Annexure – I

CREDIT FRAMEWORK STRUCTURE

Semester		I	II	III	IV	V	VI	VII	VIII	Total Credits
Basic Science Course	BSC/ESC	7	7							14
Engineering Science Course		6	6							12
Program Core Course (PCC)	Program Courses	2	2	13	10	7	4	6		44
Program Elective Course (PEC)						4	6	6	4	20
Multidisciplinary Minor (MDM)	Multidisciplinary Courses			2	3	3	3	3		14
Open Elective (OE) Other than a particular program						2	3	3		08
Vocational and Skill Enhancement Course (VSEC)	Skill Courses		2	1	1	2	2			08
Ability Enhancement Course (AEC -01, AEC-02)	Humanities Social Science and Management (HSSM)	1	1			2				04
Entrepreneurship/Economics/Management Courses				2	2					04
Indian Knowledge System (IKS)		2								02
Value Education Course (VEC)				2	2					04
Research Methodology	Experiential Learning Courses								4	04
Comm. Engg. Project (CEP)/ Field Project (FP)					2					02
Project							2	2		04
Internship/OJT									12	12
Co-curricular Courses (CC)	Liberal Learning Courses	2	2							04
Total Credits (Major)		**20**	**20**	**20**	**20**	**20**	**20**	**20**	**20**	**160**

VINCENT PALLOTTI COLLEGE OF ENGINEERING & TECHNOLOGY, NAGPUR

autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

Tech. Scheme of Examination & Syllabus 2025-26

COMPUTER SCIENCE AND ENGINEERING (CYBER SECURITY)

GROUP I: SEMESTER I

Sr No	Course Category	CourseCode	Course Title	Hours per Week			Credits	Maximum Marks				Minimum Passing Marks	Duration
				L	T	P		Mid-Sem Examination	Continual Assessment	End Sem Examination	Total		
1	BSC	25CS101T	Engineering Chemistry	2	-	-	2	10	10	30	50	23	1.5
2	BSC	25CS101P	Engineering Chemistry Lab	-	-	2	1	-	25	25	50	25	-
3	BSC	25CS102T	Linear Algebra and Calculus	3	-	-	3	20	20	60	100	45	3
4	BSC	25CS102P	Linear Algebra and Calculus Lab	-	-	2	1	-	25	25	50	25	-
5	ESC	25CS103T	Logic Building using 'C'	2	-	-	2	10	10	30	50	23	1.5
6	ESC	25CS103P	Logic Building using "C" Lab	-	-	2	1	-	25	25	50	25	-
7	ESC	25CS104T	Basics of Computer Architecture	3	-	-	3	20	20	60	100	45	3
8	PCC	25CS105P	Computer Workshop - I	-	-	4	2	-	25	25	50	25	-
9	AEC	25CS106P	Business Communication Skills - I Lab	-	-	2	1	-	25	25	50	25	-
10	IKS	25CS107T	Indian Knowledge Systems #	2	-	-	2	10	10	30	50	23	1.5
11	CC	25CS108T	Co-curricular Courses - I	2	-	-	2	-	50	-	50	25	-
Total				14		12	20	70	245	335	650		

Note: # Course should be conducted online through NPTEL

		July 2025	3.0	Applicable for 2025-26
Chairman - BoS	Dean – Academics	Date of Release	Version	

GROUP – I: SEMESTER I

Course Code	Course Name	Th	Tu	Pr	Credits	Evaluation			
						MSE	CA	ESE	Total
25CS101T	Engineering Chemistry	2	-	-	2	10	10	30	50

Course Objectives	Course Outcomes
This course is intended 1. To acquaint the students with the basic phenomenon, concepts, knowledge and understanding of the fundamental principles of chemistry. 2. To develop necessary skills and abilities to succeed in engineering education, research, Industry, environment and social context.	**Students will be able to** 1. Develop innovative ideas for use of advanced materials in sustainable development. 2. Evaluate the role of nanotechnology in industrial applications such as energy storage, medicine, electronics, and environmental remediation. 3. Apply the Basic concepts of Electrochemistry in engineering 4. Evaluate the performance and advantages of Li-Ion battery, fuel cell and photochemical cell in terms of efficiency, working mechanism, and applications. 5. Apply the concept of e-waste management and analyze its environmental impact

Unit I Advanced Material **[10 Hrs]**

Introduction-Need for Development, Biodegradable polymers- PLA, PCL - Synthesis, Properties and Applications, Conducting Polymers- Polypyrole, PANI Synthesis, Properties and Applications, Liquid Crystal Polymers- Types, Properties and Applications, Composite Material- Constituents- Matrix & Reinforcement, Classification of composite, Advantages & Industrial Applications of Composite materials, Nanomaterials- Definition, Carbon Nanotubes, Industrial Applications of Nanotechnology

Unit II Electrochemical Phenomenon & Battery Technology **[10 Hrs]**

Introduction- brief idea about Electrochemical & Galvanic series, Electrolytic & Electrochemical Cell,
Battery- Primary, Secondary & Reserve batteries- Advantages & Applications,
Li Ion Battery, H_2O_2 Fuel Cell, Photochemical Cell - Construction, Working, Advantages & Applications. Electrolysis of water to produce hydrogen

Unit III Chemistry of Electronic waste **[10 Hrs]**

Introduction. E- Waste; composition and generation. Types of E-waste, E waste hazardous properties, Effects of pollutant (E-waste) on human health and surrounding environment, Basic principles of E waste management, Component of E waste management- Domestic e-waste disposal, E-waste Control measures- Reduction of waste at source, Segregation & Recycling- Hydrometallurgical, Pyro metallurgical & Direct recycling.

Text Books:

S.N	Title	Authors	Edition	Publisher
1	Text Book of Engineering Chemistry	S.S. Dara,	New	S. Chand and Company Ltd. New Delhi.
2	Textbook of Engineering Chemistry	P.C. Jain and Monica Jain	Sixth	Dhanpat Rai and Sons, New Delhi.
3	E-waste Recycling and Management	Anish Khan, Inamuddin, Abdullah M. Ansiri	Ist	Springer

Reference Books

S.N	Title	Authors	Edition	Publisher
1	A Text book of Engineering Chemistry	Shashi Chawla	Ist	DhanpatRai& Sons, New Delhi
2	Applied Chemistry	N. Krishnamurthy:P. Vallinavagam. And K. Jeysubramanian	Ist	TMH

Online Resources

1	suchitanimbalkar@gnomio.com
2	kkhandarka@gnomio.com
3	mmjstudents@wordpress.com
4	jyotithakre@gnomio.com

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GROUP – I: SEMESTER I

Course Code	Course Name	Th	Tu	Pr	Credits	Evaluation		
						CA	ESE	Total
25CS101P	Engineering Chemistry Lab	---	---	2	1	25	25	50

Course Objectives	Course Outcomes
1. To Make the students aware about various techniques available for Analysis of Material. 2. To Impart the skill of handling chemicals and apparatus.	1. Prepare chemical compounds, materials, and standard solutions using conventional laboratory techniques and demonstrate good laboratory practices. 2. Utilize electrochemical and conductometric methods for the quantitative estimation of chemical substances such as acids and metals. 3. Analyze industrial effluents to determine the concentration of pollutants using quantitative chemical analysis methods 4. Interpret water quality parameters and estimate metal concentrations through virtual simulations and demonstration-based experiments.

Expt. No.	Experiments based on Performance (Any SIX)
1	Synthesis of Bakelite resin using acid catalyst.
2	Synthesis of Conducting polymer (Polyaniline).
3	Determination of heavy metal from industrial effluent by complexometry method.
4	Determination of heavy metal from industrial effluent by colorimeter
5	Preparation of Natural fibre reinforcement Composite material
6	Determination of strength of the given acid Conductometrically
7	Determine electrochemical equivalent of Cu metal using Faradays law
8	Preparation of different solutions (Molar, Normal & Percent solution)
	Virtual Experiment - Any ONE
9	Determination of Hardness from Tap water/ Well water/ Sea water
10	Determination of Alkalinity of Water Sample using Warder method
11	Electro gravimetric estimation of Nickel metal
	Demonstration - Any ONE
12	Determination of turbidity from industrial effluent.
13	Determination of pH by using different methods.
	Activity - Any ONE
1	Visit to e-waste recycling plant
2	Study of Air /Water Pollution Level at different Sites in Nagpur City.
3	Study of nearby industrial chemicals and safety measures

Text Books

S.N	Title	Authors	Edition	Publisher
1	A Textbook on experiment and calculation in engineering chemistry	S.S. Dara	9th	S.Chand

Reference Books

S.N	Title	Authors	Edition	Publisher
1	Applied Chemistry theory and practical	O.P. Virmani and A.K. Narular	Ist	New Age International
2	Laboratory Manual on Engineering Chemistry	Dr. Subdharani	Ist	Dhanpat Rai Publishing

GROUP – I: SEMESTER I

Course Code	Course Name	Th	Tu	Pr	Credits	Evaluation			
						MSE	CA	ESE	Total
25CS102T	Logic Algebra and Calculus	3	-	-	3	20	20	60	100

Course Objectives	Course Outcomes
This course is intended to 1. Develop students' conceptual understanding and computational skills in Matrix Algebra and Differential Equations for solving mathematical problems. 2. Enable learners to apply Multivariate and Vector Calculus for analyzing functions of several variables and modeling physical phenomena.	**Students will be able to** Students will be able to 1. Apply matrix concepts to solve and analyze linear systems. 2. Analyze and solve engineering problems involving eigenvalues, eigenvectors, and functions of matrices. 3. Solve multivariate calculus problems involving partial derivatives, Jacobians, and optimization. 4. Apply first order and higher order differential equations to solve problems in engineering. 5. Evaluate vector calculus operations and their physical applications.
Unit I	**[9Hrs]**
Matrix Algebra : Introduction to matrices, , Rank of a matrix, Consistency of system of linear equations, Linear and orthogonal transformations, Linear dependence of vectors.	
Unit II	**[9Hrs]**
Matrices: Characteristics equation, Cayley- Hamilton Theorem**,** Eigen values and Eigen vectors, Reduction to diagonal form, Reduction of quadratic form to canonical form by orthogonal transformation, Sylvester's theorem.	
Unit III	**[9Hrs]**
Multivariate Calculus: Functions of several variables and their partial derivatives, Chain rule and total differential coefficient, Jacobians and its properties, Maxima –Minima of functions of two variables, Lagrange's method of undetermined multipliers.	
Unit IV	**[9Hrs]**
Differential Equations: First order and first degree differential equations: Linear, Higher order differential equations with constant coefficients, Method of variation of parameters, Cauchy's homogeneous linear equation, Applications of differential equations.	
Unit V	**[9Hrs]**
Vector Calculus: Vector differentiation, Gradient, Directional derivatives, Divergence and Curl with their physical interpretation Solenoidal and Irrotational motions, Scalar potential, Line integral & Work done.	

Text Books

S. N	Title	Authors	Edition	Publisher
1	Higher Engineering Mathematics	B. S. Grewal	38th	Khanna Publishers, New Delhi.
2	Higher Engineering Mathematics	H. K. Das & Er. Rajnish Verma	1st	S. Chand & CO. Pvt. Ltd., New Delhi

Reference Books

S.N	Title	Authors	Edition	Publisher
1	Higher Engineering Mathematics	B.V. Ramana,	11th reprint, 2010.	Tata McGraw Hill New Delhi
2	A Text Book of Engineering Mathematics	Peter O' Neil	8th	Thomson Asia Pvt. Ltd., Singapore.

GROUP – I: SEMESTER I

Course Code	Course Name	Th	Tu	Pr	Credits	Evaluation		
						CA	ESE	Total
25CS102P	Linear Algebra & Calculus Lab	--	--	2	1	25	25	50

Course Objectives	Course Outcomes
This Course is intended to: 1. To develop students' computational proficiency in solving problems related to linear algebra, calculus, and differential equations using SageMath with an emphasis on symbolic computation and numerical methods. 2. To enable students to apply SageMath for solving and visualizing problems in vector calculus through effective use of graphical and analytical tools.	**Students will be able to:** 1. Apply fundamental matrix operations and solve systems of linear equations using SageMath. 2. Apply concepts of linear algebra to compute eigenvalues and eigenvectors of matrices using SageMath. 3. Evaluate partial derivatives of multivariable functions and solve first and higher-order ordinary differential equations using SageMath. 4. Analyze and visualize vector calculus operations including gradient, divergence, curl, and evaluate line and surface integrals using SageMath.

List of Experiments: -

Experiment No.	List of Experiment
1	To Implement basic matrix operations using SageMath's symbolic computation tools.
2	To check the consistency of a system of linear equations using augmented matrices and SageMath.
3	To solve systems of linear equations using various within the SageMath environment.
4	To determine eigenvalues and eigenvectors of matrices using built-in SageMath functions.
5	To implement and validate the Cayley-Hamilton Theorem with the aid of SageMath.
6	To compute partial derivatives of various orders for multivariable functions using SageMath.
7	To solve first-order and higher-order differential using SageMath's differential equation solvers.
8	To find maxima and minima of functions of two variables using partial derivatives and the second derivative test implemented in SageMath.
9	To compute and visualize vector differential operations using SageMath.
10	To compute vector integrals in SageMath.

Text Books

S.N	Title	Authors	Edition	Publisher
1	Computational Mathematics with SageMath	Paul Zimmermann	1st	SIAM Publications Library.
2	Basics of SageMath : Mathematics(Practicals)	Varun Kumar	1st	Amazon KDP

Reference Books

S.N	Title	Authors	Edition	Publisher
1	Mathematics-SageMath Software System	Indrajeet Varhadpande & Dr. Kirti Sahu	1st	Himalaya Publication
2	Applied Mathematics Using SageMath	Dr. Kirti Sahu & Dr. Sajid Anwar	1st	Himalaya Publication

GROUP – I: SEMESTER I

Course Code	Course Name	Th	Tu	Pr	Credits	Evaluation			
						MSE	CA	ESE	Total
25CS103T	Logic Building using 'C'	2	-	-	2	10	10	30	50

Course Objectives	Course Outcomes
This course is intended ● To develop logical thinking and problem-solving skills using algorithms, flowcharts, and structured programming techniques in C. ● To impart a thorough understanding of C fundamentals, operators, decision-making, looping constructs, and program execution flow. ● To introduce modular programming through user-defined functions and to develop skills in handling data using one- and two-dimensional arrays.	**Students will be able to** ● Design algorithms and flowcharts, and implement them in C using correct syntax, data types, operators, and standard I/O functions. ● Apply decision-making and looping constructs to solve computational problems efficiently. ● Develop modular C programs using user-defined functions and manipulate data using one- and two-dimensional arrays for real-world problem-solving.

Unit I **[06 Hrs]**

Introduction to Programming

Importance of C, Basic Structure of C Programs, Programming Style, Executing a Program. Constants, Variables, and Data Types: Introduction, Character Set, C Tokens, Keywords and Identifiers, Constants, Variables, Data Types, Declaration of Variables, Assigning Values to Variables, Defining Symbolic Constants. Managing Input and Output Operations: Reading a Character, Writing a Character, Formatted Input, Formatted Output.

Operators and Expressions: Introduction, Arithmetic Operators, Relational Operators, Logical Operators, Assignment Operators, Increment and Decrement Operators, Conditional Operator, Bitwise Operators, Special Operators, Arithmetic Expressions, Evaluation of Expressions, Precedence of Arithmetic Operators, Type Conversions in Expressions, Operator Precedence and Associativity.

Unit II **[10 Hrs]**

Decision Making and Branching

Introduction, Decision Making with IF Statement, Simple IF Statement, the IF – ELSE Statement, Nesting of IF-ELSE Statements, The ELSE IF Ladder, The Switch statement. Decision Making and Looping: The WHILE Statement, The DO Statement, the FOR Statement, Jumps in LOOPS.

Unit III **[14 Hrs]**

Introduction to the basics of function:

Elements of user-defined functions, Definition of functions, return values and their types, Function calls, Function declaration, Category of functions, No arguments and no return values, Arguments but no return values, Arguments with return values, No arguments but returns a value. **Introduction to arrays:** One-dimensional Arrays, Declaration of One-dimensional Arrays, Initialization of One One-dimensional Arrays, Two-dimensional Arrays, Declaration of Two-dimensional Arrays, Initialization of Two-dimensional Arrays, Example programs–Matrix Multiplication, Transpose of a matrix.

Text Books

S.N	Title	Authors	Edition	Publisher
1	Programming in ANSI C	E. Balguruswamy	2nd	Tata Mc-Graw Hill
2	Programming Techniques Through 'C'	M. G. Venkateshmurthy	2nd	Pearson
3	Let Us 'C'	Yashwant P. Kanetkar	1st	BPB
4	Programming With C	Byron S. Gottfried	2nd	Schaum Series
5	How to solve it by Computer	R.G. Dromey	1st	Pearson Education

Reference Books

S.N	Title	Authors	Edition	Publisher
1	The Complete Reference C	Herbert Schildt	4th	Tata Mc-Graw Hill
2	The 'C' programming language	Kernighan and Ritchie	1st	Prentice Hall
3	Programming and Problem Solving	M. Sprankle	2nd	Pearson Education

GROUP – I: SEMESTER I

Course Code	Course Name	Th	Tu	Pr	Credits	Evaluation		
						CA	ESE	Total
25CS103P	Logic Building using 'C' Lab	-	-	2	1	25	25	50

Course Objectives	Course Outcomes
This course is intended ● To reinforce theoretical concepts of C programming through hands-on implementation of programs. ● To develop problem-solving skills using C fundamentals, operators, control structures, functions, and arrays. ● To train students in writing syntactically correct, well-structured C programs through compilation and debugging.	**Upon completion, students will be able to:** ● Implement C programs using variables, constants, operators, and standard input/output functions. ● Apply decision-making and looping constructs to solve logical and computational problems. ● Develop modular programs using user-defined functions and process data using one- and two-dimensional arrays.

Expt. No.	Title
1	Demonstrate basic data types in C and implement arithmetic expressions [CO1]
2	Demonstrate decision control structures in C. [CO2]
3	Demonstrate iterative control structures in C (loops). [CO2]
4	Demonstrate multi-way decision control using the switch–case statement in C for solving selection-based problems. [CO2]
5	Demonstrate one- and two-dimensional arrays in C. [CO3]

Text Books

S. N	Title	Authors	Edition	Publisher
1	Programming in ANSI C	E. Balguruswamy	2nd	Tata Mc-Graw Hill
2	Programming Techniques Through 'C'	M. G. Venkateshmurthy	2nd	Pearson
3	Let Us 'C'	Yashwant P. Kanetkar	1st	BPB
4	Programming With C	Byron S. Gottfried	2nd	Schaum Series
5	How to solve it by Computer	R. G. Dromey	1st	Pearson Education

Reference Books

S. N	Title	Authors	Edition	Publisher
1	The Complete Reference C	Herbert Schildt	4th	Tata Mc-Graw Hill
2	The 'C' programming language	Kernighan and Ritchie	1st	Prentice Hall
3	Programming and Problem Solving	M. Sprankle	2nd	Pearson Education

GROUP – I: SEMESTER I

Course Code	Course Name	Th	Tu	Pr	Credits	Evaluation			
						MSE	CA	ESE	Total
25CS104T	Basics of Computer Architecture	3	-	-	3	20	20	60	100

Course Objectives	Course Outcomes
This course is intended • To understand the architecture and core components of a computer system, including CPU, memory, and I/O subsystems. • To learn data representation, instruction execution, and control unit designs, along with the differences between CISC and RISC architectures. • To gain knowledge of memory hierarchy, pipelining, hazards, and various I/O interfacing techniques for efficient computer performance.	**Students will be able to** **CO1:** Apply and analyze the architecture and components of a computer system, including CPU, memory, and I/O subsystems. **CO2:** Analyze instruction types, addressing modes, and differentiate between CISC and RISC architectures. **CO3:** Apply data representation and arithmetic algorithms for signed numbers, floating-point, multiplication, and division. **CO4:** Analyze control unit designs and instruction execution using microprogramming and multiple bus structures. **CO5:** Evaluate memory technologies, pipelining hazards, and I/O interfacing techniques for efficient computer performance.

Unit I	**[10 Hrs]**
Basic functional blocks of a computer, CPU, memory, input-output subsystems, control unit, Von Neuman Architecture Architecture of a CPU - registers, instruction execution cycle, instruction sequencing - straight line, conditional and unconditional branching, addressing modes, subroutine call and its implementation. Instruction Set: Complex Instruction Set Computer (CISC) Reduced Instruction Set Computer (RISC), CISC vs RISC	
Unit II	**[10 Hrs]**
Data representation: Signed number representation, fixed and floating-point representations, character representation. Computer arithmetic - integer addition and subtraction, Booth multiplier, Division - non-restoring and restoring techniques, floating point arithmetic.	
Unit III	**[8 Hrs]**
Processing Unit: Fundamental concepts, Execution of a complete instruction, Multiple bus organization, Hardwired control, Micro programmed control, Microinstructions.	
Unit IV	**[8 Hrs]**
Static RAM cell, Dynamic RAM cell, Read Only Memories, Memory hierarchy, Cache memory, Mapping functions, Memory interleaving, Virtual Memory.	
Unit V	**[9 Hrs]**
Pipelining: Instruction Cycles, Instruction Pipelining, Hazards, Data and Instruction Hazards. INPUT OUTPUT: I/O interface, Programmed IO, Memory Mapped IO, Interrupt Driven IO, DMA	

Text Books

S. N	Title	Authors	Edition	Publisher
1	Computer Organization	Carl Hamacher, Zvonks Vranesic, SafeaZaky	5th edition	McGraw Hill, New Delhi, India.
2	Computer Architecture and Organization	John P. Hayes	3rd edition	Tata McGrawHill

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GROUP – I: SEMESTER I

Course Code	Course Name	Th	Tu	Pr	Credits	Evaluation		
						CA	ESE	Total
25CS105P	Computer Workshop - I	-	-	4	2	25	25	50

Course Objectives	Course Outcomes
This course is intended • To introduce students to the fundamental concepts of web designing including HTML, CSS, and JavaScript. • To develop practical skills in creating and styling web pages using various web technologies. • To familiarize students with responsive design and client-side scripting for interactive web pages.	Students will be able to **CO1:** Apply HTML to create structured and semantic web pages. **CO2:** Use CSS for styling and formatting web pages effectively. **CO3:** Implement basic JavaScript to add interactivity to web pages. **CO4:** Develop simple websites incorporating multimedia elements like images, audio, and video to provide the security with cryptography techniques.

Experiment No.	Name of Experiment	CO Mapped
1.	Introduction to HTML: Create a basic HTML page with headings, paragraphs, lists, and links.	CO1
2.	Working with Text and Formatting in HTML: Use tags for text formatting, font styles, colors, and alignment.	CO1
3.	Creating Tables and Forms: Design tables and forms with input controls like text boxes, radio buttons, checkboxes, and submit buttons.	CO1
4.	Introduction to CSS: Apply external, internal, and inline CSS to style HTML elements. Experiment with margins, padding, borders, and positioning properties (relative, absolute, fixed).	CO2
5.	CSS Box Model and Layout: Use class, id selectors and pseudo-classes like :hover, :first-child to style elements dynamically.	CO2
6.	CSS Selectors and Pseudo-classes: Design horizontal and vertical navigation menus using HTML and CSS.	CO2
7.	Creating Navigation Menus: Design horizontal and vertical navigation menus using HTML and CSS.	CO1, CO2
8.	Introduction to JavaScript: Basics Write simple JavaScript to display alerts, take input, and validate forms.	CO3
9.	Responsive Web Design: Use media queries in CSS to make web pages responsive for different screen sizes.	CO4
10.	Embedding Multimedia: Add images, audio, and video elements into web pages.	CO4
11.	Project: Multi-page Educational Website with Caesar Cipher-Based Content Protection. Develop a small website incorporating all learned concepts with navigation between pages.	CO1, CO2. CO3, CO4

Text Books

S. N	Title	Authors	Edition	Publisher
1	Web Technologies: HTML, CSS, JavaScript, PHP, JSP, and AJAX	Achyut S. Godbole and Atul Kahate	2nd Edition	Tata McGraw-Hill Education
2	HTML & CSS: Design and Build Websites	Jon Duckett	1st Edition	Wiley

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GROUP – I: SEMESTER I

Course Code	Course Name	Th	Tu	Pr	Credits	Evaluation		
						CA	ESE	Total
25CS106P	Business Communication Skills - I Lab	-	-	2	1	25	25	50

Course Objectives	Course Outcomes
To empower students to develop a career-oriented mindset while harnessing the power of LSRW skills.	**Students will be able to:** 1. apply verbal and non-verbal skills to confidently and effectively deliver presentations. 2. prepare themselves for overall language ability through listening and reading tasks. 3. demonstrate formal writing skills. 4. draft impactful Resumes and Cover Letters. 5. prepare themselves for Personal Interviews.

Expt. No.	Title of the experiment
1	Presentation Skills
2	Poster Making (Product/ Event)
3	Reading Comprehension for Competitive Exams.
4	Writing Skills for Academic Purposes.
5	Listening Skills I
6	Business Correspondence I
7	Resume Writing and Cover Letter
8	Mock Interviews

Reference Books:

S. N	Title	Authors	Edition	Publisher
1	Communication Skills for Engineers	C. Muralikrishna & SunitaMIshra	2nd Edition, 2011	Pearson India Education Services
2	Communication Skills	Dr. L .Bisen, Dr. B. Agrawal & Dr. N. T. Kalyani	1st Edition, 2021	Himalaya Publishing House
3	Barron's IELTS Superpack	Lin Lougheed	2012	Barrons Educational Series