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Vidarbha Bahu-uddeshiya Shikshan Sanstha's

TULSIRAMJI GAIKWAD-PATIL
College of Engineering & Technology

DTE CODE : 4151

— POLYTECHNIC —

MSBTE CODE : 1683



3.32 CGPA

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• An ISO 9001:2015 Certified Institution

• Web: www.tgpcetpoly.com

• NH7, Mohgaon, Wardha Road, Nagpur - 441108

• Email: principalpoly@tgpcet.com, 1683principal@msbte.com

• Contact: 97637 11372

COMPUTER SCIENCE & ENGINEERING DEPARTMENT**COURSE OUTCOMES****FIRST SEMESTER**

SR. NO.	SEM	NAME OF COURSE	COURE CODE	CO's	COURSE OUTCOMES
1	1	ENGLISH	22101	CO1	Formulate grammatically correct sentences.
				CO2	Summarise comprehension passages.
				CO3	Compose dialogues and paragraphs for different situations,
				CO4	Use relevant words as per context
				CO5	Deliver prepared speeches to express ideas, thoughts and emotions,
2	1	BASIC SCIENCE	22102	CO1	Estimate errors in the measurement of physical quantities.
				CO2	Apply the principles of electricity and magnetism to solve engineering problems.
				CO3	Use the basic principles of heat and optics in related engineering applications.
				CO4	Apply the catalysis process in industries.
				CO5	Use corrosion preventive measures in industry.
				CO6	Use relevant engineering materials in industry.
3	1	BASIC MATHEMATICS	22103	CO1	Apply the concepts of algebra to solve engineering related problems.
				CO2	Utilize basic concepts of trigonometry to solve elementary engineering problems.
				CO3	Solve basic engineering problems under given conditions of straight lines.
				CO4	Solve the problems based on measurement of regular closed figures and regular solids.
				CO5	Use basic concepts of statistics to solve engineering related problems.



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COMPUTER SCIENCE & ENGINEERING DEPARTMENT

4	1	FUNDAMENTALS OF ICT	22001	C01	Use computer system and its peripherals.
				C02	Prepare business document using word processing tool.
				C03	Interpret data and represent it graphically using spreadsheet
				C04	Prepare professional presentations.
				C05	Use different types of web browsers.
5	1	ENGINEERING GRAPHICS	22003	C01	Draw regular geometrical figures
				C02	Use drawing codes, conversions and symbols as per IS SP-46 in engineering drawing
				C03	Draw the views of given object using principles of orthographic projection.
				C04	Draw isometric views of given component or from orthographic projections.
				C05	Draw free hand sketches of given engineering elements
				C06	Use computer aided drafting approach to create engineering drawings.
6	1	WORKSHOP PRACTICE	22005	C01	Use electrical tools, instruments, devices and equipment for basic level maintenance of computers and peripherals.
				C02	Identify active and passive electronic components.
				C03	Undertake basic level maintenance of a PC.
				C04	Use different kinds of printers and scanners.
				C05	Identify the layout of wired and wireless LAN environment.



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COMPUTER SCIENCE & ENGINEERING DEPARTMENT

COURSE OUTCOMES

SECOND SEMESTER

SR. NO.	SEM	NAME OF COURSE	COURSE CODE	CO's	COURSE OUTCOMES
1	2	FUNDAMENTAL OF ELECTRICAL ENGINEERING	22215	CO1	Use principles of magnetic circuits.
				CO2	Use single phase AC supply or electrical and Electronics equipment.
				CO3	Use three phase AC supply for industrial equipment and machines.
				CO4	Connect transformers and DC motors for specific requirements.
				CO5	Use FHP motors for diversified applications.
2	2	APPLIED MATHEMATICS	22224	CO1	Calculate the equation of tangent, maxima, minima, radius of curvature by differentiation.
				CO2	Solve the given problems of integration using suitable methods.
				CO3	Apply the concept of integration to find area and volume.
				CO4	Solve the differential equation of first order and first degree using suitable methods.
				CO5	Apply the concepts of numerical methods in Computer programming languages.
3	2	BASIC ELECTRONICS	22225	CO1	Identify electronic components in electronic circuits.
				CO2	Use diodes in different applications
				CO3	Interpret the working of junction Function transistor in the electronic circuits
				CO4	Interpret the working of unipolar devices in the electronic circuits.
				CO5	Use sensors and transducers.



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4	2	PROGRAMMING IN 'C'	22226	CO1	Develop flowchart and algorithm to solve problems logically
				CO2	Write simple 'C' programs using arithmetic expressions.
				CO3	Develop C programs using control structure
				CO4	Develop C programs using arrays and structures.
				CO5	Develop Use functions in C programs for modular programming approach
				CO6	Develop C programs using pointers
5	2	BUSINESS COMMUNICATI ON USING COMPUTERS	22009	CO1	Communicate effectively by avoiding barriers in various formal and informal situations.
				CO2	Communicate skillfully using non-verbal methods of communication.
				CO3	Give presentations by using audio-visual aids.
				CO4	Write reports using correct guidelines.
				CO5	Compose mail and formal business letters.
6	2	COMPUTER OERIPHERAL AND HARDWARE MAINTENANCE	22013	CO1	Identify different types of computer systems
				CO2	Troubleshoot common motherboard problems.
				CO3	Select processors required for relevant systems.
				CO4	Partition/format hard disk drives.
				CO5	Troubleshoot peripherals and networks.
				CO6	Test power supplies.



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7	2	WEB PAGE DESIGNING WITH HTML	22014	CO1	Use block level formatting tags to present content on web page
				CO2	Use text level formatting tags to present content on web page
				CO3	Apply hyper linking on web page.
				CO4	Organize the content using table and frames
				CO5	Apply presentation schemes on content using CSS.
				CO6	Publish websites on Internet on Intranet

COURSE OUTCOMES**THIRD SEMESTER**

SR. NO.	SEM	NAME OF COURSE	COURSE CODE	CO's	COURSE OUTCOMES
1	3	OBJECT ORIENTED PROGRAMMING USING C++	22316	CO1	Develop C++ programs to solve problems using Procedure Oriented Approach.
				CO2	Develop C++ programs using classes and objects.
				CO3	Implement Inheritance in C++ program.
				CO4	Use Polymorphism in C++ program.
				CO5	Develop C++ programs to perform file operations.
2	3	DATA STRUCTURE USING C	22317	CO1	Perform basic operations on arrays.
				CO2	Apply different searching and sorting techniques.
				CO3	Implement basic operations on Stack and queue using array representation.
				CO4	Implement basic operations on Linked List.
				CO5	Implement program to create and traverse tree to solve problems.



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COMPUTER SCIENCE & ENGINEERING DEPARTMENT

3	3	COMPUTER GRAPHICS	22318	CO1	Manipulate visual and geometric information of images.
				CO2	Implement standard algorithms to draw various graphics objects Using C program.
				CO3	Develop programs for 2-D and 3-D Transformations.
				CO4	Use projections to visualize objects on view plane.
				CO5	Implement various clipping algorithms.
				CO6	Develop programs to create Curves using algorithms.
4	3	DATABASE MANAGEMENT SYSTEM	22319	CO1	Design Normalized database on Given data.
				CO2	Create and Manage Database Using SQL command.
				CO3	Write PL/SQL code for given database.
				CO4	Apply triggers to database also Create procedure and function according to condition.
				CO5	Apply security and confidentiality on given Database.
5	3	DIGITAL TECHNIQUES	22320	CO1	Use number system and codes for interpreting working of digital system.
				CO2	Use Boolean expressions to realize logic circuits.
				CO3	Build simple combinational circuits.
				CO4	Build simple sequential circuits.
				CO5	Test data converters and PLDs in digital electronics systems.



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COMPUTER SCIENCE & ENGINEERING DEPARTMENT**COURSE OUTCOMES****FOURTH SEMESTER**

1	4	JAVA PROGRAMMING	22412	CO1	Develop programs using Object Oriented Methodology in Java.
				CO2	Apply concept of inheritance for code reusability.
				CO3	Develop programs using multithreading.
				CO4	Implement Exception Handling.
				CO5	Develop programs using graphics and applet.
				CO6	Develop programs for handling I/O and file streams.
2	4	SOFTWARE ENGINEERING	22413	CO1	Select suitable Software Process model for Software development.
				CO2	Prepares software requirement specifications.
				CO3	Use Software modeling to create data designs.
				CO4	Estimate size and cost of software product.
				CO5	Apply project management and quality assurance principles in software development
3	4	DATA COMMUNICATION AND COMPUTER NETWORK	22414	CO1	Analyze the functioning of data communication and computer network.
				CO2	Select relevant transmission media and Switching techniques as per need.
				CO3	Analyse the transmission errors with Respect to IEEE standards.
				CO4	Configure various networking devices.
				CO5	Configure different TCP/IP services.
4	4	MICROPROCESSORS	22415	CO1	Analyze the functional block of 8086 microprocessor.
				CO2	Write assembly language program for the given problem.
				CO3	Use instructions for different addressing modes.
				CO4	Develop an assembly language program Using assembler.



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				CO5	Develop assembly language programs using procedures, macro and modular Programming approach.
5	4	GUI APPLICATION DEVELOPMENT USING VB.NET	22304	CO1	Use Visual Studio IDE to design application.
				CO2	Develop GUI Application using Form Controls and its events.
				CO3	Apply Object Oriented concepts in GUI Application.
				CO4	Use Data access controls to store data in Database and retrieve it.
				CO5	Use Data Binding in GUI Application.

COURSE OUTCOMES**FIFTH SEMESTER**

SR. NO	SEM	NAME OF COURSE	COURS ECODE	CO's	COURSE OUTCOMES
1	5	ENVIRONMENTAL STUDIES	22447	CO1	Develop Public awareness about environment.
				CO2	Select alternative energy resources for Engineering Practice
				CO3	Conserve Ecosystem and Biodiversity
				CO4	Apply techniques to reduce Environmental Pollution.
				CO5	Manage social issues and Environmental Ethics as life long learning.
2	5	OPERATING SYSTEM	22516	CO1	Install operating system and configure it.
				CO2	Use operating system tools to perform various functions.
				CO3	Execute process commands for performing Process management operations.
				CO4	Apply scheduling algorithms to calculate turn around time and average waiting time.
				CO5	Calculate efficiency of different memory Management techniques.



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3	5	ADVANCED JAVA PROGRAMMING	22517	CO1	Develop programs using GUI Framework (AWT and Swing).
				CO2	Handle events of AWT and Swings components.
				CO3	Develop programs to handle events in Java Programming.
				CO4	Develop Java programs using networking concepts.
				CO5	Develop programs using database.
4	5	SOFTWARE TESTING	22518	CO1	Apply various software testing methods.
				CO2	Prepare test cases for different types and Levels of testing.
				CO3	Prepare test plan for an application.
				CO4	Identify bugs to create defect report of Given application.
				CO5	Test software for performance measures using automated testing tools
5	5	ADVANCED COMPUTER NETWORK	22520	CO1	Implement Network Layer Protocols.
				CO2	Configure IPv6 Network.
				CO3	Choose routing protocol in the given network situation.
				CO4	Implement different Transport Layer Protocols.
				CO5	Configure various Application Layer Protocols.
6	5	INDUSTRIAL TRAINING	22057	CO1	Communicate effectively (verbal as well as written) the execute work.
				CO2	Prepare the industry report of the executed work.
				CO3	Exercise time management and safety in the work environment.
				CO4	Work in teams for successful Completion of projects assuring quality.



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7	5	CAPSTONE PROJECT PLANNING	22058	CO1	Write the problem/task specification In existing systems related to the occupation.
				CO2	Select, collect and use required Information /knowledge to solve the problem/complete the task.
				CO3	Logically choose relevant possible solution(s).
				CO4	Consider the ethical issues related The project(if there are any).
				CO5	Assess the impact of the project on society(if there is any).
				CO6	Prepare 'project proposals with action Plan and time duration scientifically, before beginning of project.

COURSE OUTCOMES**SIXTH SEMESTER**

SR. No	SEM	NAME OF COURSE	COUSE CODE	CO's	COURSE OUTCOMES
1	6	MANAGEMENT	22509	CO1	Use basic management principles to execute Daily activities.
				CO2	Use principles of planning and organizing for accomplishment of tasks.
				CO3	Use principles of directing and controlling for Implementing the plans.
				CO4	Apply principles of safety management in all Activities
				CO5	Understand various provisions of industrial acts.
2	6	PROGRAMMING WITH 'PYTHON'	22616	CO1	Display message on screen using Python script on IDE.
				CO2	Develop python program to demonstrate use of operator
				CO3	Perform operations on data structures in Python.
				CO4	Develop functions for given problem.
				CO5	Design classes for given problem.
				CO6	Handle exceptions



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3	6	MOBILE APPLICATION DEVELOPMENT	22617	CO1	Interpret features of Android operating system.
				CO2	Configure Android environment and Development tools.
				CO3	Develop rich user Interfaces by using layouts And controls.
				CO4	Use User Inter face components for android Application development.
				CO5	Create Android application using database.
				CO6	Publish Android applications.
4	6	EMERGING TRENDS IN COMPUTERA ND INFORMATION TECHNOLOGY	22618	CO1	Describe machine learning and data concepts.
				CO2	Interpret IoT concepts.
				CO3	Describe Block chain technology.
				CO4	Describe Digital Forensic Models and Evidence Handling Procedures.
				CO5	Describe Ethical Hacking process.
				CO6	Detect Network, Operating System, and Applications vulnerabilities.
5	6	DATA WAREHOUSIN G WITH MINING TECHNIQUES	22621	CO1	Establish scope and necessity of Data Mining for various applications.
				CO2	Establish scope and necessity of Data Warehouse for various applications.
				CO3	Use concept of data mining components and techniques in designing data mining systems.
				CO4	Use data mining tools for different applications.
				CO5	Apply basic Statistical calculations on Data.
6	6	ENETERPRENEU RSHIP DEVELOPMENT		CO1	Identify your entrepreneurial traits.
				CO2	Identify the business opportunities that suits you.
				CO3	Use the support systems to zero down to your business idea.
				CO4	Develop comprehensive business plans.
				CO5	Prepare plans to manage the enterprise effectively.



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7	6	CAPSTONE PROJECT- EXECUTION&R EPORTING WRITING	22060	CO1	Implement the planned activity individually and/or as team.
				CO2	Select, collect and use required information/knowledge to solve the identified problem.
				CO3	Take appropriate decisions based on collected And analysed information.
				CO4	Ensure quality in product.
				CO5	In corporate energy and environment Conservation principles.
				CO6	Consider the ethical issue related to the project (if there are any).
				CO7	Assess the impact of the project on society (if There is any).
				CO8	Communicate effectively and confidently as a member and leader of team

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