Shri Vaishnav Vidyapeeth Vishwavidyalaya
Shri Vaishnav Institute Of Information Technology
B.Tech. (CSE-Data Science-IBM)
Choice Based Credit System (CBCS)-2022-26
SEMESTER-VII

COURSE CODE	CATEGORY	COURSE NAME	TEACHING & EVALUATION SCHEME					L	T	P	CREDITS
			THEORY			PRACTICAL					
			END SEM University Exam	Two Term Exam	Teachers Assessment*	END SEM University Exam	Teachers Assessment*				
BBAI501	AECC	Human Values and Professional Ethics	60	20	20	0	0	3	0	0	3

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 Educational Objectives (CEOs):

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 (COs):

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.

COURSE CONTENT

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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Vishwavidyalaya,Indore	Vishwavidyalaya,Indore		

Shri Vaishnav Vidyapeeth Vishwavidyalaya
Shri Vaishnav Institute Of Information Technology
B.Tech. (CSE-Data Science-IBM)
Choice Based Credit System (CBCS)-2022-26
SEMESTER-VII

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BBAI501	AECC	Human Values and Professional Ethics	60	20	20	0	0	3	0	0	3

Legends: **L** - Lecture; **T** - Tutorial/Teacher Guided Student Activity; **P** – Practical; **C** - Credit;
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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.

Suggested Readings

1. Beteille, Andre (1991). ***Society and Politics in India***. AthlonePress: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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Vishwavidyalaya,Indore	Vishwavidyalaya,Indore		

Shri Vaishnav Vidyapeeth Vishwavidyalaya
Shri Vaishnav Institute Of Information Technology
B.Tech. (CSE-Data Science-IBM)
Choice Based Credit System (CBCS)-2022-26
SEMESTER-VII

COURSE CODE	CATEGORY	COURSE NAME	TEACHING & EVALUATION SCHEME					L	T	P	CREDITS
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			END SEM University Exam	Two Term Exam	Teachers Assessment*	END SEM University Exam	Teachers Assessment*				
BTIBMA701N	**DCC**	**Text Analytics**	**60**	**20**	**20**	**30**	**20**	**3**	**0**	**2**	**4**

Legends: **L** - Lecture; **T** - Tutorial/Teacher Guided Student Activity; **P** – Practical; **C** - Credit;
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Course Educational Objectives (CEOs):

1. To provide an overview of Introduction to Text Analytics.
2. To introduce the students with the base of all the text analysis concepts.
3. To teach the fundamental techniques and principles in text analytics so that their data analysis skills can be achieved.
4. To enable students to have skills that will help them to analysis structured and unstructured real-world data and introduce them to a new world of emerging technologies.

Course Outcomes (COs):

After completion of this course the students are expected to be able to demonstrate following knowledge, skills, and attitudes.
The students will be able to

1. Introduction to text mining
2. An overview of text mining
3. Reading text data
4. Linguistic analysis and text mining
5. Creating a text mining concept model
6. Reviewing types and concepts in the Interactive Workbench
7. Editing linguistic resources
8. Fine-tuning resources
9. Performing Text Link Analysis
10. Clustering concepts
11. Categorization techniques
12. Creating categories
13. Managing linguistic resources
14. Using text mining models
15. The process of text mining

Syllabus:

UNIT I

Shri Vaishnav Vidyapeeth Vishwavidyalaya
Shri Vaishnav Institute Of Information Technology
B.Tech. (CSE-Data Science-IBM)
Choice Based Credit System (CBCS)-2022-26
SEMESTER-VII

COURSE CODE	CATEGORY	COURSE NAME	TEACHING & EVALUATION SCHEME					L	T	P	CREDITS
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BTIBMA701N	**DCC**	**Text Analytics**	**60**	**20**	**20**	**30**	**20**	**3**	**0**	**2**	**4**

Legends: **L** - Lecture; **T** - Tutorial/Teacher Guided Student Activity; **P** – Practical; **C** - Credit;
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Introduction to text mining:
Text mining and data mining, Text mining applications, Text Mining nodes, Identify the Text Mining modeling node, Steps in a typical text mining session, Demonstration 1: A typical text mining session and Functions Recursion

UNIT II
Reading text data
File List node, Use the File List node in text mining, Demonstration 1: Using the File List node to read text from multiple files, File Viewer node, Demonstration 2: Using the File Viewer node to view documents, Web Feed node, Web Feed node - RSS format, Web Feed node – HTML format, Demonstration 3: Reading text from a Web Feed.

UNIT III
Linguistic analysis and text mining
Using Identify elements in linguistic analysis, Identify Parts of Speech (PoS), Extractor component workflow, Text preprocessing, Identification of candidate terms, Identification of equivalence classes, Forcing and excluding, assign types, categorize extracted concepts, Use Libraries and Resource templates, Use Text Analysis Packages (TAPs), Linguistic resource relationships.

UNIT IV
Machine Categorization techniques
Strategies for creating categories, Text Analysis Package (TAP), Demonstration 1: Using a Text Analysis Package to categorize data, import predefined categories, Demonstration 2: Importing predefined categories, from a Microsoft Excel file, automated classification automated classification methods, Linguistic categorization techniques, Additional categorization options, Demonstration 3: Automated classification

UNIT V
Monitoring Using text mining models.
Demonstration 1: Explore a text mining model, Demonstration 2: Develop a model by combining categories and customer data, Demonstration 3: Score new data.

Text Books:
1. Tom IBM Skills Academy Content

Shri Vaishnav Vidyapeeth Vishwavidyalaya
Shri Vaishnav Institute Of Information Technology
B.Tech. (CSE-Data Science-IBM)
Choice Based Credit System (CBCS)-2022-26
SEMESTER-VII

COURSE CODE	CATEGORY	COURSE NAME	TEACHING & EVALUATION SCHEME					L	T	P	CREDITS
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BTIBMA701N	**DCC**	**Text Analytics**	**60**	**20**	**20**	**30**	**20**	**3**	**0**	**2**	**4**

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List of Practical's:

1. Preparing for a text mining project.
2. Text mining customer opinions about portable music players.
3. Text mining data from an RSS feed.
4. Review extracted results in the Interactive Workbench.
5. Editing dictionaries.
6. Editing advanced resources.
7. Perform Text Link Analysis.
8. Categorize music player data.
9. Use text mining models.

Shri Vaishnav Vidyapeeth Vishwavidyalaya
Shri Vaishnav Institute Of Information Technology
B.Tech. (CSE-Data Science-IBM)
Choice Based Credit System (CBCS)-2022-26
SEMESTER-VII

COURSE CODE	CATEGORY	COURSE NAME	TEACHING & EVALUATION SCHEME					L	T	P	CREDITS
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			END SEM University Exam	Two Term Exam	Teachers Assessment*	END SEM University Exam	Teachers Assessment*				
BTCS708N	**DCC**	**Introduction to Data science**	**60**	**20**	**20**	**30**	**20**	**3**	**0**	**2**	**4**

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 Educational Objectives (CEOs):

The objective of this course is to impart necessary knowledge of the mathematical foundations needed for data science and develop programming skills required to build data science applications.

Course Outcomes (COs):

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

1. Demonstrate understanding of the mathematical foundations needed for data science.
2. Collect, explore, clean, munge and manipulate data.
3. Implement models such as k-nearest Neighbors, Naive Bayes, linear and logisticregression,decision trees, neural networks and clustering.
4. Build data science applications using Python based toolkits.

SYLLABUS

UNIT–I

Introduction to Data Science: Concept of Data Science, Traits of Big data, Web Scraping, Analysis Reporting.

UNIT–II

Introduction to Programming Tools for Data Science: Toolkits using Python: Matplotlib,NumPy,Scikit-learn, NLTK, Visualizing Data: Bar Charts, Line Charts, Scatterplots, Working with data: Reading Files, Scraping the Web, Using APIs (Example: Using the Twitter APIs),Cleaning and Munging, Manipulating Data, Rescaling, Dimensionality Reduction.

UNIT–III

Mathematical Foundations: Linear Algebra: Vectors, Matrices, Statistics: Describing a Single Set of Data, Correlation, Simpson's Paradox, Correlation and Causation, Probability: Dependence and Independence, Conditional Probability, Bayes' Theorem, Random Variables, Continuous Distributions, The Normal Distribution, The Central Limit Theorem, Hypothesis and Inference: Statistical Hypothesis Testing, Confidence Intervals, Phacking, Bayesian Inference.

UNIT–IV

Machine Learning: Overview of Machine learning concepts – Over fitting and train/test splits, Types of Machine learning – Supervised, Unsupervised, Reinforced learning, Introduction to

Shri Vaishnav Vidyapeeth Vishwavidyalaya
Shri Vaishnav Institute Of Information Technology
B.Tech. (CSE-Data Science-IBM)
Choice Based Credit System (CBCS)-2022-26
SEMESTER-VII

COURSE CODE	CATEGORY	COURSE NAME	TEACHING & EVALUATION SCHEME					L	T	P	CREDITS
			THEORY			PRACTICAL					
			END SEM University Exam	Two Term Exam	Teachers Assessment*	END SEM University Exam	Teachers Assessment*				
BTCS708N	**DCC**	**Introduction to Data science**	**60**	**20**	**20**	**30**	**20**	**3**	**0**	**2**	**4**

Legends: **L** - Lecture; **T** - Tutorial/Teacher Guided Student Activity; **P** – Practical; **C** - Credit;
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Bayes Theorem, Linear Regression- model assumptions, regularization (lasso, ridge, elastic net), Classification and Regression algorithms- Naïve Bayes, K-Nearest Neighbors, logistic regression, support vectormachines (SVM), decision trees, and random forest, Classification Errors, Analysis of Time Series- Linear Systems Analysis, Nonlinear Dynamics, Rule Induction, Neural Networks-Learning And Generalization, Overview of Deep Learning.

UNIT–V

Case Studies of Data Science Application: Weather forecasting, Stock market prediction, Object recognition, Real Time Sentiment Analysis.

TEXT BOOKS:

1. Joel Grus, "Data Science from Scratch: First Principles with Python", O'Reilly Media.
2. AurélienGéron, "Hands-On Machine Learning with Scikit-Learn and Tensor Flow:Concepts, Tools, and Techniques to Build Intelligent Systems", 1st Edition, O'Reilly Media.
3. Jain V.K., “Data Sciences”, Khanna Publishing House, Delhi.
4. Jain V.K., “Big Data and Hadoop”, Khanna Publishing House, Delhi.
5. Jeeva Jose, “Machine Learning”, Khanna Publishing House, Delhi.
6. Chopra Rajiv, “Machine Learning”, Khanna Publishing House, Delhi.
7. Ian Goodfellow, YoshuaBengio and Aaron Courville, "Deep Learning", MIT Press http://www.deeplearningbook.org
8. Jiawei Han and Jian Pei, "Data Mining Concepts and Techniques", Third Edition, MorganKaufmann Publishers

LIST OF PRACTICALS:

1. Write a programme in Python to predict the class of the flower based on available attributes.
2. Write a programme in Python to predict if a loan will get approved or not.
3. Write a programme in Python to predict the traffic on a new mode of transport.
4. Write a programme in Python to predict the class of user.
5. Write a programme in Python to indentify the tweets which are hate tweets and which are not.
6. Write a programme in Python to predict the age of the actors.
7. Mini project to predict the time taken to solve a problem given the current status of the user

Shri Vaishnav Vidyapeeth Vishwavidyalaya
Shri Vaishnav Institute Of Information Technology
B.Tech. (CSE-Data Science-IBM)
Choice Based Credit System (CBCS)-2022-26
SEMESTER-VII

COURSE CODE	CATEGORY	COURSE NAME	TEACHING & EVALUATION SCHEME					L	T	P	CREDITS
			THEORY			PRACTICAL					
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BTCS707N	SEC	Technical presentation skill	0	0	0	0	50	0	0	2	1

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Course Educational Objectives (CEOs):

The student will have ability to:
1. To encourage the students to study advanced engineering developments.
2. To prepare and present technical reports.
3. To prepare technical material using audiovisual materials.
4. To encourage the students to use various teaching aids such as over head projectors, PowerPoint presentation and demonstrative models.

Course Outcomes (COs):

Upon completion of the subject, students will be able to:
1. Ability to review, prepare and present technological developments.
2. Ability to face the placement interviews.
3. Ability to effectively communicate technical material in print.
4. Ability to present technical material orally with confidence and poise.
5. Ability to present technical material using audiovisual materials.
6. Ability to communicate technical material to a variety of audiences, from members of the building and engineering trades and medical fields to government representatives and the public.
7. Ability to work well in teams.

GUIDELINES:

During the Presentation Session each student is expected to prepare and present a topic on engineering/technology, for duration of about 15-20 minutes. Each student is expected to present at least twice during the semester and the student is evaluated based on that. At the end of the semester, he / she can submit a report on his / her topic of presentation and marks are given based on the report.

TEXT BOOKS:

1. The Chicago Manual of Style, 13th Edition, Prentice Hall of India 1989.
2. Gowers Ernest, "The Complete Plan in Words" Penguin, 1973.
3. Menzel D.H., Jones H.M, Boyd, LG., "Writing a Technical Paper". McGraw Hill, 1961.
4. Strunk, W., & White E.B., "The Elements of Style", 3rd Edition , McMillan, 1979.

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Shri Vaishnav Vidyapeeth Vishwavidyalaya
Shri Vaishnav Institute Of Information Technology
B.Tech. (CSE-Data Science-IBM)
Choice Based Credit System (CBCS)-2022-26
SEMESTER-VII

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			END SEM University Exam	Two Term Exam	Teachers Assessment*	END SEM University Exam	Teachers Assessment*				
BTCS707N	SEC	Technical presentation skill	0	0	0	0	50	0	0	2	1

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.

REFERENCES:

1. Turbian K.L., "A Manual for Writers of Term Papers, Thesis and dissertations" Univ of Chicago Press, 1973.
2. IEEE Transactions on "Written and Oral Communication" has many papers.

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Vishwavidyalaya,Indore	Vishwavidyalaya,Indore		

Shri Vaishnav Vidyapeeth Vishwavidyalaya
Shri Vaishnav Institute Of Information Technology
B.Tech. (CSE-Data Science-IBM)
Choice Based Credit System (CBCS)-2022-26
SEMESTER-VII

COURSE CODE	CATEGORY	COURSE NAME	TEACHING & EVALUATION SCHEME					L	T	P	CREDITS
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BTCS705N	SEC	Industrial Training	0	0	0	0	50	0	0	2	1

Legends: **L** - Lecture; **T** - Tutorial/Teacher Guided Student Activity; **P** – Practical; **C** - Credit;
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Course Educational Objectives (CEOs):

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Vishwavidyalaya,Indore	Vishwavidyalaya,Indore		

Shri Vaishnav Vidyapeeth Vishwavidyalaya
Shri Vaishnav Institute Of Information Technology
B.Tech. (CSE-Data Science-IBM)
Choice Based Credit System (CBCS)-2022-26
SEMESTER-VII

COURSE CODE	CATEGORY	COURSE NAME	TEACHING & EVALUATION SCHEME					L	T	P	CREDITS
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BTCS706N	SEC	Project	0	0	0	120	80	0	0	8	4

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.

Guideline and instruction for Project:-

S.No	Particular
1.	Group formation and Submission of Project Topic (At least three(03))
2.	Guide allotment and Topic Finalization
3.	Presentation –I Contents: 1. Problem Domain 2. Literature Survey 3. Feasibility Study 4. References
4.	Synopsis Submission
5.	Presentation – II Contents: 1. SRS / URD 2. Conceptual Design
6.	Presentation – III Contents: 1. Detail Design 2. Implementation & Test Plan
7.	Project Report Submission

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Shri Vaishnav Vidyapeeth	Shri Vaishnav Vidyapeeth	Vishwavidyalaya,Indore	Vishwavidyalaya,Indore
Vishwavidyalaya,Indore	Vishwavidyalaya,Indore		

Shri Vaishnav Vidyapeeth Vishwavidyalaya
Shri Vaishnav Institute Of Information Technology
B.Tech. (CSE-Big Data Analytics/Data Science-IBM)
Choice Based Credit System (CBCS)-2021-25
SEMESTER-VII

COURSE CODE	CATEGORY	COURSE NAME	TEACHING & EVALUATION SCHEME					L	T	P	CREDITS
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BTIBMA703N	DSE	**Fundamentals of Deep Learning**	60	20	20	30	20	3	0	2	4

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 Educational Objectives (CEOs):

1. To understand complexity of Deep Learning algorithms and their Limitations
2. To understand modem notions in data analysis oriented computing.
3. To be capable of performing experiments in Deep Learning using real-world data.
4. To be capable of confidently applying common Deep Learning algoritims in practice and implementing their own.

Course Outcomes (COs):

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

1. Understand the concepts of TensorFlow, its maln functions, operations and the execution pipeline.
2. Learn topics such as convolutional neural networks, recurrent neural networks, training deep networks andl high-level interfaces
3. Understand difference between machine learning, deep leaming and artificial intelligence.
4. Design CNN and RNN architectures for classification and sequence modelling tasks.
5. Apply deep learning models in image, text, and speech domains.

SYLLABUS

UNIT–I **7 HOURS**

Introduction to TensorFlow: Computational Graph, Key highlights, Creating Graph, Regression example, Gradient Descent, TensorBoard, Modularity. Sharing variables, Keras Perceptrons: What is Perception, XOR Gate

UNIT–II **7 HOURS**

Activation Functions and Artificial Neural Networks: Sigmoid, RelU, Hyperbolic Fas, Sftmax, Introduction, Perceptron Training Rule, Gradient Descent Rule

UNIT–II **I HOURS**

Shri Vaishnav Vidyapeeth Vishwavidyalaya
Shri Vaishnav Institute Of Information Technology
B.Tech. (CSE-Big Data Analytics/Data Science-IBM)
Choice Based Credit System (CBCS)-2021-25
SEMESTER-VII

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BTIBMA703N	DSE	**Fundamentals of Deep Learning**	60	20	20	30	20	3	0	2	4

Legends: **L** - Lecture; **T** - Tutorial/Teacher Guided Student Activity; **P** – Practical; **C** - Credit;
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Gradient Descent and Backpropagation: Gradient Descent, Stochastic Gradient Descent. Backpropagation, Some problems in ANN, Optimization and Regularization: Overfitting and Capacity, Cross Validation, Feature Selection, Regularization, Hyperparameters

UNIT–IV **12 HOURS**

Introduction to Convolutional and Recurrent Neural Networks: Introduction CNN, Kernr filter, Principles behind CNINs, Multiple Filters, CNN applications, Introduction to RNNs, Unfolded RNNs, Seq2Seq RNNs, LSTM, RNN applications

UNIT–V **8HOURS**

Deep Learning applications: Image Processing, Natural Language Processing, Speech Recognition, Video Analytics.

TEXT BOOKS:

1. T. Goodfellow, I, Bengio,Y., and Courville, ., Deep Learning, MIT Press, 2016.

REFERENCES:

1. T. Bishop. C. M., Pattern Recognition and Machine Learning, Springer, 2006.

Shri Vaishnav Vidyapeeth Vishwavidyalaya
Shri Vaishnav Institute Of Information Technology
B.Tech. (CSE-Data Science-IBM)
Choice Based Credit System (CBCS)-2022-26
SEMESTER-VII

COURSE CODE	CATEGORY	COURSE NAME	TEACHING & EVALUATION SCHEME					L	T	P	CREDITS
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BTDSE715N	DSE	Quantum Computing	60	20	20	30	20	3	0	2	4

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Course Educational Objectives (CEOs):

The objective of this course is to impart necessary knowledge to the learner so that he/she candevelop and implement algorithm and write programs using these algorithm.

Course Outcomes (COs):

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

1. Explain the working of a Quantum Computing program, its architecture and programmodel
2. Develop quantum logic gate circuits
3. Develop quantum algorithm
4. Program quantum algorithm on major toolkits

SYLLABUS

UNIT–I

Introduction to Quantum Computing: Motivation for studying Quantum Computing, Major playersin the industry (IBM, Microsoft, Rigetti, D-Wave etc.), Origin of Quantum Computing, Overview of major concepts in Quantum Computing: Qubits and multi-qubits states, Bra-ket notation, Bloch Spherere presentation, Quantum Superposition, Quantum Entanglement.

UNIT–II

Math Foundation for Quantum Computing: Matrix Algebra: basis vectors and orthogonality, innerproduct and Hilbert spaces, matricesand tensors, unitary operators and projectors, Dirac notation,Eigen values and Eigen vectors.

UNIT–III

Building Blocks for Quantum Program: Architecture of a Quantum Computing platform, Details ofq-bit system of information representation:Block Sphere, Multi-qubits States, Quantum superpositionof qubits (valid and invalid superposition),Quantum Entanglement, Useful states from quantum algorithmic perceptive e.g. Bell State, Operation on qubits: Measuring and transforming using gates, Quantum Logic gates and Circuit: Pauli, Hadamard, phase shift, controlledgates, Ising, Deutsch, swapetc, Programming model for a Quantum Computing Program: Steps performed on classical computer, Steps performed on Quantum Computer, Moving data between bits and qubits.

UNIT–IV

Shri Vaishnav Vidyapeeth Vishwavidyalaya
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SEMESTER-VII

COURSE CODE	CATEGORY	COURSE NAME	TEACHING & EVALUATION SCHEME					L	T	P	CREDITS
			THEORY			PRACTICAL					
			END SEM University Exam	Two Term Exam	Teachers Assessment*	END SEM University Exam	Teachers Assessment*				
BTDSE715N	DSE	Quantum Computing	60	20	20	30	20	3	0	2	4

Legends: **L** - Lecture; **T** - Tutorial/Teacher Guided Student Activity; **P** – Practical; **C** - Credit;
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Quantum Algorithms: Basic techniques exploited by quantum algorithms, Amplitude amplification, Quantum Fourier Transform, Phase Kick-back, Quantum Phase estimation, Quantum Walks, Major Algorithms: Shor's Algorithm, Grover's Algorithm, Deutsch's Algorithm, Deutsch -Jozsa Algorithm,

UNIT–V
OSS Toolkits for implementing Quantum program:IBM quantum experience, Microsoft Q, RigettiPyQuil (QPU/QVM)

TEXT BOOKS And REFERENCES:

1. Michael A. Nielsen, "Quantum Computation and Quantum Information", Cambridge University Press.
2. David McMahon, "Quantum Computing Explained", Wiley.
3. IBM Experience:
   https://quantumexperience,ng,bluemix.net
4. Microsoft Quantum Development Kit
   https://www.microsoft.com/en-us/quantum/development-kit
5. Forest SDK PyQuil:
   https://pyquil.readthedocs.io/en/stable/.

List of Practicals:
1.Implementation of Qubits.
2. Visualization of Bloch Spherere.
3. Implementation of Shor's Algorithm.
4. Implementation of Grover's Algorithm.
5. Implementation of Deutsch's Algorithm.
6. Implementation of Deutsch -Jozsa Algorithm.

Chairperson	Chairperson	Controller of Examination	Joint Registrar
Board of Studies	Faculty of Studies	Shri Vaishnav Vidyapeeth	Shri Vaishnav Vidyapeeth
Shri Vaishnav Vidyapeeth	Shri Vaishnav Vidyapeeth	Vishwavidyalaya,Indore	Vishwavidyalaya,Indore
Vishwavidyalaya,Indore	Vishwavidyalaya,Indore		

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BTDSE716N	DSE	**Virtual Reality**	60	20	20	30	20	3	0	2	4

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Course Educational Objectives (CEOs):

The objective of this course is to provide a detailed understanding of the concepts of Virtual Realityand its applications.

Course Outcomes (COs):

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

1. Understand geometric modelling and Virtual environment.
2. Study about Virtual Hardware and Software
3. Develop Virtual Reality applications.

SYLLABUS

UNIT–I

Introduction to Virtual Reality: Virtual Reality and Virtual Environment: Introduction, Computergraphics, Real time computergraphics, Flight Simulation, Virtual environment requirement, benefits ofvirtual reality,Historical development of VR, Scientific Landmark.
3D Computer Graphics: Introduction, The Virtual world space, positioning the virtual observer,the perspective projection, human vision, stereo perspective projection, 3D clipping, Colourtheory, Simple 3D modelling, Illumination models, Reflection models, Shading algorithms,Radiosity, Hidden Surface Removal, Realism-Stereographic image.

UNIT–II

Geometric Modelling: Geometric Modelling: Introduction, From 2D to 3D, 3D space curves, 3Dboundary representation.
Geometrical Transformations: Introduction, Frames of reference, Modelling transformations,Instances, Picking, Flying, Scaling the VE, Collision detection.
Generic VR system: Introduction, Virtual environment, Computer environment, VR technology,Model of interaction, VR Systems.

UNIT–III

Virtual Environment: Animating the Virtual Environment: Introduction, The dynamics of numbers,Linear and Nonlinearinterpolation, the animation of objects, linear and non-linear translation, shape & objectinbetweening, free from deformation, particle system.

Shri Vaishnav Vidyapeeth Vishwavidyalaya
Shri Vaishnav Institute Of Information Technology
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Physical Simulation: Introduction, Objects falling in a gravitational field, Rotating wheels, Elasticcollisions, projectiles, simple pendulum, springs, Flight dynamics of an aircraft.

UNIT–IV
VR Hardware and Software: Human factors: Introduction, the eye, the ear, the somatic senses.
VR Hardware: Introduction, sensor hardware, Head-coupled displays, Acoustic hardware,Integrated VR systems.
VR Software: Introduction, Modelling virtual world, Physical simulation, VR toolkits,Introduction to VRML

UNIT–V
VR Applications: Introduction, Engineering, Entertainment, Science, Training.
The Future: Virtual environment, modes of interaction

TEXT BOOKS And REFERENCES:

1. John Vince, "Virtual Reality Systems ", Pearson Education Asia, 2007.
2. Anand R., "Augmented and Virtual Reality", Khanna Publishing House, Delhi.
3. Adams, "Visualizations of Virtual Reality", Tata McGraw Hill, 2000.
4. Grigore C. Burdea, Philippe Coiffet , "Virtual Reality Technology", Wiley Inter Science, 2nd Edition, 2006.
5. William R. Sherman, Alan B. Craig, "Understanding Virtual Reality: Interface, Application and Design", Morgan Kaufmann, 2008.
6. www.vresources.org
7. www.vrac.iastate.edu
8. www.w3.org/MarkUp/VRM.

List of Practicals:
1. Study of tools like Unity, Maya, 3DS MAX, AR toolkit, Vuforia and Blender.
2. Use the primitive objects and apply various projection types by handling camera.
3. Download objects from asset store and apply various lighting and shading effects.
4. Model three dimensional objects using various modelling techniques and apply texturesover them.
5. Create three dimensional realistic scenes and develop simple virtual reality enabled mobileapplications which have limited interactivity.
6. Add audio and text special effects to the developed application.

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7. Develop VR enabled applications using motion trackers and sensors incorporating fullhaptic interactivity.
8. Develop AR enabled applications with interactivity like E learning environment, Virtualwalkthroughs and visualization of historic places.
9. Develop AR enabled simple applications like human anatomy visualization, DNA/RNAstructure visualization and surgery simulation.
10. Develop simple MR enabled gaming applications.