Course Outcomes

SE – 2019 Course		
Course Code	**Course Name**	**Course Outcomes**
Semester – I		
214445	**Basics of Computer Network**	CO1	Understand and explain the concepts of communication theory and compare functions of OSI and TCP/IP model.
		CO2	Analyze data link layer services, error detection and correction, linear block codes, cyclic codes, framing and flow control protocols.
		CO3	Compare different access techniques, channelization and Ethernet standards.
		CO4	Apply the skills of subnetting, supernetting and routing mechanisms.
		CO5	Compare IPv4 and IPv6
		CO6	Understand services and protocols used at transport layer.
214453	**Computer Graphics and Computer Graphics Laboratory**	CO1	Apply mathematical and logical aspects for developing elementary graphics operations like scan conversion of points, lines, circle, and apply it for problem solving.
		CO2	Apply techniques of geometrical transforms to produce position and manipulate Objects in 2 dimensional and 3-dimensional spaces respectively.
		CO3	Describe mapping from a world coordinates to device coordinates, clipping, and projections in order to produce 3D images on 2D output device.
		CO4	Apply concepts of rendering, shading, animation, curves and fractals using computer graphics

			tools in design, development and testing of 2D, 3D modelling applications.
		CO5	Study and Describe the concept of Computer Vision, Virtual reality and animation.
		CO6	Implement 2D and 3D object generation and transformation algorithm for generating simple animation without using any animation tool.
214443	**DIGITAL ELECTRONICS AND LOGIC DESIGN**	CO1	Perform basic binary arithmetic & simplify logic expressions.
		CO2	Apply the operations of logic ICs and Implement combinational logic functions using ICs.
		CO3	Understand the operations of basic memory cell types and Implement sequential logic Functions using ICs.
		CO4	Apply the functions & organization of various blocks of CPU
		CO5	Understand CPU instruction characteristics, enhancement features of CPU and Describe an assortment of memory types (with their characteristics) used in computer systems and basic principle of interfacing input, output devices.
		CO6	Use logic function representation for simplification with K-Maps and analyze as well as design Combinational logic circuit , Sequential Circuits and implement the design Steps, main programming technique , follow ethical standards and teamwork.
214451	**PROCESSOR ARCHITECTURE CO MAPPING**	CO1	Apprehend architecture and memory organization of PIC 18 microcontroller.
		CO2	Implement embedded C

				programming for PIC 18.
		CO3		Use concepts of timers and interrupts of PIC 18.
		CO4		Demonstrate real life applications using PIC 18.
		CO5		Analyze architectural details of ARM processor.
		CO6		Learn and implement the embedded C in real application.
214449	**Soft Skill Lab**	CO1		Introspect about individual's goals, aspirations by evaluating one's SWOC and think creatively.
		CO2		Develop effective communication skills including Listening, Reading, Writing and Speaking.
		CO3		Constructively participate in group discussion, meetings and prepare and deliver Presentations.
		CO4		Write precise briefs or reports and technical documents.
		CO5		Practice professional etiquette, present oneself confidently and successfully handle personal interviews .
		CO6		Function effectively in multi-disciplinary and heterogeneous teams through the knowledge of team work, Inter-personal relationships, conflict management and leadership quality
214452	**Database Management System**	CO1		Define fundamental elements of database management systems
		CO2		Describe the fundamental elements of relational database management systems and Design ER- models to represent simple database application scenarios.
		CO3		Populate relational database and formulate SQL queries on data.
		CO4		Improve the database design by normalization & to incorporate

			query processing
		CO5	Illustrate ACID properties for transaction management & to describe concurrency control protocols.
		CO6	Understand recent trends in database technology.
214444	**Object Oriented Programming**	CO1	**Differentiate** various programming paradigms and apply basic concepts of OOP.
		CO2	**Identify** classes, objects, methods, and handle object creation, initialization, and destruction to model real-world problems.
		CO3	**Identify** relationship among objects using inheritance and polymorphism.
		CO4	**Execute** different types of exceptions and perform generic programming.
		CO5	**Define** and **Describe** appropriate design patterns to provide object-oriented solutions. **Use** file handling for real world application.
		CO6	**Differentiat**e various programming paradigms and **apply** basic concepts of OOP.
214485	**Project Based Learning**	CO1	Design solution to real life problems and analyze its concerns through shared cognition.
		CO2	Apply learning by doing approach in PBL to promote lifelong learning.
		CO3	Tackle technical challenges for solving real world problems with team efforts.
		CO4	Collaborate and engage in multi-disciplinary learning environments.
214454	**Software Engineering**	CO1	Classify various software application domains.
		CO2	Analyze software requirements by using various modeling techniques.
		CO3	Translate the requirement models

			into design models.
		CO4	Apply planning and estimation to any project.
		CO5	Use quality attributes and testing principles in software development life cycle.
		CO6	Discuss recent trends in Software engineering by using CASE and agile tools.