare.net/AbhijitSingh9/port-planning-pricing-tariff>

### **Website:**

1. [https://unctad.org/system/files/official-document/tdbc4d110rev1\\_en.pdf](https://unctad.org/system/files/official-document/tdbc4d110rev1_en.pdf)

### Semester III

Elective	
<b>Course Title</b>	<b>Warehouse Management</b>
<b>Course Code</b>	<b>PG21T3309</b>

**30 hrs.**

**Objective:** The paper provides the know-how required to operate an efficient and cost-effective warehouse as also the role of inventory in warehouse management. It provides guidance on using the latest technology, reducing inventory, people-management, location, and design.

**Learning outcomes:** In the course, individuals will gain a sound foundation in the technical knowledge necessary in the field of Warehouse management. It is designed to provide the individual with the opportunity to develop a sound understanding of the important role of Warehouse management in today's business environment and become familiar with current trends.

#### Unit I

#### Introduction.

(10 hrs.)

Warehouse- Principles of Warehousing - Role and functions – Types - Design of the Warehouse - Including bonded warehouse, cold storages and warehousing zone- Location determinants -Need – Supply chain trends affecting warehouse –Storage Equipment: Storage option – Shuttle technology- Very high bay warehouse- Warehouse handling equipment - Vertical and horizontal movement – Automated Storage/ Retrieval System (AS/RS)-Specialized equipment-Technical advancements- Warehouse safety and hinterland ecosystem.

#### Unit II

#### Warehouse process.

(10 hrs.)

Warehouse process: E-commerce warehouse- Receiving and put away- Warehouse process – Pick up preparation-Receiving - Pre-receipt - In- handling - Preparation – offloading – Checking-Cross-docking – Quality Inspection -Put-away – Pick preparation - Pick area layout - Picking strategies and equipment - Packing, packaging systems - Order picking methods – Replenishment to dispatch- Value adding services –Indirect

activities - Stock management - Stock or Inventory counting - Perpetual inventory counts – Security – Returns processing–Dispatch.

### Unit III

## Warehouse Management System.

(10 hrs.)

Warehouse Management Systems (WMS): Choosing – Processing and implementation. Cloud computing – Warehouse layout – Data collection – Space calculation- Finding additional space. Warehousing Information System (WIS) - Performance management- Outsourcing decisions. Technologies in Warehouse

### Text Books:

1. Gwynne Richards, Warehouse Management: The Definitive Guide to Improving Efficiency and Minimizing Costs in the Modern Warehouse, 4<sup>th</sup> edition, (New Delhi: Kogan Page, 2021).
2. Gwynne Richards, Warehouse Management: A Complete Guide to Improving Efficiency and Minimizing Costs in the Modern Warehouse, 3<sup>rd</sup> edition, (New Delhi: Kogan Page, 2018).
3. Edward Frazzle, World Class Warehousing and Material Handling, 2<sup>nd</sup> edition, (New Delhi: McGraw-Hill Education, 2016).

### Reference Books:

1. Villivalam Rangachari Rangarajan, Basics of warehouse and Inventory Management (The pillars of business logistics) Northern Press 2022.
2. James A Thompkins and Jerry D Smith, The Warehouse Management., 2<sup>nd</sup> Edition, 1998, Thompkins Publishers, USA.
3. N.Chapman Stephen Et al., Introduction to material Management, Person 2017.

### Websites:

1. <https://fci.gov.in/> (Food Corporation of India)
2. <http://cewacor.nic.in> (CentralWarehouseCorporation)
3. [www.zintro.com/area/warehouse](http://www.zintro.com/area/warehouse)(Connectwithwarehouseexperts)
4. [http://www.theseus.fi/bitstream/handle/10024/52246/Add\\_y-Tayie\\_Nicholas%20Ewiene.pdf?sequence=1](http://www.theseus.fi/bitstream/handle/10024/52246/Add_y-Tayie_Nicholas%20Ewiene.pdf?sequence=1)

5. [https://www.lanhamassoc.com/downloads/EIM1-The First Steps to Achieving Effective Inventory Control.pdf](https://www.lanhamassoc.com/downloads/EIM1-The%20First%20Steps%20to%20Achieving%20Effective%20Inventory%20Control.pdf)

## **Case Studies**

1. <https://www.thecasecentre.org/>
2. <https://icmrindia.org/>

### Semester III

Elective	
<b>Course Title</b>	<b>Air Cargo Management</b>
<b>Course Code</b>	<b>PG21T3310</b>

**30 hrs.**

**Objective:** To understand the fundamentals of Air cargo and how it contributes by carrying important shipments all over the world and facilitates the supply chain of, low and high-value shipments.

**Learning Outcome:** Students can gain an overview of the aspects of air cargo operations, and learn about different service providers and stakeholders and their role in air cargo operations to obtain an overview of air freight and heavy lift operations, study how to prepare air cargo for transport and also understand the fundamentals of technology in air freight.

#### Unit I

#### Fundamentals of Air Cargo Operation

(8 hrs.)

The air freight supply chain – The air freight process-global supply chain - The viability of air freight - Manufacturing convenience-dangerous goods – IATA Rules and Regulations - Easy access-A brief history of air freights the birth of air cargo-emerging new market - Airports: the vital connection- international customs in air freight-Ground handling and IT systems for cargo processing.

#### Unit II

#### Facilitation to Supply Chain

(12 hrs.)

Perishable supply chain-the cold chain-on-the ground handling - Animals by air-Security -keeping the air cargo safe-The charter broker - Air freight to the rescue-care by air when disaster strikes-a worldwide network with the global capacity-The role of freighters: past, present and future -freighter fleets-air cargo-the modern freighter aircraft-outsourcing the non-core business.

Crime, natural disasters, health hazards, cybercrime, corruption, Innovations-changing buying habits – Swiss cheese Model

**Text Books:**

1. Sales M, Air Cargo Management Air Freight and the Global Supply Chain, Taylor and Francis 2016.
2. The Air Logistics Handbook, Michael Sales, -New York-Routledge publication- Indian reprint 2015.

**Reference Book**

1. Logistics & Air Cargo Management, N.V.Suresh, Deepa Rajesh,V.Suganya, Iterative International Publisher,2021,India
2. Moving boxes by Air:The Economics of International Air Cargo, Peter S Morrell and Thomas Klein,-New York -Routledge,2020

### Semester III

Elective	
<b>Course Title</b>	<b>Business Consultancy and Analytics</b>
<b>Course Code</b>	<b>PG21T3311</b>

**30 hrs.**

**Objectives:** This course is expertly designed to help the students to become skilled with Data Analytics tools and able to write business plans.

**Learning outcomes:** After this course, introduce students to the skills needed to be good at consulting as an external management consultant and as an employee working inside a company and the students will be able to appreciate and write effective business plans and as well apply statistical tools to compute and visualize the real-time problem for decision- making using Excel.

#### Unit I

#### Introduction to Business Consultancy

(8 hrs.)

Introduction, Challenges to business consultancy, Defining and framing business Problem-Essentials of a business Plan-Developing a business plan. Consulting frameworks and methods; Simulate consulting project activities and situations using business cases. Consulting Firm Structure and Business Practices- Project Planning and Mobilization - Analytical Tools and Frameworks- Strategic Planning, Benchmarking, and Industry Analysis -Descriptive, predictive and prescriptive analytics

#### Unit II

#### Managing Client

(8 hrs.)

Managing expectations on both sides - Managing difficult clients and using different intervention styles - Establishing the appropriate role as the consultant - Working effectively with a client team - Managing client and team conflict - Writing a winning proposal - Defining project scope and controlling it - Developing and using project management tools - Determining individual value and how to cost-out projects - Establishing value/time trade-offs and applying the 80/20 rule.

Decision Trees, CHAID (Chi-Square Automatic Interaction Detection), controlling Complexity, or Pruning trees Toolkit for Analyst – Customer Lifetime Value, RFM Analysis, Adstock Transformation, Common Visual Presentation, Techniques, Market Basket Analysis, Cluster Analysis, Analytics ROI, Model Management.

**Text Books:**

1. Regi Mathew, Business Analytics for Decision Making, Pearson 2020.
2. Sandhya Jane, Business Analysis: The question and answer, Anisan 2017.
3. Wayne L. Winston, "Microsoft Excel 2016 – Data Analysis and Business Modeling" – 2018, Delhi PHI Learning Private Limited
4. Frederick S Hiller, Mark S Hiller, - "Introduction to Management Science" 3<sup>rd</sup> Edition New Delhi – Tata McGraw Hill Education Private Limited 2010

**Reference Books:**

1. Debra Paul, Business Analysis, BCS, The chartered Institute for IT, 4<sup>th</sup> edition, 2020.
2. Elaine Biech, The New Business of Consulting, The basics and beyond, John Wiley & Sons 2019.

**Website**

1. <https://www.iiba.org/>
2. <https://www.imcusa.org/>

### Semester III

Elective	
<b>Course Title</b>	<b>Supply Chain Analytics</b>
<b>Course Code</b>	<b>PG21T3312</b>

**30 hrs.**

**Objectives:** This course is expertly designed to help the students to become skilled with Supply chain analytical in Excel.

**Learning outcomes:** After this course, the students will be able to use supply chain analytical tools for decision-making for real-time problems using Excel.

#### Unit I

#### Supply Chain Analytics and Optimization methods (8 hrs.)

Overview of supply chain analytics - Supply Chain Analytics – Descriptive – Predictive – Prescriptive – Cognitive analytics. Optimization methods- Constrained optimization models – Assumptions and general form of LLP – Graphical solution – Excel solver for solving LPP. Transportation Problem – General description - Finding solutions – Excel solver method –Assignment problem – Solver solution – unbalanced assignment problem.

#### Unit II

#### Facility Locations and Trade-Off in Transport Decision (12 hrs.)

Facility locations and discrete Location models- Single and multiple facility location – P-Center – Dispersion – Median and capacitated fixed charge location problem - Facility location through Heuristic approach – Baumol and Wolfe -Spatial Interaction- Gravity-Huff models. Trade-Off in Transport Decision – Horizontal and Vertical Trade-Off – Network Models – Minimal Spanning Tree- Shortest Path Algorithms.

Routing and scheduling problems – Euler Graphs – Fleury’s Algorithm – Hamiltonian Paths and Circuits – Construction Heuristics- Nearest Neighbour- Insertion – Minimal Spanning Tree – Christofides and k-Opt Tour Improvement methods – Vehicle Routing problems – Branch and Bound – Clark – Wright saving methods – Vehicle Scheduling methods – Multiple-Attribute utility theory- Fuzzy Analytic Hierarchy Process

**Text Books:**

1. Vijayaraghavan T. A. S, “Supply Chain Analytics” -2021 Wiley India Pvt. Ltd.
2. Wayne L. Winston, “Microsoft Excel 2016 – Data Analysis and Business Modeling” – 2018 Delhi PHI Learning Private Limited
3. Frederick S Hiller, Mark S Hiller, - “Introduction to Management Science” 3<sup>rd</sup> Edition New Delhi – Tata McGraw Hill Education Private Limited 2010
4. Kanti Swarup, P.K. Gupta, Man Mohan – “OperationsResearch ” – New Delhi 2017 – Sultan Chand & Son Educational Publishers.

**Reference**

1. Nicoleta Tipi, Supply Chain Analytics and Modelling, Korgan page 1<sup>st</sup> edition 2021
2. Peter W. Robertson, Supply Chain Analytics – Using data to optimize supply chain processes, Routledge 2021.

## Semester III

### Elective

<b>Course Title</b>	<b>Freight Derivatives and Risk Management in Shipping</b>
<b>Course Code</b>	<b>PG21T3313</b>

**30 hrs.**

**Objective:** This paper is designed to outline the role of Risk Management in shipping and the usage of Derivatives in handling Risk in shipping business.

**Learning Outcome:** This course will bring out the students to understand, analyse, forecast, plan and strategies to minimize the business risk in shipping.

#### Unit I

#### Introduction

(10 hrs.)

Introduction - Business risks in Shipping – Traditional risk management strategies - Financial derivatives- Meaning – economic functions- benefits – Participants in derivatives – Forward & Futures Contracts – Swap credit – option pricing – Case studies on various option Models – Freight rate Indices.

#### Unit II

#### Elements of Freight Derivatives

(10 hrs.)

Freight Rate Derivatives - brief history and Freight futures – OTC Freight derivatives – negotiating and writing of freight forward contracts -Application of Freight options – Dry bulk, Tanker, Finance, and Investments- Case studies on Applicability.

#### Unit III

#### Risk in shipping Derivatives

(10 hrs.)

Market risk assessment – Risk management in shipping markets – Value at Risk Models, Parametric & Non-Parametric models – evaluation – Bunker price derivatives – Vessel value derivatives – Foreign exchange derivatives – Interest rate derivatives Credit risk derivatives – Few statistical tools for risk analysis.

**Textbook:**

1. Manolis G. Kavussanos, Dimitris A. Tsouknidis, Ilias D. Visvikis, Freight Derivatives and Risk Management in Shipping (Routledge Maritime Masters), 2<sup>nd</sup> Edition, (New York, Routledge, 2021)

**Reference Book:**

1. Manolis G. Kavussanos, Dimitris A. Tsouknidis, Freight Derivatives and Risk Management in Shipping, Routledge 2<sup>nd</sup> edition 2021.
2. Madhumathi R, Ranganatham M, Derivatives and Risk Management, 1<sup>st</sup> edition (New Delhi, Pearson India, 2011)

### Semester III

#### Elective

<b>Course Title</b>	<b>Operations Research</b>
<b>Course Code</b>	<b>PG21T3314</b>

**30 hrs.**

**Objectives:** To familiarize the concepts of OR and to develop problem-solving skills using techniques of OR such as simulation, mathematical optimization, queueing theory, and other stochastic-process models.

**Learning Outcome:** The students are expected to gain skills to find solutions for various problems of supply chain management. To an understanding of optimal or near-optimal solutions to complex decision-making problems.

#### **Unit I** An Overview of Operation Research & Linear Programming (10 hrs.)

Introduction to Operation Research – Formulating a Linear Programming Problem: Objective Functions and Constraints – Maximization and Minimization Problem – Graphical Method to solve LP - Solving LP using Simplex Method

#### **Unit II** Transportation & Assignment Problems (10 hrs.)

Basic Transportation Model – Balancing with dummy variables –Transportation Algorithms: Northwest Corner Method, Least Cost Method, and Vogel Approximation Method – Basic Assignment Model – The Hungarian Method – Transshipment Model – Travelling Salesman Problem – Vehicle Routing Problem – Optimization of Milk run routes.

#### **Unit III** Location and Inventory Reorder Model (10 hrs.)

Centre of Gravity method for Warehouse or Plant location – Equipment Replacement Analysis – The EOQ model for Inventory – Fixed reorder time and fixed reorder level type inventory models – Problem structure and solution methods for Knapsack problem and Bin packing Problem.

**Textbooks:**

1. Fredrick S. Hillier et al., (2012), *Operations Research*, McGraw Hill India, New Delhi.
2. KANTI SWARUP, P.K. GUPTA, MAN MOHAN, "Operations Research" Nineteenth Edition, Sultan Chand & Sons Educational Publishers New Delhi

**Reference Books:**

1. Hamdy A. Taha, (2006), *Operations Research*, Pearson India, New Delhi.
2. Fredrick S. Hillier et al., (2012), *Introduction to Management Science*", McGraw Hill India, New Delhi.

**Websites:**

1. <http://people.brunel.ac.uk/~mastjib/jeb/or/contents.html>

## Semester – IV

<b>Course Title</b>	<b>Entrepreneurship &amp; Strategic Management</b>
<b>Course Code</b>	<b>PG21T3401</b>

**60 hrs.**

**Objectives:** The main objective of the course is to provide knowledge of start-up business to the students and to make them successful entrepreneur. It is intended to develop an understanding the art of applying concepts and tools of strategic analysis to devise and execute strategies that can provide an insight to improve approaches for to craft and execute strategies.

**Learning Outcomes: The student will be able to** choose the type of entrepreneur he/she wants to be after understanding the concept of entrepreneurship. Go through the steps systematically in forming a start-up. They can choose the correct source of funding, read the financial statement, design promotional strategies as well as understand the legal obligations and able to prepare an effective business plan.

### **Unit I** Introduction to Entrepreneurship

(10 hrs.)

Meaning and concept of entrepreneur, entrepreneurship and enterprise, objectives of entrepreneurship development, characteristics of entrepreneurship, Myths about entrepreneurs, agencies in entrepreneurship management and future of entrepreneurship - types of Entrepreneurs- Entrepreneurial Traits- Sacrifices an entrepreneur has to make-Entrepreneurship as a career option Choosing the right Team: Family, Friends or Professionals - Intrapreneur vs. Entrepreneurs- role of entrepreneurship in economic development,

### **Unit II** Establishing a New Enterprise Ventures

(14 hrs.)

Business Opportunity identification - Search of new ideas, Imagination and creativity, the creative process, developing creativity, impediments to creativity, types and sources of innovation - opportunity in crisis-impediments to creativity - the entrepreneurial decision process, skill gap analysis, and role models, mentors and support system, entrepreneurial success stories. Generating ideas- Environmental scanning, Creativity and Creative Problem Solving, Brainstorming, Focus Groups, Market Research. Evaluation of Ideas:

Decide what is important, Identify Strengths and Weaknesses of the Idea, Make the best use of limited resources, Minimize risks while maximizing return - Pitfalls in Selecting New Venture - Critical Factors for New-Venture Development - Failure in New-Venture - New-Venture Evaluation Process.

### **Unit III** Financial Requirements and Sources of a New Enterprise (12 hrs.)

Financing a New Enterprise – Estimation of fixed and working capital requirements – Early-Stage Financing- Stages of Expansion or Development Financing- Acquisitions and Leveraged Buyout Financing. Identifying the sources of finance – Long-term financing – medium –term financing – short-term financing – providing financial assistance for MSME – Central/ State government – financial institutions support – public sector/ private sector. Venture capital funding process in India.

### **Unit IV** Challenges for Entrepreneurial Ventures and Developing Business Plan (12 hrs)

Legal Challenges: Intellectual Property Protection (Patents, Copy Rights and Trade Marks) need and process of Intellectual Property audit – Bankruptcy. Legal Structure for Entrepreneurial Ventures: Sole Proprietorship, Partnerships, Corporation, Franchise – establishing a franchising system. Marketing Challenges: Overview of Market Knowledge, Market Research, Market Plan and Pricing Strategy. Assessment of Entrepreneurial Opportunities: Challenges of New-Venture Start-Ups - Pitfalls in Selecting New Venture - Critical Factors for New-Venture Development - Failure in New-Venture - New-Venture Evaluation Process – Corporate Social responsibility and business ethics. Developing an Effective Business Plan - Elements of Business Plan - Updating and Presentation of Business Plan.

### **Unit V** Strategic Management and its Implementation (12 hrs.)

Corporate Level Strategy – Diversification strategies, Portfolio analysis and the role of corporate presenting in creating value, Business level strategy – Evaluate Porter’s generic competitive strategies, Industry lifecycle, Strategy Implementation – Implementing strategy: Organizing for Action, International Strat

– What motivates to organization to expand abroad, types of international strategy – entry mode strategies and competitive advantage for nation.

### **Textbook**

1. Entrepreneurship: Theory, Process, Practice 11th Edition by Donald F. Kuratko  
Publisher: Cengage Learning USA
2. Understanding Strategic Management by Anthony Henry, 2<sup>nd</sup> edition – Oxford 2011

### **Reference Books**

1. Entrepreneurial Development by Khanka S.S. Publisher: S Chand & Company; 2011th edition
2. Entrepreneurship Development by Monica Loss and F.L. Bascunan Publisher: Global Academic Publishers & Distributors
3. Entrepreneurship- Theory, Process Practice by Howard Frederick, Allan O'Connor – 5th Edition Publisher: Cengage Learning AUS
4. Dhirubhai Ambani: Against All Odds by A G Krishnamurthy
5. Steel King: Lakshmi Mittal by Prateeksha M Tiwary.
6. Concepts in Strategic Management and Business Policy, by Wheelen, Thomas L and J David Hunger, 13<sup>th</sup> edition, Pearson Education.
7. Strategic Management by Pitts Robert A and Lei Devid, 3<sup>rd</sup> edition Thomson.

### **Websites**

Forbes.com/entrepreneur

<https://blog.asmartbear.com/>

<https://www.under30ceo.com/>

<b>Practical Course</b>	
<b>Course Title</b>	<b>Data Analysis Through Software (Practical)</b>
<b>Course Code</b>	<b>PG21P3401</b>

**60 hrs.**

**Objectives:** To illustrate how to apply the statistical functions for analysis using R Commander. It will give a good exposure to build a predictive module and machine learning using R Commander.

**Learning Outcome:** The students will know how to use the R commander for decision making/analysis.

<b>Unit I</b>	<b>Basics of R Software</b>	(20 hrs.)
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Introduction to R – Features, Data entry: - Manual entry, import from text file, import from Excel – Variables: - checking categorical variables and continuous variables, Data set – compute new Variable, converting numerical variables to categorical variables, sub dividing variables - In-build Functions. Data types of R – Control Structures.

<b>Unit II</b>	<b>Data Exploration and Statistical Test</b>	(20 hrs.)
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Data Expiration: - Basic Visualization: - Pie Chart, Bar chart, Histograms, and Line Chart, Histograms. Advanced visualization: - Norm Q-Q Plots, Scatter plot, Star and Segment Plots, Box Plot, Tree Plots- Single Sample t-Test, One-way ANOVA - Comparing the variance: -Bartlett’s test, Levene’s test, Two variance F-test – Non Parametric Tests: - Two-sample Wilcoxon Test, Paired-sample Wilcoxon Test, Kruskal-Wallis Test.

<b>Unit III</b>	<b>Amending the graphical output</b>	(20 hrs.)
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Amending the graphical output: Amending the axis labels - Adding a main title - Adding a line – Amending the line appearance - Amending the plot symbol – Adding a text label – Amending the plot colours – R Commander Odds - Existing

script, Saving and printing outputs -Copying text and graphs – Entering commands directly into the script window.

### **Text Books**

1. Dr. Bharti Motwani, Data Analytics with R, Wiley Publications, 2019 Pune

### **Reference Books**

1. Viswa Viswanathan, Data Analytics with R, Second Edition, Infivistia Inc, 2015