



ST. VINCENT PALLOTTI COLLEGE OF ENGINEERING & TECHNOLOGY, NAGPUR

(An autonomous institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)



B. Tech. Scheme of Examination & Syllabus 2025-26

COMPUTER SCIENCE AND ENGINEERING

GROUP 1: SEMESTER I

Sr No	Course Category	Course Code	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	25CE101T	Engineering Chemistry	2	-	-	2	10	10	30	50	23	1.5
2	BSC	25CE101P	Engineering Chemistry Lab	-	-	2	1	-	25	25	50	25	-
3	BSC	25CE102T	Linear Algebra and Calculus	3	-	-	3	20	20	60	100	45	3
4	BSC	25CE102P	Linear Algebra and Calculus Lab	-	-	2	1	-	25	25	50	25	-
5	ESC	25CE103T	Logic building with C	3	-	-	3	20	20	60	100	45	3
6	ESC	25CE103P	Logic building with C Lab	-	-	2	1	-	25	25	50	25	-
7	ESC	25CE104T	Competitive Programming - I	2	-	-	2	10	10	30	50	23	1.5
8	PCC	25CE105T	Concept in Computer Engineering-I	2	-	-	2	10	10	30	50	23	1.5
9	AEC	25CE106P	Business Communication Skills I Lab	-	-	2	1	-	25	25	50	25	-
10	IKS	25CE107T	Indian Knowledge Systems #	2	-	-	2	10	10	30	50	23	1.5
11	CC	25CE108T	Co-curricular Courses - I	2	-	-	2	-	50	-	50	25	-
Total				16	00	08	20	80	230	340	650		

To be conducted online through NPTEL

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



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COMPUTER SCIENCE AND ENGINEERING

SEMESTER I

Course Code	Course Name	Th	Tu	Pr	Credits	Evaluation			
						MSE	CA	ESE	Total
25CE101T	Engineering Chemistry	2	0		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- Polypyrrole, 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, H₂O₂ 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	1st	Springer

Reference Books

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

Online Resources

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

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

**SEMESTER I**

Course Code	Course Name	Th	Tu	Pr	Credits	Evaluation		
						CA	ESE	Total
25CE101P	Engineering Chemistry Lab			1	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	1st	New Age International
2	Laboratory Manual on Engineering Chemistry	Dr. Subdharani	1st	Dhanpat Rai Publishing

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



SEMESTER-I

Course Code	Course Name	Th	Tu	Pr	Credits	Evaluation			
						MSE	CA	ESE	Total
25CE102T	Linear Algebra & Calculus	3		1	4	20	20	60	100

Course Objectives	Course Outcomes
<p>This course is intended to</p> <ol style="list-style-type: none"> Develop students' conceptual understanding and computational skills in Matrix Algebra and Differential Equations for solving mathematical problems. Enable learners to apply Multivariate and Vector Calculus for analyzing functions of several variables and modeling physical phenomena. 	<p>Students will be able to</p> <p>Students will be able to</p> <ol style="list-style-type: none"> Apply matrix concepts to solve and analyze linear systems. Analyze and solve engineering problems involving eigenvalues, eigenvectors, and functions of matrices. Solve multivariate calculus problems involving partial derivatives, Jacobians, and optimization. Apply first order and higher order differential equations to solve problems in engineering. 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	8 th	Thomson Asia Pvt. Ltd., Singapore.

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Chairman - BoS	Dean – Academics	Date of Release	Version	

**SEMESTER-I**

Course Code	Course Name	Th	Tu	Pr	Credits	Evaluation		
						CA	ESE	Total
25CE102P	Linear Algebra & Calculus Lab	--	--	2	1	25	25	50

Course Objectives	Course Outcomes
This Course is intended to: <ol style="list-style-type: none">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.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: <ol style="list-style-type: none">Apply fundamental matrix operations and solve systems of linear equations using SageMath.Apply concepts of linear algebra to compute eigenvalues and eigenvectors of matrices using SageMath.Evaluate partial derivatives of multivariable functions and solve first and higher-order ordinary differential equations using SageMath.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	1 st	Himalaya Publication
2	Applied Mathematics Using SageMath	Dr. Kirti Sahu & Dr. Sajid Anwar	1 st	Himalaya Publication

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COMPUTER SCIENCE AND ENGINEERING

GROUP 1: SEMESTER I

Course Code	Course Name	Th	Tu	Pr	Credits	Evaluation			
						MSE	CA	ESE	Total
25CE103T	Logic Building with C	3	-	-	3	20	20	60	100

Course Objectives	Course Outcomes
<p>This course is intended</p> <ul style="list-style-type: none">To make the student learn a programming language.To learn problem solving techniques.To teach the student to write programs in C and to solve the problems	<p>Students will be able to</p> <ul style="list-style-type: none">Analyze computer fundamentals and software, and design algorithms and flowcharts using basic C.Apply decision-making and loop control structures to develop effective C programs.Design complex C programs using functions, recursion, and pointers effectively.Develop problem solving skills by applying the concepts of Array and String Handling.Evaluate the use of structures and file handling techniques in C to develop efficient data management programs.

Unit I [8 Hrs]

Fundamentals of Computers: internal structure of Computer, its assembly, Software and its types, Translators, programming languages.

Introduction and Structure of 'C' Programming: Algorithms and Flowchart, Characteristics of algorithm, Data types, Operators, Input-output Functions.

Unit II [10 Hrs]

Decision Making Control Structures: if, if-else, nested if statements, Conditional operators (? Operator), Switch Case Statement.

Loop Control Structures: for loop, while loop, do-while loop, break and continue statement.

Unit III [10 Hrs]

Functions: Introduction to functions, why use function, Scope rule of function, implementation of functions, use of library function (math.h), recursion.

Pointers: declaration & its use, Types of Pointers, Call by Value, Call by Reference.

Unit IV [9 Hrs]

One Dimension and Two Dimension arrays: creation of array, declaration, initialization and displaying the elements, linear search and binary search. Read & display the matrix on the screen, matrix manipulation operations like addition, multiplication.

Strings: Introduction to string, basic operations on string strlen, strcpy, strcmp, strcmp.

Unit V [8 Hrs]

Structures: Introduction, declaration, initialization and its use.

File handling in C: File opening modes, File operations-File Opening, Closing File, read content of file, Write onto the file, Copy one file to another file.

Text Books

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

Reference Books

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

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Course Code	Course Name	Th	Tu	Pr	Credits	Evaluation		
						CA	ESE	Total
25CE103P	Logic Building with C Lab	-	-	2	1	25	25	50

Course Objectives	Course Outcomes
<p>This course is intended</p> <ul style="list-style-type: none">To make the student learn a programming language.To learn problem solving techniques.To teach the student to write programs in C and to solve the problems	<p>Students will be able to</p> <ul style="list-style-type: none">Apply the basic concepts of C language and different Control Structures for problem solving.Develop applications to solve complex problems using the concept of Functions and pointersApply the concepts of Arrays and Strings to develop applications using C language.Design programs using structures and file operations to handle complex data.

Expt. No.	Experiments based on
1	To study Fundamentals of Computer and Introduction to Programming Languages
2	To study Control Statements (Conditional): if and its Variants, s witch
3	To study Control Statements (Looping): while, do...while, for Loop, continue & break
4	To study Arrays, One Dimensional Array: Declaration and Initialization, Accessing Array Elements
5	To study Two-Dimensional Array: Declaration and Initialization, Accessing Array Elements, Matrix operations
6	To study Strings: Read & Write, "String.h" Predefined Functions
7	To study Functions: Definition, Syntax, Terminology, Function Declaration, Classification (Arguments and Return Type)
8	To study Pointers: Declarations, Types, Parameter passing techniques
9	To study structures: declaration, initialization, accessing structure members
10	To study Files: Definition, Opening, Closing of Files, Reading and Writing of Files

Text Books

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

Reference Books

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

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Chairman - BoS	Dean - Academics	Date of Release	Version	

**GROUP 1: SEMESTER I**

Course Code	Course Name	Th	Tu	Pr	Credits	Evaluation			
						MSE	CA	ESE	Total
25CE104T	Competitive Programming - I	2	-	-	2	10	10	30	50

Course Objectives	Course Outcomes
This course is intended to <ul style="list-style-type: none">Understand the fundamental aspects of problem-solving in computer scienceUnderstand various fundamental algorithmsEnhance critical thinking and problem-solving skills by approaching computational problems systematically	Students will be able to <ul style="list-style-type: none">Apply fundamental knowledge of problem-solving in computer science and the role of algorithms as a technology in computing.Analyze algorithms to solve a variety of computational problems efficientlySolve factoring methods and number computations

Unit I	[10 Hrs]
Introduction: Problem solving aspects, Top down design, implementation of algorithm, program verification. The Role of Algorithms in Computing, Algorithms as a technology, Analyzing algorithms, Designing algorithms, Asymptotic notation.	
Unit II	[10 Hrs]
Fundamental Algorithms: Exchanging the values of two variables, Counting, Summation of a set of numbers, Factorial Computation, Sine function computation, Generating of the Fibonacci sequence, Reversing the digits of an integer, Base Conversion, Character to number conversion.	
Unit III	[10 Hrs]
Factoring Methods: Finding the square root of a number, the smallest Divisor of an integer, the greatest common divisor of two integers, generating prime numbers, computing the prime factors of an integer, generation of pseudo random numbers, raising a number to a large power, computing the nth Fibonacci Number.	

Text Books

S.N	Title	Authors	Edition	Publisher
1	How to solve it by Computer	R. G. Dromey	1 st	Prentice-Hall India EEE Series.
2	Structure and Interpretation of Computer Programs	Harold Abelson and Gerald Sussman	2 nd	MIT Press

Reference Books

S.N	Title	Authors	Edition	Publisher
1	The Art of Computer Programming	Donald E. Knuth	3	Addison Wesley Longman

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COMPUTER SCIENCE AND ENGINEERING

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Course Code	Course Name	Th	Tu	Pr	Credits	Evaluation			
						MSE	CA	ESE	Total
25CE105T	Concepts in Computer Engineering-I	2	-	-	2	10	10	30	50

Course Objectives	Course Outcomes
<p>This course is intended</p> <ul style="list-style-type: none"> To remember the basics of Computer and Computer history. To understand the utility of programming languages. To learn basics of computer software and Operating Systems. 	<p>Students will be able to</p> <ul style="list-style-type: none"> Analyze the evolution of computer systems and memory architectures across generations. Apply programming language constructs such as algorithms and flowcharts to solve computational problems effectively. Apply software concepts and problem-solving skills to develop programs and explain the various operating systems.

Unit I	[10 Hrs]
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COMPUTER ORGANIZATION AND MEMORY SYSTEMS:
 Description of computer, input and output unit, Memory cell, Memory organization, Primary memory, Secondary Memory, Serial access memory, Physical devices used to construct memory, Magnetic hard disk.
 First generation computers, Second generation computers, Third generation computers, Fourth generation computers, Fifth generation computers, Moore's Law, Classification of computers, Parallel computer systems, Distributed computer systems.

Unit II	[10 Hrs]
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COMPUTER LANGUAGES:
 Algorithms, Flowcharts, why programming languages? Characteristics of good programming languages, Machine level language, Assembly language, Middle level language – C, Factors affecting the choice of the languages, High level programming languages.

Unit III	[10 Hrs]
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COMPUTER SOFTWARES AND OPERATING SYSTEMS:
 Introduction to computer software, Types of computer software, System management programs, System development programs, Unique application programs, Problem solving, Structuring the logic, Developing a program.
 Need of operating system, Definition of operating system, Types of operating system, Operating systems – UNIX, MAC OS, LINUX (Ubuntu, Fedora) and WINDOWS.

Text Books

S.N	Title	Authors	Edition	Publisher
1	Fundamentals of Computers	V. Rajaraman	V th	PHI
2	Fundamentals of Computers	Balguruswamy	I st	McGraw Hill Education

Reference Books

S.N	Title	Authors	Edition	Publisher
1	Operating Systems	Achyut Godbole & Atul Kahate	3 rd	McGraw Hill Education
2	Open Source Technology	Kailash Vadera & Bhavesh Gandhi	I st	Laxmi Publications

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Course Code	Course Name	Th	Tu	Pr	Credits	Evaluation		
						CA	ESE	Total
25CE106P	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 & Sunita Mishra	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

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SEMESTER I

Course Code	Course Name	Th	Tu	Pr	Credits	Evaluation			
						MSE	CA	ESE	Total
25CE107T	Indian Knowledge System	2	-	-	2	10	10	30	50

Course Objectives	Course Outcomes
Students will be able to <ul style="list-style-type: none">To introduce the origin, evolution and approach of Indian knowledge systemsTo understand the Indian knowledge approaches to various domains such as time, language, environment, management, life and mindTo appreciate the principles of thought process, reasoning, inferencing and sustainability in Indian knowledge systemsTo navigate knowledge sources of different disciplines of studies from a Vedic perspective	Students will be able to <ul style="list-style-type: none">Explain the origin, evolution and approach of IKS and build various practices to conserve and protect rich Indian KnowledgeDescribe importance of Indian Literature and will know about Indian ScholarsUnderstand ancient Indian traditions, practices and knowledge for conservation of resources
Unit I	[10 Hrs.]
Introduction and Management of Indian Knowledge System 1.1 Definition, Concept and Scope of IKS 1.2 IKS based approaches on Knowledge Paradigms 1.3 IKS in Ancient India and Modern India 1.4 Documentation and Preservation of IKS 1.5 Approaches for Conservation and Management of nature and Bio – Resources 1.6 Approaches and Strategies to protection and conservation of IKS	
Unit II	[12 Hrs.]
IKS and Indian Scholars, Indian Literature 2.1 Philosophy and Literature (Maharshi Vyas, Kanad, Pingala, Parasar, Banabhatta, Nagarjuna and Panini) 2.2 Mathematics and Astronomy (Aryabhata, Mahaviracharya, Bodhayan, Bhaskaracharya, Brahmagupta, Varahamihira) 2.3 Medicine and Yoga (Charak, Susruta, Maharshi Patanjali and Dhanwantari) 2.4 Sahitya (Vedas, Upvedas (Ayurveda, Dhanurveda, Ghandarvaveda), Puran and Upanishad and Shad Darshan (Vedanta, Vaisheshik, Sankhya, Mimamsa, Yoga, Adhyatma, Meditation) 2.5 Shastra (Nyaya, Vyakarana, Krishi, Shilp, Vastu, Natya, Sangeet)	
Unit III	[08 Hrs.]
Unique Traditional Practices and Applied Traditional knowledge 3.1 Myths, Rituals, Spirituals, Folk stories, Traditional Narratives 3.2 Agriculture, Land, Water and Soil Conservation and Management Practices 3.3 Vaidya (Traditional health Care system), Amchi Medicine system	

Text Books

S. N.	Title	Authors	Edition	Publisher
1	Indian Knowledge System: Introduction and Prospects	Acharya Shreyas Kurhekar	First	Sanskrit University, Ramtek
2	Indian Knowledge System Vol. I and II	Kapil Kapoor, Awadhesh Kumar Singh		D.K. Print World Ltd.
3	Traditional Knowledge System in India	Amit Jha		Atlantic Publisher

Reference Books / Resources

S. N.	Title	Authors	Edition	Publisher
1	Website of Indian Knowledge System Division, New Delhi			

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