

## JSPM's

# JAYAWANT INSTITUTE OF MANAGEMENT STUDIES (NAAC Accredited – A Grade)

(Approved by AICTE, New Delhi, Recognised by Govt. of Maharashtra & Affiliated to

Savitribai Phule Pune University)

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Prof. Dr. T. J. Sawant B.E. (Elec.) PGDM, Ph. D Founder- Secretary

**AISHE ID: C-60096** 



Dr. H. D. Patil B.E., MBA, Ph. D. Director

## **Add-on Courses Syllabus**

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Sr. No	Name of Certificate course	Academic year	Digital Page Number
20	Business Communication	2018-19	40
21	Internet of Things (IoT)	2018-19	44
22	Comprehensive Web Development	2018-19	47
23	Web and Mobile testing with selenium	2018-19	50
24	Software testing and Automation	2018-19	52
25	Digital Marketing	2018-19	54
26	Advance Excel	2018-19	57



Dr. H. D. Patil Director

# JSPM's Jayawant Institute of Management Studies

## **Add-on Course: Python Programming**

## **Course Outcomes for Python Programming**

By the end of this course, students will be able to:

- 1. Understand and Implement Complex Data Structures and Algorithms.
- 2. Object-Oriented Programming Concepts.
- 3. Develop Concurrent and Parallel Programs.
- 4. Utilize Advanced Python Libraries and Frameworks.
- 5. Apply Advanced Testing and Debugging Techniques.
- 6. Automate and Manage DevOps Tasks with Python.
- 7. Explore Special Topics in Python.
- 8. Develop and Present a Capstone Project.

## syllabus for an Python Programming course:

Module	Hours
Advanced Data Structures and Algorithms	6
Advanced Object-Oriented Programming	6
Concurrency and Parallelism	6
Advanced Libraries and Frameworks	8
Testing and Debugging	4
Python in DevOps	2
Special Topics (Optional)	4
Assessment and Project	2
Total	32

## **Module 1: Advanced Data Structures and Algorithms (6 hours)**

- 1. Complex Data Structures (3 hours)
  - o Linked Lists, Stacks, Queues, and Deques
  - o Trees (Binary Trees, AVL Trees, B-Trees)
  - o Graphs (Representation, Traversal Algorithms: BFS, DFS)
- 2. **Algorithm Design and Analysis** (3 hours)
  - o Sorting Algorithms (Quick Sort, Merge Sort, Heap Sort)
  - o Searching Algorithms (Binary Search, Hashing)
  - Complexity Analysis and Big O Notation

## **Module 2: Advanced Object-Oriented Programming (6 hours)**

- 1. **Design Patterns** (3 hours)
  - o Creational Patterns (Singleton, Factory)
  - o Structural Patterns (Adapter, Composite)
  - o Behavioral Patterns (Observer, Strategy)
- 2. **Metaprogramming** (3 hours)
  - o Decorators and Metaclasses
  - o Dynamic Class Creation and Attributes
  - o Reflection and Introspection

## **Module 3: Concurrency and Parallelism (6 hours)**

- 1. **Multithreading and Multiprocessing** (3 hours)
  - o Threading Module
  - o Global Interpreter Lock (GIL) and its Impact
  - o Multiprocessing Module
- 2. **Asynchronous Programming** (3 hours)
  - Asyncio Module
  - o Coroutines, Tasks, and Event Loops
  - Async/Await Syntax

## **Module 4: Advanced Libraries and Frameworks (8 hours)**

- 1. **Data Science Libraries** (4 hours)
  - o NumPy and Pandas for Data Manipulation
  - o Matplotlib and Seaborn for Data Visualization
  - o Scikit-learn for Machine Learning
- 2. **Web Development Frameworks** (4 hours)
  - o Django Advanced Concepts (ORM, Middleware, Caching)
  - o Flask Advanced Usage (Blueprints, Extensions)
  - o RESTful API Design with Django Rest Framework

## **Module 5: Testing and Debugging (4 hours)**

- 1. Advanced Testing Techniques (2 hours)
  - o Unit Testing with Unittest and PyTest
  - o Mocking and Patching
  - o Test-Driven Development (TDD)
- 2. **Debugging and Profiling** (2 hours)
  - o Debugging with PDB
  - o Profiling Code for Performance Bottlenecks
  - o Memory Management and Optimization

## **Module 6: Python in DevOps (2 hours)**

- 1. **Automation and Scripting** (2 hours)
  - o Writing Scripts for System Administration
  - o Automation with Fabric and Ansible
  - o Continuous Integration/Continuous Deployment (CI/CD) with Jenkins

## **Module 7: Special Topics (Optional) (4 hours)**

- 1. **Web Scraping** (2 hours)
  - o Web Scraping with BeautifulSoup and Scrapy
  - o Handling AJAX and Dynamic Content
- 2. **Data Encryption and Cryptography** (2 hours)
  - Hashing and Encryption Algorithms
  - o Secure Socket Layer (SSL) and Public Key Infrastructure (PKI)

## **Assessment and Project (2 hours)**

- 1. **Capstone Project** (2 hours)
  - Application of concepts learned in a comprehensive project
  - Presentation and Code Review

## **Evaluation**

Project: 80%MCQs: 20%

Dr. Priyanka Singh Director

## JSPM's

## Jayawant Institute of Management Studies, Tathawade

Academic year 2022-2023

Session:- II

## Add-on Course: Consumer Psychology (CS01)

## **Course Outcomes**

- Students will understand the foundational concepts of consumer behavior, including the differences between buyers, shoppers, and consumers.
- Students will be able to identify and apply the benefits of segmentation in marketing strategies.
- Students will comprehend the stages of the consumer decision-making process and the EKB model.
- Students will learn methods for studying consumer behavior and applying these methods to real-world scenarios.
- Students will understand the need recognition and information search phases in consumer decision making.
- Students will be able to differentiate between internal and external information search and understand the influence of products and purchase decisions.
- Students will be able to evaluate alternative products using different criteria and understand the roles in consumer decision-making.
- Students will comprehend the individual factors influencing consumer behavior, such as psychophysics, consumer attributes, and perceptions.
- Students will learn about memory, learning, mood, motivation, emotion, involvement, consumer attitudes, and the effects of communication on consumer behavior.

## **Course Contents**

- **Module 1:** Introduction to Consumer Psychology Overview of foundation of consumer behaviour: Buyer, Shopper, Consumer Benefits, Segmentation,
- Module 2: Consumer Decision Making Process, EKB Model, Studying Consumer behaviour.
- **Module 3:** Consumer Decision Making Need and Information Search, Two Types of Capitals, External Information Search, Product Influence, , Purchase decision influence,
- **Module 4:** Alternate Evaluation , Evaluation Criteria, Consumer Set, Consumer Decision roles, Outlet Selection, Consumer Decision rules, Choice Consumption , Consumption Situations, and Post-Purchase Behaviour Module
- **Module 5:** The Individual Consumer, Psychophysics, Consumer Attributes, Person perception, Consumer Inferences, Consumer perceptions Memory and Learning Mood, Consumer Motivation, Emotion and Involvement Consumer Attitude, Communication Effects

Trainer: Dr. Sushil Kumar Sarangi

## **Assessment Techniques**

	Assessment	Marks	
1.	Quizzes on foundational concepts.	10	
2.	Short essays on segmentation benefits and strategies.	10	
3.	Case studies analyzing different consumer decision-making processes.	20	
4.	Surveys and analysis reports on consumer motivation, emotion, and involvement in decision-making.	50	
5.	Role-playing exercises to understand communication effects on consumer attitudes.	10	
	Total	100	



Dr. Bipin Bankar Director

## Value added course on Gender Sensitivity

#### **Objectives of the course:**

The course is designed to sensitize the students regarding the issues of gender and the gender inequalities prevalent in society. It aims at raising and developing social consciousness among the students. Students are expected to initiate the gender perspective in all the issues of their daily life. The course will develop capacity building among the students to enable them to engage in policy decisions to remove gender biases in all fields of life in the process of gender equality for nation building.

#### **Course Contents:**

#### 1. Gender Inequality and its Impact on Men and Women

- a. Understanding the Notion of Citizenship
- b. Violation of Women's Rights as Citizens and Individuals
- c. Nature of Gender Inequalities
- d. Access to and Control over Resources and Positions of Power

#### 2. Understanding patriarchy

- a. Biological Sex and Socially Constructed Gender
- b. Femininity and Masculinity,
- c. Gender Stereotypes and their Impact; Breaking the Stereotypes
- d. Gender Equality as Liberation of Men as well as Women

#### 3. Contributing to Prevention of Sexual Harassment

- a. What is and is not Sexual Harassment
- b. Legal Provisions about prevention of Sexual Harassment
- c. Preconditions for Effective Working of Sexual Harassment Complaints Committees
- d. Role of men in prevention of sexual harassment at workplace
- e. Gender sensitive language, work culture and workplace

#### **Methods of Instruction**

- Lecture
- Class discussion
- Role plays

- Guest speakers
- Written assignments
- Videos



## A Certificate Course in Soft Skills Development

#### **Objectives:**

- Aims to increase learner's unique soft skills so as to develop attributes that enhance an individual's interactions, earning power and job performance.
- The objective of the program is to inculcate potential skills in the learners to prepare them to deal with the external world in a collaborative manner, communicate effectively, take initiative, solve problems, and demonstrate a positive work ethic so as to hold a good impression and positive impact.

#### **Course Outcomes:-**

By the end of the soft skills training program, the students should be able to:

- Become self-confident individuals by mastering inter-personal skills, team management skills, and leadership skills.
- Develop all-round personalities with a mature outlook to function effectively in different circumstances.
- Develop broad career plans, evaluate the employment market, identify the organizations to get good placement, match the job requirements and skill sets.
- Take part effectively in various selection procedures adopted by the recruiters.

#### **SYLLABUS**

#### Unit 1- Life Skills

Integrity Respect for awLove for work Productivity Punctuality Responsibility Save and Invest

## **Unit 2** Communication Skills

Importance of Communication, Communication Process 6C's of effective, CommunicationEffective Listening Skills

#### **Unit 3** Interview Skills

Introduction to Interview SkillsImportance of Interview Skills How to prepare for interview what is resume?

#### **Unit 4** Self grooming and self presentation skills

Why is Self grooming Important? Self grooming For Men Self grooming For Women What is self presentation Importance of self presentation

#### **Unit 5 Basic Computer Skills.**

Introduction to computers Understanding Word Processing Communications and collaborationBasics of electronic mail Getting an email account Sending and receiving emails Accessing sent emails Using EmailsDocument

#### Unit 6 Stress management

Action oriented skills Emotion oriented skills Acceptance oriented skills Stress Management Techniques Action-oriented skills Action-oriented skills Job Oriented Analysis

#### **Unit 7** Group discussion

**Public Speaking** 



## Add on course in Disaster Management (ADM)

For Academic Session 2021-22

## **Course Objective:**

- 1. The course has been prepared with a goal to provide a general concept on natural disasters caused by nature beyond human control as well as the disaster management emphasizing Preparedness, Response, Rehabilitation and Recovery, and Application of GIS in it.
- 2. Looking at the intensity and frequency of natural disasters especially in Indian context, the addon course on disaster management is innovative, skill and employment oriented to attract students from different branches of science and humanities.

#### **Unit-1: Introduction to Disaster Management**

Hazard, Risk, Vulnerability, Disaster, types of disasters, Meaning, Nature, Importance, Dimensions and Scope of Disaster Management; Hydrological Disasters - Flood, Flash flood, Drought, cloud burst; Geological Disasters- Earthquakes, Tsunamis, Landslides, Avalanches, Volcanic eruptions, Mudflow; Wind related- Cyclone, Storm, Storm surge, Tidal waves, Heat and cold Waves Climatic Change, Global warming, Sea Level rise

#### **Unit-2: Principles and Practices in Disaster management**

Principles and Practices in Disaster management, concepts of Disaster management, Pre-and post-disaster management, Real time management, rehabilitation and long term disaster management Prediction system, warning system, preparedness, evacuation, Rescue and relief operation, rehabilitation and reconstruction, community disaster management, resilience

#### Unit-3: Geographical Information System and IT in Disaster Management

Definition of GIS, Concept of Space and Time, Spatial data, Map Projection and Datum, GIS Functionalities for end user / system (Data Acquisition, Data Input, Data Management, Data Analysis, Data Modelling and Data Output); Remote Sensing Application in Disaster Management, Communication System, Wireless Communication, Bluetooth Wireless Technology, HAM Radio, GPS Application in Emergency Communication.



## A Certificate Course in Computerized Account Writing (Tally-ERP 9.0)

## **Objectives:**

- To acquire knowledge of basic concepts in Accounting
- To understand the Computerized Account Writing System
- To understand various Tax Calculations like VAT, Excise, TDS, etc.
- To study and understand the finalization of accounts using the accounting software.
- To acquaint with report generation from accounting software.

## Scope:

- It is an additional skill for a successful entrepreneur/businessman.
- Participant can start his own Account Writing Business.
- Participant can join as an Accountant in any Industry (Manufacturing/Service)

## **Syllabus**

Sr.	Unit	Total
No.		Periods
1.	Accounting Fundamental	1
2.	Introduction to Tally and Company Creation, Company Information & Account Information	1
3.	Vouchers	3
4.	Cost Centers and Cost Categories and BRS	3
5.	Stock	3
6.	Bill of Materials	2
7.	VAT & VAT Report	3
8.	Excise & Excise Report	2
9.	TDS & TDS Reports	2
10.	TCS & TCS' Reports	1
11.	Service Tax & Service Tax Reports	1
12.	Payroll System	2
13.	Tally Audit	3
14.	Backup, Import and Export	2
15.	Display, Reporting and Printing	1
	Total	30

#### **Course Outcome:**

- 1. Participant learns the basic concepts in Accounting.
- 2. Participant knows the method of keeping the records in various accounting packages especially Tally ERP 9.0.

- 3. Participant understands the calculations to be made while preparing various
- 4. invoices.
- 5. Participant learns to finalize the accounts with the help of Tally ERP 9.0
- 6. Participant learns to generate the reports from accounting package i.e. Tally ERP 9.0.

## **Reference Books:**

- Book keeping and Accountancy of 11th Standard
- Basics of Accountancy by Khan & Jain
- Computer Notes for Everyday Use: Tally. ERP by Parag Joshi and Santosh
- Pendse, Dnyansankul Prakashan
- Certificate Course in Financial Accoounting(Using Tally.ERP 9) by Ajay
- Maheshwari and Sachin Maheshwari, MITCON E-SCHOOL
- Tally ERP Accounting by ICA



## A Certificate Course in Event Management

#### **Objectives:**

- To provide students with the knowledge and skills required to plan, organize and
  execute successful events, such as a business conferences, weddings, music concerts,
  sports events and community festivals.
- The course aims to equip students with the ability to identify and understand the various elements involved in event planning and management, including budgeting, marketing, risk management, logistics, and resource management.
- The course aims to enhance student's critical thinking, problem solving, communication, and teamwork skills, as well as their ability to adapt to different situation and handle unexcepted challenges that may arise during an event.
- By the end of the course, students should be able to develop and present a comprehensive event plan that meets the needs and expectations of stakeholders and successfully delivers a memorable and meaningful experience for attendees.
- The course may also cover industry-specific areas, such as event production, audiovisual technology, and event safety and security.

#### **Course Outcomes:-**

After successfully completing this course, students will be able -

- CO 1. To understand the principals and concepts of event management, including event design, event planning, and event execution
- CO 2. To develop knowledge and skills related to marketing and communication strategies for promoting events.
- CO 3. To acquire project management skills, including planning and execution scheduling, risk management, and budgeting.
- CO 4. To develop skills in managing and motivating teams, including leadership, communication, and problem-solving

Topic	Hours
Topic 1	3
Introduction to event management	
Types of events	
Event planning process	
Budgeting for events	



Topic 2	3
Venue selection and contracts	
Event logistics and operations	
Event marketing and promotion	
Topic 3	4
Project management for events	
Risk management for events	
Sustainable event management	
Event technology and social media	
Topic 4	4
Event evaluation and feedback	•
Ethics and professional standards inevent	
management	
Event legal issues and contracts	
Event design and theming	
Event design and theming     Event sponsorship and partnerships	
Dvent sponsorship and partnerships	
Topic 5	3
Audio-visual equipment & production management	
Food and beverage management for events	
Event staffing and volunteer management	
Topic 6	4
Weddings and special occasions	
Corporate events and conferences	
Festival and outdoor events.	
Topic 7	3
Event safety and emergency planning	
Crisis and contingency planning for events	
Cultural sensitivity in event planning	
International events	
mornadona evento	
Topic 8	3
<ul> <li>Event marketing and promotion</li> </ul>	
Social media for event planning	
Post-event evaluation and analysis	
Topic 9	3
Using technology in event planning	
Sustainable event planning and green initiatives	
Event budgeting and finance	
Dvent oudgeting and initiative	
Total	30 Hrs.



## JSPM's Jayawant Institute of Management Studies Tathawade, Pune

Academic year: 2019-20 session: I

## **Add-on Course Syllabus**

**Course Name:** R programming Advanced

**Total Duration:** 32 Hrs

Offering from: 15 July 2019 to 30 August 2019

**Course Coordinator:** Prof. Sarika Patil

## **Course Contents:**

#### 1. Advanced Data Structures and Manipulation (6 Hrs)

- Working with advanced data structures: lists, data frames, matrices, arrays.
- Manipulating data with dplyr: filtering, arranging, mutating, summarizing.
- Using tidyr for data tidying: gathering and spreading data.

## 2. Functional Programming (6 Hrs)

- Understanding functional programming concepts in R.
- Applying functional programming techniques: map, reduce, filter.
- Writing custom functions and applying them to data.

#### 3. Object-Oriented Programming (OOP) in R (4 Hrs)

- Introduction to S3 and S4 object systems.
- Creating and using classes and methods.
- Implementing inheritance and polymorphism in R.

## 4. Advanced Statistical Analysis (8 Hrs)

- Advanced statistical modeling with R: linear and generalized linear models.
- Time series analysis using R.
- Survival analysis and longitudinal data analysis.

## 5. Advanced Data Visualization (8 Hrs)

- Using ggplot2 for advanced plotting: facets, themes, custom geoms.
- Interactive visualizations with Shiny and plotly.
- Creating dashboards with Shiny and flexdashboard.

## 6. Machine Learning with R

• Introduction to machine learning in R: caret and mlr packages.

- Supervised learning techniques: regression, classification.
- Unsupervised learning techniques: clustering, dimensionality reduction.

## 7. R Packages Development

- Developing R packages: structure, documentation, testing.
- Publishing packages on CRAN and GitHub.
- Collaborating on R package development using Git and GitHub.

#### 8. Integration with Other Technologies

- Integrating R with databases: SQL databases, NoSQL databases.
- Web scraping with R: using rvest and RSelenium.
- Working with APIs in R: accessing and analyzing data from web APIs.

## 9. Reproducible Research and Reporting

- Creating reproducible reports with R Markdown.
- Using knitr for dynamic report generation.
- Automating report generation and distribution.

## 10. Case Studies and Projects

- Implementing end-to-end data analysis projects in R.
- Working on real-world datasets and solving practical problems.
- Presenting findings and insights effectively.

## 11. Ethical Considerations in Data Analysis

- Understanding ethical issues in data analysis and research.
- Implementing best practices for data privacy and security in R.

#### 12. Career Development

- Resume building and portfolio development.
- Interview preparation and mock interviews.
- Networking and job search strategies in the field of data analysis and R programming.

This syllabus provides a structured approach to advancing your skills in R programming, covering both technical aspects and practical applications. Courses or resources aligned with these topics can significantly enhance your proficiency and prepare you for more complex data analysis tasks using R.

## **Course Objectives:**

- 1. Master Advanced Data Structures and Manipulation.
- 2. Apply Functional and Object-Oriented Programming Concepts.
- 3. Perform Advanced Statistical Analysis.
- 4. Create Advanced Data Visualizations.
- 5. Utilize Machine Learning Techniques.
- 6. Develop and Publish R Packages.
- 7. Integrate R with External Technologies.
- 8. Produce Reproducible Research and Reports.
- 9. Address Ethical Considerations in Data Analysis.
- 10. Complete Hands-on Projects and Case Studies.
- 11. Enhance Career Readiness.
- 12. Foster Lifelong Learning and Skill Development.

These objectives aim to provide a comprehensive and structured learning path for advancing your skills in R programming, preparing you to tackle complex data analysis tasks and pursue career opportunities in data science, analytics, and related fields.

Course outcomes for an advanced R programming course would typically focus on what students are expected to achieve by the end of the course. Here are some key course outcomes:

## **Course Outcomes for Advanced R Programming**

## 1. Proficiency in Advanced Data Structures and Manipulation:

- Ability to effectively manipulate complex data structures (e.g., lists, data frames, matrices) using R.
- Skill in using dplyr and tidyr for data filtering, arrangement, mutation, and summarization.

## 2. Competence in Functional and Object-Oriented Programming:

- Application of functional programming concepts (e.g., map, reduce, filter) to solve data manipulation challenges.
- o Implementation of object-oriented programming (OOP) principles in R, including the creation of classes, methods, and inheritance.

## 3. Capability in Advanced Statistical Analysis:

- Proficiency in conducting advanced statistical modeling using linear and generalized linear models.
- Ability to perform time series analysis, survival analysis, and longitudinal data analysis using R.

## 4. Skill in Creating Advanced Data Visualizations:

- Competence in generating sophisticated plots and visualizations using ggplot2, including custom geoms and themes.
- Ability to develop interactive visualizations using Shiny and plotly, and create dashboards with flexdashboard.

## 5. Expertise in Machine Learning Techniques:

- Application of machine learning algorithms in R using packages like caret and mlr for both supervised and unsupervised learning tasks.
- Ability to evaluate and optimize machine learning models for performance and accuracy.

## 6. Proficiency in Developing and Publishing R Packages:

- Design and development of R packages adhering to best practices for structure, documentation, and testing.
- Publication of R packages on CRAN and GitHub, and collaboration on package development using version control systems.

## 7. Integration of R with External Technologies:

- o Integration of R with databases (SQL, NoSQL) for data storage and retrieval.
- Proficiency in web scraping using rvest and RSelenium, and accessing data from web APIs for advanced data analysis.

## 8. Ability to Produce Reproducible Research and Reports:

- Creation of reproducible reports and dynamic documents using R Markdown and knitr, facilitating automated report generation.
- o Implementation of workflows that ensure transparency, reproducibility, and efficiency in data analysis and reporting.

## 9. Awareness of Ethical Considerations in Data Analysis:

- Recognition and consideration of ethical issues related to data privacy, security, and bias in data-driven decision-making.
- o Implementation of ethical practices to mitigate risks and ensure fairness and transparency in data analysis processes.

## 10. Completion of Hands-on Projects and Case Studies:

- Application of learned concepts and techniques to real-world datasets and case studies.
- Development and presentation of end-to-end data analysis projects, demonstrating practical skills and problem-solving abilities in R programming.

## 11. Enhanced Career Readiness:

- Development of a professional portfolio showcasing projects and reports developed during the course.
- o Preparation for job interviews in data analysis and R programming roles, demonstrating technical proficiency and effective communication of data insights.

## 12. Commitment to Lifelong Learning and Skill Development:

- Adoption of a mindset of continuous learning and exploration of new R packages, techniques, and trends in data science and programming.
- Engagement in networking opportunities and participation in professional communities to stay updated with advancements in the field.

## **Evaluation Methods:**

- Assignments and homework (30%)
- Quizzes (70%)





# JSPM's Jayawant Institute of Management Studies

Session: I

## Academic year 2020-21

## **Add-on Course Syllabus**

## **AWS Basics Course Outline (35 hours)**

## 1. Introduction to AWS (2 hours)

- Overview of Cloud Computing
- Introduction to AWS
- AWS Global Infrastructure

## 2. AWS Identity and Access Management (IAM) (3 hours)

- Introduction to IAM
- Users, Groups, and Roles
- IAM Policies and Permissions
- Multi-Factor Authentication (MFA)

## 3. AWS Compute Services (6 hours)

- Amazon EC2
  - o EC2 Instance Types
  - o Launching and Managing Instances
  - Security Groups
- AWS Lambda
  - o Introduction to Serverless Computing
  - Creating and Deploying Lambda Functions

## 4. AWS Storage Services (5 hours)

- Amazon S3
  - o S3 Buckets and Objects
  - o S3 Storage Classes and Lifecycle Management
- Amazon EBS
  - o EBS Volume Types
  - o Creating and Managing EBS Volumes

## **5.** AWS Networking Services (5 hours)

- Amazon VPC
  - VPC Basics
  - o Subnets, Route Tables, and Gateways
- Elastic Load Balancing (ELB)
- Amazon Route 53

#### **6. AWS Database Services (4 hours)**

- Amazon RDS
  - o RDS Instances

- Backup and Restore
- Amazon DynamoDB
  - o NoSQL Database Basics
  - o Creating and Managing Tables

## 7. AWS Security and Compliance (3 hours)

- Shared Responsibility Model
- AWS Security Tools and Services
- Monitoring and Logging with CloudWatch

## 8. AWS Management Tools (4 hours)

- AWS CloudFormation
  - o Infrastructure as Code
  - Creating and Managing Stacks
- AWS CloudTrail
  - o Logging and Monitoring
  - Setting Up CloudTrail Trails

## 9. AWS Cost Management (2 hours)

- Pricing Models
- Cost Management Tools
- Best Practices for Cost Optimization

## 10. Hands-On Labs and Projects (1 hour)

- Practical Exercises and Real-World Scenarios
- Course Review and Q&A

This outline provides a comprehensive overview of AWS basics, with a focus on hands-on learning and practical applications. You can adjust the time allocated to each topic based on the specific needs and prior knowledge of your students.

**Trainer:** 

Mr. Vijay Vishwakarma

**Technical Manager** 

Flexur Systems Pvt. ltd.

**Duration: 32 Hrs.** 

**Starting date: 14/07/2020** 

Time: 5:00 pm to 7:00 pm (Monday to Friday)

**Course Coordinator: Prof. Shweta Padale** 



# JSPM's Jayawant Institute of Management Studies

Academic year 2020-21

## **Add-on Course Outcomes**

Session: I

**Course Name: AWS Basics (SD4)** 

- Students will understand the fundamentals of AWS, including its global infrastructure comprising regions, availability zones, and edge locations.
- Students will be able to manage AWS IAM resources such as users, groups, and roles to enforce access control policies.
- Students will implement IAM policies and permissions to secure AWS resources and configure Multi-Factor Authentication (MFA) for enhanced security.
- Students will be able to launch, configure, and manage Amazon EC2 instances, including selecting appropriate instance types and configuring security groups.
- Students will be able to manage Amazon S3 storage by creating buckets, uploading objects, and configuring storage classes and lifecycle management.
- Students will be proficient in creating and managing Amazon EBS volumes, understanding the differences between EBS volume types.
- Students will be able to design and manage a Virtual Private Cloud (VPC) by configuring subnets, route tables, and gateways.
- Students will understand the basics of NoSQL databases and be able to create and manage tables in Amazon DynamoDB.
- Students will set up monitoring and logging with AWS CloudWatch to maintain security and compliance.
- Students will be able to use AWS CloudFormation to create and manage infrastructure as code by setting up and managing stacks.
- Students will apply best practices for cost optimization in AWS environments.

Dr. Priyanka Singh Director



## JSPM's Jayawant Institute of Management Studies

Academic year 2020-21

**Session: I** 

## **Add-on Course Assessment Details**

**Course Name: AWS Basics (SD4)** 

Sr. No.	Assessment	Weightage	Marks
1	MCQs	90 %	90
2	Attendance	10 %	10
	Total Mark	100	

Dr. Priyanka Singh Director



## A Certificate Course in Direct Taxation & GST

## **Objectives:**

- To Aware with Taxation structure and GST process in India.
- To acquaint with knowledge of basic concept of Income Tax and GST.
- To understand the provision of Income tax and GST.
- To aware recent techniques in tax and GST.

#### **CURRICULUM**

Sr. No	Topic	Hours
1	Introduction and Meaning: Meaning. Definition- structure of Income tax &	2
	GST	
2	Type of Income Tax & GST in Good: Constitution GST Amendments, Act	4
	2017, Levy & collection of Tax Administration of GST	
3	Calculation of Income Tax & Process of GST: What is the Taxable Income,	6
	Total taxable Income, Classification and Exemptions	
4	Deductions and Exemptions of Income Tax & GST registration, Time &	4
	value of supply, Input Tax credit, Tax invoice, Credit & Debit notes	
5	Recent techniques in Tax & GST process	4
6	PAN card Procedure, Tax & GST Return concept, Accounts & Records,	4
	payments of GST Tax.	
7	Income Tax Return & GST Return :	2
8	Tax Return file & Audit with GST Return file.	4

## **Learning Outcomes:**

After successfully completing this course, students will be able

- CO 1. To know the taxation and GST Structure in India.
- CO 2. To learn the basic concept of Tax and GST. CO 3. To understand the provisions of Tax and GST. CO 4. To learn the calculation of Tax and GST.
- CO 5. To learns recent techniques in Tax and GST.

#### **Job Opportunities:**

- As Accountant.
- As GST Consultant.
- Corporate Sector and in Company.
- For Tax Consultant.

#### **Projects:**

• GST Return File.



- Tax Return File.
- Purchase and Sales Transaction
- Calculation of GST of Varity of Goods

## **Reference Books:**

- CCA Institutes GST Notes and Book.
- Income Tax Dr. L.P. Wakale, Gayatri Prakashan.
- Business Taxation M.G. Patkar SET Pralashan, Bombay.
- Income Tax Ready Reckney V.G. Mehata's Kuber Publishing House.

## Web References (if any):

- www.Introduction of GST.
- www.GST pdf file and Process of return file.
- www.online books on GST for Restructuring the Syllabus.
- www.on GST and Tax Project for References.



## A Certificate Course in Intellectual Property Rights

#### **Course Objectives:**

- To recognize the importance of IP and to educate the pupils on basic concepts of Intellectual Property Rights.
- To identify the significance of practice and procedure of Patents.
- To make the students to understand the statutory provisions of different forms of IPRs in simple forms.
- To learn the procedure of obtaining Patents, Copyrights, Trade Marks & Industrial Design
- To enable the students to keep their IP rights alive.

#### **Course Outcomes:**

On successful completion of this course the student should be able to: CO 1 : Distinguish and Explain various forms of IPRs.

- CO 2: Identify criteria's to fit one's own intellectual work in particular form of IPRs.
- CO 3 : Apply statutory provisions to protect particular form of IPRs.
- CO4 : Analyse rights and responsibilities of holder of Patent, Copyright, Trademark, Industrial Design etc.
- CO 5: Identify procedure to protect different forms of IPRs national and international level.
- CO 6: Develop skill of making search using modern tools and technics.

## 1. Law Relating to Patent

#### 1. Patent Law

- Meaning and Objects of Patents, The Patents Act, 1970
- Patentability of Inventions
- How to Obtain a Patent- Application and Procedure
- Specification, Opposition to Grant of Patent, Register of Patents and Patent Office, Effects of Grant of the Patent
- Rights and Obligations of a Patentee, Transfer of Patent Rights,
- The Patent Co-operation Treaty (PCT)
- Term of Patents, Renewal, Revocation, Surrender, Revocation and Restoration of Patents

#### 1. Novelty, Inventiveness and Utility of an Invention

- Meaning of Novelty and Non obviousness
- Inventive step
- Utility of an Invention
- True and First Inventor
- Patentability of Biotechnological Inventions, Pharmaceuticals and Computer Software

## 2. Infringement of Patents, Remedies thereof

• Infringement of Patents



- Defenses Available for Defendant
- Reliefs Available to a Successful Plaintiff
- Threat of Infringement Proceedings

#### 3. Practical Aspects

 Practical Training by the way of Drafting and Documentations related to Specifications, Oppositions etc of Patents and Technology Transfer Involving Patent Licensing

#### SUBJECT / MODULE-

06 Hrs.

#### 2. Law Relating to Trademark

#### 1. Trademark- Its Basic Principles

- Introduction and Meaning of Trademark
- Definition and Interpretation of Various Terms Related to Trademark
- What are Good Trademarks and Grounds for Refusal of Trademark
- Distinctiveness and Distinctive Character of a Trademark

#### 2. Registration of Trademark

- Detail Procedure for Registration of Trademark
- Acceptance, Advertisement and Opposition of Trademark
- Effects of Registration of Trademark
- Rectification and Correction of Trademark

#### 3. Rights of the Owner of the Trademark

- · Introduction and Rights of Trademark Owner
- Assignment, Transmission and Licensing of Trademarks
- Documentation related to Assignment and Transmission of Trademarks

#### 4. Infringement of Trademark

- Infringement of Trademark- Essential Elements
- Action for Infringement
- · Passing Off
- · Difference between Infringement and Passing Off
- Defenses and Remedies in Trademark Infringement

#### SUBJECT / MODULE-

06 Hrs.

## 3. Law of Copyright

#### . Copyright- Its Basic Aspects

- Introduction of Copyright
  - Historical evolution of Copyright
  - Definitions, Nature and Scope of Copyright

#### 2. Subject-matter of Copyright & Originality in Copyright

- Various Works in which Copyright Subsists
- Literary, Dramatic, Musical, Artistic, Cinematographic Film, SoundRecording etc
- Concept of Originality in Copyright

#### 3. Author and Ownership of Copyright

- · Concept of Author and Owner
- Rights Granted by Copyright
- Performances and Broadcasting Rights
- Assignment, Transmission, Licensing and Relinquishment of Copyright

#### 4. Infringement of Copyright

- Definition and Essential Ingredients of Infringement
- Infringement of various Copyright Works and Exceptions for it
- Remedies Against Infringement of Copyright- Civil as



#### well as CriminalRemedies

# 5. Copyright Office, Copyright Board and Copyright Societies SUBJECT / MODULE-

06 Hrs.

- 4. Law Relating to Industrial Design
  - 1. Industrial Design-Its Basic Aspects
    - · Historical Background of Industrial Design
    - Introduction, Definition, Nature, Objective and Functions of IndustrialDesign
    - Relation between Industrial Design and Copyright
  - 2. Registration Procedure of Industrial Design
    - Registration of Design
    - Rights Granted by Registration
    - Refusal to Register a Design
  - 3. Infringement of Industrial Design
    - Definition
    - Piracy of Registered Design
    - Defenses and Remedies in Design Infringement
    - Power and Duties of Controller

#### SUBJECT / MODULE-

06 Hrs.

- 5. Law Relating to Geographical Indications
  - 1. Introduction and Meaning of Geographical Indications
  - Registration Procedure and Infringement and Passing Off of GeographicalIndications
  - 3. Effects of Registration of Geographical Indications
  - 4. Defenses and Remedies in Geographical Indications Infringement
  - 5. Case Study of Some Registered Geographical Indications For e.g. Mahabaleshwar Strawberry, Puneri Pagadi, Darjeeling Tea, TirupathiLaddu, Nashik Grapes etc.

SUBJECT / MODULE-

6 Hrs.

## References:

- 1. Dr G.B. Reddy, "Intellectual Property Rights and Law", Gogia Law Agency Hyderabad, Reprint edition2020
- 2. N.R.Subbaram. S.Viswanathan, "Hand book Indian Patent Law and, Practice" Printers and publishers Pvt,Ltd,2008.
- 3. Cornish,"Intellectual Property Rights", Universal publications.

Dr.B.L.Wadehra,"Law Relating to Intellectual Property" 5th edition,Universal Law publishing Co, Delhi





#### JSPM's

## JAYAWANT INSTITUTE OF MANAGEMENT STUDIES

(NAAC Accredited – A Grade)

(Approved by AICTE, New Delhi, Recognised by Govt. of Maharashtra & Affiliated to Savitribai Phule Pune University)

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Prof. Dr. T. J. Sawant B.E. (Elec.) PGDM, Ph. D

Dr. Priyanka A. Singh **AISHE ID: C-60096** B.Sc. (Hons), MBA, Ph. D.

Director



## Add-On Course: Essential Life Skills

**Course Duration:** 32 hrs. Dates: Every Friday & Saturday Aug-Sep 2020

## **Essential Life Skills Course**

## What you'll learn

- Organize Your Personalized S.M.A.R.T. Short-Term and Long-Term Goals
- Identify Time Wasting Areas in Your Life and Use a Harvard Graduate's Tips on Time Management
- Use the "Five Rules of Gold" to Better Save Money, Budget, and Invest
- Focus Your Philosophy, Physical State, and Mental State Toward Building a Better You
- Apply the Six Principles of Likability to Open Doors to Relationships and Opportunity
- Build Your "Social Capital" to Better Become and remain a thought leader in Your Field
- Take the Eight Steps to Identify and Establish a Mentor-Mentee Relationship
- Attract People Who Will Help Build You Up for Success
- Learn Lessons Through Failure that Cannot be Learned Through Success
- Utilize the Science of Happiness to Raise Your "Happiness Baseline"
- Practice Problem Solving and Creativity to Enhance Your Own Level of Resourcefulness
- Craft a Personal Brand Statement and Intelligently Manage Your Offline and Online Reputation Show less

## Requirements

- A Desire to Become More Successful
- Willingness to Work Toward Goals



#### A Proactive Attitude

#### **Description**

#### Why take this class?

#### **All-In-One Course:**

Having life skills is an essential part of being able to meet the challenges of everyday life, and this course covers the fundamentals of the top twelve life skills that lead to success and happiness. And strangely enough, these skills are almost never taught in university nor discussed at length in homes. Do you recall ever learning how to use compound interest to quickly double your money, how to use sincerity to win the hearts and minds of others, the truth of what happiness is and how to apply it, or the best techniques to manage your reputation? If used, that information can have a dramatically positive effect on a person's life, your life, or the life of a family member.

After all, the dramatic changes in global economies over recent years have been matched with the transformation in technology and these are all impacting on education, the workplace and our home life. To cope with the increasing pace and change of modern life, you need to have developed or be in the process of developing these abilities. So, if you are not confident in each of these twelve areas, can you really afford not to do something about it?

## This course is unique.

Why? Because this course has curated and consolidated the best advice from experts and highly successful individuals over twelve of the most critical life skills necessary to make it in today's rapidly evolving and competitive environment. Along with this advice, this course also goes into the science of why these lessons lead to results.

## What topics are covered in this course?

The goals of this course are for students to develop a basic level of knowledge and skill set within a number of practical areas to nurture personal and professional development throughout a lifetime. These goals are organized by content and class below.

- 1. **Goal Setting** Students will learn the importance of finding direction in life by continually setting, adjusting, and following a strategy to reach both long-term and short-term goals. They will also learn methods to create goals that provide focus, motivation, and measured progress.
- 2. **Time Management** Students will benefit from learning how to accomplish more with less effort, improve decision making, and develop a better sense of self-discipline. This section will address the time management steps of goal setting, time tracking, planning, self-monitoring, and time adjusting.
- 3. **Personal Finance** Understanding money management and preparing a financial future are subjects usually neither taught in schools or in homes although crucial to a person's well

being. Students will learn the basics of money management in budgeting, accounting, and investing.

- 4. **Continuing Personal Development** The greatest asset one can have is the investment they make in themselves. By consistently developing and improving oneself, success and personal fulfillment are more easily attained. Self-development enables a person to serve and be more valuable to those around them—for their children, for their colleagues, for their business, and for their community. Here students will learn the importance of persistent self-development, which areas they should develop, and the steps needed to create a personal development strategy.
- 5. **Being Likable** It is important to know that success does not simply depend on a person's skill level. It also has a great deal to do with how others fell about that person. Being unlikable can be harmful to one's career just as being likable can open many doors to opportunity. Dale Carnegie (developer of famous courses in self-improvement, salesmanship, corporate training, public speaking, and interpersonal skills) was a pioneer in identifying what is necessary to "win friends and influence people." In the course section, students will learn Dale Carnegie's six principles to being likable.
- 6. **Networking** Most people are aware that a strong network can have a big impact on a person 's career success. Networking will not only help someone land a job faster, but it will give them a competitive edge throughout every stage of their career. Students will find in this section steps to build and maintain a network of peers and industry leaders which will serve them as they develop their careers.
- 7. **Having a Mentor** A remarkable 75% of executives say mentoring has been critical to their career development, according to a survey by the American Society for Training and Development. This section of the course will teach not only the importance of having a mentor but also a 10-step process on finding, evaluating, and building a mentor relationship with the right person.
- 8. The Right People Around You Students will learn that surrounding themselves with the right people is essential to future success because a person is the average of the five people they spend the most time with. And when a student is goal-oriented, having the right people in their life can help them reach any target more effectively and efficiently. This section will help students identify personality types of both who they should and should not surround themselves with and how to build the right relationships.
- 9. **Embracing Failure and Learning from It** The most successful people have shown that the secret to success is having first gone through failures. The key lies in getting up when you fail and moving forward. Here students will learn why failure is okay, why it is important to put effort into learning from failure, and what steps to take in order to document this process.
- 10. **Happiness and Mental Health** A growing number of top universities such as Yale are offering courses that aim to put students on the path toward happier lives. Peter Salovey, president of Yale, said: "I think students are looking for meaning." He believes that while students today are more sophisticated and worldly than previous generations, they seem to be much less resilient. This section of the course will help students figure out what it means

to live happier, more satisfying lives, and teach them scientifically-tested strategies to achieve that goal.

- 11. **Resourcefulness** Unless information is processed, organized, and applied, knowledge can become a source of frustration rather than fulfillment. The section of the class will focus on helping students develop the ability to find and use available resources to achieve goals. Students will be better equipped to process information intellectually and emotionally by applying problem-solving knowledge to new situations and helping them know when to collaborate or work independently.
- 12. **Personal Branding** As society moves towards the digitalization of everything, one of the most valuable assets an individual can possess is a personal brand. It is advantageous for young individuals to build a personal brand because it helps establish credibility, build a network, and create job security in an evolving marketplace. Students will learn methods of building a personal brand and how to use tools to support that process.

Dr. Priyanka Singl

**Director** 

#### Value added course on Value Education

#### **Objectives of the course:**

The course is designed to inculcate the values which are an utmost need of the hour to overcome various challenges. The students will learn to adopt and implement the suitable values at appropriate time, understand various challenges in value adoption in this contemporary world, use the 'Reflection method' to explore values from inside out.

The course is expected to aquatint students with the core values such as physical, mental and spiritual aspects of personality, developing respect for the dignity of individual and the society, inculcation of spirit of patriotism and national integrity and developing tolerance towards understanding of different religious faiths as well. The course will help students to be a better human being and a strong pillar of society.

#### **Course Contents ;-**

#### 1. Values for excellence in life:

Developing Values, Personal Values, Family Values, Professional Values.

#### 2. Life Skills:

Motivational Skills, Communication Skills, Life style modification, Accessibility and Addiction, Environmental Awareness.

#### 3. Spiritual Education:

Different schools of meditation, exploring the self, universal concept of the supreme, changing the belief system, Self Esteem, Stress free living.

#### **Methods of Instruction**

- Lecture
- Class discussion
- Role plays
- Guest speakers
- Written assignments
- Videos



# JSPM's Jayawant Institute of Management Studies

Course Name: Basics of R programming

Total Duration: 35 Hrs

Offering from: 15 July 2019 to 30 August 2019

Course Coordinator: Prof. Sarika Patil

## Course Description:

This course is designed for beginners who are new to R programming and want to learn the fundamentals. It covers the basics of R programming, including data types, control structures, functions, data manipulation, and basic data visualization.

## Course Objectives:

- To introduce the fundamentals of R programming.
- To familiarize students with R's data types and structures.
- To teach basic data manipulation and data visualization techniques.
- To enable students to write simple functions and scripts in R.
- To provide a foundation for further study in advanced R programming and data analysis.

## Learning Outcomes:

By the end of this course, students will be able to:

- Understand and use basic R data types and structures.
- Write and execute simple R scripts.
- Perform basic data manipulation tasks.
- Create basic data visualizations.
- Use R for simple statistical analysis.

## Prerequisites:

• No prior programming experience is required.

## Week 1: Introduction to R and RStudio

- Installing R and RStudio
- Overview of RStudio interface
- Basic R syntax and operations
- Understanding R's help and documentation

## Week 2: R Data Types and Structures

- Basic data types: numeric, character, logical
- Vectors, factors, and lists
- Data frames and matrices
- Reading and writing data: CSV, Excel, and other formats

## Week 3: Basic Data Manipulation

- Subsetting and indexing
- Basic operations on data frames and matrices
- Introduction to the dplyr package for data manipulation
- Filtering, selecting, mutating, and summarizing data

## Week 4: Control Structures and Functions

- Conditional statements: if, else if, else
- Loops: for, while, repeat
- Writing simple functions
- Applying functions: apply, lapply, sapply

#### Week 5: Basic Data Visualization

- Introduction to base R plotting
- Creating scatter plots, line plots, bar plots, and histograms
- Customizing plots: titles, labels, legends, colors
- Introduction to ggplot2 for advanced plotting

#### Week 6: Basic Statistical Analysis

- Descriptive statistics: mean, median, mode, standard deviation
- Basic inferential statistics: t-tests, chi-squared tests
- Correlation and linear regression
- Using built-in R functions for statistical analysis

#### Week 7: Working with Dates and Times

- Date and time classes in R
- Formatting and manipulating dates and times
- Calculating differences between dates and times

## Week 8: Project and Review

- Final project: Applying the concepts learned to a real-world dataset
- Review of key concepts
- Q&A session and further resources for learning

## **Evaluation Methods:**

- Assignments and homework (30%)
- Quizzes (70%)

#### Recommended Resources:

- Books: "R for Data Science" by Hadley Wickham and Garrett Grolemund, "The Art of R Programming" by Norman Matloff
- Online resources: R documentation, R-bloggers, Stack Overflow
- Software: R and RStudio

## *Instructor Information:*

- Dr. Gorakh Wakhare
- 9823024237

Tethnwarle, Pune - 33.

Dr. Priyanka Singh Director

## A Certification Course in Introduction to Share Market

## Objectives-

- To aware students about stock market
- To understand the Basic terminologies used in Stock Market
- To aware about different types of analysis
- To aware them about technical analysis and decision making

## **SYLLABUS**

No		Unit	Period
Topic 1	1.	Introduction of Share Market  1. What is stock market I. Background II. What is share  2. History of stock market 3. Different segments of stock market I. Equity II. Derivatives III. Currency IV. Commodity  4. Nature and role of financial structure  5. Reserve bank of Indiaorganization, management, and function.	6
Topic 2	2.	Types of analysis in stock market  1. I. Technical analysis II. Fundamental analysis 2. Why should we learn technical analysis? 3. Types of charts 4. Chart analysis I. Trend identification i. Dow theory a) Uptrend b) Downtrend c) Sideways trend ii. Uptrend stocks iii. Downtrend stocks II. Supports III. Resistance	6
Topic 3	3.	Time frames 1. Trend lines	6



		2. Candlestick patterns	
		I. Bullish candlestick pattern	
		II. Bearish candlestick pattern	
Topic 4	4.	Fibonacci retracement	6
		1. Chart patterns	
		I. Trend continuation pattern	
Topic 5	5.	Indicators	6
		1. Volume	
		II. RSI	
		III. MACD	
		IV. Stochastic	
		V. Moving averages	
		2. Revision of all concepts	
		3. Implementations	
		4. Revision of implementations	

#### **Course Outcomes:**

After successfully completing this course, students will be able –

- CO 1. To understand basic concepts of share market.
- CO 2. To get information of trends, support and resistance in the stock market.
- CO 3. To understand how to build a portfolio and make investment decisions.

#### **Text Books:**

- Prasanna Chandra, "Investment Analysis and Portfolio management", Tata McGraw Hill, 3rd Edn., 2008
- 2. Julian Walmsley, "New Financial Instruments". John Wiley & Sons, 2nd edition, Inc 1998.

#### **References:**

- 1. Bharati V. Pathak. -The Indian Financial System: Markets, Institutions and Services", Pearson education, 3 edn.
- 2. Bhole I. M.: "Financial Markets and Institutionals": Tata McGraw Hill, New Delhi.
- 3. Chandler M. V. and Goldfeld S. M: Economics of Money and Banking: Harper and Row, New York.



# A Certificate Course in Self Employment & Entrepreneurship Development

#### **Objectives**

- To acquire the knowledge of the self-employment of the students.
- To acquire the knowledge of self-employment management.
- To acquaint the student with technical knowledge of the employment.
- To develop the personality of the students through self-employment.
- To strengthen the students for job opportunity.

#### **Syllabus**

Sr. No.	Unit	Hours
	Introduction	4
	Defining, Meaning, Concept, Structure of the self-employment	
1	Characterizes of the self-employment	
1	Scope of the self-employment	
	Importance of the self-employment	
	Development of the self-employment	
	Job opportunity	4
	Defining, Meaning, Concept, Structure of the job opportunity	
2	Various fields of job opportunity	
	Importance of job opportunity	
	Development of the job opportunity	
	Essential qualities of the self employment	6
	Self confidence     Proper planning of the work	
3	Activeness • Carrierness	
	Balanced thinking • Innovation aim	
	Trustiness of work • Positive thinking	
	New knowledge of the job • Future aim	
	Financial Resources for Self-employment	6
	Small Industries development Bank of India	
	National Bank for agricultural and Rural Development	
	Nationalized banks	
4	State Co-operative Banks	
	State Financial Corporation of India	
	District Industries Centre	
	Khadi and village Grammodyog Centre	
	Regional Rural Banks	
	Maharashtra Industrial Development Corporation (M.I.D.C.)	
	Various self-employment schemes of government	4
5	Self-employment the Educated unemployedyouth	
3	61983-1984	
	Self-Employment progress of the urban poor	



	<ul> <li>September 1986</li> <li>Urban Micro Enterprises 1990</li> <li>Swaraj Jayanti Sahakari Rozgar Yojana,</li> </ul>	
	December 1997	
6	<ul> <li>Self-employment and Development</li> <li>Personal Development</li> <li>Social Development</li> <li>Economic Development</li> <li>Rural Development</li> <li>Urban Development</li> </ul>	3
	Regional Development     National Development	
	To overcome the Problems in self-employment	3
	Lack of education	
	Skills and Techniques	
	Efficiency of the person	
	Accommodation in the job	
7	Finance for the job	
	Prices of the goods	
	Market situation	
	Demand of the consumers	
	Profit from the job	
	Government policy	

#### **Course Outcome:**

After successfully completing this course, students will be able

- CO 1. To learn how to develop a career plan and occupational options.
- CO 2. To develop practical competence.
- CO 3. To learn to seek appropriate resources.
- CO 4. To learn career development skills.

#### **Outcome of the Short Term Course:**

After the completion of the course the students will get the proper knowledge of self-employment job. After graduation the students will be able to start the self-employment with their own responsibility and risk. After the completion of course the students will strengthen their own life, and also strengthen the society. And when the flow of students, the rate of self-employment job will increase, the economic development and growth of the nation will take place. So the opportunities of self-employment will be ideal model among the students.



# JSPM's Jayawant Institute of Management Studies

Academic year 2018 -19 Session: II

#### **Business communication**

Date: 21st October 2019

#### **About course:**

These skills are important for every person in an organization. Soft skills is a term relating to a collection of personal, positive attributes and competencies that enhance relationships, job performance, and value to the market. Soft skills are one of the business communication skills that refer to a set of skills that determine how we interact with others. Business communication skills play a highly important role in the work place as well as in one's career success. These skills are applicable to every field of work, and are usually behavioral traits inherent in an individual. These skills are typically hard to observe, quantify and measure.

Soft skills are needed for everyday life as much as they're needed for work. Some of soft skills are: communication skills, critical and structured thinking, Problem solving skills, creativity, teamwork capability, negotiating skills, self-management, time management, conflict management, cultural awareness, common knowledge, responsibility, etiquette and good manners, courtesy, self-esteem, sociability, integrity, empathy, work ethic, project management, business management. In new age institute should provide set of soft skills that are required for students to succeed both academically and professionally. This indicates the importance and necessity of acquiring soft skills for the students while studying.

Companies opt for, maintain and prop up persons who are trustworthy, ingenious, principled and good communicators and who are prepared to work under stress. These lessons are developed with a view to create awareness of the importance of the business skills and assist the learners to improve them.

Course code	Course Name	Duration	Trainer
SS-02	Business communication	30 hrs.	Prof. Tejal Pradhan

### **Objectives:**

- To help the students understand interpersonal skills
- To improve the ability to work with others
- To develop effective presentation skills
- To develop effective communication skills
- To overcome the fear of public speaking

#### Methodology

The sessions would be delivered through PowerPoint and would incorporate videos, break assignments, Role plays and coaching sessions.

**Course Prerequisite:** The participants must have basic knowledge of English vocabulary, comprehend sentences spoken or written in English.

Resource Person: Prof. Tejal Pradhan

Date of commencement: 1st August 2018

**Course Contents** 

Sr. No.	Торіс	No. of sessions Required (each of 1.5 hours)
1	Introduction	1
2	Unique selling proposition	1
3	Elevators pitch	1
4	Extempore	1
5	Presentation	1
6	Email writing	1
7	Grammar	2
8	Mad Ad	1
9	Entrepreneurial challenge	1
10	Guiding a blind team	1
11	SWOC Analysis	1
12	I can	1
13	Time Management	1
14	Decision Making	1
15	Interview training- 3 sessions	3
16	Group discussion practise- 3 sessions	3
	Total Sessions required (each of 1.5 hours)	21

#### Assessment

Assessment	Marks
1. Extempore	15
2. Presentation	20
3. GD	15
Total	50





# JSPM's Jayawant Institute of Management Studies

Academic year: 2018-19 Session: Jan.2019- April 2019

Course: Internet of Things (IoT)

Course code: TS04

6 Hrs per Week (Saturday)
No. of Hours: 30 hrs

Dates: Every Saturday Feb-Apr 2019

The IOT is the technology of future computing where any living or non-living entity gets connected to the world of internet. The analysis and monitoring will be done by clouds present on the internet which speeds up the processing in automation.

#### **Requirements:**

#### **Software Requirements:**

Operating System: Ubuntu 16.04 LTS

Python 2 or 3.

#### **Hardware Requirements:**

Raspberry Pi Complete Kit with Sensors

(RPi 3B Board, Breadboard, Jumper Wires [M-F, F-F, M-M], LEDs, Buzzer, Power Adapter, HDMI Cable, SDHC Card, IR Sensor, LDR Sensor, DHT11 Sensor, Ultrasonic Sensor, Servo Motor, Soil Sensor, PI Camera, 2 Channel Relay)

#### **Configuration:**

1. Operating System: Ubuntu 16.04 LTS

2. RAM: 4 to 6 GB

3. Processor: i3 (Minimum)

#### **Course Outcomes**

- Students will comprehend the basic concepts, architecture, and key components of the Internet of Things (IoT).
- Students will understand the different IoT protocols and standards.
- Students will learn to interface sensors and actuators with microcontrollers such as Arduino and Raspberry Pi.
- Students will be able to set up and manage IoT networks, ensuring secure and efficient data transmission.
- Students will learn about data collection, storage, and analysis techniques in IoT systems.

#### **Contents:**

#### Module 1

#### **Python Programming:**

- Installation and History
- Language basics
- Basic Syntax, Operators,
- Decision Making statements
- Loops control statements
- Strings, Lists
- Tuples, Dictionary
- Creating and using Functions
- Creating Modules and Packages
- Files I/O
- Command line arguments
- Exception Handling

#### **Module 3**

#### IOT Design using Raspberry Pi

- Introduction to RPi python programming
- Blinking the LEDs, Fading the LEDs
- Ringing Buzzers by various ways
- Interfacing the IR sensor
- Interfacing LDR sensor
- Interfacing the Ultrasonic distance Sensor
- Installation of extra libraries in Python
- Interfacing servo motor
- Interfacing the Temperature / Humidity sensors
- Creating the Sensor RPi Actuator system

#### **Module 4**

#### IOT Design using Raspberry Pi

- Interfacing the LDR sensors
- Interfacing Gas sensors
- Collecting the sensors data.

#### **Database Programming**

- Installation of MySQL on RPi
- Using the database application
- Storing the sensors data in the database
- Calculating the data of the database for results

#### **Networking**

- TCP Communication with sockets
- UDP Communication with sockets

#### Module 2

#### **Introduction to Internet of Things**

- IOT Architecture
- Impact of IoT
- IoT Privacy, Security and Governance
- Current Trends and Research Opportunities in IoT

# **Introduction to Raspberry Pi Development Board**

- Architecture, features and versions
- Embedded Developer Suit
- OS for ARM architectures
- OS installation
- Raspbian Fundamentals: Working in GUI / Terminal Mode
- Complete Raspbian configuration
- Introduction to GPIO
- Installing, updating, upgrading the packages
- Networking and accessing via ssh or telnet or PuTTY
- Control RPi through Android
- Sensors and GPIO interfacing

#### Module 5

#### **Cloud Connections**

- Cloud in IOT
- Various clouds available for IOT applications
- Creating your own cloud
- Uploading data on ThingSpeak cloud
- Analysing and retriving the data from ThingSpeak

#### **Triggering Various Actions**

- IOT ThingTweet using ThingSpeak
- Sending the SMS in IOT by WaytoSMS
- Connecting the Social Network like

#### Facebook

#### Module 6

#### The PI Camera

- Connecting and using PiCamera
- Taking and Storing images
- Making various image effects.
- Recording Videos, Converting Videos
- LIVE Streaming of Video

#### **Creating web Interface**

- Using WiringPI
- GPIO Commands
- Create HTML-PHP based web interface
- Control LED using web page

#### **Home Automation**

- Study of Relay
- Using Relay to control the Home appliances
- Controlling Home appliances through web interface

Creating a temperature server	Module 7
<ul> <li>Creating the local clients</li> </ul>	Automation Based Projects
<ul> <li>IOT Based server application</li> </ul>	

#### **Weekly Assignment:**

- 1. After every weekend session you'll need to solve assignments until next week.
- 2. On completion of 1 module, you are required to appear exam.
- 3. All exams will be taken in College.

#### **Final Exam:**

A duration of 15 days, will be given after completion of Course. The Final exam will be a conducted once, in case of Failure; exam can be reappeared after another 15 days.



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#### Jayawant Institute of Management Studies

#### (SD1) Comprehensive Web Development

**Course Title:** Comprehensive Web Development

**Duration:** 37 hours

**Certification:** Certificate of Completion

#### **Course Objectives:**

- 1. Understand the basics of web development, including HTML, CSS, and JavaScript.
- 2. Develop the skills to create responsive and interactive web pages.
- 3. Learn to use web development tools and frameworks.
- 4. Gain knowledge of server-side programming and database integration.
- 5. Implement web development best practices and SEO techniques.

#### **Course Outcomes:**

- 1. Create and style web pages using HTML and CSS.
- 2. Develop dynamic web content using JavaScript.
- 3. Build responsive web pages using modern frameworks like Bootstrap.
- 4. Integrate server-side functionality using languages like Node.js or PHP.
- 5. Connect web applications to databases using SQL or NoSQL databases.
- 6. Apply best practices in web development for performance and SEO.

#### Why Choose This Course?

In today's digital age, web development skills are essential for creating and maintaining websites and web applications. Our Comprehensive Web Development course is designed to equip you with the knowledge and skills necessary to build dynamic, responsive, and user-friendly websites.

#### **Course Objectives**

- Understand the fundamentals of web development.
- Learn to create and style web pages using HTML and CSS.
- Develop interactive and dynamic content using JavaScript.
- Gain proficiency in using web development frameworks and tools.
- Implement server-side functionality and database integration.
- Apply best practices for web performance and SEO.

#### What You Will Learn

#### **Module 1: Introduction to Web Development (3 hours)**

- Overview of web development
- Understanding the web and how it works
- Setting up the development environment

#### **Module 2: HTML Basics (5 hours)**

- Structure of an HTML document
- Common HTML tags and their uses
- Creating forms and tables
- Semantic HTML

#### **Module 3: CSS Fundamentals (5 hours)**

- Introduction to CSS
- Styling text and layout
- Box model and positioning
- Responsive design with media queries

#### **Module 4: JavaScript Basics (5 hours)**

- Introduction to JavaScript
- Variables, data types, and operators
- Control structures and loops
- Functions and events

#### **Module 5: Advanced JavaScript (5 hours)**

- DOM manipulation
- Introduction to ES6 features
- AJAX and fetch API
- JavaScript libraries (e.g., jQuery)

#### **Module 6: Responsive Web Design (4 hours)**

- Principles of responsive design
- Using frameworks like Bootstrap
- Grid systems and flexbox
- Creating mobile-first designs

#### **Module 7: Introduction to Server-Side Programming (4 hours)**

- Overview of server-side technologies
- Introduction to Node.js or PHP
- Building simple server-side applications
- Handling requests and responses

#### **Module 8: Database Integration (4 hours)**

- Introduction to databases (SQL and NoSQL)
- Connecting web applications to databases
- CRUD operations
- Using ORM (Object-Relational Mapping) tools

#### **Module 9: Web Development Best Practices (2 hours)**

- Code organization and version control (Git)
- Performance optimization
- SEO basics
- Security practices

This syllabus provides a comprehensive overview of web development, covering both frontend and back-end aspects. Adjustments can be made based on the specific needs and level of the students.

#### Who Should Enroll?

- Aspiring web developers
- Graphic designers looking to enhance their skills
- Entrepreneurs wanting to build their own websites
- Anyone interested in learning web development from scratch

#### Why JIMS?

- Expert Instructors: Learn from industry professionals Mr. Swami Panjala, Elite Software Ltd.
- Hands-on Learning: Engage in practical, real-world projects.
- Career Support: Guidance on building a portfolio and job placement assistance.

#### **Assessment**

- 1. Quiz (10)
- 2. Practical Assignment (20)
- 3. Project (30)

#### **Enrolment Details**

**Start Date: 7 July 2018.** (Every 1<sup>st</sup> and 3<sup>rd</sup> Saturday between 9:00 am to 1:00 pm)

#### **Contact Information:**

• Course Coordinator: Prof. Sarika Patil

• Phone: 9922274810

Email: <u>srpatil\_mcajims@jspm.edu.in</u>Website: www.jspmjims.edu.in



# JSPM's Jayawant Institute of Management Studies

Academic year: 2018-19

## ST4 Web and Mobile Testing with Selenium

#### **Course Description:**

This course provides a thorough understanding of web and mobile application testing, focusing on both functional and non-functional aspects. It covers the fundamentals of testing, various testing methodologies, and tools used in the industry. Students will gain hands-on experience in designing and executing tests, analyzing results, and ensuring the quality of web and mobile applications.

#### **Course Outcomes**

- 1. Differentiate Testing Environments: Students will be able to identify and differentiate between various testing environments and tools used for web and mobile applications.
- 2. Compare Testing Approaches: Students will be able to compare and contrast the specific challenges and considerations of web versus mobile testing.
- 3. Execute Functional Tests: Students will be able to perform functional tests to validate web application functionalities against requirements.
- 4. Analyze and Report Defects: Students will analyze test outcomes, identify defects, and report them effectively.
- 5. Employ Non-functional Testing Tools: Students will gain hands-on experience with tools like JMeter for performance testing and OWASP ZAP for security testing.
- 6. Execute Mobile Tests: Students will perform functional and non-functional tests on mobile applications.

#### **Assessment**

Sr. No.	Assessment	Weightage (%)	Marks
1	Assignments	30	15
2	Tests	50	25
3	Attendance	30	15
	Total	Marks	50

# **Course Contents (32 Hrs)**

Topic	Duration
Introduction to Web and Mobile Testing	
Introduction	
<ul> <li>Challenges in Web and Mobile Testing</li> </ul>	
<ul> <li>A Brief Introduction to XML and HTML</li> </ul>	4
<ul> <li>Using Firefox Developer Tools</li> </ul>	4
Introducing Selenium	
Using Selenium from Eclipse IDE	
Functional Web Testing	
Web Test Planning	
<ul> <li>Minimal Essential Test Strategy (METS)</li> </ul>	
<ul> <li>Using METS for Time Budgeting</li> </ul>	10
Representational State Transfer (REST): The	
Architecture of the Web	
XPath Introduction	
Non-functional Web Testing	
Introduction to Security Testing	
Security Testing Techniques	
OWASP Top Ten Risks Overview	
OWASP Top Ten Security Risks 1-5	12
<ul> <li>OWASP Top Ten Security Risks 6-10</li> </ul>	
Fuzz Testing	
<ul> <li>Introduction to Performance Testing</li> </ul>	
Introduction to JMeter	
Mobile Testing	
Intro to Appium	6
Getting Started with Appium	U
Testing with Appium	

Dr. Priyanka Singh Director



#### JSPM's

# **Jayawant Institute of Management Studies**

#### **Add-on Course Syllabus**

Academic year: 2018-19 Session: July 2018 to Dec. 2019

#### ST 1 Software Testing and Automation (35 hours)

#### **Course Outcomes**

Upon successful completion of this course, participants will be able to:

- 1. Understand Fundamental Concepts of Software Testing
- 2. Design and Manage Effective Test Cases
- 3. Apply Various Testing Methodologies.
- 4. Automate Testing Processes
- 5. Conduct Performance and Load Testing
- 6. Perform Mobile Testing
- 7. Execute API Testing

#### **Contents**

#### 1. Introduction to Software Testing (3 hours)

- Basics of Software Testing
- Types of Testing (Manual vs. Automated)
- Software Development Life Cycle (SDLC) and Testing

#### 2. Testing Methodologies and Techniques (4 hours)

- Black Box Testing
- White Box Testing
- Unit Testing, Integration Testing, System Testing, Acceptance Testing
- Agile and DevOps Testing Practices

#### 3. Test Case Design and Management (3 hours)

- Writing Effective Test Cases
- Test Case Management Tools (e.g., TestRail, Zephyr)
- Test Data Management

#### 4. Introduction to Test Automation (3 hours)

- Fundamentals of Test Automation
- Benefits and Challenges of Automation
- Choosing the Right Automation Tools

#### **5.** Automation Tools and Frameworks (6 hours)

- Selenium WebDriver
  - o Introduction to Selenium
  - Writing Selenium Scripts
  - Selenium Grid for Parallel Execution
- JUnit and TestNG
  - Writing Test Cases in JUnit/TestNG
  - Test Suites and Test Runners
- BDD with Cucumber
  - o Introduction to Behavior-Driven Development
  - Writing Gherkin Scenarios

#### **6.** Continuous Integration and Continuous Testing (4 hours)

- Introduction to CI/CD
- Setting Up Jenkins for Test Automation
- Integrating Automated Tests in CI/CD Pipelines

#### 7. Performance Testing (3 hours)

- Introduction to Performance Testing
- Tools for Performance Testing (e.g., JMeter, Gatling)
- Creating and Running Performance Tests

#### 8. Mobile Testing (3 hours)

- Introduction to Mobile Testing
- Tools for Mobile Testing (e.g., Appium, Espresso)
- Writing and Running Mobile Test Scripts

#### 9. API Testing (3 hours)

- Introduction to API Testing
- Tools for API Testing (e.g., Postman, RestAssured)
- Writing and Executing API Tests

#### **10.** Advanced Topics in Test Automation (3 hours)

- Test Automation Frameworks
- Best Practices in Test Automation
- Dealing with Dynamic Web Elements

#### **Evaluation Methods:**

- Assignments (30%)
- Quizzes (70%)



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### A Certificate Course in Digital Marketing

#### **Objectives:**

- Understand and learn digital marketing concepts and tools
- Use digital marketing tools to run ad campaigns
- Create website using WordPress and WordPress plugins.
- Optimize website using SEO techniques.
- Learn about google services and tools
- Blogging, graphic creation, video creation

#### **Curriculum:**

Certificate Course in Digital Marketing (35 Hrs)

Module	Topic to be Covered
Module 1	Digital Marketing Overview
Module 2	Website Planning Creation
Module 3	App Creation
Module 4	Graphic Creation
Module 5	Video Creation
Module 6	Advanced SEO
Module 7	Local SEO
Module 8	App Optimization
Module 9	Video Optimization (YouTube)
Module 10	Social Media Optimization
Module 11	Social Media Automation
Module 12	Search Engine Marketing (AdWords)
Module 13	Online Display Advertising (AdWords)
Module 14	E-Commerce Shopping Advertising (AdWords)
Module 15	Mobile Marketing (AdWords)
Module 16	Facebook & Instagram Marketing
Module 17	Twitter Marketing
Module 18	LinkedIn Marketing
Module 19	Quora Marketing
Module 20	Email Marketing
Module 21	SMS Marketing
Module 22	WhatsApp Marketing
Module 23	Re-Marketing & Conversion
Module 24	Lead & Traffic Generation



Module 25	Advance Google Analytics
Module 26	Google Web Master
Module 27	Blogging
Module 28	Google AdSense
Module 29	Affiliate Marketing
Module 30	Content Marketing
Module 31	Online Reputation Management
Module 32	Growth Hacking
Module 33	Freelancing Project
	Test

#### **Course Outcome:**

After successfully completing this course, students will be able

CO1. To create and run ads and ad campaigns using various sites.

CO2. To create WordPress web sites and blogs,

CO3. To create SEO, blogging, freelancing

#### **Job Opportunities:**

- Digital Marketing Executive
- Digital Marketing Manager
- SEO Executive
- Analytics Manager
- Content Manager/Content Marketing Manager
- Digital Account Manager
- Digital Sales Manager
- Digital Integrated Copywriter
- PPC Search Manager
- Social Media Marketing Manager
- Ecommerce Manager
- Digital Marketing Consultant
- Internet Marketing Executive

#### Web References:

https://www.the-reference.com/en/expertise/digital-marketing				
https://www.marketingterms.com				
https://dsmmcm1314.wordpress.com/digital-marketing-references-and-links.				

#### **Project:**



- Create website and promote it using learned digital marketing techniques.
- Graphics Design.
- Ad campaigns
- SEO Project



#### A Certificate Course in Advance Excel

#### **Objective:**

Excel spreadsheets are commonly used across business to display financial information and other data relevant to the running of the business. This could be information relevant to the customer relationship management department, sales, marketing or HR. With so many business functions now depend on IT and the internet, Excel continues to be seen as a important tool for administration and effectively running business. Our Objective is to:

- Make student aware of advance feature available
- Use these functions in their future professional life with ease for their day to day operations
- Teach faster way to get work done, analyse data using excel.

#### Syllabus:-

Sr.	Topics	Theory	Practical	Duration
1.	Recap of Basic Excel: Review of widely used basic functions of Excel	1	3	4
2.	Print Functions: Printing Range, print heading, footers, adjusting margin etc.	1	2	3
3.	Text and String Functions: Though Excel is mainly for numeric data at times user come across data with mainly text. Excel provides functions to handle it.	1	4	5
4.	Numeric/ Financial Functions: Excel is mainly preferred and used for its ability to process numeric data with the help of wide range is functions. We will learn use of advance Numeric and Financial functions.	3	6	9
5.	Advanced Excel: Logical Functions: Excel provide logical functions those are AND, OR, XOR and NOT. User uses these functions when want to carry out more than one comparison in formula or test multiple conditions instead of just one. We will learn how to use them.	2	6	8



6.	Date and Time Functions :	1	2	3	
	We will learn how to use data and time				
	functions its different formats, calculations				
	of two dates or times and calendar functions.				

#### **Course Outcome:**

This course will help the students to: (Advanced Excel)

- Learn using advanced features to perform repetitive tasks.
- Learn to build Charts/Graphs using data to present.
- Learn to use conditional formatting to perform different day to day operations.
- Learn to use Pivot tables to represent large data in summery form.
- Learn to collect or gather data at one place to analyse quickly.

#### **Job Opportunities:**

These days excel is used in every field. There are multiple job opportunities available for excel skilled people. Jobs are available for entry level data entry level operators in various government organizations, freelancers, accountant, and multinational organizations in various roles.

#### Web References:

https://www.tutorialspoint.com/advanced excel/ https://digital.com/blog/excel-tutorials/

https://corporatefinanceinstitute.com/resources/excel/study/advanced-excel- formulas- must-know/

#### **Project:**

- Preparing budgets sheets
- Work Plan Timeline
- Simple Gantt Chart
- Event Planner Template

