

BHAKTA KAVI NARSINH MEHTA UNIVERSITY**Major/Minor****Syllabus of B.C.A & B.Sc. (IT) (Honors) as per NEP-2020****Faculty of Science****Effective from June 2026****Subject: Computer Science****SEMESTER- VII****SUMMARY OF THE SYLLABUS**

Sem No.	Sr. No.	Category of Course	Course Title	Course Level	Credit	Teaching Hrs.	SEE Marks	CCE Marks	Total Marks	Exam Duration
Sem-7	1	Major-17	Application Development Using Flutter (Theory)	6.0	Theory – 04	Theory – 60	50	50	100	2:00 Hrs
	2	Major-18	Application Development Using Flutter (Practical)	6.0	Practical – 04	Practical – 120	50	50	100	2:00 Hrs
	3	Major-19	Advanced Web Development using Laravel	6.0	Theory – 03 Practical – 01	Theory – 45 Practical – 30	50	50	100	2:00 Hrs
	4	Minor-7	NoSQL Database: MongoDB	6.0	Theory – 03 Practical – 01	Theory – 45 Practical – 30	50	50	100	2:00 Hrs
	5	OJT	On the Job Training (OJT)	6.0	06	-	As Per BKNM University Guideline			
	OR									
	5	MDSC-01	In-House Project	6.0	Practical – 04	Practical – 120	50	50	100	2:00 Hrs
		MDRC-01	Professional Communication Skills	6.0	Theory – 02	Theory – 30	25	25	50	1:00 Hrs

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Note: Honours students not undergoing research, will do either OJT of 12 credits in major course relevant industry in 7th and 8th semester OR 12 credits (6 credits in 7th Semester and 6 credits in 8th semester) of Major/Minor discipline relevant courses (1 subject of Major/Minor discipline relevant of 4 credits and 1 subject of Major/Minor discipline relevant SEC course of 2 credits in each semester) in lieu of a research project, which will award honours degree to the students. Student can choose these courses from the pool of courses available in same or different institutions.

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Course Level	6.0	Internal Marks	50
Programme	Bachelor of Computer Application	External Marks	50
Semester	7	Practical Internal	0
Category of Course	Major-17	Practical External	0
Course Credit	4	Prac. External Exam Duration	-
Teaching Hours	Theory-60 Practical-0	Total	100
Course Code		Exam Duration	2:00 Hrs
Course Title	Application Development Using Flutter (Theory)		

Objectives:

- To introduce the fundamentals and history of Flutter and its role in cross-platform mobile application development.
- To understand the architecture and features of Flutter framework.
- To learn the basics of Dart programming language including data types, variables, operators, and control statements.
- To develop understanding of Object-Oriented Programming (OOP) concepts used in Dart.
- To explore different Flutter widgets and layouts for building user interfaces.
- To design interactive user interfaces using various Flutter controls and containers.
- To learn handling of gestures, forms, dialogs, and navigation components in Flutter.
- To understand the use of animations, themes, and UI customization in Flutter applications.
- To develop Flutter applications that integrate Firebase, local storage, HTTP services, camera, and notifications.

Outcomes:

- Explain the architecture, features, advantages, and limitations of Flutter.
- Install and configure Flutter development environment on Windows.
- Apply Dart programming concepts to build Flutter applications.
- Develop applications using Flutter widgets and layout structures.
- Design UI components using containers, text fields, buttons, lists, grids, and navigation widgets.
- Implement forms, validations, gestures, and user interactions in Flutter apps.
- Create visually appealing applications using themes, animations, and UI customization techniques.
- Integrate Flutter applications with Firebase, SQLite, and HTTP services.
- Build complete cross-platform mobile applications using Flutter framework.

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Subject: **Computer Science****SEMESTER- VII****Course Contents**

UNIT		Hours
Unit 1 Introduction to Flutter and Dart Programming	Introduction to Flutter • History of Flutter • Features of Flutter • Advantage of Flutter • Disadvantages of Flutter • Flutter Installation for windows • Flutter Architecture Introduction to Dart Programming • Data Type • Variables and Functions • Operators • Decision Making and Loops • Continue and Break • Final and Const Keyword • OOP Concepts	15
Unit 2 Flutter Widgets, Layouts and State Management	Flutter Basics • Flutter Widget ▪ Types Of Widgets ▪ State Management Widget • Flutter Scaffold ▪ constructor and properties of the Scaffold widget class • Flutter Layouts • Flutter Gestures system ▪ Gestures and pointers ▪ Gesture Detector • Flutter State Management • Flutter IDE	15
Unit 3 Flutter UI Components and Controls	Flutter Container and Controls • Flutter Container • Flutter Row and Column • Flutter Text • Flutter TextField • Flutter Buttons	15

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	• Flutter Stack • Flutter Forms • Flutter Alert Dialogs • Flutter Icons • Flutter Images • Flutter Card • Flutter Tabbar • Flutter Drawer • Flutter Lists • Flutter GridView • Flutter Toast • Flutter Checkbox • Flutter Radio Button • Flutter Progress Bar • Flutter SnackBar • Flutter Tooltip • Flutter Slider • Flutter Switch • Flutter Charts • Bottom Navigation Bar • Flutter Themes • Flutter Table • Flutter Calendar • Flutter Animation	
Unit 4 Flutter Design, Animations and Data Handling	Design & Animations • Customizing Fonts in Flutter • Flutter - Skeleton Text • Flutter - Themes • Flutter - Lazy Loader • Flutter - UI Orientation • Flutter - Animation in Route Transition • Flutter - Physics Simulation in Animation • Flutter - Radial Hero Animation • Flutter - Hinge Animation • Flutter - Lottie Animation	15

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	Forms & Gestures • Form Validation in Flutter • Designing a Form Submission Page in Flutter • Flutter - Gestures • Flutter - Read and Write Data on Firebase • Gallery Access and Camera in Flutter • Camera Access in Flutter • SQLite and local storage • Shared preferences • Background local notifications in Flutter • HTTP GET Response in Flutter	
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Suggested Reading:

References Book:

- Flutter in Action By Eric Windmill 1st Edition Manning Publications
- Beginning Flutter: A Hands-On Guide to App Development By Marco L. Napoli 1st Edition Wiley Publications
- Flutter Cookbook By Simone Alessandria 1st Edition Packt Publishing
- Learning Dart By Ivo Balbaert 2nd Edition Packt Publishing
- Programming Flutter: Native, Cross-Platform Apps the Easy Way By Carmine Zaccagnino 1st Edition Pragmatic Bookshelf Publications
- Flutter Complete Reference: Create beautiful, fast and native apps for any device
- Beginning App Development with Flutter By Rap Payne 1st Edition Apress Publications

Web site References:

- <https://flutter.dev>
- <https://dart.dev>
- <https://docs.flutter.dev/reference/tutorials>
- <https://www.javatpoint.com/flutter>
- <https://www.geeksforgeeks.org/flutter>
- <https://www.tutorialspoint.com/flutter>
- <https://www.w3schools.com/flutter>

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Course Level	6.0		Internal Marks	00
Programme	Bachelor of Computer Application		External Marks	00
Semester	7		Practical Internal	50
Category of Course	Major-18		Practical External	50
Course Credit	4		Prac. External Exam Duration	2:00 Hrs
Teaching Hours	Theory-0 Practical-120		Total	100
Course Code			Exam Duration	-
Course Title	Application Development Using Flutter (Practical)			

Objectives:

- To introduce the fundamentals and history of Flutter and its role in cross-platform mobile application development.
- To understand the architecture and features of Flutter framework.
- To learn the basics of Dart programming language including data types, variables, operators, and control statements.
- To develop understanding of Object-Oriented Programming (OOP) concepts used in Dart.
- To explore different Flutter widgets and layouts for building user interfaces.
- To design interactive user interfaces using various Flutter controls and containers.
- To learn handling of gestures, forms, dialogs, and navigation components in Flutter.
- To understand the use of animations, themes, and UI customization in Flutter applications.
- To develop Flutter applications that integrate Firebase, local storage, HTTP services, camera, and notifications.

Outcomes:

- Explain the architecture, features, advantages, and limitations of Flutter.
- Install and configure Flutter development environment on Windows.
- Apply Dart programming concepts to build Flutter applications.
- Develop applications using Flutter widgets and layout structures.
- Design UI components using containers, text fields, buttons, lists, grids, and navigation widgets.
- Implement forms, validations, gestures, and user interactions in Flutter apps.
- Create visually appealing applications using themes, animations, and UI customization techniques.
- Integrate Flutter applications with Firebase, SQLite, and HTTP services.
- Build complete cross-platform mobile applications using Flutter framework.

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Subject: **Computer Science****SEMESTER- VII****Course Contents**

UNIT		Hours
Unit 1 Introduction to Flutter and Dart Programming	Introduction to Flutter • History of Flutter • Features of Flutter • Advantage of Flutter • Disadvantages of Flutter • Flutter Installation for windows • Flutter Architecture Introduction to Dart Programming • Data Type • Variables and Functions • Operators • Decision Making and Loops • Continue and Break • Final and Const Keyword • OOP Concepts	30
Unit 2 Flutter Widgets, Layouts and State Management	Flutter Basics • Flutter Widget ▪ Types Of Widgets ▪ State Management Widget • Flutter Scaffold ▪ constructor and properties of the Scaffold widget class • Flutter Layouts • Flutter Gestures system ▪ Gestures and pointers ▪ Gesture Detector • Flutter State Management • Flutter IDE	30
Unit 3 Flutter UI Components and Controls	Flutter Container and Controls • Flutter Container • Flutter Row and Column • Flutter Text • Flutter TextField • Flutter Buttons	30

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Unit 4 Flutter Design, Animations and Data Handling	Design & Animations • Customizing Fonts in Flutter • Flutter - Skeleton Text • Flutter - Themes • Flutter - Lazy Loader • Flutter - UI Orientation • Flutter - Animation in Route Transition • Flutter - Physics Simulation in Animation • Flutter - Radial Hero Animation • Flutter - Hinge Animation • Flutter - Lottie Animation	30

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Suggested Reading:

References Book:

- Flutter in Action By Eric Windmill 1st Edition Manning Publications
- Beginning Flutter: A Hands-On Guide to App Development By Marco L. Napoli 1st Edition Wiley Publications
- Flutter Cookbook By Simone Alessandria 1st Edition Packt Publishing
- Learning Dart By Ivo Balbaert 2nd Edition Packt Publishing
- Programming Flutter: Native, Cross-Platform Apps the Easy Way By Carmine Zaccagnino 1st Edition Pragmatic Bookshelf Publications
- Flutter Complete Reference: Create beautiful, fast and native apps for any device
- Beginning App Development with Flutter By Rap Payne 1st Edition Apress Publications

Web site References:

- <https://flutter.dev>
- <https://dart.dev>
- <https://docs.flutter.dev/reference/tutorials>
- <https://www.javatpoint.com/flutter>
- <https://www.geeksforgeeks.org/flutter>
- <https://www.tutorialspoint.com/flutter>
- <https://www.w3schools.com/flutter>

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Course Level	6.0	Internal Marks	25
Programme	Bachelor of Computer Application	External Marks	50
Semester	7	Practical Internal	25
Category of Course	Major-19	Practical External	0
Course Credit	4	Prac. External Exam Duration	-
Teaching Hours	Theory- 45 Practical-30	Total	100
Course Code		Exam Duration	2:00 Hrs
Course Title	Advanced Web Development using Laravel		

Objectives:

- Understand and apply fundamental concepts of PHP programming and Object-Oriented Programming (OOP).
- Develop the ability to design and implement classes, objects, inheritance, and advanced OOP features in PHP.
- Gain proficiency in designing responsive web interfaces using the Bootstrap framework and UI components.
- Understand the architecture, features, and installation process of the Laravel framework.
- Apply the MVC architecture to develop structured and maintainable web applications.
- Configure Laravel applications using environment settings, database configuration, and Artisan tools.
- Implement core Laravel functionalities including routing, controllers, middleware, sessions, and request-response handling.
- Perform database operations using migrations, seeding, raw queries, and transactions in Laravel.
- Develop dynamic web pages using Blade templating engine and form handling techniques.
- Utilize Eloquent ORM and validation mechanisms to manage data and ensure data integrity in web applications.

Outcomes:

- Apply basic and advanced concepts of PHP and Object-Oriented Programming to develop web applications.
- Design and implement modular and reusable code using OOP principles such as inheritance, interfaces, and encapsulation.
- Develop responsive and user-friendly interfaces using the Bootstrap framework and its components.
- Understand and implement the Laravel framework for modern web application development.

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- Apply MVC architecture to structure web applications efficiently.
- Configure and manage Laravel applications using environment settings, database connectivity, and Artisan commands.
- Implement application logic using routing, controllers, sessions, and request-response handling in Laravel.
- Perform database operations using migrations, seeding, and transactions in Laravel.
- Create dynamic views and handle user input using Blade templating and form handling techniques.
- Apply Eloquent ORM and validation techniques to ensure efficient data handling and data integrity.

Course Contents

UNIT		Hours
Unit 1 Object-Oriented PHP & Bootstrap Fundamentals	Object-Oriented Programming in PHP • Revision of PHP Basics: Syntax, Variables, Data Types, Operators, Arrays, Functions • Introduction to OOP: Classes, Objects, Properties, Methods • Constructors and Destructors • Visibility: Public, Private, Protected • Class Constants and Static Keyword • Inheritance and Scope Resolution Operator (::) • Interfaces • Magic Methods • Object Cloning and Comparing Objects • Final Keyword Bootstrap Framework • Introduction to Bootstrap and File Structure • Basic HTML Template and Global Styles • Grid System: Default Grid, Fluid Grid, Offsetting and Nesting Columns • Container Layouts • Implementation of UI Components: • Typography • Tables • Forms • Buttons	10

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	• Images and Icons • Navigation and Navbar • Pagination • Labels and Badges • Progress Bars and Wells	
Unit 2 Introduction to Laravel & Application Configuration	Laravel Framework Overview • Introduction to Laravel and its Features • MVC Architecture • Laravel Directory Structure • Installation using Composer and Laravel Installer • Understanding Composer and Package Management Configuration and Environment Setup • Environment Configuration (.env file) • Protecting Sensitive Data • Database Configuration • Artisan Command Line Tool Overview • Maintenance Mode and Application Settings	10
Unit 3 Laravel Core Concepts & Database Interaction	Core Laravel Concepts • Namespaces • Controllers • Routing: • Basic Routing • Route Parameters • Named Routes • Route Groups and Prefixing • Sub-Domain Routing • Route Model Binding • Request and Response Handling • Redirection • Cookies and Sessions • Views and Passing Data Database Handling	10

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	• Creating Models with Migration • Migration Structure and Execution • Database Seeding • Running Raw SQL Queries • Database Transactions • Clearing Cache and Compiled Views	
Unit 4 Blade Templates, Eloquent ORM & Validation	Blade Template Engine • Introduction to Blade • Template Inheritance and Master Layouts • Displaying Variables • Conditional Statements • Loops • Executing PHP Functions in Blade Form Handling • Creating Forms in Laravel • Form Controls: Text, Password, File Input • Checkboxes and Radio Buttons • Drop-down Lists • Submit Buttons • Localization Eloquent ORM • Introduction to Eloquent • Model Naming Conventions • Table Names and Primary Keys • Timestamps • CRUD Operations (Create, Retrieve, Update, Delete) • Displaying Data in Views Validation • Defining Routes for Validation • Writing Validation Rules • Displaying Validation Errors	15

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	• Array Validation • Custom Validators • Available Validators: • Accepted • Date (After/Before) • Alpha/Numeric • Between • Boolean • Email • Exists • Image • Integer • Max/Min • Regular Expressions	
	Practical	30

Suggested Reading:

References Book:

- Modern PHP (Updated Edition) – Josh Lockhart
- Laravel: Up & Running (3rd Edition) – Matt Stauffer
- Clean Code in PHP – Carsten Windler & Alexander Makarov
- Hands-On Full Stack Web Development with Laravel – Fernando Monteiro
- Mastering Bootstrap 4 (2nd Edition) – Benjamin Jakobus & Jason Marah
- Learning PHP, MySQL & JavaScript (5th Edition) – Robin Nixon

Web site References:

- Laravel Docs → <https://laravel.com/docs>
- PHP Official → <https://www.php.net>
- Bootstrap → <https://getbootstrap.com>
- GeeksforGeeks → <https://www.geeksforgeeks.org/php/laravel/>
- Tutorialspoint → <https://www.tutorialspoint.com/laravel/index.htm>

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Course Level	6.0	Internal Marks	25
Programme	Bachelor of Computer Application	External Marks	50
Semester	7	Practical Internal	25
Category of Course	Minor-7	Practical External	0
Course Credit	4	Prac. External Exam Duration	-
Teaching Hours	Theory-45 Practical-30	Total	100
Course Code		Exam Duration	2:00 Hrs
Course Title	NoSQL Database: MongoDB		

Objectives:

- Understand the fundamentals of database systems and the limitations of traditional RDBMS.
- Explain the concept of NoSQL databases, their features, advantages, and real-world use cases.
- Identify and differentiate between various types of NoSQL databases such as key-value, document, column-oriented, and graph databases.
- Compare SQL and NoSQL databases based on structure, scalability, and performance.
- Understand MongoDB architecture including databases, collections, documents, and JSON/BSON formats.
- Perform CRUD operations in MongoDB using various methods and query operators.
- Apply querying techniques such as filtering, projection, sorting, and pagination (limit/skip).
- Design efficient data models using schema design principles, relationships, and embedding vs referencing.
- Implement indexing and aggregation techniques to optimize performance and analyze data.
- Manage MongoDB databases through backup, restore, security (authentication/authorization), and integrate MongoDB with applications using Node.js.

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Outcomes:

- Describe the basic concepts of database systems and identify limitations of relational databases.
- Explain NoSQL database concepts, types, features, and their practical applications.
- Differentiate between SQL and NoSQL databases based on use cases, scalability, and data models.
- Demonstrate understanding of MongoDB architecture including collections, documents, and data formats (JSON/BSON).
- Perform CRUD operations in MongoDB using appropriate commands and query operators.
- Apply filtering, projection, sorting, and pagination techniques to retrieve specific data efficiently.
- Design effective MongoDB data models using embedding, referencing, and relationship concepts.
- Implement indexing and aggregation framework to improve query performance and data analysis.

UNIT		Hours
Unit 1 Introduction to NoSQL	• Introduction to Database Systems • Limitations of Relational Databases (RDBMS) • What is NoSQL? • Types of NoSQL Databases • Key-Value Stores • Document Databases • Column-Oriented Databases • Graph Databases • Features and Advantages of NoSQL • Use cases of NoSQL databases • SQL vs NoSQL comparison	10
Unit 2 Introduction to MongoDB	• MongoDB concepts - Databases, collections, and documents • Downloading Installing MongoDB, MongoDB shell and Compass • Introduction to JSON and BSON format CRUD Operations and Querying • Creating Databases and Collections • Insert Operations	15

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	○ insertOne() ○ insertMany() • Read Operations ○ find(), findOne() • Update Operations ○ updateOne(), updateMany() • Delete Operations ○ deleteOne(), deleteMany() • Projection in MongoDB • Query Operators ○ Comparison Operators (\$gt, \$lt, \$eq) ○ Logical Operators (\$and, \$or, \$not) ○ Element Operators ○ Array Operators • Sorting Documents • Limit and Skip methods	
Unit 3 Data Modeling, Indexing and Aggregation	• MongoDB Data Modeling Concepts • Schema Design Principles • Embedded vs Referenced Documents • Relationships in MongoDB ○ One-to-One ○ One-to-Many ○ Many-to-Many • Indexing in MongoDB • Types of Indexes • Creating and Dropping Indexes • Performance Optimization • Aggregation Framework • Aggregation Pipeline Stages ○ \$match ○ \$group ○ \$project ○ \$sort	10
Unit 4 Administration and Application Development	• Backup and Restore Database • Import and Export Data • User Authentication and Authorization • Role-Based Access Control	10

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	• Replication Concept • Sharding Concept • MongoDB with Node.js Introduction • Connecting MongoDB with Application • CRUD Operations using Node.js	
Practical		30

Suggested Reading:

References Book:

- Mastering MongoDB 7.0 (Fourth Edition) – Marko Aleksendrić et al. (2024)
- Mastering NoSQL Databases with MongoDB – Greyson Chesterfield (2024)
- Mastering MongoDB: A Comprehensive Guide to NoSQL Database Excellence – Frahaan Hussain & Kameron Hussain (2024)
- MongoDB in Action (Third Edition) – Arek Borucki (2025)
- MongoDB: Learning NoSQL Databases Made Easy – Feri Sulianta (2025)

Web site References:

- MongoDB Inc. Documentation → <https://www.mongodb.com/docs/>
- W3Schools MongoDB Tutorial → <https://www.w3schools.com/mongodb/>
- GeeksforGeeks MongoDB Guide → <https://www.geeksforgeeks.org/mongodb-tutorial/>
- MongoDB University → <https://university.mongodb.com/>
- TutorialsPoint MongoDB Tutorial → <https://www.tutorialspoint.com/mongodb/index.htm>
- freeCodeCamp → <https://www.freecodecamp.org/>

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INTERNAL EVALUATION SCHEME		
NO	Particulars	Marks
1	Mid Semester Exam (Mandatory)	25
2	Class Test	05
3	Open book exam/test	05
4	Open note exam/test	05
5	Self-test/ Online test	05
6	Essay/Article writing	05
7	Quizzes/Objective test	05
8	Class assignment	05
9	Home assignment	05
10	Reports Writing	05
11	Research/Dissertation	05
12	Case Studies	05
13	Viva/Oral exam	05
14	Group Discussion	05
15	Role Play	05
16	Paper presentation/Seminar	05
17	Language Lab work	05
18	Interview	05
19	Craft work	05
20	Co-curricular work	05
21	Field Assignment	05
22	Poster Presentation	05
23	Attendance	05
24	Project Work	05
	Total	50

Note: Sr.No.1 is mandatory. Select any five from Sr.No.2 to 24. Each Contains five marks. Student should secure 18 Marks for passing in internal Exam.

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Paper Style

Ques. No.	Particulars	From which Unit	Marks
1	Questions (Any Two Out Of Four)	1	10
2	Questions (Any Two Out Of Four)	2	10
3	Questions (Any Two Out Of Four)	3	10
4	Questions (Any Two Out Of Four)	4	10
5	Questions (Any Two Out Of Four)	From Each Unit	10
		Total Marks	50

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SUMMARY OF THE SYLLABUS

Sem No.	Sr. No.	Category of Course	Course Title	Course Level	Credit	Teaching Hrs.	SEE Marks	CCE Marks	Total Marks	Exam Duration
7	1	MDSC-01	In-House Project	6.0	Practical – 04	Practical – 120	50	50	100	2:00 Hrs
	2	MDRC-01	Professional Communication Skills	6.0	Theory – 02	Theory – 30	25	25	50	1:00 Hrs

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Module	Content	Hours
1	Project Development (In House) With any of the Minor or Major Subject Basics.	120

Suggestive assessment scheme:

Component	Marks	Type
Internal Practical	25	Proposal, Flowcharts and Diagrams, attendance
	25	Code Implementation and Testing
External Practical	50	Final report, viva, project presentation

Guidelines:

- Project must be developed in the computer laboratory of concern institute under the supervision of faculties of concern institute on any subject of previous semester or current semester.
- At the time of Project-Viva examination student must show all the Workouts, SDLC, Documentation, Program codes and project in running mode.
- The guide shall monitor progress of the student continuously. A student is required to present the progress of the Project work during the semester as per the schedule provided by the Guide.
- Student has to submit a hard copy of Project Report, workbook and a copy of Project as per guide suggestion.
- Project submission should follow the guide's schedule, with a mandatory live demonstration during the viva, supported by a multimedia presentation.

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Course Level	6	Internal Marks	25
Programme	Bachelor of Computer Application	External Marks	25
Semester	7	Practical Internal	00
Category of Course	MDRC-01	Practical External	00
Course Credit	2	Prac. External Exam Duration	-
Teaching Hours	Theory-30 Practical-00	Total	50
Course Code		Exam Duration	1:00 Hrs
Course Title	Professional Communication Skills		

Course Objectives:

- To understand the process of communication and its importance in personal and professional contexts.
- To develop proficiency in verbal communication, including oral (face-to-face, meetings, presentations, public speaking) and written forms (emails, reports, business documents).
- To enhance listening skills by identifying types of listening, overcoming barriers, and practicing attentive and effective listening techniques.
- To improve reading comprehension skills through various strategies and techniques for better understanding of professional content.
- To analyze and apply nonverbal communication skills, including physical expression (gestures, posture), vocal expression (tone, pitch, speed), and space-based interaction.
- To understand the principles of effective presentation, including purpose, organization, depth, and emphasis in delivering content.
- To develop presentation strategies such as audience analysis, content creation, interaction, and practice for impactful communication.
- To build professional and technical communication skills for interviews and workplace situations, including preparation techniques, STAR method, role-play, and case-study communication.

Course Learning Outcomes:

- Students will be able to explain the process of communication and identify its key elements in various contexts.
- Students will be able to demonstrate effective verbal communication skills in both oral (discussions, presentations, meetings) and written forms (emails, reports, professional documents).
- Students will be able to apply active listening techniques, overcome communication barriers, and exhibit qualities of a good listener.

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- Students will be able to use appropriate reading strategies and techniques to improve comprehension of academic and professional texts.
- Students will be able to interpret and use nonverbal communication cues, including gestures, posture, tone, pitch, and spatial behavior effectively.
- Students will be able to design and deliver effective presentations with proper organization, clarity, depth, and emphasis.
- Students will be able to apply presentation strategies, including audience analysis, engaging content creation, interaction, and practice techniques.
- Students will be able to demonstrate professional communication and interview skills, including preparation strategies, use of the STAR method, role-play, and workplace communication scenarios.

Course Contents

UNIT		Hours
Unit 1 Fundamentals of communication	Process of communication Types of communication • Verbal ○ Oral Communication • Face-to-face conversation • Group discussion • Meetings • Presentations • Public speaking ○ Written Communication • E-mail • Business Letter • Report writing • Professional Communication • Mou • Agreements • EoI • CV/ Resume ○ Listening skills • Types of listening • Barriers to communication • Qualities of good listener • Attentive hearing ○ Developing reading comprehension • Strategies of reading	15

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	• Techniques of reading • Nonverbal ○ Physical expression • Gestures • Posture • Eye contact ○ Vocal expression • Volume of voice • Pitch Tone • Speed • Vocalization • confidence ○ Space-based interaction • Space and distance to communicate non-verbally ○ Time-management in communication	
Unit 2 Presentation & Interview Skills Development	Definition and purpose of presentation • Objectives, Goal, Aim Effective Presentation • Organization of presentation • Depth of presentation • Emphasis in presentation Strategies of presentation • Understanding your audience • Creating engaging content • Interacting with audience • Practice Preparing Presentation Using Technical Skills with AI Tools • Gamma AI • Beautiful.ai • Tome AI • Canva AI Key Strategies for interview • Research the company • Analyse the job description • Preparation of answer • Preparation for your own questions • STAR method • Preparation of documents	15

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	• Case-study communication • Placement communication • Role-play	
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Suggested Reading:

References Book:

- Interviewology: The New Science of Interviewing – Anna Papalia (2024)
- Supercommunicators – Charles Duhigg (2024)
- Five Stars: The Communication Secrets to Get from Good to Great – Carmine Gallo (recent edition)
- Crucial Conversations: Tools for Talking When Stakes Are High – Joseph Grenny et al. (latest editions)
- Talk Like TED – Carmine Gallo (updated editions)

Web site References:

- <http://edu.gcfglobal.org/en/communicationskills/>
- <http://www.coursera.org/learn/communication-skill-course>
- <http://www.coursera.org/learn/communication-skills>
- <http://www.coursera.org/learn/packt-communication-skills-fjvc1>
- <http://www.coursera.org/articles/communication-skills>

INTERNAL EVALUATION SCHEME		
NO	Particulars	Marks
1	Mid Semester Exam (Mandatory)	13
2	Class Test	03
3	Open book exam/test	03
4	Open note exam/test	03
5	Self-test/ Online test	03
6	Essay/Article writing	03
7	Quizzes/Objective test	03
8	Class assignment	03
9	Home assignment	03
10	Reports Writing	03
11	Research/Dissertation	03
12	Case Studies	03
13	Viva/Oral exam	03
14	Group Discussion	03

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15	Role Play	03
16	Paper presentation/Seminar	03
17	Language Lab work	03
18	Interview	03
19	Craft work	03
20	Co-curricular work	03
21	Field Assignment	03
22	Poster Presentation	03
23	Attendance	03
24	Project Work	03
	Total	25
Note: Sr.No.1 is mandatory. Select any Four from Sr.No.2 to 24. Each Contains three marks. Student should secure 09 Marks for passing in internal Exam.		

Paper Style

Ques. No.	Particulars	From which Unit	Marks
1	Questions (Any Two Out Of Four)	1	10
2	Questions (Any Two Out Of Four)	2	10
3	Questions (Any One Out Of Two)	From Each Unit	05
		Total Marks	25