

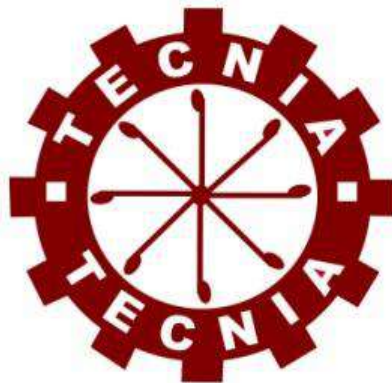
# **Scheme of Examination & Syllabi**

of

## **POST GRADUATE DIPLOMA IN OPERATION MANAGEMENT (PGDOM)**

For

**Academic Session 2018-2019 Onwards**



### **TECNIA INSTITUTE OF ADVANCED STUDIES-CDL**

Centre for Distance Learning Approved by UGC-DEB & AICTE

4 PSP, Institutional Area, Sector-14, Rohini, Delhi-110085

<http://www.cdl.tecnia.in>

w.e.f. Academic Session 2018-19

# **Tecnia Institute of Advanced Studies-CDL**

## **Centre for Distance Learning Approved by UGC-DEB & AICTE**

### **Post Graduate Diploma(s)**

TIAS-CDL is a recognized Institution for offering the Post Graduate Programs by the Joint Committee UGC-AICTE- DEC since 2009 vide DEC Recognition Letter F.No. DEC/Recog/2009/3181 dated 09/09/2009, F.No. DEC/Recog/2012/ 14776-77 dated 24/09/2012, F.No. UGC/DEB/Recog./Tecnia/2014/ 6894-97 dated 27/05/2014, No.F. 12-2/2015/ (DEB-III) dated 29/05/2015, as per the norms/guidelines of apex regulatory bodies and approved by the Distance Education Council, for offering Post Graduate Diploma(s) in the following programs through Distance Mode:

- |   |        |
|---|--------|
| 1. Post Graduate Diploma in Management                  | PGDIM  |
| 2. Post Graduate Diploma in Finance Management          | PGDFM  |
| 3. Post Graduate Diploma in Operation Management        | PGDOM  |
| 4. Post Graduate Diploma in Human Resources Management- | PGDHRM |
| 5. Post Graduate Diploma in Marketing Management        | PGDMM  |

The Post Graduate Diploma(s) is spread across Six Semesters. The outline is mentioned in the preceding text.

The students can opt for any of the specialized programs. The subjects in the first two semesters in all the programs would be common to all, however, in the Third and the Fourth Semester, the specialized opted subjects would be taught. Further, in the Fifth and the Sixth Semester of all the programs, students would be required to undergo and submit Summer Training report and Project Dissertation respectively

Following is the criteria(s) for the assessment

### **Criteria for Assessment**

The assessment of the students (out of 100 marks) shall be as per the criteria given below:

<b>S.No</b>	<b>Weightage / Criteria</b>	<b>Marks</b>
1.	Assignments	25 Marks
2.	PCP, Attendance and Interaction	10 Marks
3	Term End Examination	65 Marks

\* Record to be maintained by faculty and made available to the examination branch of the TIAS - CDL, If required.

# Tecnia Institute of Advanced Studies-CDL

Centre for Distance Learning Approved by UGC-DEB & AICTE  
Post Graduate Diploma in Operation Management  
(PGDOM)

<b>FIRST SEMESTER</b>					
Code No.	Paper	L	T/P	Credits	Distribution of Course
TDL - 01	Management Process & Organizational Behavior	4	-	4	Core
TDL - 02	Decision Sciences	4	-	4	Core
TDL - 03	Managerial Economics	4	-	4	Core
TDL - 04	Accounting for Management	4	-	4	Core
TDL - 05	Information Technology Management	4	-	4	Core
TDL - 06	Business Communication	4	-	4	Core
TDL - 07	Business and Legal Environment	4	-	4	Core
	<b>Total</b>	<b>28</b>	<b>-</b>	<b>28</b>	

<b>SECOND SEMESTER</b>					
Code No.	Paper	L	T/P	Credits	Distribution of Course
TDL - 08	Management of Technology, Innovation & Change	4	-	4	Core
TDL - 09	Financial Management	4	-	4	Core
TDL - 10	Marketing Management	4	-	4	Core
TDL - 11	Business Research	4	-	4	Core
TDL - 12	Operations Management	4	-	4	Core
TDL - 13	Human Resources Management	4	-	4	Core
TDL - 14	E-Business	4	-	4	Core
	<b>Total</b>	<b>28</b>	<b>-</b>	<b>28</b>	

**Note:** The Subjects Taught in the First Two Semesters are common for all the Five Specialized Post Graduate Programs i.e. PGDIM, PFDFM, PGDOM, PGDHRM, PGDMM.

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<b>THIRD SEMESTER</b>					
Code No.	Paper	L	T/P	Credits	Distribution of Course
TDL - 15	Management of International Business	4	-	4	Core
TDL - 16	Information Systems Management	4	-	4	Core
TDL - 17	Entrepreneurship Development	4	-	4	Core
TOM - 01	Quantitative Techniques	3	-	3	Elective
TOM - 02	Materials Management	3	-	3	Elective
TOM - 03	Techniques for Operations Efficiency	3	-	3	Elective
TOM - 04	Operations Strategy	3	-	3	Elective
TOM - 05	Supply Chain Management	3	-	3	Elective
	<b>Total</b>	<b>27</b>	<b>-</b>	<b>27</b>	

<b>FOURTH SEMESTER</b>					
Code No.	Paper	L	T/P	Credits	Distribution of Course
TDL - 18	Business Intelligence and Applications	4	-	4	Core
TDL - 19	Strategic Management	4	-	4	Core
TDL - 20	Corporate Social Responsibility, Human Values & Ethics	4	-	4	Core
TOM - 06	Technology Management	3	-	3	Elective
TOM - 07	Business Process Re-Engineering	3	-	3	Elective
TOM - 08	Operations Research	3	-	3	Elective
	<b>Total</b>	<b>21</b>	<b>-</b>	<b>21</b>	

# Tecnia Institute of Advanced Studies-CDL

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<b>FIFTH SEMESTER</b>					
Code No.	Paper	L	T/P	Credits	Distribution of Course
TDLP – 01	Summer Training Report	-	-	8	Skill Based
	<b>Total</b>	-	-	<b>8</b>	

<b>SIXTH SEMESTER</b>					
Code No.	Paper	L	T/P	Credits	Distribution of Course
TDLP – 02	Project Dissertation	-	-	8	Skill Based
	<b>Total</b>	-	-	<b>8</b>	

<b>Total Credits =</b>	<b>120</b>
<b>To obtain the degree a student shall require 113 Credits.</b>	

**Note:** The students would be required to submit Summer Training Report and Project Dissertation of 8 credits each, common in PGDIM, PGDFM, PGDOM, PGDHRM, PGDMM.



**FIRST SEMESTER  
SYLLABUS  
PGDOM**

# **Tecnia Institute of Advanced Studies-CDL**

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## **Management Process & Organizational Behavior**

**Course Code: TDL 01**

**L - 4, Credits - 4**

**Objective:** This course is designed to expose the students to fundamental concepts of management, its processes and behavioral dynamics in organizations.

### **Course Contents**

#### **Unit I**

**Introduction to Management:** Meaning and Nature of Management, Evolution of Management, Managerial Functions, Skills, Tasks and Responsibilities of a Professional Manager, Management by Objectives, Case Study.

**(3+15+12 Hours)**

#### **Unit II**

**Process of Management:** Planning-Process and Techniques, Directing-Principles and Process, Controlling-Process and Techniques, Decision Making Models, Case Study.

**(3+15+12 Hours)**

#### **Unit III**

**Fundamentals of Organizational Behaviour:** Introduction and Meaning, OB Models & Approaches, Work Force Diversity, Organizational Justice, Whistle Blowing and Social Responsibility, OB Trends, Case Study.

**Individual Processes and Behaviour:** Personality, Perception, Attitude, Learning, Motivation, Managing Emotions and Stress at Work.

**(3+15+12 Hours)**

#### **Unit IV**

**Interpersonal Processes and Behavior:** Communication, Work teams and group dynamics Leadership, Conflict Management, Interpersonal Behavior and Relations, Transactional Analysis, Case Study.

**Organizational Processes and Structure:** Organizational Design and Structure, Organizational Culture and Climate, Organizational Change and Development, Cross Cultural Organizational Behavior.

**(3+15+12 Hours)**

### **Text Books**

1. Robbins, S.P. Judge, T.A., Vohra, N. (2016), Organizational Behaviour, 16/e, Pearson Education.
2. Pierce, J.L. & Gardner, D.G. (2010), Management and Organizational Behavior, Cengage Learning.

### **Reference Books**

w.e.f. Academic Session 2018-19

1. Nelson D.L., Quick, J.C. & Khandelwal, P. (2014), ORGB, 2/e, Cengage Learning
2. Greenberg, J. and Baron, R.A. (2015), Behaviour in Organization, Pearson Education.
3. Newstrom, J.W. & Davis, K (2014), Organizational Behaviour at Work, Tata McGrawHill.
4. George, J. M. & Jones, G.R. (2012), Understanding and Managing Organizational Behaviour 6/e, Pearson Education.



# **Tecnia Institute of Advanced Studies-CDL**

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## **Decision Sciences**

**Course Code: TDL 02**

**L – 4, Credits - 4**

**Objective:** To expose students to quantitative techniques in management decision making.

### **Course Contents**

#### **Unit I**

**Probability** – Meaning, Approaches of Probability Theory, Addition and Multiplication Theorems, Conditional Probability, Bayes' Rule, Probability Distributions – Binominal Poisson, Normal Distribution, Application of Probability Theory in Business Decision Making.

**(3+15+12 Hours)**

#### **Unit II**

**Linear Programming** – Meaning, Assumptions of Linear Programming, Formulation of Linear Programming Model, Solution of Linear Programming Problem with the help of Graphical and Simplex Method, Concept of Duality, Shadow Prices, Sensitivity Analysis, Role LP in Economic Decision Making. Transportation Problems - Initial Basic Feasible Solution, Test for Optimality. Assignment Problems, Travelling Salesman Model.

**(3+15+12 Hours)**

#### **Unit III**

**Decision Theory** - Decision under Certainty, Uncertainty and Risk, Decision Tree Analysis. Game Theory - Pure and Mixed Strategies, Principle of Dominance, Solution of Game Theory Problems with the help of Graphical, Algebraic and Simplex Methods.

**(3+15+12 Hours)**

#### **Unit IV**

**Network Analysis** – Meaning of Networking, Network Analysis with help of PERT and CPM Models, Resource Planning and Meaning of crashing, Queuing Theory – Meaning, Concepts and assumptions of queuing models, M/M/1/FIFO, Simulation Modeling.

**(3+15+12 Hours)**

### **Textbooks**

1. Render Barry, Stair RM, Hanna ME and Badri TN (2016), Quantitative Analysis for Management, 12/e, Pearson India
2. Ken Black (2013), Business Statistics: For Contemporary Decision Making, 8/e, Wiley-India.

### **Reference Books**

1. Sharma, J.K. (2013), Operations Research: Theory and Applications, 5/e, Macmillan, India
2. Taha, Hamdy (2014), Operations Research: An Introduction, 9/e, Pearson India
3. Levin Richard and Rubin DS (2012), Statistics for Management, 7/e, Pearson Education.
4. Kapoor VK, (2014), Operations Research: Techniques for Management, 9/e, Sultan Chand & Sons, New Delhi.

# **Tecnia Institute of Advanced Studies-CDL**

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## **Managerial Economics**

**Course Code: TDL 03**

**L - 4, Credits - 4**

**Objective:** The course is aimed at building a perspective necessary for the application of modern economic concepts, precepts, tools and techniques in evaluating business decisions taken by a firm. The course will also look at recent developments in business in the context of economic theory.

### **Course Contents**

#### **Unit I**

**Introduction:** Nature, Scope and Significance of Managerial Economics, its Relationship with other Disciplines, Role of Managerial Economics in Decision Making; Opportunity Cost Principle, Production Possibility Curve, Incremental Concept, Cardinal and Ordinal Approaches to Consumer Behaviour: Equi-Marginal Principle, Law of Diminishing Marginal Utility, Indifference Curve Analysis.

**(3+15+12 Hours)**

#### **Unit II**

**Demand Analysis and Theory of Production:** Demand Function, Determinants of Demand, Elasticity of Demand, Demand Estimation and Forecasting, Applications of Demand Analysis in Managerial Decision Making; Theory of Production: Production Function, Short Run and Long Run Production Analysis, Isoquants, Optimal Combination of Inputs.

**(3+15+12 Hours)**

#### **Unit III**

**Theory of Cost and Market Structures:** Traditional and Modern Theory of Cost in Short and Long Runs, Economies of Scale and Economies of Scope; Revenue curves; Market Structures: Price-Output decisions under Perfect Competition, Monopoly, Monopolistic Competition and Oligopoly; Strategic Behaviour of Firms and Game Theory:- Nash Equilibrium, Prisoner's Dilemma – Price and Non-price Competition.

**(3+15+12 Hours)**

#### **Unit IV**

**Introduction to Macro Economics:** Nature and Importance; Economic Growth and Development, Determinants of Economic Development; Methods of Measurement of National Income; Inflation: Meaning, Theories, and Control Measures; Recent Developments in Indian Economy.

**(3+15+12 Hours)**

**Text Books**

1. H. Craig Petersen, W Cris Lewis, Sudhir K. Jain, (2005), Managerial Economics, 4/e, Pearson Education.
2. Robert S. Pindyck Daniel L. Rubinfeld, Prem L Mehta, (2009), Micro Economics, 7/e, Pearson Education.

**Reference Books:**

1. Lila J. Truett, Dale B. Truett,(2006), Managerial Economics: Analysis, Problems, Cases, 8/e, Wiley India.
2. Chaturvedi, DD, (2014), Managerial Economics, Scholar Technical Press, New Delhi.
3. Salvatore, D.(2006), Managerial Economics in a Global Economy, 6/e, Oxford University Press.
4. Petersen, H. C., Cris, L W and Jain, S.K. (2008), Managerial Economics, 4/e, Pearson Education

# **Tecnia Institute of Advanced Studies-CDL**

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## **Accounting for Management**

**Course Code: TDL 04**

**L - 4, Credits - 4**

**Objective:** The course aims at enabling students to understand the basic accounting principles and techniques of preparing & presenting the accounts for users of accounting information. The course also familiarizes the students with the basic cost and management accounting concepts and their applications in managerial decision making.

### **Course Contents**

#### **Unit I**

**Nature of Accounting Information:** Scope and Nature of Accounting, Accounting concepts, Principles & Standards, Accounting Cycle, Journalisation, Subsidiary Books; Ledger Posting, Preparation of Trial Balance, Rectification of Errors. Classification of Capital and Revenue. Expenditure. Fixed Assets and Depreciation Accounting. Preparation of Final Accounts, Manufacturing Account; Trading Account, Profit and Loss Account; Balance Sheet (with adjustments).

**(3+15+12 Hours)**

#### **Unit II**

**Cost Accounting:** Objectives, Classification of Cost, Preparation of Cost Sheet, Material Cost Accounting, Perpetual Inventory Control, Inventory Valuation, EOQ, ABC Analysis, Setting of Reorder Level, Maximum Level, Minimum Level, Labour Costing, Overhead Cost Allocations, Over and Under Absorption. Job and Contract Costing, Operating Costing, Reconciliation of Financial and Cost Accounting.

**(3+15+12 Hours)**

#### **Unit III**

**Performance Evaluation Techniques:** Introduction to Budgeting and Budgetary Control; Performance Budgeting; Classification of Budget; Fixed and Flexible Budgets, Zero Based Budgeting, Standard Costing and Variance Analysis; Balanced Scorecard; Responsibility Accounting.

**(3+15+12 Hours)**

#### **Unit IV**

**Decision Making Techniques:** Marginal Costing, Application of Marginal Costing in Decision Making, Cost Volume Profit Analysis; Profit Planning, Management Accounting for Decision Making and Control; EVA; Introduction to Activity Based Costing, Target Costing, Life Cycle Costing; Uniform Costing.

**(3+15+12 Hours)**

**Text Books**

1. Dhamija, Sanjay (2015), Financial Accounting for Managers, Pearson Education
2. Jawaharlal (2016), Advanced Management Accounting, S. Chand & Company.

**Reference Books**

1. Maheshwari S.K, (2013), A Textbook of Accounting for Management, 3/e, Vikas Publishing House Pvt. Ltd-Noida
2. Arora, M. N., (2012), Cost Accounting Principles & Practice, 12/e, Vikas Publishing House.
3. Duray. Colin. (2014), Management and Cost Accounting, 8/e, Cengage Learning India Pvt. Ltd.
4. M.Y.Khan and P.K.Jain (2013), Management Accounting-Text, Problems and Cases, 6/e, McGraw Hill.

# **Tecnia Institute of Advanced Studies-CDL**

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## **Information Technology Management**

**Course Code: TDL 05**

**L – 4, Credits - 4**

**Objective:** The primary objective of this course is to familiarize the student with basic concepts of information technology and their applications to business processes.

### **Course Contents**

#### **Unit I**

**Computer Hardware and Number System:** - CPU, Computer Memory and Mass Storage Devices, Computer Hierarchy, Input Technologies, Output Technologies. Number Systems and Arithmetic: Decimal, Binary, Octal and Hexadecimal Number Systems, Binary Arithmetic.

**(3+15+12 Hours)**

#### **Unit II**

**Computer Software:** Application and System Software, Programming Languages and their Classification, Assemblers, Compilers and Interpreters. Process of Software Development, Data Analysis using Spreadsheets Operating Systems- Functions of Operating Systems, Types of Operating Systems (Batch Processing, Multitasking, Multiprogramming and Real time Systems) DBMS: Traditional File concepts and Environment, Database Management Systems Concepts, Types of Data Models, ER Modeling, Integrity Constraints, SQL queries.

**(3+15+12 Hours)**

#### **Unit III**

**Data Communication and Networks:** Concepts of Data Communication, Types of Data-Communication Networks, Communications Media, Concepts of Computer Networks, Primary Network Topologies, Network Architectures-The OSI Model, Inter-Networking devices. The Internet, Intranet and Extranets: Operation of the Internet, Services provided by Internet, World Wide Web. Creating Web Pages using HTML, Intranets and Extranets.

**(3+15+12 Hours)**

#### **Unit IV**

**Functional and Enterprise Systems:** Data, Information and Knowledge Concepts, Decision Making Process, Physical Components of Information Systems, Classification of Information Systems. Overview of Security Issues in Information Technology, Emerging Trends in Information Technology.

**(3+15+12 Hours)**

**Text Books**

1. ITL Education Solutions (2012), Introduction to Information Technology, 2/e, Pearson Education.
2. Turban, Rainer and Potter (2006), Introduction to information technology, 2/e, John Wiley and Sons.

**Reference Books:**

1. Turban Efraim, Ephraim McLean, James Wetherbe (2006), Information Technology for Management - Transforming organizations in the digital economy, 5/e, Wiley India.
2. Joseph A. Brady and Ellen F Monk (2014), Problem Solving Cases in Microsoft and Excel, 12/e, Thomson Learning.
3. V. Rajaraman, (2013), Introduction to Information Technology, 2/e, PHI.
4. Dhingra S & Tondon A, (2015), Introduction to Information Technology, 1/e, Galgotia Publishing House.



# **Tecnia Institute of Advanced Studies-CDL**

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**Post Graduate Diploma in Operation Management**  
**(PGDOM)**

## **Business Communication**

**Course Code: TDL 06**

**L-4, Credits -4**

**Objective:** The aim of the course is to train students to enhance their skills in written and oral communication through practical conduct of this course. This course will help students develop competence in communication so that they can successfully handle the challenges of all types of communication in business.

### **Unit I**

**Introduction to Business Communication:** Business communication- definition, Importance. Forms and Types of Communication (Downward, Upward, Horizontal and Lateral Communication), Formal and Informal Communication Network. Process of communication. Barriers and Gateways to communication.

**(3+15+12 Hours)**

### **Unit II**

**Written Communication and Applications of Communication:** Principles of Written Communication – 7C's Concept. Business and Commercial Letters (Request letters, Good News letters, Bad news letters, Persuasive letters, Sales letters). Minutes of the Meeting, Report Writing, Job application and Resume Writing, Business communication via Social Network, Writing a Blog.

**(3+15+12 Hours)**

### **Unit III**

**Oral Communication and Business Etiquettes:** Principles of Oral Presentation, Factors Effecting Presentation, Video-conferencing and Skype, Non – Verbal Communication (Para language, Time, Space, Silence, Body language). Group Discussion and Employment Interview, Business Etiquettes and Professionalism, Introduction and Greetings, Dressing and Grooming, Gifting in Business, Public Speaking, Active Listening.

**(3+15+12 Hours)**

### **Unit IV**

**External Influence on Business Communication:** Legal and Ethical dimensions of communication (Dealing with pressure to compromise your ethics). Cross Cultural and Diversity Issues of Communication, Technology Enabled Communication, Negotiation and its relevance in Business Communication, Mass Communication.

**(3+15+12 Hours)**

### **Text Books**

1. Lehman, C.M., DuFrene D.D., &Sinha M. (2013), BOM – What’s Inside: An Innovative Approach to Learning and Teaching – Business Communication, 3/e, Cengage Learning.
2. Lesikar, R.V., Flatley M.E., Rentz, K., &Pande N. (2014), Business Communication: Making Connections in a Digital World, 11/e, McGraw Hill Education (India) Private Limited.

### **Reference Books**

1. Pearson, J.C., Nelson, P.E., Titsworth S., & Harter, L. (2013), Human Communication, 4/e, McGraw Hill Education (India) Private Limited.
2. Dignen, B. & McMaster I. (2013), Communication for International Business: The Secrets of Excellent Interpersonal Skills , 4/e, HarperCollins Publishers.
3. Conger, J.A. (2013), HBR’s 10 Must Reads on Communication – Harvard Business School Publishing Corporation.
4. Monipally, M.M. (2013), Business Communication: From Principles to Practice, 1/e, McGraw Hill Education.

# **Tecnia Institute of Advanced Studies-CDL**

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**Post Graduate Diploma in Operation Management**  
**(PGDOM)**

## **Business and Legal Environment**

**Course Code: TDL 07**

**L-4, Credits -4**

**Objective:** This course is intended to make students understand the legal aspects of business in terms of various acts that influence business in India so as to enable them appreciate associated opportunities, risks and challenges and their relevance for managerial decisions.

### **Course Contents**

#### **Unit-I**

**Business Legislation:** Indian Contract Act, 1872- Formation, Essential Elements, Performance and Discharge of Contract, Remedies for Breach of Contract, Overview of Special Contracts. Overview of Alternate Dispute Resolution Mechanisms; Negotiable Instruments Act, 1881: Meaning and Essential Features, Types, Endorsement of NI, Presentment of NI, Discharge of Parties, Liabilities of Banker and Dishonor of Negotiable Instruments like Hundis etc.

**(3+15+12 Hours)**

#### **Unit II**

**Companies Act 2013** – Meaning and Essential Features of Company, Types of Companies, Formation of Company, Memorandum and Articles of Association, Prospectus; Company Meetings; Concept of Independent Directors, Single Person Company, Company Directors and Managers; Duties of Directors; Appointment Remuneration and Allied matters; Company Secretary-Duties and Responsibilities; CSR Activities.

**(3+15+12 Hours)**

#### **Unit -III**

**Investment Laws:** Securities Exchange Board of India Act, 1992: Objective, Salient Features, Definition of Security, Securities Exchange Board of India- Composition, Powers and Functions; SEBI Guidelines-Pre-issue formalities-Disclosure Standards; Legal requirements; Operation of Clearing; Settlement and Depository system in Securities Transaction; SEBI Guidelines for Mutual Funds and Venture Capital.

**(3+15+12 Hours)**

#### **Unit IV**

**Sales and Competition laws:** Sales of Goods Act, 1930-Meaning and Essential Elements of Contract of Sale, Meaning of Goods, Conditions and Warranties, Transfer of Ownership, Performance of a Contract of Sale, Rights of unpaid seller; Competition Act 2002: Objective, Anti- Competitive Agreements, Abuse of Dominant Position, Regulation of Combinations, Competition Commission of India –Composition, Duties Powers and

Functions, Procedure for inquiry and investigation; Competition Appellate Tribunal; with recent orders.

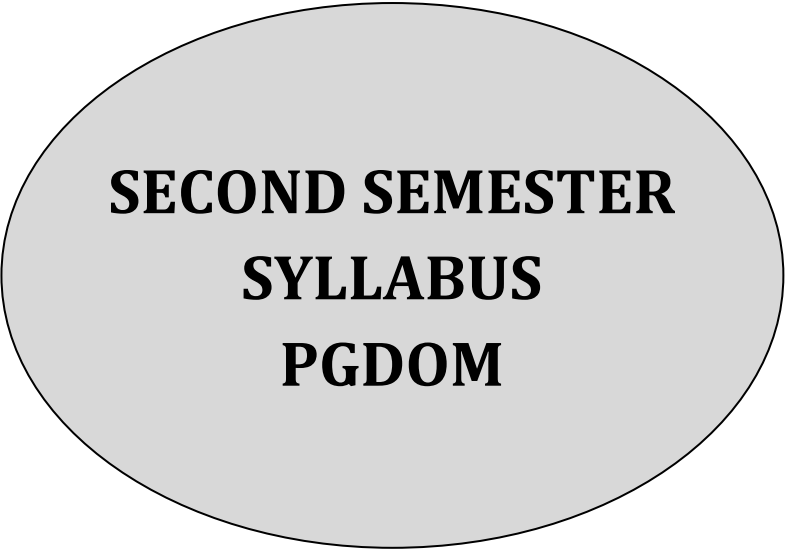
**(3+15+12 Hours)**

**Text Books:**

1. Daniel Albuquerque (2013), "Legal Aspects of Business", Oxford University Press, New Delhi
2. K. R. Bulchandani (2014), "Business Law for Management," 7/e, Himalaya Publishing House, MuMSi-400004 India.

**Reference Books:**

1. R.S.N.Pillai and Bagavathi (2011), " Legal Aspects of Business", S. Chand & Company Ltd, New Delhi
2. S.K. Kapoor (2013), "Law of Contract-I and Specific Relief Act", 13/e., Central LawAgency, Allahabad-2, India.
3. N.V Pranjape (2014), "The New Company Law", Central Law Agency, Allahabad, India.
4. Ravinder Kumar (2013), "Legal Aspects of Business", 3/e, Cengage Learning India Pvt. Ltd.; Delhi.



**SECOND SEMESTER  
SYLLABUS  
PGDOM**

# **Tecnia Institute of Advanced Studies-CDL**

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## **Management of Technology, Innovation and Change**

**Course Code: TDL 08**

**L-4, Credits-4**

**Objective:** This course is designed to help students to understand the importance of managing technology, innovation and change at the micro and macro level.

### **Course Contents**

#### **Unit I**

**Technology Management:** Understanding Technology and its Relationship with Wealth of Nations and Firms Specific Knowledge; Technology Life Cycles, S- curve of Technology Evolution, Technology Strategy, Technological Planning and Forecasting, Technology Policy, Technology Generation and Development, Technology Acquisition and Absorption; Technology Transfer, Technology Exports and Joint Ventures. Global Trends in Technology Management.

**(3+15+12 Hours)**

#### **Unit II**

**Change Management:** Understanding the Nature, Importance, Forces, Types of Technological Change; Technology Transitions; Diagnosing Organizational Capability to Change: Process, Strategy, Structure, Systems and People; Building Culture and Climate for Change and Innovation, Innovative Firms, Role of Leadership.

**(3+15+12 Hours)**

#### **Unit III**

**Innovations Management:** Invention vs. Innovation; Types of Innovation, Innovation Strategies and Models; Concurrent Engineering; Process Innovation, Product Innovation, Building, Managing and Sustaining Innovative Organizations; Case Studies on Innovation.

**(3+15+12 Hours)**

#### **Unit IV**

**Creative and Lateral Thinking Management:** Thinking, Creative Thinking, Myths about Creativity; Factors affecting Creativity; Creative Problem Solving: Approach and Process; MEET framework for Organizational Creativity; Managing Lateral Thinking.

**(3+15+12 Hours)**

#### **Text Books:**

1. Khurana V. K. and Saini A.K. (2017), Management of Technology and Innovation for Competitive Advantage, Ane Books, New Delhi.
2. Khalil, Tarek and Shankar, Ravi (2014), Management of Technology: The Key to Competitiveness and Wealth Creation, 2/e, McGraw Hill Education.

**Reference Books:**

1. Tushman, Michael L and Philip Anderson (2004), Managing Strategic Innovation and Change, 2/e, Oxford University Press.
1. 2. Narayanan, V K. (2001), Managing Technology and Innovation for Competitive Advantage. Prentice Hall
2. 3. Frederick Betz (2011), Managing Technological Innovation: Competitive Advantage from change, Third Edition, John Wiley & Sons, Inc., USA.

# **Tecnia Institute of Advanced Studies-CDL**

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**Post Graduate Diploma in Operation Management**  
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## **Financial Management**

**Course Code: TDL 09**

**L-4, Credits-4**

**Objective:** The course is aimed at building an understanding of concepts, vital tools and techniques applicable for financial decision making by a business firm. Use of MS-Excel Functions and Formulas will be promoted amongst students for all topics given in the syllabus.

### **Course Contents:**

#### **Unit I**

**Nature and Scope of Financial Management;** Financial Objectives; Impact of Financial and Economical Environment on Financial Management; Time Value of Money including Pension Funds, Computation of EMI, Annuity, Annuity Due. Funds Flow Analysis; Cash Flow Statement and its Interpretation (AS-3), Financial Statement Analysis, Ratio Analysis, Common Size Statements, Du Pont Analysis.

**(3+15+12 Hours)**

#### **Unit II**

**Planning for Sources of Finance** (Domestic and International); Capital Structure; Net Income Approach; Net Operating Income Approach; Traditional Approach and MM Approach, Cost of Capital; EBIT – EPS Analysis, Capital Gearing/Debt-Equity Ratio, Generation of Internal Funds.

**(3+15+12 Hours)**

#### **Unit III**

**Capital Budgeting** - Conventional and DCF Methods; Inflation and Capital Budgeting; Risk Analysis and Capital Budgeting-Certainty Equivalent Factor; Risk Adjusted Discounting Rate; Decision Tree; Independent and Dependent Risk Analysis; Replacement Decisions, Sensitivity Analysis, Introduction to Financial Analytics.

**(3+15+12 Hours)**

#### **Unit IV**

**Retained Earning Vs. Dividend Decision;** Gordon Model; Walter Model; MM Approach; Lintner Model; Planning of Funds through Management of Assets - Fixed and Current: Sustainable Growth Rate. Working Capital Management; Concept of Working Capital, Working Capital Approaches, Working Capital Estimations, Management of Cash (Various Theoretical Models), Inventories, Receivables, Marketable Securities and Account Payables.

**(3+15+12 Hours)**



**Text Books:**

1. Van Horne, James, C, Sanjay Dhamija, (2012), Financial Management and Policy, 12/e, Pearson Education.
2. Pandey I.M (2015), Financial Management, 11/e, Vikas Publishing House Pvt Ltd, Delhi

**Reference Books**

1. Prasanna, Chandra (2015), Financial Management: Theory and Practice, 9/e, Tata McGraw Hill.
2. Jonathan Berk, Peter De Marzo, (2016), Financial Management, Pearson Education.
3. Brigham. Eugene F. and Houston. Joel F.(2012), Fundamentals of Financial Management, 12/e , Cengage Learning India Pvt. Ltd.
4. Maheshwari, S.N. (2014), Financial Management – Principles & Practice, Sultan Chand & Sons

# **Tecnia Institute of Advanced Studies-CDL**

**Centre for Distance Learning Approved by UGC-DEB & AICTE**  
**Post Graduate Diploma in Operation Management**  
**(PGDOM)**

## **Marketing Management**

**Course Code: TDL 10**

**L – 4, Credits – 4**

**Objective:** The course aims at making students understand concepts, philosophies, processes and techniques of managing the marketing operations of a firm.

### **Course Contents**

#### **Unit I**

**Introduction to Marketing:** Meaning and Scope of Marketing; Marketing Philosophies; Concept of Customer Value, Marketing Management Process-An Overview; Concept of Marketing Mix; Understanding Marketing Environment; Consumer and Organization Buyer Behavior; Demand Forecasting; Market Segmentation, Targeting and Positioning. Over View of Competitive Marketing Strategies.

**(3+15+12 Hours)**

#### **Unit II**

**Product and Pricing Decisions:** Product Concept; Product Classifications; Product Levels; Product Differentiation; Product Mix; Product Line Decisions; Product Life Cycle-Concept & Strategies; Packaging; Brand and Branding Strategies; New Product Development Process; Pricing-Pricing Objectives, Determinants of Price, Pricing Methods & Strategies.

**(3+15+12 Hours)**

#### **Unit III**

**Promotion and Distribution Decisions:** Promotion Mix-Advertising, Personal Selling, Publicity, Direct Marketing and Sales Promotion; Integrated Marketing Communication, Channels of Distribution; Functions of Intermediaries; Channel Design Decisions, Selecting Channel Members; Channel Management; Emerging Channels of Distribution.

**(3+15+12 Hours)**

#### **Unit IV**

**Contemporary Marketing Trends and Issues:** Rural Marketing, Social Marketing; Green Marketing; Digital Marketing; Ethical Issues in Marketing. Introduction to Marketing Analytics.

**(3+15+12 Hours)**

#### **Text Books :**

1. Kotler,P., Keller, K.L. (2015), Marketing Management, 15/e, Pearson Education.
2. Baines, P., Fill, C., Page, K., Sinha, P.K. (2013), Marketing: Asian Edition, Oxford University Press, New Delhi.

**Reference Books:**

1. Ramaswamy, V.S and Namakumari, S. (2013), Marketing Management: Global Perspective Indian Context, 5/e, McGraw Hill Education (India) Pvt Ltd, New Delhi.
2. Lamb, C.W, Hair, J.F, Sharma D. &Mc Daniel C. (2012), Marketing- A South Asian Perspective Edition, Cengage India Pvt. Ltd, Delhi
3. Boone, Louis E. and Kurtz, David L. (2007), Principles of Marketing, 12/e, Cengage Learning India Pvt. Ltd.
4. Etzel, M., Walker, B., Stanton, W. and Pandit, A. (2010), Marketing Management, 14/e, McGraw Hill Education (India) Pvt Ltd, New Delhi.

# **Tecnia Institute of Advanced Studies-CDL**

**Centre for Distance Learning Approved by UGC-DEB & AICTE**  
**Post Graduate Diploma in Operation Management**  
**(PGDOM)**

## **Business Research**

**Course Code: TDL 11**

**L - 4, Credits - 4**

**Objective:** The course aim at equipping students with an understanding of the research process, tools and techniques in order to facilitate managerial decision making.

### **Course Contents**

#### **Unit I**

**Introduction:** Introduction to business research-types of research, process of research, Formulation of the research problem, development of the research hypotheses, Types of Hypotheses. Lab Work of around 4 hours.

**(3+15+12 Hours)**

#### **Unit II**

**Research Design:** Definition, functions, exploratory, descriptive, experimental; Experimental research designs-pre-experimental, quasi-experimental, true experimental, statistical; Validity of research instruments-face and content, construct validity; Reliability of research instruments internal consistency procedures; Methods of data collection-primary and secondary sources; Attitudinal scales-Likert, Thurstone, Guttman scales; Questionnaire designing. Lab Work of around 4 hours.

**(3+15+12 Hours)**

#### **Unit III**

**Sampling and Data Analysis:** Concept, designs; Types of sampling designs- probability, non-probability, mixed sampling designs; sampling frame; Sample size determination; Data processing- editing, coding and tabulating; Data analysis-univariate, bivariate, multivariate; Hypothesis testing- concept, types of errors, steps in hypothesis testing.

**(3+15+12 Hours)**

#### **Unit IV**

**Analytical Techniques:** Parametric Vs Non-parametric tests, Anova, Correlation and Regression Analysis, Chi-square Test, Non-parametric Tests for Normality, Runs Test, Advanced data analysis techniques-basic concepts of factor analysis, discriminant analysis and Conjoint Analysis. Lab Work of around 4 hours.

**(3+15+12 Hours)**

### **Text Books**

1. Chawla Deepak, Sodhi Neena (2015), Research Methodology Concept and Cases, 2/e, Vikas Publishing House.
2. Malhotra K. Naresh, Dash Satyabhushan (2015), Marketing Research 7/e, Pearson Education Ltd.

**Reference Books:**

1. Cooper Donald, Schindler Pamela, Sharma J K (2012), Business Research Methods, 11/e, McGraw Hill Education
2. Bryman Alan, Bell Emma (2011), Business Research Methods, 3/e, Oxford University Press
3. Saunders Mark, Lewis Philip, Thornhill Adrian (2011), Research Method for Business Student, 5/e, Pearson Education.
4. Hair F. Joseph, Black C. William, Babin Barry J. Anderson E. Rolph (2015), Multivariate Data Analysis, 7/e, Pearson Education

# **Tecnia Institute of Advanced Studies-CDL**

**Centre for Distance Learning Approved by UGC-DEB & AICTE**  
**Post Graduate Diploma in Operation Management**  
**(PGDOM)**

## **Operations Management**

**Course Code: TDL 12**

**L- 4, Credits-4**

**Objective:** The course is designed to enable students appreciate the strategic significance of operations management in highly competitive global economy and to introduce various principles, concepts, tools and techniques developed in the area of operations management over the years. It is envisaged that students would gain a conceptual understanding of the subject and relate them to practical applications in real life situation.

### **Course Contents**

#### **Unit I**

**Introduction** to Operations Management, Nature & Scope of Operations Management, Historical Evolution of Operations Management, Systems Perspectives of Operations Management, and Relationship of Operations Management with Other Functional Areas, Operations Strategy, Recent Trends in the Field of Operations Management.

**(3+15+12 Hours)**

#### **Unit II**

**Product Development:** Product Development Process, Concurrent Engineering, Tools and Approaches in Product Development viz: Quality Function Deployment, Design for Manufacturability, Design for Assembly, Design for Quality, Mass Customization; Process Selection and Facilities Layout: Determinant of Process Selection, Process-Product Matrix, Types of Layouts, Line Balancing; Facilities Location; Work Measurement and Job Design.

**(3+15+12 Hours)**

#### **Unit III**

**Demand Forecasting;** Capacity Planning; Resources Planning: Aggregate Production Planning Materials Requirement Planning, Scheduling; Theory of constraints and Synchronous Manufacturing; Lean Management and Just in Time Production; Supply Chain Management; Inventory Planning and Control.

**(3+15+12 Hours)**

#### **Unit IV**

**Quality Management, Quality:** Definition, Dimension, Cost of Quality, Continuous Improvement (Kaizen), ISO (9000&14000 Series), Quality Awards, Statistical Quality Control: Variable & Attribute, Process Control, Control Chart (X, R, p, np and C chart) Acceptance Sampling Operating Characteristic Curve (AQL, LTPD, a & b risk) Total Quality Management (TQM), Introduction to Operations Analytics.

**(3+15+12 Hours)**

**Text Books**

1. Mahadevan B. (2015), Operations Management: Theory and Practice, 3/e, Pearson Education.
2. Chase, R.B, et. Al (2010), Operations Management for Competitive Advantage, Tata McGraw Hill, New Delhi.

**Reference Books**

1. Gaither Norman and Frazier G. (2004), Operations Management, 9/e, Cengage Learning India Pvt.Ltd.
2. Chary, S.N and Paneerselvam R. (2009), Production and Operations Management, Tata McGraw Hill, New Delhi
3. Terry Hill (2005), Operation Management, Palgrave McMillan.
4. Stevenson W. J (2007), Operations Management, 9/e, Tata McGraw Hill.

# **Tecnia Institute of Advanced Studies-CDL**

**Centre for Distance Learning Approved by UGC-DEB & AICTE**  
**Post Graduate Diploma in Operation Management**  
**(PGDOM)**

## **Human Resource Management**

**Course Code: TDL 13**

**L - 4, Credits -4**

**Course Objectives:** The course shall enhance the understanding of varied practices and processes of managing human resources and understand their relevance and contribution in terms of not only organization, but the other employees working therein, and also the society at large.

### **Course Content**

#### **Unit I**

**Introduction to Human Resource Management:** Concept of HRM, Nature, Scope, Functions, Models of HRM; Roles and Responsibilities of HR managers; Business and organizational restructuring and its implications for human resource management; The HRM and approaches to HRM; Competitive Challenges and HRM: Workforce Diversity, Managing Protean Careers, Moonlighting Phenomenon, Psychological Contract, developmental leadership, employee engagement.

**(3+15+12 Hours)**

#### **Unit II**

**Strategy and Workforce Planning:** Strategic Planning and HR Planning: Linking the Processes, Methods and Techniques of Forecasting the Demand and Supply of Manpower, Turnover and Absenteeism, Job Analysis, Job Design and Re-design: Job enlargement, Job Enrichment, Corporate strategy and human resource management; HRM and culture management. Managing HR after mergers and acquisitions.

**(3+15+12 Hours)**

#### **Unit III**

**Expanding the Talent Pool:** Recruitment, Selection, Career Development Initiatives, HRM Competencies: Roles of HR Generalists and HR Specialists, Training & Development, Balance Scorecard(BSC), Idea underlying BSC, Research by Kaplan and Norton Introducing BSC- step By- Step.

**(3+15+12 Hours)**

#### **Unit IV**

**Contemporary Issues in HR –** Strategic Human Resource Management, International Human Resource Management ,Wellness Programs Work Life Balance and Green HRM; Different working patterns (e.g. day work, shift systems, flexi-time, working at home, casual employment)Human Resource Information Systems and e–HR for the digital age. Competency mapping .Empowering managers through positive political skills, Mentorship, Introduction to Human Resource Analytics.

**(3+15+12 Hours)**



**Text Books**

1. Dessler, G. & Varkkey B., (2015), Human Resource Management, 14/e, Pearson Education.
2. Denisi, A., Griffin, R. and Sarkar, A. (2014), HR, Cengage Learning (India Edition).

**Reference Books**

1. Torrington et al (2014), Human Resource Management 9/e, Pearson Education.
2. Lepak, D. & Gowan M. (2009), Human Resource Management, Pearson Education.
3. Ivancevich, J.M. (2014), Human Resource Management, 10/e, Tata McGraw Hill.
4. Byars, L.L. & Rue, L.W. (2014), Human Resource Management, 10/e, Tata McGraw Hill.

# **Tecnia Institute of Advanced Studies-CDL**

**Centre for Distance Learning Approved by UGC-DEB & AICTE**  
**Post Graduate Diploma in Operation Management**  
**(PGDOM)**

## **E-Business**

**Course code: TDL 14**

**L-4, Credits: 4**

**Objective:** The course imparts understanding of the concepts and various application issues of e-business like Internet infrastructure, security over internet, payment systems and various online strategies for e-business.

### **Course Contents**

#### **Unit I**

**Introduction to e-business:** Electronic Business, Electronic Commerce, Types of Electronic Commerce, Benefits, Limitations and Barriers of E-commerce, Electronic Commerce Models, Value Chains in Electronic Commerce, Ecommerce in India., Intranet, Composition of Intranet, Business Applications on Intranet, Extranets. Electronic Data Interchange, Components of Electronic Data Interchange, Electronic Data Interchange Communication Process.

**(3+15+12 Hours)**

#### **Unit II**

**Security Issues in e-business:** Security Overview, Electronic Commerce Threats, Encryption, Cryptography, Public Key and Private Key Cryptography, Digital Signatures, Digital Certificates, Securing E-commerce Networks: Security Protocols such as HTTP, SSL, Firewalls, Personal Firewalls, IDS, VPNs, Public Key Infrastructure(PKI) for Security.

**(3+15+12 Hours)**

#### **Unit III**

**Electronic Payment System:** Concept of e-Money, Electronic Payment System, Types of Electronic Payment Systems, Credit & Debit cards, Charge cards, Smart cards, RuPay cards, E-Wallets, Infrastructure Issues in EPS, Electronic Fund Transfer.

**(3+15+12 Hours)**

#### **Unit IV**

**E-Business:** Applications & Strategies Business Models & Revenue Models over Internet, Emerging Trends in e-Business, Digital Commerce, Mobile Commerce: Concepts, Benefits and Models, Emerging Trends in Mobile Apps; Strategies for E-Commerce, Internet based Business Models; Legal and Ethical Issues of E-Commerce.

**(3+15+12 Hours)**

**Text Books:**

1. Dave Chaffey (2013), E-Business and E-Commerce Management- Strategy, Implementation and Practice, 5/e, Pearson Education.
2. Schneider, Gary P.(2012), Electronic Commerce Strategy Technology and Implementation, 9/e, Cengage Learning India Pvt. Ltd.

**Reference Books :**

1. Reynolds, Jonathan (2009), E-Business A Management Perspective, South Asian Edition, Oxford.
2. Elias M. Awad (2007), Electronic Commerce- From Vision to Fulfillment, 3/e, Prentice Hall of India.
3. Joseph, P.T. and S.J. (2013), E-Commerce – An Indian Perspective, 4/e, Prentice Hall of India.
4. Bharat Bhaskar (2014), Electronic Commerce- Framework, Technologies and Applications, 4/e, McGraw Hill.



**THIRD SEMESTER  
SYLLABUS  
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# **Tecnia Institute of Advanced Studies-CDL**

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**(PGDOM)**

## **Management of International Business**

**Course Code: TDL 15**

**L- 4, Credits-4**

**Objective:** The objective of this course is to enable the students to manage business when the Organizations are exposed to overseas environment.

### **Course Contents**

#### **Unit I**

**Introduction to International Business:** Nature and Scope of International Business; E.P.R.G. Approach, The Environment Of International Business, Reasons for Going International, Analyzing International Entry Modes, Entry Barriers, Porters Diamond Model, Deming Eclectic OLI model and other models.

**(3+15+12 Hours)**

#### **Unit II**

**Formulating & Implementing Global Strategy:** International Competitive Advantage, International Strategic Alliances, Global Mergers and Acquisition, Organization Design & Structures.

**(3+15+12 Hours)**

#### **Unit III**

**Managing Globally:** Cross-Cultural Management: Hofstede Study, Edward T Hall Study, Cultural Sensitization using sensitivity analysis, Global Marketing Management, Global Operations Management & Global Supply Chain Management, Global Human Resources Management, Aspects of Global Financial Management.

**(3+15+12 Hours)**

#### **Unit IV**

**Broad Issues in Globalization:** Ethical issues in Context of International Business, The Social Responsibility of the Global Firm, International Negotiations and Cross-Cultural Communication, Globalization and the Internet, distinction between TNC and MNC, future of International Business and other emerging concepts.

**(3+15+12 Hours)**

### **Text Books**

1. Daniels John, RadebaughLee , Sullivan Daniel, Salwan P. (2016), International Business, 15/e, Pearson Education
2. Holmes George, Luthans Fred & Doh Jonathan P, (2016), International Management: Culture, Strategy, and Behavior, 9/e, McGraw-Hill;

## **Reference Books**

1. Charles W L Hills, Arun Kumar Jain (2014), International Business Competing in the GlobalMarketplace, McGraw Hill Education (India) Private Limited.
2. K Aswathappa (2014), International Business, Tata Mcgraw Hill.
3. Ball D.A, McCulloch, Jr. W.H, Geringer J.M, Minor M.S and McNett J.M (2013), International Business The Challenge of Global Competition, McGraw Hill Education (India) Private Limited.
4. Deresky (2013), International Management: Managing across borders and culture, Text and Cases, 8/e, Pearson Education.

# **Tecnia Institute of Advanced Studies-CDL**

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**Post Graduate Diploma in Operation Management**  
**(PGDOM)**

## **Information Systems Management**

**Course Code: TDL 16**

**L- 4, Credits-4**

**Objective:** The objective of this course is to expose the students to the managerial issues relating to information systems and help them identify and evaluate various options in this regard.

### **Course Contents**

#### **Unit I**

**Information Systems in Global Business;** Global e-Business and collaboration; Information systems, organizations, and strategy; Ethical and social issues in information systems.

**(3+15+12 Hours)**

#### **Unit II**

**IT Infrastructure and Emerging Technologies;** Foundations of business intelligence – databases and information management; Telecommunications, the Internet, and wireless technology; Securing information systems.

**(3+15+12 Hours)**

#### **Unit III**

**Data, Information and Enterprise Applications:** Introduction, data and information-measuring data, information as a resource, information in organizational functions, types of information technology, types of information systems- transaction processing systems-management information systems, Enterprise applications – operational excellence and customer intimacy; eCommerce – digital markets, digital goods; Managing knowledge; Decision making – business intelligence.

**(3+15+12 Hours)**

#### **Unit IV**

**Business Process Integration with IT:** Introduction, Business Process Integration-Business processes-example of a complex process, Motivation for Enterprise Systems, Enterprise Resource Planning systems- finance and accounting module-human resource management module-manufacturing and operations module- sales and marketing module, Building information systems – systems development and organizational change, business process redesign, tools for business process management; Project management – business value of information systems, managing project risk; Managing global systems.

**(3+15+12 Hours)**

**Text Books**

1. Kenneth Laudon and Jane Laudon (2016), Management Information Systems: Managing the Digital Firm, 14/e, Pearson Education.
2. James O'Brien, George Marakas and Ramesh Behl (2014), Management Information Systems, 10/e, McGraw Hill Education India, Delhi.

**References Books**

1. Ralph Stair and George Reynolds (2012), Information Systems, 10/e, Cengage Learning.
2. D.P.Goyal (2014), Management Information Systems: Managerial Perspectives, 4/e, Vikas Publishing House.
3. Haag, Stephen , (2012), Management Information Systems for the Information Age, 9/e, McGraw Hill Education India, Delhi
4. Sahil Raj, (2013), Management Information System, Pearson Education.



# **Tecnia Institute of Advanced Studies-CDL**

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**(PGDOM)**

## **Entrepreneurship Development**

**Course Code: TDL 17**

**L- 4, Credits – 4**

**Objective:** The course aims at instituting entrepreneurship skills in the students by giving an overview of who the entrepreneurs are and what competences are needed to become an entrepreneur. It helps in grasping entrepreneurship, based on 3S Model i.e. Stimulate, Sustain and Support, so that a spirit of entrepreneurship can be inculcated among the student participants.

### **Course Contents**

#### **Unit I**

**Entrepreneurship:** Concept and Definitions; Entrepreneurship and Economic Development; Factor Affecting Entrepreneurial Growth – Economic, Non-Economic Factors; Classification and Types of Entrepreneurs; Entrepreneurial Competencies; EDP Programs; Entrepreneurial Training; Traits/Qualities of an Entrepreneurs; Manager Vs. Entrepreneur; Entrepreneur Vs. Entrepreneurship; Entrepreneur vs. Administrator.

**(3+15+12 Hours)**

#### **Unit II**

**Opportunity / Identification and Product Selection:** Entrepreneurial Opportunity Search and Identification; Sources of Information; Criteria to Select a Product; Conducting Feasibility Studies; Marketing Feasibility, Technical Feasibility, Finance Feasibility, HR Feasibility etc; Business Plan Formulation; Format of Business Plan with Practical example; Project Report Preparation; Specimen of Project Report.

**(3+15+12 Hours)**

#### **Unit III**

**Enterprise Launching Formalities :** Definition of Small Scale as per MSMED Act, 2006; Rationale; Objective; Scope; steps involved in starting enterprise; SME; Registration; NOC from Pollution Board; Machinery and Equipment Selection; Role of SME in Economic Development of India; Project Planning and Scheduling using Networking Techniques of PERT/CPM; Methods of Project Appraisal.

**(3+15+12 Hours)**

#### **Unit IV**

**Role of Support Institutions and Management of Small Business :** Role of Director of Industries, DIC, DCMSME, SIDBI, Small Industries Development Corporation (SIDC), MSME (D-I), NSIC, NISBUED, State Financial Corporation (SFC); Functional areas application for Small Enterprises like Marketing Management issues; Production Management issues; Finance Management issues; Human Resource Management issues; Export Marketing.

**(3+15+12 Hours)**

**w.e.f. Academic Session 2018-19**

**Text Books**

1. Donald F. & Dr. Kuratko, (2013), Entrepreneurship: Theory, Process and Practice, South Western Publication.
2. Sharma K.C, (2010), Entrepreneurship Development, Regal Publications, Delhi.

**References Books**

1. NathSuryakant (2012), Entrepreneurship Development and Small Scale Industries, Neha Publishers & Distributors, Delhi.
2. Charantimath (2013), Entrepreneurship Development and Small Business Enterprise Pearson Education.
3. Gupta S.L. & Mittal Arun (2012), Entrepreneurship Development, International Book House, Delhi.
4. Taing Kalpana (2014), Entrepreneurship Theory and Practice, Anmol Publication Pvt. Ltd, Delhi.

# **Tecnia Institute of Advanced Studies-CDL**

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## **Quantitative Techniques**

**Course Code: TOM 01**

**L-3, Credits: 3**

**Objective:** The objective of this paper is to acquaint the students with operations research techniques that play an important role in managerial decision-making.

### **Course Contents:**

#### **Unit I**

Quantitative analysis and decision making, Linear programming problems for maximization and minimization problems; Models of cost, revenue, and profit; Breakeven analysis.

**(3+15+12 Hours)**

#### **Unit II**

Graph linear equations; Interpret computer output and solutions; Sensitivity analysis; Project scheduling with PERT/CPM; Network models: Transportation, Assignment, Transshipment, and Production and Inventory.

**(3+15+12 Hours)**

#### **Unit III**

Inventory models: Economic Order Quantity (EOQ), Economic Production Lot-Size, Single-Period, Quantity Discounts for the EOQ, Order-Quantity, Reorder-Point, Periodic-Review, and Just-in-Time; Decision analysis in the face of uncertainty or risk.

**(3+15+12 Hours)**

#### **Unit IV**

Smoothing methods, trend projection, trend and seasonal components, and regression analysis in forecasting; Qualitative approaches to forecasting: Delphi method, Expert Judgment, Scenario Writing, and Intuitive approaches.

**(3+15+12 Hours)**

### **Text Books**

1. Introduction to Management Science Quantitative Approaches to Decision Making, by Anderson, Sweeney & Williams

## Reference Books

1. Jeffrey, L. Whitten and Lonnie D. Bentley (2000), System and Design Methods. Irwin McGraw-Hill.
2. Jeffrey A. Hoffer, Joey F. George and Joseph S. Valacich (2011), Modern Systems Analysis and Design, 6/e, Pearson Education.
3. Roger H.L.Chinan ,KengSiau, and Bill C. Hardgrave (2009), Systems Analysis and Design-Techniques, Methodologies, Approaches, and Architectures, PHI Learning, New Delhi.
4. Roger. S. Pressman (2009), Software Engineering: A Practitioner's Approach, 7/e, McGraw Hill, New Delhi.

# **Tecnia Institute of Advanced Studies-CDL**

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**(PGDOM)**

## **Materials Management**

**Course Code: TOM 02**

**L-3, Credits: 3**

**Objectives:** This course aims at providing overall knowledge regarding the concepts and structure of Enterprise business systems and imparts necessary knowledge for ERP, CRM, SCM implementation in a business enterprise.

### **Course Contents**

#### **Unit I**

An Overview of Material Management, Materials Flow Systems, Strategic Role of Materials Management, Linkage with other Functional Areas of Management- Sourcing of Materials- Issues and Overview, Domestic vs International Purchase, Vendor Network, Buyers -Sellers Relationship.

**(3+15+12 Hours)**

#### **Unit II**

**MATERIALS PLANNING AND CONTROL** - Materials Planning and Budgeting, Pull vs Push System,  
**INVENTORY POLICIES AND SYSTEMS** - Inventory Systems and Modelling, Process Inventory, Spare Parts Management, Stores Accounting.

**(3+15+12 Hours)**

#### **Unit III**

**WAREHOUSING:** Codification and Standardisation of the Materials, Location and Structure of Warehouse, Incoming Material Receipts, Retrieval and Transaction Processing System, Security and Loss Prevention.

**(3+15+12 Hours)**

# **Tecnia Institute of Advanced Studies-CDL**

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## **Techniques for Operations Efficiency**

**Course Code: TOM 03**

**L-3, Credits: 3**

**Objectives:** The students will learn on how to efficiently perform operations including Quality, Benchmarking.

### **Course Contents:**

#### **Unit I**

Introduction - Need for quality - Evolution of quality - Definition of quality - Dimensions of manufacturing and service quality - Basic concepts of TQM - Definition of TQM – TQM Framework - Contributions of Deming, Juran and Crosby – Barriers to TQM.

**(3+15+12 Hours)**

#### **UNIT II : TQM PRINCIPLES**

Leadership – Strategic quality planning, Quality statements - Customer focus – Customer orientation, Customer satisfaction, Customer complaints, Customer retention - Employee involvement – Motivation, Empowerment, Team and Teamwork, Recognition and Reward, Performance appraisal – Continuous process improvement – PDSA cycle, 5s, Kaizen - Supplier partnership – Partnering, Supplier selection, Supplier Rating.

**(3+15+12 Hours)**

#### **UNIT III : TQM TOOLS & TECHNIQUES**

The seven traditional tools of quality – New management tools – Six-sigma: Concepts, methodology, applications to manufacturing, service sector including IT – Benchmarking – Reason to bench mark, Bench marking process – FMEA – Stages, Types.

**(3+15+12 Hours)**

#### **UNIT IV : TQM TOOLS & TECHNIQUES II**

Quality circles – Quality Function Deployment (QFD) – Taguchi quality loss function – TPM – Concepts, improvement needs – Cost of Quality – Performance measures.

**(3+15+12 Hours)**

#### **Text Books**

1. Dale H.Besterfield, et al., "Total Quality Management", Pearson Education, Inc. 2003.(Indian reprint 2004).ISBN 81-297-0260-6.

## References

1. James R.Evans & William M.Lidsay, "The Management and Control of Quality", (5th Edition), South Western (Thomson Learning), 2002 (ISBN 0-324-06680-5).
2. Feigenbaum. A.V. "Total Quality Management", McGraw Hill, 1991.
3. Oakland.J.S. "Total Quality Management", Butterworth – Hcinemann Ltd., Oxford. 1989.
4. Narayana V. and Sreenivasan, N.S. "Quality Management – Concepts and Tasks", New Age International 1996.
5. Zeiri."Total Quality Management for Engineers", Wood Head Publishers, 1991.

# **Tecnia Institute of Advanced Studies-CDL**

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## **Operations Strategy**

**Course Code: TOM 04**

**L-3, Credits- 3**

**Objective:** To equip the students with the understanding of Operations Strategy, Scheduling, Supply Chain Partners.

### **Course Contents**

#### **Unit I**

**Operations Strategy:** Introduction to Operations Strategy framework-Manufacturing Architecture, Systems and Processes-Service Strategy -Capacity Strategy and Management-Technology Strategy-Quality Strategy and Change / Action programs-Purchasing and Supply network strategy-Environmental and Social sustainability strategy.

**(3+15+12 Hours)**

#### **Unit II**

**Operations Research Applications:** O.R. tools-Dynamic programming, branch and bound method- Scheduling systems-single machine, flow shop, job shop-Vehicle routing problems-Resource constrained project scheduling-Bin packing-Portfolio optimization-Quadratic Programming-Staff transfer problem-Two-stage supply chain distribution problem.

**(3+15+12 Hours)**

#### **Unit III**

**Behavioural Operations Management:** The study of Behavioural Operations-Process and Perception- Dynamic Pricing in Revenue Management-Envisioning motivation and Performance in Work Design- Intertemporal choices in Project based organisations - Impulsiveness and Emotions-Sharing the Risk- Supply Chain Negotiator-Behaviour Assessment Test on Conflict Management-Kicking the mean Habit-A chain of hands.

**(3+15+12 Hours)**



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## **Supply Chain Management**

**Course Code: TOM 05**

**L-3, Credits-3**

**Objective:** To make the students understand the importance of supply chain, the partners in the supply chain right from the manufacturing to the final consumption, the channels of distribution.

### **Course Contents**

#### **Unit I**

**Supply Chain and Logistics Management:** Introduction-Supply chain strategy-Demand forecasting- Sourcing decisions-Inventory management-Risk management-Packaging-Warehousing-Facility location and network design-Distribution management-Transportation fundamentals and planning- Green logistics-Reverse logistics-Supply chain sustainability.

**(3+15+12 Hours)**

#### **Unit II**

**Supply Chain Analytics:** Analytics and Supply Chain Analytics-Integrated models for Facility Location Selection and Warehouse Location Selection Ex.: AHP integrated along with traditional methods-Application of Simulation and DoE for Manufacturing System design/redesign-Application of tools for aggregate Production Planning and Control and designing automated dashboards with relevant KPIs for understanding the deviations in planned aggregate output with root-causes-Application of integrated tools for Resource planning & control, Material planning & control and Capacity planning & Control and designing automated dashboards with relevant KPIs for understanding the optimal resources planned and achieved.

**(3+15+12 Hours)**

#### **Unit III**

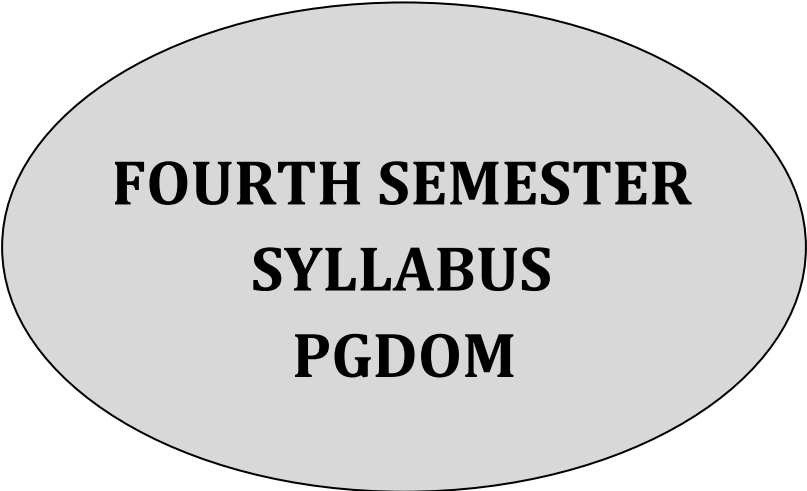
**Toolkit:** Overview on 'application of SQC, SPC, TQM & TPM for Quality Planning & Control and designing dashboards with relevant KPIs for understanding the deviations in quality and performance along with root-causes'-Application of Experimental Designs (Taguchi, RSD, Mixture Design) and Analyses for optimizing all the processes across Supply Chain and designing automated dashboards with relevant KPIs for understanding the deviations from optimum along with root-causes.

**(3+15+12 Hours)**

**Unit IV**

Application of OR Tools for Recourse Optimization across Supply Chain and designing automated dashboards with relevant KPIs for understanding the deviations from optimum along with root-causes-Application of OR Tools for Distribution System Optimization and designing automated dashboards with relevant KPIs for understanding the deviations from optimum along with root-causes.

**(3+15+12 Hours)**



**FOURTH SEMESTER  
SYLLABUS  
PGDOM**

# **Tecnia Institute of Advanced Studies-CDL**

**Centre for Distance Learning Approved by UGC-DEB & AICTE**  
**Post Graduate Diploma in Operation Management**  
**(PGDOM)**

## **Business Intelligence and Applications**

**Course Code: TDL 18**

**L- 4, Credits - 4**

**Objective:** This course is intended to expose the students to the latest tools of Business Intelligence and applying those tools for effective decision-making.

### **Course Contents**

#### **Unit I**

**Business Intelligence and Business Decisions:** Decision Support Systems; Group Decision support and Groupware Technologies, Expert Systems.

**(3+15+12 Hours)**

#### **Unit II**

**Data Warehousing:** - Features, System Databases, Creating Databases and Tables, Constraints, Data Manipulation Language, OLTP & OLAP, Data Marts, Data Warehousing, Data Warehouse Architecture. Success factors of Data Warehousing.

**(3+15+12 Hours)**

#### **Unit III**

**Data Mining and Knowledge Discovery:** Phases of knowledge Discovery in Data Bases (KDD); Data Mining Techniques; Market Basket Analysis, Applications of Data Mining.

**(3+15+12 Hours)**

#### **Unit IV**

**Knowledge Management:** Knowledge Assets, Knowledge Generation, Knowledge Storage, Knowledge Utilization, Knowledge Management Technologies, Emerging Issues in Business Intelligence.

**(3+15+12 Hours)**

### **Text Books**

1. Efraim Turban, E. Aronson (2013), Decision Support and Business Intelligent Systems.9/e, Pearson Education.
2. Sam Anahory, Dennis Murray (2006), Data Warehousing in the Real World, Pearson Education.

### **Reference Books**

1. PaulrajPonniah (2003), Data Warehousing Fundamentals. John Wiley.
2. Fernandez, Irma Becerra (2008), Knowledge Management, 1/e, Pearson Education.
3. Panda, Tapan K (2008), Knowledge Management, 1/e, Excel Books, Delhi.
4. Dr. Sachin Kumar, KadambriAgarwal (2013), Data Mining and Data Warehousing, S.K. Kataria& Sons, Delhi.

**w.e.f. Academic Session 2018-19**

# **Tecnia Institute of Advanced Studies-CDL**

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## **Strategic Management**

**Course Code: TDL 19**

**L- 4, Credit-4**

**Objective:** To develop an understanding of the Strategic Management process in a dynamic and competitive global environment.

### **Course Contents**

#### **Unit I**

**Nature of Strategic Management:** Concept of Strategy; Vision Mission, Goals and Objectives; External Environmental Analysis; Analyzing Companies Resource in Competitive Position; Mintzberg's 5Ps of Strategy; Strategic Management Process, Corporate Governance.

**(3+15+12 Hours)**

#### **Unit II**

**Strategy Formulation:** External Environmental Analysis; Analyzing Companies Resource in Competitive Position- Concept of Stretch, Leverage and Fit; Strategic Analysis and Choice, Porter's Five Forces Model, Concept of Value Chain, Grand Strategies; Porter's Generic Strategies; Strategies for Competing in Global Markets.

**(3+15+12 Hours)**

#### **Unit III**

**Corporate-Level Strategies:** Diversification Strategies: Creating Corporate Value and the Issue of Relatedness, Vertical Integration: Coordinating the Value Chain, The Growth of the Firm: Internal Development, Mergers & Acquisitions, and Strategic Alliances Restructuring Strategies.

**(3+15+12 Hours)**

#### **Unit IV**

**Strategy Implementation and Evaluation:** Structural Considerations and Organizational Design; Leadership and Corporate Culture; Strategy Evaluation: Importance and Nature of Strategic Evaluation; Strategic and Operational Control, Need for Balanced Scorecard.

**(3+15+12 Hours)**

### **Text Books**

1. Thomas L. Wheelen, J. David Hunger (2016), Concept in Strategic Management and Business Policy, Pearson Education.
2. Arthur, A, Thomson and Strickland, A. J. (2002), Strategic Management – Concept and Cases. Tata McGraw Hill, New Delhi.

### **Reference Books**

1. Kark Rajneesh (2008), *Competing with the Best: Strategic Management of Indian Companies in a Globalizing Arena*, Penguin Books, India.
2. AzharKazmi (2004), *Business Policy and Strategic Management*, Tata McGraw Hill, New Delhi.
3. Hitt Michael A., Ireland R.D. and Robert E Hoskisson, *Strategic Management: Competitiveness & Globalization, Concepts and Cases*, Addison Wesley.

# **Tecnia Institute of Advanced Studies-CDL**

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## **Corporate Social Responsibility, Human Values and Ethics**

**Course Code: TDL 20**

**L- 4, Credit-4**

**Objective:** The objective of this course is to develop an understanding and appreciation of the importance of value system, ethical conduct in business and role and responsibilities of corporate in social systems. It aims at applying the moral values and ethics to the real challenges of the organizations.

### **Course Contents**

#### **Unit I**

**Moral Values and Ethics:** Values – Concepts, Types and Formation of Values, Ethics and Behaviour. Values of Indian Managers; Managerial Excellence through Human Values; Development of Ethics, Ethical Decision Making, Business Ethics Values and ethics as drivers of Corporate Social responsibility (CSR ): A Historical Perspective from Industrial Revolution to Social Activism; The Stakeholder theory of Firm ; CSR and the regulatory issues.

**(3+15+12 Hours)**

#### **Unit II**

**Ethical Dilemma** , Implications of failed corporate responsibilities: Worker rights and health, Technology and Privacy in the workplace , Human rights, Stockholders Right and Corporate Governance; Consumerism; Unethical Issues in Sales, Marketing , Advertising and Supply Chain ; Intellectual Property Rights, Corruption in Business and Administration, Building a value based Corporate Culture , Big Data : Ethical and Regulatory Framework.

**(3+15+12Hours)**

#### **Unit III**

**Corporate Social Responsibility:** Current CSR Practices of the Firms in India and Abroad, International Frameworks of CSR and Sustainability: Global Compact, Caux Round Table, OECD Guidelines for Multinational Enterprises , GRI, SA8000 Standard etc., BS / ISO Guideline on CSR Management (ISO-26000), Social Audit of Government Programs.

**(3+15+12 Hours)**

#### **Unit IV**

**Sustainable Development:** Challenges of Sustainable Development, Environmental Challenges as Business Opportunity, Kyoto Protocol and Clean Development Mechanism (CDM), managing environmental Quality, Green IT initiatives, emerging trends in Corporate Social Responsibility,

**(3+15+12 Hours)**

### **Text Books**

1. Lawrence, A. T., and Weber, J. (2016). Business and society: Stakeholders, ethics, public policy. Tata McGraw-Hill Education.
2. Blowfield, M., & Murray, A. (2014). Corporate responsibility. Oxford University Press.

### **Reference Books**

1. Hartman, L. P. and DesJardins J. (2013). Business Ethics: Decision-Making For Personal Integrity And Social Responsibility, McGraw-Hill/Irwin
2. Carroll, A., & Buchholtz, A. (2014). Business and society: Ethics, sustainability, and stakeholder management. Cengage Learning
3. Steneir J.F. and Steiner G.A. (2014) Business, Government and society: A Managerial Perspective Text and Cases McGraw-Hill Education.
4. Manuel G.Velasquez (2015), Business Ethics Concepts and Cases, Pearson Education.



# **Tecnia Institute of Advanced Studies-CDL**

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## **Technology Management**

**Course Code: TOM 06**

**L-3, Credits-3**

**Objective:** This Course will aid the students in having a clear understanding about the concepts, methods and techniques and issues involved in Technology and their Challenges.

### **Unit I**

Meaning of technology – Technology versus Technique – Technology Development – Technology Transfer, Technology lifecycle - Technological Environmental changes, Managing Research Function – Research & Development – Product life cycle.

**(3+15+12 Hours)**

### **Unit II**

Multistage decisions – R&D projects, Creative process, influence of environmental trends on R & D -Designing & engineering – Simultaneous engineering – Product Liability and Safety.

**(3+15+12 Hours)**

### **Unit III**

Product life characteristics curve – infant mortality – Human factors in engineering – value engineering-Flexible manufacturing systems - Synchronized manufacturing, Factors of the future.

**(3+15+12 Hours)**

### **Unit IV**

Just in Time – Quality control techniques - Facilities engineering - Project definition - project proposal process – project planning tools – network models - controlling cost & schedule.

**(3+15+12 Hours)**

# **Tecnia Institute of Advanced Studies-CDL**

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## **Business Process Re-Engineering**

**Course Code: TOM 07**

**L-3, Credits-3**

**Objective:** This Course will aid the students in having a clear understanding about the concepts, methods and techniques and issues involved in Reengineering and its Implications.

### **Unit I**

Business Process Reengineering: A Consolidated Approach to Different Models- The Need for BPR and Its History.

**(3+15+12 Hours)**

### **Unit II**

Business Process Reengineering: Framework and Approach- Business Process Management (Process Life Cycle, Process Maturity)- Organization Life Cycle and Its Relationship with Process Reengineering.

**(3+15+12 Hours)**

### **Unit III**

Business Process Modelling- People Issues with BPR and Change Management- Change Management Approach in Implementing BPR.

**(3+15+12 Hours)**

### **Unit IV**

BPR and Malcolm Baldrige National Quality Program- BPR and Automation- TQM and BPR- Case Study: AEGON Religare.

**(3+15+12 Hours)**

# **Tecnia Institute of Advanced Studies-CDL**

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## **Operations Research**

**Course Code: TOM 08**

**L-3, Credits-3**

**Objective:** The students would learn about the research toolkits in operations which would be helpful to those opting for Operation Management.

### **Unit I**

Introduction- Overview of the Operations Research Modeling Approach- Introduction to Linear Programming- Solving Linear Programming Problems.

**(3+15+12 Hours)**

### **Unit II**

The Simplex Method- The Theory of the Simplex Method- Duality Theory and Sensitivity Analysis.

**(3+15+12 Hours)**

### **Unit III**

Other Algorithms for Linear Programming- The Transportation and Assignment Problems- Network Optimization Models.

**(3+15+12 Hours)**

### **Unit II**

Decision Analysis- Markov Chains- Queueing Theory- Inventory Theory- Markov Decision Processes- Simulation.

**(3+15+12 Hours)**