

III Year I Semester (Semester-5)

S.No.	Course Code	Course Name	L	T	P	C
1	PS3101	Automata and Compiler Design	3	0	0	3
2	PC3102	Machine Learning	2	1	0	3
3	PC3103	Computer Networks	3	0	0	3
4	PE3101	Professional Elective-1	2	0	2	3
5	OE3101	Open Elective-1	2	0	2	3
6	PC3101L	Unix & Shell Programming Lab	0	0	3	1.5
7	PC3102L	Machine Learning Lab	0	0	3	1.5
8	SAC3101	.Net Programming	1	0	2	2
9	MC3101	Indian Constitution	2	0	0	0
10	PR/INTERN	Summer Internship / Community Service Project 2 Months (Mandatory) after second year (to be evaluated during V semester)	0	0	0	1.5
Total						21.5
		Honors/Minor courses	3	1	0	4

Category		Credits
PC	Professional Core Courses	3+3+1.5+1.5=9
PE	Professional Elective Courses	3
OE	Open Elective Courses/Job Oriented Elective Courses	3
SAC	Skill Advanced Course/Soft Skills Course	2
HS	Humanities and Social Sciences Courses	3
INTERN	Summer Internship	1.5
Total Credits		21.5

III Year II Semester (Semester-6)

S No.	Course Code	Course Name	L	T	P	C
1	PC3201	Deep Learning	3	0	0	3
2	PC3202	Natural Language Processing	3	0	0	3
3	HS3101	Engineering Economics & Management	2	1	0	3
4	PE3201	Professional Elective-2	0	0	3	3
5	OE3201	Open Elective-2	2	0	2	3
6	PC3201L	Deep Learning Lab	0	0	3	1.5
7	PC3202L	Cloud Computing Lab	0	0	3	1.5
8	PC3203L	Full Stack Lab	0	0	3	1.5
9	SAC3201	Soft Skills	1	0	2	2
10	MC3201	Entrepreneurial Skill Development	2	0	0	0
Total						21.5
		Industrial/Research Internship 2 Months (Mandatory) during summer vacation				

III- Year II - Semester	Name of the Course	L	T	P	C
PC3201	Deep Learning	3	0	0	3

Course Objectives:

1. To understand basic concepts of neural networks.
2. To emphasize on learning, optimization techniques.
3. To learn CNN, RNN, Auto encoder models.
4. To learn deep learning algorithms to solve real world problems.

Syllabus:

UNIT-I: Deep learning basics

Introduction, the perceptron, Practical network training, Back-Propagation, why does it work? Overfitting and generalization, Shallow Neural Network, Deep Neural Networks.

UNIT-II: Optimization

Challenges in neural network optimization, Initialization, Regularization, Gradient Checking, Gradient Descent, Stochastic Gradient Descent, Momentum Optimizer, AdaGrad, RMSProp, Adam, Batch normalization.

UNIT– III: Deep Learning for Natural Language Processing

Computational representation of language, one-hot representation of words, word vectors, The skip-gram word2vec model, The CBOW word2vec model, word vector arithmetic, RNN, LSTM.

UNIT-IV: Deep Learning for Computer Vision

Building blocks of CNN, Local receptive fields, Shared weights and bias, Pooling layers, Max-pooling, Average pooling, CNN for image classification, CNN for segmentation, An example of DCNN — LeNet, LeNet code in Keras, Understanding the power of deep learning, Recognizing CIFAR-10 images with deep learning, Recognizing cats with a VGG-16 net.

UNIT – V: Effective training of Deep Neural Networks and Recent trends in Deep Learning Architecture

Early stopping, Dropout, Instance Normalization, Group Normalization, Transfer Learning, Improving the CIFAR-10 performance with deeper a network, Improving the CIFAR-10 performance with data augmentation, Predicting with CIFAR-10, Very deep convolutional networks for large-scale image recognition.

Recent Trends in Deep Learning Architectures: Residual Network, Skip Connection Network.

Text books:

1. Deep Learning- Ian Goodfellow, Yoshua Benjio, Aaron Courville, The MIT Press
2. Pattern Classification- Richard O. Duda, Peter E. Hart, David G. Stork, John Wiley & Sons Inc.

Reference books:

1. Theodoridis, S. and Koutroumbas, K. Pattern Recognition. Edition 4. Academic Press, 2008.
2. Russell, S. and Norvig, N. Artificial Intelligence: A Modern Approach. Prentice Hall Series in Artificial Intelligence. 2003.

4. Koller, D. and Friedman, N. Probabilistic Graphical Models. MIT Press. 2009.

Web Resources & other digital material:

NPTEL Lecture material

1. Lecture Series on Deep Learning by Prof. P. K. Biswas, Department of Electrical & Electronic Communication Engineering, IIT Kharagpur.
https://onlinecourses.nptel.ac.in/noc22_cs22/preview#:~:text=Week%201%3A%20Introduction%20to%20Deep,Multilayer%20Perceptron%2C%20Back%20Propagation%20Learning

Course Outcomes: By the end of the course the student will be able to

- Demonstrate basic neural network models
- Perform optimization and evaluate performance of the neural network Model.
- Able to implement mathematical model of neural network.
- Design convolutional neural network for solving problems.
- Design RNN's, Auto encoders.

III- Year II - Semester	Name of the Course	L	T	P	C
Course Code:PC3202	Natural Language Processing	3	0	0	3

Syllabus:

Unit I: Introduction and Overview

Welcome, motivations, what is Natural Language Processing; The problem of ambiguity and uncertainty in language; The Turing test; NLP Representations in syntax, semantics, and pragmatics; The applications of NLP; The role of Deep Learning in Natural Language Processing; Deep Learning for Natural Language Computing: Backpropagation, Recurrent neural networks, Transformers;

Unit II: Syntactic parsing

Grammar formalisms and tree banks; Efficient parsing for context-free grammars (CFGs); Statistical parsing and probabilistic CFGs (PCFGs); Lexicalized PCFGs. **Semantic Analysis:** Lexical semantics and word-sense disambiguation. Compositional semantics; Semantic Role Labeling and Semantic Parsing

Unit III: N-gram Language Models

The role of language models; Simple N-gram models. Estimating parameters and smoothing; evaluating language models.

Part of Speech Tagging and Sequence Labeling: Lexical syntax. Hidden Markov Models (Forward and Viterbi algorithms and EM training)

Unit IV: Deep Learning for Named entity recognition

Dependency Parsing, Gradient checks, Overfitting, Regularization, Activation functions, Multi-task and Semi-supervised Learning;

Text Embedding: Word Vector representations: word2vec, GloVe; Advanced word vector representations; Sequence-to-sequence model

Unit V: Information Extraction

Named entity recognition and relation extraction. IE using sequence labeling

Machine Translation: Basic issues in MT. Statistical translation, word alignment, phrase-based translation, and synchronous grammars.

References:

1. James Allen. Natural Language Understanding. The Benjamins/Cummings Publishing Company Inc. 1994. ISBN 0-8053-0334-0.
2. Yoav Goldberg. Neural Network Methods for Natural Language Processing, Morgan & Claypool Publishers, 2017. ISBN 9781627052986 .
3. Tom Mitchell. Machine Learning. McGraw Hill, 1997. ISBN 0070428077.
4. Cover, T. M. and J. A. Thomas: Elements of Information Theory. Wiley, 1991, ISBN 0-471-06259-6.
5. Charniak,E.: Statistical Language Learning. The MIT Press. 1996. ISBN 0-262-53141-0.

Web Resources:

1. <https://nptel.ac.in/courses/106105158>

III- Year II - Semester	Name of the Course	L	T	P	C
HS3101	Engineering Economics and Management	3	0	0	3

Course Objectives: The student should be able to

1. To understand the concept and nature of Economics and Demand and to familiarize about the Production function, Input Output relationship, Cost-Output relationship and Break Even Analysis.
2. To understand the nature of markets and the concepts of Money and RBI functions.
3. To familiarize with the process of management, principles, and to provide conceptual knowledge on functional management that is on Human resource management and Marketing management.
4. To learn different Accounting Systems, preparation of Financial Statement and to familiarize with the tools of project Management.
5. To understand the concept of Capital, Capital Budgeting and the techniques used to evaluate Capital Budgeting proposals.

Syllabus:

UNIT-I: Introduction to Economics and Theory of Production

Introduction to Economics; Definitions, Nature, Scope, Difference between Microeconomics & Macroeconomics –Concept of Demand, Types of Demand, Determinants of Demand-Law of Demand -Elasticity of Demand, Types of Elasticity of Demand.

Theory of production; production function, Law of variable proportions & law of returns to scale, Cost; meaning, short run & long run cost, fixed cost, variable cost, total cost, average cost, marginal cost, opportunity cost. Break even analysis; meaning, explanation, simple problems.

UNIT-II: Introduction to Markets and Money

Markets:meaning, types of markets & their characteristics (Perfect Competition, Monopoly, Monopolistic Completion, Oligopoly). National Income, GNP, GDP, NNP, NDP, Personal income and GST (Goods & Service Tax).

Money: meaning, functions, types, Monetary policy- meaning, objectives, tools, fiscal policy- meaning, objectives, tools, Banking; meaning, types, functions, Central Bank- RBI; its functions, concepts; CRR, bank rate, repo rate, reverse repo rate, SLR.

UNIT-III: Introduction to Management

Concept –nature and importance of Management Functions of Management, Principles of Management.

Human Resource Management: Meaning and difference between Personnel Management and Human Resource Management, Functions of Human Resource Management.

Marketing Management: Functions of Marketing - Marketing strategies based on product Life Cycle, Channels of distributions.

UNIT-IV: Introduction to Accounting & Project Management

Introduction to Double Entry System, Journal, Ledger, Trail Balance and Preparation of Final Accounts with adjustments – Preparation of Financial Statements.

Project Management: (PERT/CPM): Development of Network – Difference between PERT and CPM Identifying Critical Path (Simple Problems).

value of money- Methods of appraising Project profitability: Traditional Methods (payback period, accounting rate of return) and modern methods (Discounted cash flow method, Net Present Value method, Internal Rate of Return Method and Profitability Index).

Text books:

1. Dr. A. R. Aryasri – Managerial Economics and Financial Analysis, TMH 2018, 2e.
2. Dr. N. Appa Rao, Dr. P. Vijay Kumar: ‘Managerial Economics and Financial Analysis’, Cengage Publications, New Delhi – 2012.
3. Management Science, Aryasri, Tata McGraw Hill, 2014.
4. Dr. P. Vijaya Kumar &Dr. N. Appa Rao, ‘Introduction to *Management Science*’ Cengage, Delhi, 2012.
5. Engineering Economy and Management 1 Edition Pravin Kumar – Wiley Publication.
6. Engineering Economics & Management- Dr. Vilas Kulkarni & HardikBavishi - Vikas Publishing.

Reference books:

1. R. L Varshney, K.L. Maheshwari: Managerial Economics, Sultan Chand&Sons 2014,22e.
2. Suma Damodaran: Managerial Economics, Oxford 2010,2e.
3. Ambrish Gupta: ‘Financial Accounting for Management’, Pearson 2015,5e.
4. Dr. S.N. Maheswari: Financial Accounting, Vikas Publications 2018.
5. S. A. Siddiqui & A. S. Siddiqui: Managerial Economics and Financial Analysis, New Age International Publishers, 2017.
6. Principles of Marketing: A South Asian Perspective, Kotler Philip, Gary Armstrong, Prafulla Y. Agnihotri, and Eshanul Haque, 17th Edition, Pearson Education/ Prentice Hall of India, 2018.

Web Resources:

1. www.managementstudyguide.com
2. www.tutorialspoint.com
3. www.lecturenotes.in

Course Outcomes:

1. The Learner is equipped with the knowledge of estimating the Demand and demand elasticity’s for a product and Input-Output-Cost relationships.
2. The Learner is also ready to understand the nature of different markets and also to have the knowledge of Money & Banking.
3. The Learner will acquire the knowledge on management, HRM and Marketing.
4. The Learner will acquire the knowledge to prepare Financial Statements and the techniques of project management.
5. The Learner can able to evaluate various investment project proposals with the help of capital budgeting techniques for decision making.

III- Year II - Semester	Name of the Course	L	T	P	C
Job Oriented Course	Design and Analysis of Algorithms	2	0	2	3

Course Objectives:

1. To familiarize students with various notations to represent algorithms.
2. To understand various asymptotic notations.
3. To familiarize with various design methodologies.
4. To learn solving problems by choosing appropriate design methodology.

UNIT – I: Introduction, Divide and Conquer

Introduction: Algorithm Definition, Algorithm Specification, Performance Analysis, Performance Measurement, Asymptotic notations.

Divide and Conquer: General Method, Binary Search, Finding the Maximum and Minimum, Quick Sort.

UNIT - II: The Greedy Method

The Greedy Method: The General Method, Knapsack Problem, Single Source Shortest Path Problem, Optimal Storage on Tapes Problem, Optimal Merge Patterns Problem.

UNIT – III: Dynamic Programming

Dynamic Programming: The General Method, 0/1 Knapsack Problem, Single Source Shortest Path – General Weights, All Pairs-Shortest Paths Problem, Traveling Salesperson Problem, String Editing Problem.

UNIT – IV: Backtracking

Backtracking: The General Method, The N-Queens Problem, Sum of Subsets Problem, Graph Coloring Problem, Hamiltonian Cycles Problem.

UNIT – V: Branch and Bound, NP-Hard and NP-Complete

Branch and Bound: The General Method, FIFO Branch-and-Bound, LC Branch-and-Bound, 0/1 Knapsack Problem, Travelling Salesperson Problem.

NP-Hard and NP-Complete problems: Basic concepts, Cook's Theorem.

Text Books:

1. Ellis Horowitz, Sartaj Sahni, Sanguthevar Rajasekaran, "Fundamentals of Computer Algorithms", 2nd Edition, Universities Press.

Reference Books:

1. Harsh Bhasin, "Algorithms Design & Analysis", Oxford University Press.
2. S. Sridhar, "Design and Analysis of Algorithms", Oxford University Press.

Web Resources:

1. <https://nptel.ac.in/courses/106106131>

Course Outcomes:

1. Analyze the asymptotic performance of algorithms.
2. Write rigorous correctness proofs for algorithms.
3. Demonstrate a familiarity with major algorithms and data structures.
4. Apply important algorithmic design paradigms and methods of analysis.
5. Synthesize efficient algorithms in common engineering design situations

III- Year II - Semester	Name of the Course	L	T	P	C
PC3201L	Deep Learning Lab	0	0	2	1.5

Course Objectives:

1. To learn data pre-processing activities before presenting data to model as an input.
2. To implement simple neural network using python.
3. To learn construction of deep neural network models.
4. To understand optimization process using python programs.
5. To implement complex networks using machine learning libraries in python.

Programs:

1. Installation and working on python, Jupyter, and its different libraries for deeplearning (Tensor Flow, NumPy, Keras, Pandas, Matplotlib, etc.)
2. To implement a Multilayer Perceptron (MLP) using Keras with TensorFlow, and fine-tune neural network hyperparameters for regression problem (houseprice prediction).
3. To implement a MLP using keras with TensorFlow for classification problem (heart disease predication).
4. To implement a Convolution Neural Network (CNN) for dog/cat classificationproblem using keras.
5. To Implement a CNN for object detection in the given image.
6. To implement a Recurrent Neural Network (RNN) for predicating time seriesdata.
7. To implement a Long Short-Term Memory (LSTM) for predicating time seriesdata.
8. To implement a Seq2Seq Model for Neural Machine Translation in Keras.
9. To implement an Encoder-Decoder Recurrent neural network model for NeuralMachine Translation.
10. To implement a Gated Recurrent Unit (GRU) for time series data predication.

Text books:

1. Deep Learning- Ian Goodfellow, Yoshua Benjio, Aaron Courville, The MIT Press
2. Pattern Classification- Richard O. Duda, Peter E. Hart, David G. Stork, John Wiley & Sons Inc.

Reference books:

1. Theodoridis, S. and Koutroumbas, K. Pattern Recognition. Edition 4. Academic Press, 2008.
2. Russell, S. and Norvig, N. Artificial Intelligence: A Modern Approach. Prentice Hall Series in Artificial Intelligence. 2003.
3. Bishop, C. M. Neural Networks for Pattern Recognition. Oxford University Press. 1995.
4. Hastie, T., Tibshirani, R. and Friedman, J. The Elements of Statistical Learning. Springer. 2001.
5. Koller, D. and Friedman, N. Probabilistic Graphical Models. MIT Press. 2009.

Web Resources & other digital material:

NPTEL Lecture material

1. Lecture Series on Deep Learning by Prof. P. K. Biswas, Department of Electrical & Electronic Communication Engineering, IIT Kharagpur.
https://onlinecourses.nptel.ac.in/noc22_cs22/preview#:~:text=Week%201%3A%20Introduction%20to%20Deep%20Learning%20-%20Machine%20Learning%20-%20Deep%20Learning%20-%20Week%201

Course Outcomes:

1. Students able to implement linear classifier using perceptron, Multi layer perceptron.
2. Able to implement Convolution neural networks.
3. Able to implement Recurrent neural network and other complex neural network structures.

III- Year II - Semester	Name of the Course	L	T	P	C
PC3202L	Cloud Computing Lab	0	0	3	1.5

Course Objectives:

1. To introduce students with various cloud components.
2. To familiarize student with cloud frameworks.
3. To understand simulation of cloud framework.
4. To familiarize with commercial cloud frameworks like Amazon AWS.

List of Program's:

1. Basics of Virtualization: VMM, Example of VMM (virtual box), Creation of a VM, Networking and communication between VMs.
2. Introduction to Cloud Sim: Installation and Execution, Cloud Data centre, Network Topology.
3. Simulation of a Cloud Framework: Creating a DC, Creation of Tasks, Creation of VMs, Defining task and VM characteristics, execution of tasks on VMs.
4. Scalable and dynamic Cloud systems: Creation of scalable cloud entities, creation of dynamic entities.
5. Resource Allocation in Cloud Data centre: Experimenting and understanding various resource allocation policies, Changing the resource allocation policy, effects of resource allocation policies.
6. Power Management in Cloud Data centres: Creation of a power data centre, understanding various power saving techniques.
7. Understanding Commercial Cloud Frameworks: Amazon AWS, Elastic Cloud, Amazon Load Balancer, creating VMs, Allocation of Resources.

Course Outcomes:

1. Able to install and configure cloud environment.
2. Handle Resource allocation at cloud data center.
3. Able to create power data centers.
4. Configure and perform cloud operations on AWS.

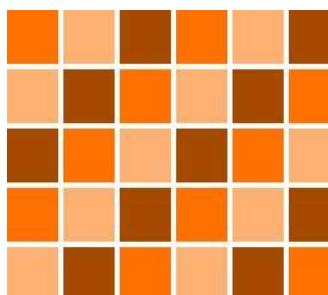
III- Year II - Semester	Name of the Course	L	T	P	C
PC3203L	Full Stack Development Lab	0	0	3	1.5

Course Objectives:

1. To learn Client-side application development using HTML and CSS
2. To understand Java script ES6 features
3. To focus on contemporary front-end technologies like React
4. To understand data access through NodeJS

List of experiments:

1. Try to recreate the following patterns using HTML and CSS only.



2. Implement Drag n Drop feature in HTML 5
3. Demonstrate Event bubbling with necessary examples.
4. Design a Calculator using Java script and relevant CSS.

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5. Demonstrate Higher order functions with necessary examples – filter(), reduce() and map()
6. Create a Class Component for Counter in React JS
7. Create a Class component for Changing the color of the text given in React JS
8. Class a Class Component for viewing an array of objects in a tabular form.
9. Display a digital clock in React JS.
10. Demonstrate useState Hook with the help sample text.
11. Demonstrate useContext Hook with necessary example.
12. Demonstrate useEffect Hook with necessary example.
13. Demonstrate consuming web API using fetch & axios (AXIOS API). Demonstrate with the help of fake URL.
14. Design a BMI calculator using React JS based on the description given below:

BMI is a measurement of a person's leanness or corpulence based on their height and weight, and is intended to quantify tissue mass. It is widely used as a general indicator of whether a person has a healthy body weight for their height.

weight (kg) / [height (m)]² (or) [weight (kg) / height (cm) / height (cm)] x 10,000
 BMI table for adults: This is the World Health Organization's (WHO) recommended body weight based on BMI values for adults. It is used for both men and women, age 18 or older.

Category	BMI range - kg/m ²
Severe Thinness	< 16
Moderate Thinness	16 - 17
Mild Thinness	17 - 18.5
Normal	18.5 - 25
Overweight	25 - 30
Obese Class I	30 - 35
Obese Class II	35 - 40
Obese Class III	> 40

15. Display a selected set of images in tabular format using React JS.
16. Implement Upload & down load options on a given file.
17. Create a React application to view EMI calculator. A specific view is given below:

The screenshot shows a user interface for an EMI Loan Calculator. At the top, it says "EMI Loan Calculator". Below that are input fields for "Loan Amount: \$ 16,500.00", "Loan Tenure: 36 months", "Interest Rate: % 5.1250", and "Type: in Arrears". There are "Clear" and "Calculate" buttons. Under the "Answer:" heading, it displays "Monthly Payment: \$495.45".

$$E = P \times r \times \frac{(1 + r)^n}{(1 + r)^n - 1}$$

Where,

E is the EMI

P is the principal amount

r is the monthly rate of interest

n is the number of months

18. Design the following Hotel bill screen. User can select as many items as possible from the dropdown box and is allowed to enter in the text field provided. Each transaction must be added in the table given below along with the bill amount.

GREEN STAR HOTEL

Customer Bill

Date:

Items: No of Items:

1.	Biryani	2	Rs. 140 Each	Rs.280
2.	Fried Rice	1	Rs. 110 Each	Rs.110
3.	Chicken Curry	2	Rs. 230 Each	Rs.460

Total Rs. 650

19. Demonstrate the procedure to create a schema in MongoDB.
Demonstrate CRUD operations using MongoDB.

Course Outcomes: by the end of the course the student will be able to

1. Summarize Client-side design of the web.
 2. Explore different ES6 features in Java script.
 3. Implement components and props through React.
 4. Comprehend React Hooks
 5. Use NodeJs for data availability
- .

III- Year II - Semester	Name of the Course	L	T	P	C
SAC3201	Skill Advanced Course- 2: Soft Skills	1	0	2	2

Course Objective:

To familiarize students with industry level soft skills.

Module1 Effectivecommunicationskills

- ✓ Startwithselfandconnectwithothers.
- ✓ Theartofnarratingandstorytelling.
- ✓ Enhanceteamworkandinfluencechange.

Module2 Advancedverbalabilityconcepts—practiceandProfessionalwritingskills

- ✓ Nurtureand enhancetheverbalabilitystrengththroughpractice.
- ✓ Conductingmockverbal(ability)testsand theirtimelyreview.
- ✓ Listthestepsofwritinganemaileffectively&comprehendtheimportanceofstructuringanemail.
- ✓ Overview of various elements related to accuracy, brevity and correctness in our everyday writing attheworkplace(Projectproposals / coveringletters /blogs / short essays).

Module3 Industriesneakandrésumé/CV buildingstrategies

- ✓ Industry&aspirantcareerexpectationsandtailoringactionlearningplanaptly.
- ✓ Craftingwinningrésumé(s)suitingtodifferentprofiles.
- ✓ Framingresponsestorésumé-basedinterviewquestions.

Module4 Behavioralcompetencybuilding— PartIIandpsychometricstest(HRRoundPreparation)

- ✓ Listingpersonalcharacteristicsandpreparingblueprinttoinculcatethem.
- ✓ Assessthestudents'abilitytofitintoaspecificworkenvironmentwithspecificpersonalitytypes.
- ✓ Determinebasiccharacteristicsofanindividual.

Module5 Presentationskills&Mockinterviews

- ✓ Illustration of presentation structure via impromptu / free speech – and essential criteria for aneffectivepresentation
- ✓ Importanceofnon-verbalcommunication(signposting)
- ✓ Incitingtheinterviewprocessbypracticingagamutofbehavioralmockinterviews.

Module1–Tasks

- ✓ Listening&comprehensionskills—lessonsfromthecorporatetrainingvideos/scenesinfilms.
- ✓ Roleplay—storytelling&anchoring
- ✓ Extempore—students'experiencewithcollege/program.
- ✓ Listening&comprehensionskills—lessonsfromthecorporatetrainingvideos/scenesinfilms

Module2-Tasks

- ✓ Storyparaphrasing,peerintroductionandmonologue.
- ✓ Assignmentonshortessayandblogbuilding/digitalprofilecreation.

Module3-Tasks

- ✓ Overview&analysisofaJobDescription (JD)anditsreflectioninresume/self-introduction
- ✓ Craftingofresumesbymappingskills&competencestodifferentprofiles offeredforengineeringgraduates.
- ✓ Anacton–onedayinthelifeofanHRmanager/Projectleaderetc.

Module4-Tasks

- ✓ Casescenarios–toidentifybehaviouralcompetenciesandpersonalitytraits
- ✓ increaseself-awarenessandimproveinteractionswithothers

Module5-Tasks

- ✓ Pair&Groupwork–debating/demonstrationofproductpromotion,etc.
- ✓ Peermockinterviewpracticeonselectedprofiles.

Reference Books

1. TheAceofSoftSkills:Attitude,CommunicationandEtiquetteforSuccess,Pearson Education; 1edition,2013.
2. BarunK.Mitra,“PersonalityDevelopment&SoftSkills”,OxfordPublishers,Thirdimpression,2017.
3. ICTAcademyofKerala,"LifeSkillsforEngineers",McGrawHillEducation(India)PrivateLtd.,2016.
4. Caruso,D.R.andSaloveyP,“TheEmotionallyIntelligentManager:HowtoDevelopandUse theFourKeyEmotionalSkillsofLeadership”,JohnWiley&Sons,2004.
5. Kalyana,“SoftSkillforManagers”;FirstEdition;WileyPublishingLtd,2015.
6. LarryJames,“TheFirstBookofLifeSkills”;FirstEdition,EmbassyBooks,2016.
7. ShaliniVerma,“DevelopmentofLifeSkillsandProfessionalPractice”;FirstEdition;Sultan Chand(G/L)&Company,2014.
8. DanielGoleman,"EmotionalIntelligence";Bantam,2006.
9. RemeshS.,VishnuR.G.,“LifeSkillsforEngineers”,RidhimaPublications,FirstEdition,2016.
10. ButterfieldJeff,“SoftSkillsforEveryone”,CengageLearningIndiaPvt.Ltd;1edition,2011.
11. TraininginInterpersonalSkills:TipsforManagingPeopleatWork,PearsonEducation,India;6thEdition,2015.

Web Resources

1. InfosysSpringboard(<https://infyspringboard.uk.onwingspan.com/web/en/login>)
2. AICTEDigitalLearningPortal(<https://free.aicte-india.org/>)
3. APSCHELMS–BringingLearningtoPeople(<https://apschelms.e-pragati.in/#/>)
4. DaleCarnegieAcademy(<https://www.dalecarnegie.com/en>)

5. TedXProgram(<https://www.ted.com/about/programs-initiatives/tedx-program>)
6. ToastMastersInternational(<https://www.toastmasters.org/>)
7. NPTEL(<https://nptel.ac.in/>)
8. Coursera/Udemy/Unacademy/Wikipedia(https://en.wikipedia.org/wiki/Main_Page)

Course Outcomes: After completion of the course the students will be able to

- CO1:** Master advanced nuances of both written and oral communication skills that are imperative for any professional to succeed coupled with being emphatic.
- CO2:** Confidently ace different competitive exams and develop writing skills.
- CO3:** Gain awareness of the industry expectations and craft CV / Résumé in lieu with desired job profiles.
- CO4:** Crack behavioral (HR) interview confidently and exhibit professional persona.
- CO5:** Make presentations effective and develop interview strategies while get rid of interview phobia.

III- Year II - Semester	Name of the Course	L	T	P	C
MC3201	Entrepreneurial Skill Development	2	0	0	0

Course Objectives:

To familiarize and motivate the students with entrepreneurship skills needed.

Syllabus:

UNIT I: Entrepreneurial Perspectives

Introduction to Entrepreneurship, Evolution, Concept of Entrepreneurship, Types of Entrepreneurs, Entrepreneurial Competencies-Capacity Building for Entrepreneurs. Entrepreneurial Training Methods - Entrepreneurial Motivations - Models for Entrepreneurial Development - The process of Entrepreneurial Development.

UNIT – II: New Venture Creation

Introduction, Mobility of Entrepreneurs, Models for Opportunity Evaluation; Types of loans for entrepreneurship and startups. Business plans – Purpose, Contents, Presenting Business Plan, Procedure for setting up Enterprises, Central level - Startup and State level - T Hub, Other Institutions initiatives.

UNIT – III: Small Scale Ventures, MSME in India and their challenges

Concept of micro, small and medium enterprises and startups. Scope and trends of small entrepreneurship and startup in India. Role of government in promoting small scale industries. Management of MSMEs and Sick Enterprises Challenges of MSMEs, Preventing Sickness in Enterprises – Specific Management Problems; Industrial Sickness; Industrial Sickness in India – Symptoms, process and Rehabilitation of Sick Units.

UNIT – IV: Market growth for generating entrepreneurship opportunities

Entrepreneur's legal and regulatory systems, Intellectual property rights, patents, Copy rights and trademark and their protection. Managing Marketing and Growth of Enterprises Essential Marketing Mix of Services, Key Success Factors in Service Marketing, Cost and Pricing, Branding, New Techniques in Marketing, International Trade.

UNIT – V: Institutional Support to Entrepreneurship and Woman Entrepreneurship

Strategic perspectives in Entrepreneurship, Technology and Entrepreneurship, Training institutions “District Industry Centre (DIC), Entrepreneurship Development Institute of India (EDII)” Innovation council – Ministry of Human Resource Development (MHRD), Small Industries Development Bank of India (SIDBI), Industrial Development Bank of India (IDBI). Women Entrepreneurs – Strategies to develop Women Entrepreneurs, Institutions supporting Women Entrepreneurship in India, Association of Lady Entrepreneurs of India (ALEAP)

TEXT BOOKS:

1. Entrepreneurship Development and Small Business Enterprises, Poornima M. Charantimath, 2e, Pearson, 2014.
2. P.Narayana Reddy, Entrepreneurship, Cengage Learning, New Delhi,2010.
3. Steven Fisher, Ja-nae Duane, The startup equation – A visual guide book for building your

REFERENCE BOOKS:

1. Entrepreneurship, Arya Kumar, 4 e, Pearson 2015.
2. Entrepreneurship, a South – Asian Perspective, D.F. Kuratko and T. V. Rao, 3e, Cengage, 2012.
3. The Dynamics of Entrepreneurial Development and Management, Vasant Desai, Himalaya Publishing House, 2015.
4. Anajan Rai Chaudhuri, Managing new ventures, concepts and cases, Prentice Hall International, 2010
5. Rajeev Roy: Entrepreneurship, Oxford university press, New Delhi, 2010.

Web Resources:

1. <https://nptel.ac.in/courses/110106141>

Course Outcomes: After completion of the course, students will be able to

CO1: The basics of entrepreneurship skills for better understanding of entrepreneurial scenario are understood.

CO2: The various components from I to E and promoting adaptability nature were made familiar.

CO3: Awareness on small scale ventures and registrations and patents related for entrepreneurship and startups was explained.

CO4: Significance of institutional support at various levels for determining the marketing strategies was explained.

CO5: Strategic perspectives in entrepreneurship are made familiar.
