



Shri Vaishnav Vidyapeeth Vishwavidyalaya

Shri Vaishnav Institute of Information Technology

Choice Based Credit System (CBCS) in the Light of NEP-2020 Bachelor of Technology (CSE with specialization in Computer Science and Business Systems –TCS) SEMESTER-I (2023-2027)

COURSE CODE	Category	COURSE NAME	TEACHING & EVALUATION SCHEME								
			THEORY			PRACTICAL		L	T	P	CREDI TS
			END SEM University Exam	Two Term Exam	Teachers Assessment *	END SEM University Exam	Teachers Assessment *				
BTCSH101N	DCC	Discrete Mathematics for Computer Science	60	20	20	0	50	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 OBJECTIVES

Student will have ability:

1. To introduce fundamental concepts of calculus and discrete mathematics.

COURSE OUTCOMES

Upon completion of the subject, Students will be able:

1. To understand and apply basic concepts of calculus, Boolean algebra and combinatorics.

SYLLABUS

UNIT I

Boolean algebra: Introduction Of Boolean Algebra, Truth Table, Basic Logic Gate, Basic Postulates Of Boolean Algebra, Principle Of Duality, Canonical Form, Karnaugh Map.

UNIT II

Abstract algebra: Set, Relation, Group, Ring, Field.

UNIT III

Combinatorics: Basic Counting, Balls And Bins Problems, Generating Functions, Recurrence Relations. Proof Techniques, Principle of Mathematical Induction, Pigeonhole Principle.



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UNIT IV

Graph Theory: Graphs and Digraphs, Complement, Isomorphism, Connectedness and Reachability, Adjacency Matrix, Eulerian Paths And Circuits in Graphs and Digraphs, Hamiltonian Paths and Circuits in Graphs and Tournaments, Trees; Planar Graphs, Euler's Formula, Dual of A Planer Graph, Independence Number And Clique Number, Chromatic Number, Statement of Four-Color Theorem.

UNIT V

Logic: Propositional Calculus - Propositions and Connectives, Syntax; Semantics - Truth assignments and Truth Tables, Validity and Satisfiability, Tautology; Adequate Set of Connectives; Equivalence and Normal Forms; Compactness and Resolution; Formal Reducibility - Natural Deduction System and Axiom System; Soundness and Completeness.

TEXT BOOKS:

1. Topics in Algebra, I. N. Herstein, John Wiley and Sons.
2. Digital Logic & Computer Design, M. Morris Mano, Pearson.
3. Elements of Discrete Mathematics, (Second Edition) C. L. Liu McGraw Hill, New Delhi.
4. Graph Theory with Applications, J. A. Bondy and U. S. R. Murty, Macmillan Press, London.
5. Mathematical Logic for Computer Science, L. Zhongwan, World Scientific, Singapore.



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REFERENCES:

1. Introduction to linear algebra. Gilbert Strang.
2. Introductory Combinatorics, R. A. Brualdi, North-Holland, New York.
3. Graph Theory with Applications to Engineering and Computer Science, N. Deo, Prentice Hall, Englewood Cliffs.
4. Introduction to Mathematical Logic,(Second Edition), E. Mendelsohn, Van-Nostrand, London.



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Bachelor of Technology (CSE with specialization in Computer Science and Business Systems –TCS)

SEMESTER-I (2023-2027)

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BTC SH102	DCC	Statistics, Probability and Calculus	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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COURSE OBJECTIVES

Student will have ability:

1. To introduce fundamental concepts of statistics and probability.

COURSE OUTCOMES

Upon completion of the subject, Students will be able:

1. To learn and understand the basic concepts of probability theory.
2. To learn types of data and graphical representation.
3. To learn descriptive statistics, probability distribution and sampling techniques.

SYLLABUS

UNIT I

Introduction to Statistics: Definition of Statistics. Basic objectives. Applications in Various Branches of Science with Examples. Collection of Data: Internal and External Data, Primary and Secondary Data. Population and Sample, Representative Sample.

UNIT II

Descriptive Statistics: Classification and Tabulation of Univariate Data, Graphical Representation, Frequency Curves. Descriptive Measures - Central Tendency and Dispersion. Bivariate Data. Summarization, Marginal and Conditional Frequency Distribution.

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UNIT III

Probability: Concept of Experiments, Sample Space, Event. Definition of Combinatorial Probability. Conditional Probability, Bayes Theorem. Probability Distributions: Discrete & Continuous Distributions, Binomial, Poisson and Geometric Distributions, Uniform, Exponential, Normal, Chi-Square, T, F Distributions.

UNIT IV

Expected Values and Moments: Mathematical Expectation and its Properties, Moments (Including Variance) and their Properties, Interpretation, Moment Generating Function.

UNIT V

Calculus: Basic Concepts of Differential and Integral Calculus, Application of Double and Triple Integral.

TEXT BOOKS:

1. Introduction of Probability Models, S.M. Ross, Academic Press, N.Y.
2. Fundamentals of Statistics, vol. I & II, A. Goon, M. Gupta and B. Dasgupta, World Press.
3. Higher Engineering Mathematics, B. S. Grewal, Khanna Publication, Delhi.

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Bachelor of Technology (CSE with specialization in Computer Science and Business Systems –TCS)

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REFERENCES:

1. A first course in Probability, S.M. Ross, Prentice Hall.
2. Probability and Statistics for Engineers, (Fourth Edition), I.R. Miller, J.E. Freund and R. Johnson, PHI.
3. Introduction to the Theory of Statistics, A.M. Mood, F.A. Graybill and D.C. Boes, McGraw Hill Education.
4. Advanced Engineering Mathematics, (Seventh Edition), Peter V. O'Neil, Thomson Learning.
5. Advanced Engineering Mathematics, (Second Edition) M. D. Greenberg, Pearson Education.
6. Applied Mathematics, Vol. I & II, P. N. Wartikar and J. N. Wartikar, Vidyarthi Prakashan.

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SEMESTER-I (2023-2027)

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BTSCS103	DCC	Fundamentals of Computer Science	60	20	20	30	20	2	1	2	4

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COURSE OBJECTIVES

Student will have ability:

1. To familiarize with basic concepts of computer programming and developer tools and design programs in C, involving different data types and operators.
2. To familiarize with decision structures, loop and structured and un- structured programming.
3. To familiarize with Function, Recursion, Preprocessor, Standard Library Functions and return types.
4. To familiarize with array and pointers and structures.
5. To familiarize with Standard I/O, Error Handling
6. To familiarize with Unix system Interface

COURSE OUTCOMES

Upon completion of the subject, Students will be able:

1. To learn and understanding the basic terminologies of computer science and programming a computer.
2. To learn about the process of moving from problem statement to a computational formulation of a method for solving the problem.
3. Proficient in using the basic constructs of C, to develop a computer program.
4. To use of functions, pointers, arrays and files in programming.
5. To understand the fundamentals of procedure-oriented programming and be able to apply it in computer program development and understanding the basic set of commands and utilities in Linux/UNIX systems.

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SYLLABUS

UNIT I

General problem Solving concepts: Algorithm, and Flowchart for Problem Solving with Sequential Logic Structure, Decisions and Loops.

Imperative languages: Introduction to imperative language; syntax and constructs of a specific language (ANSI C).

Types Operator and Expressions with discussion of variable naming and Hungarian Notation: Variable Names, Data Type and Sizes (Little Endian Big Endian), Constants, Declarations, Arithmetic Operators, Relational Operators, Logical Operators, Type Conversion, Increment Decrement Operators, Bitwise Operators, Assignment Operators and Expressions, Precedence and Order of Evaluation, Proper Variable Naming and Hungarian Notation

UNIT II

Control Flow with discussion on structured and unstructured programming: Statements and Blocks, If-Else-If, Switch, Loops – While, do, For, Break and Continue, Goto Labels, structured and un- structured programming

UNIT III

Functions and Program Structure with discussion on standard library: Basics of Functions, Parameter Passing and Returning Type, C main Return as Integer, External, Auto, Local, Static, Register Variables, Scope Rules, Block Structure, Initialization, Recursion, Preprocessor, Standard Library Functions and Return Types.

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UNIT IV

Pointers and Arrays: Pointers and address, Pointers and Function Arguments, Pointers and Arrays, Address Arithmetic, character Pointers and Functions, Pointer Arrays, Pointer to Pointer, Multi-dimensional array and Row/column major formats, Initialisation of Pointer Arrays, Command line arguments, Pointer to functions, Complicated declarations and how they are evaluated.

Structures: Basic Structures, Structures and Functions, Array of structures, Pointer of structures, Self-referral Structures, Table look up, Typedef, Unions, Bit-fields

UNIT V

Input and Output: Standard I/O, Formatted Output – printf, Formated Input – scanf, Variable length argument list, File access including FILE structure, fopen, stdin, stdout and stderr, Error Handling including exit, perror and error.h, Line I/O, Related miscellaneous functions

Unix system Interface: File Descriptor, Low level I/O – read and write, Open, create, close and unlink, Random access – lseek, Discussions on Listing Directory, Storage allocator

Programming Method: Debugging, Macro, User Defined Header, User Defined Library Function, Makefile Utility.

TEXT BOOKS:

1. The C Programming Language, (Second Edition) B. W. Kernighan and D. M. Ritchi, PHI.
2. Programming in C, (Second Edition)B. Gottfried, Schaum Outline Series.

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Choice Based Credit System (CBCS) in the Light of NEP-2020

Bachelor of Technology (CSE with specialization in Computer Science and Business Systems –TCS)

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REFERENCES:

1. C: The Complete Reference,(Fourth Edition), Herbert Schildt, McGraw Hill.
2. Let Us C, Yashavant Kanetkar, BPB Publications.

List of Practical's:

1. Algorithm and flowcharts of small problems like GCD
2. Structured code writing with:
 - i. Small but tricky codes
 - ii. Proper parameter passing
 - iii. Command line Arguments
 - iv. Variable parameter
 - v. Pointer to functions
 - vi. User defined header
 - vii. Make file utility
 - viii. Multi file program and user defined libraries
 - ix. Interesting substring matching / searching programs
 - x. Parsing related assignments

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- i. Interesting substring matching / searching programs
- ii. Parsing related assignments

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BTCSH104N	DCC	Principles of Electrical Engineering	60	20	20	30	20	3	0	2	4

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COURSE OBJECTIVES

Student will have ability:

1. To introduce fundamental concepts of DC and AC circuits, Electrostatics electromagnetism, transformer, electrical wiring.

COURSE OUTCOMES

Upon completion of the subject, Students will be able:

1. To apply Knowledge of basic concepts of work, power, energy for electrical, mechanical and thermal systems.
2. To calculate current in electrical network using Kirchoff's law and network theorems.
3. To describe construction, principle of operation ,specifications and applications of capacitors and batteries .
4. To defines basic terms of single phase and three phase AS circuits and supply system.
5. To describe types of wiring and earthing system.

SYLLABUS

Introduction: Fundamental linear passive and active elements to their functional current-voltage relation, voltage source and current sources, ideal and practical sources, Kirchoff-s laws and applications to network solutions using mesh and nodal analysis, Concept of work, power, energy, and conversion of energy.

Basic network: Current-voltage relations of the electric network by mathematical equations to analyze the network (Thevenin's theorem, Norton's Theorem, Maximum Power Transfer theorem) Simplifications of

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Bachelor of Technology (CSE with specialization in Computer Science and Business Systems –TCS)

SEMESTER-I (2023-2027)

networks using series-parallel, Star/Delta transformation. Superposition theorem.

Concept of AC: AC waveform definitions, form factor, peak factor, phasor representation in polar and rectangular form, concept of impedance, admittance, complex power, power factor, single phase and three phase concept.

Electrostatics and Electro-Mechanics: Electrostatic field, electric field strength, concept of permittivity in dielectrics, energy stored in capacitors, charging and discharging of capacitors. ElectroMagnetism, magnetic field and Faraday's law. Magnetic materials and B-H curve. Self and mutual inductance, Ampere's law, Study of R-L, R-C, RLC series circuit, R-L-C parallel circuit. Electromechanical energy conversion.

Measurements and Sensors: Measuring devices/sensors and transducers (Piezoelectric and thermo-couple) related to electrical signals, Elementary methods for the measurement of electrical quantities in DC and AC systems (Current & Single-phase power). Concept of indicating and integrating instruments.

Practical considerations: Electrical Wiring types and accessories, Illumination system, Basic layout of the distribution system, Types of earthing, Safety devices & systems. Battery principles and types.

List of Practical's:

Laboratory

1. Familiarization of electrical circuits: sources, measuring devices and transducers
2. Determination of resistance temperature coefficient
3. Verification of Network Theorem (Superposition, Thevenin, Norton, Maximum Power Transfer theorem)
4. Simulation of R-L-C series circuits for $X_L > X_C$, $X_L < X_C$
5. Simulation of Time response of RC circuit
6. Demonstration of measurement of electrical quantities in DC and AC systems.

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SEMESTER-I (2023-2027)

Text Books:

1. *Electric Machinery*, (Sixth Edition) A.E. Fitzgerald, Kingsely Jr Charles, D. Umans Stephen, Tata McGraw Hill.
2. *A Textbook of Electrical Technology*, (vol. I), B. L. Theraja, Chand and Company Ltd., New Delhi.
3. *Basic Electrical Engineering*, V. K. Mehta, S. Chand and Company Ltd., New Delhi.
4. *Theory and problems of Basic Electrical Engineering*, (Second Edition), J. Nagrath and Kothari, Prentice Hall of India Pvt. Ltd.

Reference Books:

1. *Basic of Electrical Engineering*, T. K. Nagsarkar and M. S. Sukhija, Oxford University Press.
T. K. Nagsarkar and M. S. Sukhija, Basic of Electrical Engineering, Oxford University Press, 2011.
2. *Introduction to Electrodynamics*, D. J. Griffiths, (Fourth Edition), Cambridge University Press.
3. *Engineering Circuit Analysis*, William H. Hayt & Jack E. Kemmerly, McGraw-Hill Book Company Inc.
4. *Fundamentals of Electrical and Electronics Engineering*, Smarjith Ghosh, Prentice Hall (India) Pvt. Ltd.

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BTC SH105N	DCC	Physics for Computing Science	60	20	20	30	20	3	0	2	4

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***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. To develop the comprehensive understanding of laws of physics.
2. To develop ability to apply laws of physics for various engineering applications.
3. To develop the experimental skills, ability to analyze the data obtained experimentally to reach substantiated conclusions.

COURSE OUTCOMES

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

1. Student will be able to comprehend laws of physics.
2. Student will be able to apply laws of physics for various engineering applications.
3. Student will be able to determine physical parameter experimentally and will be able to analyze the data obtained experimentally to draw substantiate conclusions.



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Shri Vaishnav Institute of Information Technology

Choice Based Credit System (CBCS) in the Light of NEP-2020

Bachelor of Technology (CSE with specialization in Computer Science and Business Systems –TCS)

SEMESTER-I (2023-2027)

COURSE CODE	Category	COURSE NAME	TEACHING & EVALUATION SCHEME								
			THEORY			PRACTICAL		L	T	P	CREDI TS
			END SEM University Exam	Two Term Exam	Teachers Assessment *	END SEM University Exam	Teachers Assessment *				
BTC SH105	DCC	Physics for Computing 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.

SYLLABUS

Oscillation: Periodic motion-simple harmonic motion-characteristics of simple harmonic motion-vibration of simple spring mass system. Resonance-definition., damped harmonic oscillator – heavy, critical and light damping, energy decay in a damped harmonic oscillator, quality factor, forced mechanical and electrical oscillators.

Interference-principle of superposition-young’s experiment: Theory of interference fringes-types of interference-Fresnel’s prism-Newton’s rings, Diffraction-Two kinds of diffraction-Difference between interference and diffraction-Fresnel’s half period zone and zone plate-Fraunhofer diffraction at single slit-plane diffraction grating. Temporal and Spatial Coherence.

Polarization of light:Polarization - Concept of production of polarized beam of light from two SHM acting at right angle; plane, elliptical and circularly polarized light, Brewster’s law, double refraction.

Basic Idea of Electromagnetisms: Continuity equation for current densities, Maxwell’s equation in vacuum and non-conducting medium.

Semiconductor Physics: Conductor, Semiconductor and Insulator; Basic concept of Band theory.

Laser and Fiber optics: Einstein’s theory of matter radiation interaction and A and B coefficients; amplification of light by population inversion, different types of lasers: Ruby Laser, CO₂ and Neodymium lasers; Properties of laser beams: mono-chromaticity, coherence, directionality and brightness, laser speckles, applications of lasers in engineering. Fiber optics and Applications, Types of optical fibers.

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Choice Based Credit System (CBCS) in the Light of NEP-2020

Bachelor of Technology (CSE with specialization in Computer Science and Business Systems –TCS)

SEMESTER-I (2023-2027)

Thermodynamics: Zeroth law of thermodynamics, first law of thermodynamics, brief discussion on application of 1st law, second law of thermodynamics and concept of Engine, entropy, change in entropy in reversible and irreversible processes.

List of Practical's:

- 1) Magnetic field along the axis of current carrying coil – Stewart and Gee
- 2) Determination of Hall coefficient of semi-conductor
- 3) Determination of Plank constant
- 4) Determination of wave length of light by Laser diffraction method
- 5) Determination of wave length of light by Newton's Ring method
- 6) Determination of laser and optical fiber parameters
- 7) Determination of Stefan's Constant.

Text Books:

1. *Concepts of Modern Physics*, (Fifth Edition) A Beiser, McGraw Hill International.
2. *Fundamentals of Physics*, David Halliday, Robert Resnick and Jearl Walker, Wileyplus.

Reference Books:

1. *Optics*, (Fifth Edition) Ajoy Ghatak, Tata McGraw Hill.
2. *Sears & Zemansky University Physics*, Addison-Wesley.
3. *Fundamentals of Optics*, (Third Edition) Jenkins and White, McGraw-Hill.



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Shri Vaishnav Institute of Information Technology

Choice Based Credit System (CBCS) in the Light of NEP-2020 Bachelor of Technology (CSE with specialization in Computer Science and Business Systems –TCS) SEMESTER-I (2023-2027)

COURSE CODE	Category	COURSE NAME	TEACHING & EVALUATION SCHEME								
			THEORY			PRACTICAL		L	T	P	CREDI TS
			END SEM University Exam	Two Term Exam	Teachers Assessment *	END SEM University Exam	Teachers Assessment *				
BTC SH106	DCC	Business Communication Value Science - I	60	20	20	30	20	2	1	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 Objectives:

1. Understand what life skills are and their importance in leading a happy and well-adjusted life.
2. Motivate students to look within and create a better version of self.
3. Introduce them to key concepts of values, life skills and business communication.

Course Outcomes:

Upon completion of the course, students shall have ability to

1. Recognize the need for life skills and values
2. Recognize own strengths and opportunities
3. Apply the life skills to different situations
4. Understand the basic tenets of communication
5. Apply the basic communication practices in different types of communication



Shri Vaishnav Vidyapeeth Vishwavidyalaya
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Choice Based Credit System (CBCS) in the Light of NEP-2020
Bachelor of Technology (CSE with specialization in Computer Science and
Business Systems –TCS)
SEMESTER-I (2023-2027)

Course Contents: Overview of the course with immersion activity Overview of biz communication Self-awareness, confidence and communication Essentials of Business communication Application of communication skills Application of Life Skills Assignment		Total Hours	
Text Books:		65	
	There are no prescribed texts for Semester 1 – there will be handouts and reference links shared.		
Reference Books:			
1	English vocabulary in use – Alan McCarthy and O’ dell		
2	APAART: Speak Well 1 (English language and communication)		
3	APAART: Speak Well 2 (Soft Skills)		
4	Business Communication – Dr. Saroj Hiremath		
Web References:			
1	Train your mind to perform under pressure- Simon sinek		
2	https://curiosity.com/videos/simon-sinek-on-training-your-mind-to-perform-under-pressure-capture-your-flag/ Brilliant way one CEO rallied his team in the middle of layoffs https://www.inc.com/video/simon-sinek-explains-why-you-should-put-people-before-numbers.html		
3	Will Smith's Top Ten rules for success https://www.youtube.com/watch?v=bBsT9omTeh0		
Online Resources:			
1	https://www.coursera.org/learn/learning-how-to-learn https://www.coursera.org/specializations/effective-business-communication		
Assessment Methods & Levels (based on Blooms’ Taxonomy)			
Formative assessment (Max. Marks:20)			
Bloom’s			
Course	Assessment Component		Marks
Outcome	Level		

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Choice Based Credit System (CBCS) in the Light of NEP-2020 Bachelor of Technology (CSE with specialization in Computer Science and Business Systems –TCS) SEMESTER-I (2023-2027)

C1.6.1	Understand	Immersion (interview)	5

1.6.3	Apply	Group Assignment – community service	5
C1.6.4	Understand	Group activities	3
C1.6.5	Apply	Record a conversation	3
Summative Assessment based on End Semester Project			
Bloom's Level			
Understand	Paper Trek followed by project		50
Apply			
Analyse			

Lesson Plan

Unit No	Objective	Bloom's Level	Content	Type of Class	Duration
1	Recognize the need for life skills and values	Understand	Overview of LOL (include activity on introducing self)	Lecture & reflection	1 hour
			Class activity – presentation on favorite cricket captain in IPL and the skills and values they demonstrate	Activity	1 hour
			Self-work with immersion – interview a maid, watchman, sweeper, cab driver, beggar and narrate what you think are the values that drive them	Immersion activity	2 hours
			Overview of business communication	Lecture with videos	1 hour
			Activity: Write a newspaper report on an IPL match	Class activity with 3 iterations - Formative Evaluation	1 hour

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Choice Based Credit System (CBCS) in the Light of NEP-2020
Bachelor of Technology (CSE with specialization in Computer Science and
Business Systems –TCS)
SEMESTER-I (2023-2027)

			Activity: Record a conversation between a celebrity and an interviewer	Class activity with 3 iterations - Formative Evaluation	1 hour
			Quiz Time	Summative Evaluation for Unit	30 mins
Unit No	Objective	Bloom's Level	Content	Type of Class	Duration
		Understand	Self-awareness – identity, body awareness, stress management	Anubhaab Activities (Please conduct at least one activity per week and include the Meditation session in it)	4 hours
2	Understand the basic tenets of communication Unit name: Be At Ease (BAE) (in Millennial lingo it means Before Anyone Else)	Understand	Essential Grammar – I: Refresher on <u>Parts of Speech</u> – Listen to an audio clip and note down the different parts of speech followed by discussion <u>Tenses:</u> Applications of tenses in Functional Grammar – Take a quiz and then discuss	Lecture with audio and video	1 hour
			Sentence formation (general & Technical), Common errors, Voices. Show sequence from film where a character uses wrong sentence structure (e.g. Zindagi Na MilegiDobara where the characters use ‘the’ before every word)	Lecture with video/audio	1 hour

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Choice Based Credit System (CBCS) in the Light of NEP-2020 Bachelor of Technology (CSE with specialization in Computer Science and Business Systems –TCS) SEMESTER-I (2023-2027)

			Communication Skills: Overview of Communication Skills Barriers of communication, Effective communication		1 hour
			Types of communication- verbal and non – verbal – Role-play based learning Importance of Questioning	Activity based learning	1 hour
			Listening Skills: Law of nature- Importance of listening skills, Difference between listening and hearing, Types of listening.	Activity based learning	1 hour
	Recognize own strengths and	Understand	Expressing self , connecting with emotions, visualizing and	Anubhaab Activities	4 hours
Unit No	Objective	Bloom's Level	Content	Type of Class	Duration
	opportunities		experiencing purpose	(Please conduct at least one activity per week and include the Meditation session in it)	
	Apply the basic communication practices in different types of communication	Apply	Activity: Skit based on communication skills	Formative Evaluation	4 hours
			Evaluation on Listening skills – listen to recording and answer questions based on them	Formative Evaluation	30 mins
3	Understand the basic tenets of communication Talk Mail Write (TMW) - In Millennial it means That	Understand	Email writing: Formal and informal emails, activity	Activity based learning	1 hour
			Verbal communication: Pronunciation, clarity of speech	Audio and video based learning	30 minutes

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Choice Based Credit System (CBCS) in the Light of NEP-2020 Bachelor of Technology (CSE with specialization in Computer Science and Business Systems –TCS) SEMESTER-I (2023-2027)

	Moment When		<p>Vocabulary Enrichment: Exposure to words from General Service List (GSL) by West, Academic word list (AWL) technical specific terms related to the field of technology, phrases, idioms, significant abbreviations formal business vocabulary – Read Economic Times, Reader’s Digest, National Geographic and take part in a GD, using the words you learnt/liked from the articles. Group discussion using words learnt</p>	Activity based learning (Group Discussion) Flipped classroom where students will study words before coming to class	1 hour
			<p>Practice: Toastmaster style Table Topics speech with evaluation</p>	Activity based learning	2 hours over 2/3 days
			<p>Written Communication: Summary writing, story writing</p>	Activity based learning	1 hour
			<p>Build your CV – start writing your comprehensive CV including every achievement</p>	Formative Evaluation	30 minutes
Unit No	Objective	Bloom’s Level	Content	Type of Class	Duration
			in your life, no format, no page limit		
	Apply the basic communication practices in different types of communication	Apply	Project: Create a podcast on a topic that will interest college students	Formative Evaluation	1 hour

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Choice Based Credit System (CBCS) in the Light of NEP-2020 Bachelor of Technology (CSE with specialization in Computer Science and Business Systems –TCS) SEMESTER-I (2023-2027)

	Recognize own strengths and opportunities	Understand	Life skill: Stress management, working with rhythm and balance, colours, and teamwork	Anubhaab Activities (Please conduct at least one activity per week and include the Meditation session in it)	4 hours
	Apply the basic communication practices in different types of communication	Apply	Project: Create a musical using the learnings from unit	Formative Evaluation	2 hours
4	Unit 4 Recognize the need for life skills and values Unit name: Realities of Facing Life (ROFL)	Understand	Understanding Life Skills: Movie based learning – Pursuit of Happiness. What are the skills and values you can identify, what can you relate to?	Interactive learning	3 hours
			Introduction to life skills What are the critical life skills	Activity and Video	1 hour
			Multiple Intelligences Embracing diversity – Activity on appreciation of diversity	Video and activity based	1 hour
	Apply the life skills to different situations	Apply	Life skill: Community service – work with an NGO and make a presentation Life skill:Join a trek – Values to be learned: Leadership, teamwork, dealing with ambiguity, managing stress,	Field work: Formative Evaluation	10 hours
			Field work: Formative Evaluation	12 hours	

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Choice Based Credit System (CBCS) in the Light of NEP-2020
Bachelor of Technology (CSE with specialization in Computer Science and
Business Systems –TCS)
SEMESTER-I (2023-2027)

Unit No	Objective	Bloom's Level	Content	Type of Class	Duration
			motivating people, creativity, result orientation		
TOTAL					65 hours
	Summative Evaluation	Bloom's Level	Type of Assessment	Marks	Total
		Understand	Knowledge Test	20 marks	50 marks
		Apply	Project (to be evaluated by TCS)	20 marks	
		Apply	Group discussion (to be evaluated by TCS)	10 marks	

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SEMESTER-I (2023-2027)

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			END SEM University Exam	Two Term Exam	Teachers Assessment t*	END SEM University Exam	Teachers Assessment t*				
	DCC	Induction Program(Non-Credit)	0	0	0	0	0	0	0	0	

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

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