Shri Vaishnav Vidyapeeth Vishwavidyalaya

Bachelor of Technology (Information Technology)

Choice Based Credit System (CBCS) 2016-17

SEMESTER VII

COURSE CODE	CATEGORY	COURSE NAME	TEACHING & EVALUATION SCHEME								
			THEORY			PRACTICAL		Th	T	P	CREDITS
			END SEM University Exam	Two Term Exam	Teachers Assessment*	END SEM University Exam	Teachers Assessment*				
BBAI501		HUMAN VALUES & PROFESSIONAL ETHICS	60	20	20	-	-	4	-	-	4

Legends: **L** - Lecture; **T** - Tutorial/Teacher Guided Student Activity; **P** – Practical; **C** - Credit;
***Teacher Assessment** shall be based on following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

COURSE OBJECTIVES:

The objective of the course is to disseminate the theory and practice of moral code of conduct and familiarize the students with the concepts of "right" and "good" in individual, social and professional context

COURSE OUTCOMES:

1. Help the learners to determine what action or life is best to do or live.
2. Right conduct and good life.
3. To equip students with understanding of the ethical philosophies, principles, models that directly and indirectly affect business.

Syllabus:

Unit I: Human Value

1. Definition, Essence, Features and Sources
2. Sources and Classification
3. Hierarchy of Values
4. Values Across Culture

Unit II: Morality

1. Definition, Moral Behaviour and Systems
2. Characteristics of Moral Standards
3. Values Vs Ethics Vs Morality
4. Impression Formation and Management

Unit III: Leadership in Indian Ethical Perspective.

1. Leadership, Characteristics
2. Leadership in Business (Styles), Types of Leadership (Scriptural, Political, Business and Charismatic)
3. Leadership Behaviour, Leadership Transformation in terms of Shastras (Upanihads, Smritis and Manu-smriti).

Unit IV: Human Behavior – Indian Thoughts

1. Business Ethics its meaning and definition
2. Types, Objectives, Sources, Relevance in Business organisations.
3. Theories of Ethics, Codes of Ethics

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Unit V: Globalization and Ethics

1. Sources of Indian Ethos & its impact on human behavior
2. Corporate Citizenship and Social Responsibility – Concept (in Business),
3. Work Ethics and factors affecting work Ethics.

REFERENCES:

1. Beteille, Andre (1991). **Society and Politics in India**. Athlone Press:New Jersey.
2. Chakraborty, S. K. (1999). **Values and Ethics for Organizations**. oxford university press
3. Fernando, A.C. (2009). **Business Ethics - An Indian Perspective .**India: Pearson Education: India
4. Fleddermann, Charles D. (2012). **Engineering Ethics**. New Jersey: Pearson Education / Prentice Hall.
5. Boatright, John R (2012). **Ethics and the Conduct of Business.**Pearson. Education: New Delhi.
6. Crane, Andrew and Matten, Dirk (2015). **Business Ethics**. Oxford University Press Inc:New York.
7. Murthy, C.S.V. (2016). Business **Ethics – Text and Cases**. Himalaya Publishing House Pvt. Ltd:Mumbai
8. Naagrajan, R.R (2016). **Professional Ethics and Human Values**. New Age International Publications:New Delhi.

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			THEORY			PRACTICAL		Th	T	P	CREDITS
			END SEM University Exam	Two Term Exam	Teachers Assessment*	END SEM University Exam	Teachers Assessment*				
BTCS701		CLOUD COMPUTING	60	20	20	30	20	3	1	2	5

Legends: **L** - Lecture; **T** - Tutorial/Teacher Guided Student Activity; **P** – Practical; **C** - Credit;
*__Teacher Assessment__ shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

COURSE OBJECTIVE:

The student will have ability to:

1. Analyze the SAAS, PAAS IAAS services of Cloud Computing to represent how engineering agility in an organization can be created.
2. Assess the exploitation of web services from cloud computing.
3. Configure essential infrastructural components used contained by the cloud.
4. Critically analyze dissimilar techniques for implementing Cloud.
5. Significantly study case studies to derive the most excellent practice model to be appropriate when deploying cloud based applications.

COURSE OUTCOMES:

Upon completion of the subject, students will be able to:

1. Investigate the trade-offs among deploying applications in the cloud and over the local infrastructure.
2. Compute the real-world problems using cloud computing through group collaboration.
3. Development and Deployment applications over commercial cloud computing infrastructures.
4. Analyze and investigation of application & hardware performance, scalability, and availability of the underlying cloud technologies and software.
5. Classify security and privacy issues in cloud computing.

SYLLABUS:

UNIT – I: Overview of Cloud Computing

Advantages, History, and Characteristics of Cloud Computing, Service & Deployment Models, Infrastructure, and Consumer View, Functioning of Cloud Computing, Cloud Architecture, Cloud Storage, Cloud Services, Industrial Applications.

UNIT – II: Dynamic Interactions and Computing Architectures

Overview , Service, Deployment, Scope, and Control ,SaaS Interaction Dynamics and Software Stack Control ,SaaS Benefits, Issues and Concerns, Suitability, and Recommendations ,PaaS Dynamics and Software Stack Control ,PaaS Benefits, Issues and Concerns, Suitability, and Recommendations , IaaS Abstract Interaction Dynamics and Software Stack Control Hardware

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and Infrastructure- Clients, Security, Network, Services. Software as a Service (SaaS)-Understanding the Multitenant Nature of SaaS Solutions, Understanding SOA. Platform as a(PaaS)-IT Evolution Leading to the Cloud, Benefits of PaaS Solutions, Disadvantages of PaaS Solutions. Infrastructure as a Service (IaaS)-Understanding IaaS, Improving Performance through Load Balancing, System and Storage Redundancy.

UNIT – III: Economics of Cloud Computing and Securing the Cloud
Overview, Review of Service Models, SWOT Analysis and Value Proposition, General Cloud Computing Risks. Service Level Agreements and Monitoring- Support Services- Accounting Services, Resource Management- IT Security- Performance Management- Provisioning- Service Management, Untangling Software Dependencies.

UNIT–IV: Developing Applications and Migrating to the Cloud
Technologies and the processes required when deploying web services; Deploying a web service from inside and outside a cloud architecture, advantages and disadvantages , Analysing the Services- Establishing a Baseline and Metrics- Tools, Best Practices- Finding the Right vendor- Phased-in v/s Flash-cut Approaches- Bringing in Creativity, How Cloud computing might evolve- Researcher Predictions- Responding to Changes- Getting ready.

UNIT–V: Designing Cloud Based Solutions and Coding Cloud Based Applications
System Requirements, Design Is a Give-and-Take Process. Creating a Simple Yahoo Pipe, Amazon Web Services, Using Google App Engine and creating Windows Azure Applications.

TEXT BOOKS:

1. Cloud Computing: A Practical Approach by Anthony T. Velte Toby J. Velte, RobertElsenpeter, 2010 by The McGraw-Hill.
2. Cloud Computing Theory And Practice Danc.Marinercus, Elsevier, 2013.
3. Cloud Computing: Principles and Paradigms, Editors: Rajkumar Buyya, James Broberg, Andrzej M. Goscinski, Wile, 2011.
4. Buyya, Selvi ," Mastering Cloud Computing ",TMH Pub.
5. Cloud Computing: Principles, Systems and Applications, Editors: Nikos Antonopoulos, Lee Gillam, Springer, 2012.

REFERENCES:

1. Kumar Saurabh, "Cloud Computing" , Wiley Pub,2012.
2. Krutz , Vines, "Cloud Security " , Wiley Pub,2013.
3. Sosinsky, " Cloud Computing" , Wiley Pub,2012.
4. Murray Woodside ; John Chinneck ; Marin Litiou on "Adaptive Cloud Deployment Using Persistence Strategies and Application Awareness"IEEE Xplore, Year: 2017, Page(s):277 – 290.
5. ImanSadooghi ; Jesús Hernández Martin ; Tonglin Li on "Understanding the Performance and Potential of Cloud Computing for Scientific Applications" IEEE Xplore, **ISSN:** 2168-7161Page(s): 358 – 371.

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LIST OF EXPERIMENTS:

1. Service deployment & Usage over cloud using Virtual Box.
2. Performance evaluation of services over cloud using VMware tool.
3. Management of cloud resources using VMware tool.
4. Working on Aneka for Cloud application.
5. Working of Goggle Drive to make spreadsheet.
6. Working and installation of Google App Engine.
7. Working and installation of Microsoft Azure.
8. Java Application deployment with Azure.
9. Installation and configuration of IBM Smart Cloud.
10. Installation and configuration of Hadoop.
11. Installation and configuration of Euceliptus.
12. Working & usage of Amazon Web Services

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			THEORY			PRACTICAL		Th	T	P	CREDITS
			END SEM University Exam	Two Term Exam	Teachers Assessment*	END SEM University Exam	Teachers Assessment*				
BTCS702		BIG DATA AND HADOOP	60	20	20	30	20	3	1	2	5

Legends: **L** - Lecture; **T** - Tutorial/Teacher Guided Student Activity; **P** – Practical; **C** - Credit;
***Teacher Assessment** shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

COURSE OBJECTIVES:

The objectives of this course are to make the students to:

1. Introduce students to Big Data Analysis using hadoop
2. Introduce to Hadoop Eco System, HDFS, commands, management and map reduce.
3. Understating machine learning concept and Introduce JAQL, pig and HIVE
4. Data stream, partitioning, debugging and toolkits

COURSE OUTCOMES:

At the end of the course, students shall be able to:

1. Install Hadoop, configure HDFS, Install Zookeeper , Pig Installation, Sqoop Installation, Hbase Installation run commands
2. Use Zookeeper , Sqoop, Hbase, JAQL, PIG & HIVE
3. Use BigInsite, data streams, partitioning and other toolkits
4. appreciate the influence of big data for business decisions and approach

Syllabus:

UNIT I

Introduction about big data ,Describe details Big data: definition and taxonomy , explain Big data value for the enterprise , Setting up the demo environment ,Describe Hadoop Architecture , Hadoop Distributed File System, MapReduce & HDFS , First steps with the Hadoop , Deep to understand the fundamental of MapReduce

UNIT II -

Hadoop ecosystem, Installing Hadoop Eco System and Integrate With Hive Installation , Pig Installation ,Hadoop , Zookeeper Installation , Hbase Installation , , Sqoop Installation, Installing Mahout Introduction to Hadoop , Hadoop components: MapReduce/Pig/Hive/HBase, Loading data into Hadoop, Getting data from Hadoop.

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UNIT III

Using Hadoop to store data, Learn NoSQL Data Management, Querying big data with Hive, Introduction to the SQL Language , From SQL to HiveQL , Querying big data with Hive, Introduction to HIVE e HIVEQL, Using Hive to query Hadoop files. Moving the Data from RDBMS to Hadoop , Moving the Data from RDBMS to Hbase , Moving the Data from RDBMS to Hive

UNIT IV

Big data & Machine learning , Quick into to Machine learning , , Machine learning tools , Spark & Spark ML , H2O , Azure ML.

UNIT V

Monitoring The Hadoop Cluster , Monitoring Hadoop Cluster, Monitoring Hadoop Cluster with Nagios , Monitoring Hadoop Cluster, Real Time Example in Hadoop , Apache Log viewer Analysis , Market Basket Algorithms Big Data Analysis in Practice , Case Study , Preparation of Case Study Report and Presentation , Case Study Presentation

TEXT BOOKS:

1. Tom White," Hadoop: The Definitive Guide Paperback – 2015" Shroff Publishers & Distributers Private Limited - Mumbai; Fourth edition (2015).
2. V. K. Jain (Author)," Big Data and Hadoop" Khanna Publishers; 1 edition (1 June 2015)
3. Jason Bell (Author) "Machine Learning for Big Data: Hands-On for Developers and Technical Professionals" Wiley (2014)
4. Big Data Analytics & Hadoop by IBM ICE Publications

REFERENCES:

1. Big data. Architettura, tecnologie e metodi per l'utilizzo di grandi basi di dati, A. Rezzani, Apogeo Education, 2013
2. Hadoop For Dummies, Dirk deRoos, For Dummies, 2014
3. Cohen et al."MAD Skills: New Analysis Practices for Big Data", 2009
4. Ullman, Rajaraman, Mining of Massive Datasets, Chapter 2
5. Stonebraker et al., "MapReduce and Parallel DBMS's: Friends or Foes?", Communications of the ACM, January 2010.
6. Dean and Ghemawat, "MapReduce: A Flexible Data Processing Tool", Communications of the ACM, January 2010.

LIST OF EXPERIMENTS:

1. Installing Hadoop, configure HDFS, Install Zookeeper , Pig Installation, Sqoop Installation, Hbase Installation
2. Configuring Hadoop
3. Running jobs on Hadoop
4. Working on HDFS
5. Hadoop streaming
6. Creating Mapper function using python.

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7. Creating Reducer function using python
8. Python iterator and generators
9. Twitter data sentimental analysis using Flume and Hive
10. Business insights of User usage records of data cards
11. Wiki page ranking with hadoop
12. Health care Data Management using Apache Hadoop ecosystem

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			THEORY			PRACTICAL		Th	T	P	CREDITS
			END SEM University Exam	Two Term Exam	Teachers Assessment*	END SEM University Exam	Teachers Assessment*				
BTIT703		DESIGN PATTERN	60	20	20	30	20	3	1	2	5

Legends: **L** - Lecture; **T** - Tutorial/Teacher Guided Student Activity; **P** – Practical; **C** - Credit;
***Teacher Assessment** shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

COURSE OBJECTIVES:

The student will have ability to:

1. Current state of practice and the latest developments in the area of software design patterns.
2. The course will emphasize how the software design pattern is specifically used as a part of the software design process,
3. Will incorporate this knowledge as they begin to work within the discipline of pattern oriented software design methodology
4. Understand most important design patterns and apply object-oriented techniques for designing reusable, maintainable and modifiable software.

COURSE OUTCOMES:

Upon completion of the subject, students will be able to:

1. Describe what design patterns are and how they can be used
2. Explain possibilities and limitations of basic design patterns
3. Apply design patterns to create object-oriented programs that are simple to modify
4. Identify implemented design patterns
5. Decide if design pattern implementations utilize their advantages
6. Assess which design patterns that are appropriate in different situations

SYLLABUS:

UNIT I - Introduction

What Is a Design Pattern, Design Patterns in Smalltalk MVC, Describing Design Patterns, the Catalog of Design Patterns, Organizing the Catalog, How Design Patterns Solve Design Problems, How to Select a Design Pattern, How to Use a Design Pattern.

UNIT II - Case Study: Designing a Document Editor

Design Problems, Document Structure, Formatting, Embellishing the User Interface, and Supporting Multiple Look-and-Feel Standards, Supporting Multiple Window Systems, User Operations, Spelling Checking and Hyphenation.

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UNIT III - Creational Patterns
Abstract Factory, Builder, Factory Method, Prototype, Singleton.

UNIT IV - Structural Patterns
Adapter, Bridge, Composite, Decorator, Façade, Flyweight, Proxy.

UNIT V - Behavioral Patterns:
Chain of Responsibility, Command, Interpreter, Iterator, Mediator, Memento, Observer, State, Strategy, Template Method, Visitor, a Brief History, and the Pattern Community

TEXT BOOKS:

1. Design Patterns Explained (second Ed), by A. Shalloway and J. Trott 2005.
2. C++ Programming: Program Design Including Data Structures, Fifth Edition,
3. C++ Design Patterns and Derivatives Pricing, Second edition, Mark S. Joshi.
4. Fowler, Martin, UML Distilled, Third Edition, Addison-Wesley, 2004
5. Freeman, Eric & Robson, Elisabeth, Head First Design Patterns, First Edition, O'Reilly

REFERENCES:

1. John Vlissides, Pattern Hatching - Design Patterns Applied, Addison-Wesley, 1998.
2. Frederick Brooks, The Design of Design, Addison-Wesley, 2010
3. Frank Buschmann et al, Pattern-Oriented Software Architecture – A System of Patterns, John Wiley, 1995.
4. Paul Clements et al, Documenting Software Architectures – Views and Beyond, Addison-Wesley, 2003.

LIST OF EXPERIMENTS:

1. WAP for implement Abstract factory Design Pattern.
2. WAP for implement Builder Design Pattern.
3. WAP for implement Façade Design Pattern.
4. WAP for implement Bridge Design Pattern.
5. WAP for implement Decorator Design Pattern.
6. WAP for implement Iterator Design Pattern.
7. WAP for implement Flyweight Design Pattern.
8. WAP for implement Proxy Design Pattern.
9. WAP for implement Visitor Design Pattern.

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			THEORY			PRACTICAL					
			END SEM University Exam	Two Term Exam	Teachers Assessment*	END SEM University Exam	Teachers Assessment*	Th	T	P	CREDITS
BTCS711		SOFT COMPUTING	60	20	20	30	20	3	1	2	5

Legends: **L** - Lecture; **T** - Tutorial/Teacher Guided Student Activity; **P** – Practical; **C** - Credit;
***Teacher Assessment** shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

COURSE OBJECTIVES:

The student will have ability to:

1. Apply soft computing techniques to real word problems
2. Understand the concepts of fuzzy sets, knowledge representation using fuzzy rules, approximate reasoning, fuzzy inference systems, and fuzzy logic control and other machine intelligence applications of fuzzy logic.
3. Understand the fundamental theory and concepts of neural networks, neuro-modeling, several neural network paradigms and its applications.
4. Understand the basics of an evolutionary computing paradigm known as genetic algorithms and its application to engineering optimization problems.
5. Apply hybrid techniques to improve efficiency of the algorithms.

COURSE OUTCOMES:

Upon completion of the subject, students will be able to:

1. Design systems using approaches of soft computing for solving various real-world problems.
2. Apply the rules of fuzzy logic for fuzzy control and Competent with issues related fuzzy systems.
3. Learn training, verification and validation of neural network models.
4. Design Engineering applications that can be optimized using genetic algorithms.
5. Design a robust and low-cost intelligent machines with knowledge of tolerance of imprecision and uncertainty.

Syllabus:

UNIT–I

Introduction to Soft Computing, Historical Development, Definitions, advantages and disadvantages, solution of complex real life problems, Soft Computing and its Techniques, Soft Computing verses Hard Computing. Applications of Soft Computing in the Current industry.

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UNIT–II

Introduction to Fuzzy Logic, Crisp Sets, Fuzzy Sets, Fuzzy Relations, Membership Functions and features, Fuzzi fication, Methods of Membership Value Assignments, Defuzzification and methods, Lambda cuts. Fuzzy Measure, Fuzzy Reasoning, Fuzzy Inference System.

UNIT–III

Neural Network (NN), Biological foundation of Neural Network, Neural Model and Network Architectures, Perceptron Learning, Supervised Hebbian Learning, Back-propagation, Associative Learning, Competitive Networks, Hopfield Network, Computing with Neural Netsand applications of Neural Network

UNIT–IV

Genetic Algorithm, Fundamentals, basic concepts, working principle, encoding, fitness function, reproduction, Genetic modeling: Inheritance operator, cross over, inversion & deletion, mutation operator, Bitwise operator, Generational Cycle, Convergence of GA, Applications & advances in GA, Differences & similarities between GA & other traditional methods.

UNIT–V

Neuro-Fuzzy and Soft Computing, Adaptive Neuro-Fuzzy Inference System Architecture, Hybrid Learning Algorithm, Learning Methods thatCross-fertilize ANFIS and RBFN. Coactive Neuro Fuzzy Modeling, Framework Neuron Functions for Adaptive Networks, Neuro Fuzzy Spectrum. Hybridization of other techniques

.

TEXT BOOKS:

1. S.N. Deepa and S.N. Sivanandam, Principles of Soft Computing, 2ed., Wiley, 2011
2. Vojislav Kecman, Learning and Soft Computing - Support Vector Machines, Neural Networks, and Fuzzy Logic Models, 1ed., The MIT Press, 2001.
3. D. K. Pratihar, Soft Computing, 1ed., Alpha Science, 2007.
4. Timothy J. Ross, Fuzzy logic with Engineering Applications, 3ed., John Wiley and Sons, 2010.
5. S. Rajasekaran and G.A.V. Pai, Neural Networks, Fuzzy Logic and Genetic Algorithms, 2ed. PHI
6. David E. Goldberg, Genetic Algorithms in search, Optimization & Machine Learning, 1ed., Addison-Wesley Publishing Company, 1989

REFERENCES:

1. Jang, Sun andMizutani, Neuro-Fuzzy and Soft Computing: A Computational Approach to Learning and Machine Intelligence, 1ed., Pearson, 1997.
2. George J. Klir and Bo Yuan, Fuzzy Sets and Fuzzy Logic: Theory and Applications, 1ed., Prentice Hall, 1995
3. Simon Haykin, Neural Networks: A Comprehensive Foundation, 2ed. Prentice Hall, 1998
4. Samir Roy and UditChakraborty, A Beginners Approach to Soft Computing, 1ed., Pearson, 2013

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LIST OF EXPERIMENTS:

1. Fuzzy Membership Functions.
2. Fuzzy set operations and its properties.
3. Fuzzy and Crisp Relations.
4. Fuzzy Inference System
5. McCulloh-Pitts neural network for generate AND, OR functions.
6. Perceptron learning for particular set of problem.
7. OR function with bipolar inputs and targets using Adaline network.
8. XOR function with bipolar inputs and targets using Madaline network.
9. Use of Genetic Algorithm for optimization problem solving.
10. Radial Basis Function and Application
11. Binary and Real Coded genetic Algorithms and Application
12. Introduction to Evolutionary Algorithms and Fundamentals
13. Genetic Expression Programming and Application
14. Introduction to Probabilistic Reasoning and Bayesian Networks Application

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			END SEM University Exam	Two Term Exam	Teachers Assessment*	END SEM University Exam	Teachers Assessment*				
BTIT712		ENTERPRISES RESOURCE PLANNING	60	20	20	30	20	3	1	2	5

Legends: **L** - Lecture; **T** - Tutorial/Teacher Guided Student Activity; **P** – Practical; **C** - Credit;
*__Teacher Assessment__ shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

COURSE OBJECTIVES:
The objective of this course is to help students to understand the basics of ERP, its uses and its application.

COURSE OUTCOMES:
Students to understand the basics of the basics of ERP, its uses and its application in present business scenario.

Syllabus

Unit I: Introduction to ERP

1. Enterprise Resource Planning –Introduction
2. Need of ERP
3. Advantages of ERP
4. Growth of ERP

Unit II: ERP and Related Technologies

1. Business process Reengineering (BPR)
2. Management Information System (MIS)
3. Decision Support Systems (DSS) Executive Support Systems (ESS)
4. Data Warehousing
5. Data Mining
6. Online Analytical Processing (OLTP)
7. Supply Chain Management (SCM)
8. Customer Relationship Management (CRM)

Unit III: Modules of ERP

1. ERP modules & Vendors Finance Production planning, control & maintenance Sales & Distribution Human Resource Management (HRM)
2. Inventory Control System.
3. Quality Management ERP Market

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Unit IV: ERP Implementation

1. ERP Implementation Life Cycles Evaluation and selection of ERP package
2. Project planning Implementation
3. Team training & testing
4. End user training & Going Live
5. Post Evaluation & Maintenance.

Unit V: Post implementation of ERP

1. ERP Case Studies Post implementation review of ERP Packages in Manufacturing
2. Services

REFERENCES:

1. Leon, A. (2008). Enterprise Resource Planning. New Delhi; Tata McGraw-Hil Education
2. Kumar, V., Venkitakrishna, N. K. (1998). ERP - Concepts and Practice. New Delhi; PHI
3. Garg, Venkitakrishnan (2003).ERP Concepts and Planning. New Delhi; PHI Learning

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			THEORY			PRACTICAL		Th	T	P	CREDITS
			END SEM University Exam	Two Term Exam	Teachers Assessment*	END SEM University Exam	Teachers Assessment*				
BBAI502		CUSTOMER RELATIONSHIP MANAGEMENT	60	20	20	30	20	3	1	2	5

Legends: L - Lecture; T - Tutorial/Teacher Guided Student Activity; P - Practical; C - Credit;
*Teacher Assessment shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

COURSE OBJECTIVES:

1. The objective of this course is to develop an insight and understanding of Customer relationship Management

COURSE OUTCOMES:

1.To enable an understanding of fundamental of retail sector.
2.To develop ability to analyse the dynamics of retail Industry and its environment.
3.To make them understand about the Retail marketing & promotion.

SYLLABUS

UNIT–I

Introduction to CRM

1. Definition & Concepts of CRM
2. Components of CRM
3. Understanding the goal of CRM
4. Customer Touch point

UNIT–II

CRM Process

1. Introduction & objective of CRM Process
2. Insights into CRM and e CRM online
3. The CRM Cycle
4. CRM Process for Marketing Organization
5. CRM affiliation in retailing sector

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UNIT–III

Developing CRM Strategy

1. Role of CRM in business strategy
2. Understanding service Quality: Technical, functional & dimensions of service quality
3. Managing Customer communications

UNIT–IV

CRM Implementation

1. Choosing the right CRM solution
2. Framework for Implementing CRM
3. Five phases for CRM Projects
4. Development of customization

UNIT–V

Sales force Automation

1. Sales process
2. Activity
3. Contact, Lead & Knowledge Management
4. Field Force Automation

TEXT BOOKS:

1. Mohammed H Peeru,Sagadevan. "**Customer Relationship Management"** Vikas Publishing House: New Delhi
2. GreenbergePaul.CRM- **Essentials customer Strategies for the 21st Centuary.** Tata McGraw Hill
3. Kincaid W. Judith**. Customer Relationship Management: Geeting it Right.** Prentice Hall: New Delhi
4. Anton,John. **Customer Relationship Management**, PrenticeHall of India: New delhi
5. GaGarikaparthiMadhavi. **CRM- The New face of Marketing.** ICFAI Press: Hyderabad

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Bachelor of Technology (Information Technology)

Choice Based Credit System (CBCS) 2016-17

SEMESTER VII

COURSE CODE	Category	COURSE NAME	TEACHING & EVALUATION SCHEME								
			THEORY			PRACTICAL		Th	T	P	CREDITS
			END SEM University Exam	Two Term Exam	Teachers Assessment*	END SEM University Exam	Teachers Assessment*				
BBABAN503		BUSINESS ANALYTICS	60	20	20	30	20	3	1	2	5

Legends: L - Lecture; T - Tutorial/Teacher Guided Student Activity; P - Practical; C - Credit;
*Teacher Assessment shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

COURSE OBJECTIVES:

The course is designed to provide the knowledge of handling data and Business Analytics' tools that can be used for fact-based decision-making.

COURSE OUTCOMES:

1. After learning this course students will have basic knowledge of business analytics.
2. Students will be able to know business analytics tools and handling of big data.

SYLLABUS

UNIT–I

Introduction to Analytics

1. Definition of analytics
2. Purpose and tools of analytics
3. Types of analytics (business related examples)

UNIT–II

Introduction to Business Analytics

1. Evolution of business analytics.
2. Importance and scope of business analytics.
3. Meaning and definition of Business Intelligence.
4. Relation of Business Intelligence with business analytics.

UNIT–III

Business Analytics Data

1. Types of data for Business Analytics
2. Types of data measurement classification scales.
3. Decision models for Business Analytics.
4. Types of Decision models with examples.

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UNIT–IV

Business Analytics Data

1. Types of data for Business Analytics
2. Types of data measurement classification scales.
3. Decision models for Business Analytics.
4. Types of Decision models with examples.

UNIT–V

Major Business Analytics Methods and Tools

1. OLAP
2. Data visualization
3. Multidimensionality
4. Executive Information System
5. Executive Support System

TEXT BOOKS:

1. Albright, S. C and Winston, W. L (2015). Business Analytics: Data Analysis and Decision Making. Atlantic Publisher and Distributors: New Delhi.
2. Thorlund, J. (2013).Business Analytics for Managers.Wiley Publishers: New Delhi.