Department of Information Technology (Post Graduate Course)

Program Outcome	
Semester – I	
Course name	Course Outcome
Research in Computing (PSIT101)	• To be able to conduct business research with an understanding of all the latest theories. • To develop the ability to explore research techniques used for solving any real world or innovate problem.
Data Science (PSIT102)	• Develop in depth understanding of the key technologies in data science and business analytics: data mining, machine learning, visualization techniques, predictive modeling, and statistics. • Practice problem analysis and decision-making. • Gain practical, hands-on experience with statistics programming languages and big data tools through coursework and applied research experiences.
Cloud Computing (PSIT103)	• Define Cloud Computing and memorize the different Cloud service and deployment models • Describe importance of virtualization along with their technologies. • Use and Examine different cloud computing services • Analyze the components of open stack & Google Cloud platform and understand Mobile Cloud Computing • Describe the key components of Amazon web Service • Design & develop backup strategies for cloud data based on features. •
Soft Computing Techniques (PSIT104)	• Soft computing concepts like fuzzy logic, neural networks and genetic algorithm, where Artificial Intelligence is mother branch of all. • All these techniques will be more effective to solve the problem efficiently
Semester – II	
Big Data Analytics (PSIT201)	• To provide an overview of an exciting growing field of big data analytics. • To introduce the tools required to manage and analyze big data like Hadoop, NoSql MapReduce. • To teach the fundamental techniques and principles in achieving big data analytics with scalability and streaming capability. • To enable students to have skills that will help them to solve complex real world problems in for decision support.
Modern Networking (PSIT202)	• To understand the state-of-the-art in network protocols, architectures and applications. • Analyze existing network protocols and networks. • Develop new protocols in networking. • To understand how networking research is done.

	• To investigate novel ideas in the area of Networking via term-long research projects.
Micro services Architecture (PSIT203)	• Gain a thorough understanding of the philosophy and architecture of Web applications using ASP.NET Core MVC;□□ • Gain a practical understanding of.NET Core;□ • Acquire a working knowledge of Web application development using ASP.NET Core MVC 6 and Visual Studio□ • Persist data with XML Serialization and ADO.NET with SQL Server • Create HTTP services using ASP.NET Core Web API. • Deploy ASP.NET Core MVC applications to the Windows Azure cloud.
Image Processing (PSIT204)	• Review the fundamental concepts of a digital image processing system. • Analyze images in the frequency domain using various transforms. • Evaluate the techniques for image enhancement and image restoration. • Categorize various compression techniques. • Interpret Image compression standards. • Interpret image segmentation and representation techniques.
Semester – III	
Embedded Systems (PSIT301)	• Explain the embedded system concepts and architecture of embedded systems • Understand the concepts of Microcontroller and microprocessor architecture. • Describe the architecture of 8051 microcontroller and write embedded program for 8051 microcontroller. • Design the interfacing for 8051 microcontroller. • Select elements for an embedded systems tool
Information Security Management (PSIT302)	• Understand the concepts of security from a management perspective. • Get the idea about the security needs by identifying security threats and vulnerabilities in the systems. • Come to know about few Legal and ethical implications of security management • Be aware of risk assessment of networking systems in various level.
Virtualization (PSIT303a)	• Understanding Virtual machines and Implementation of virtual machines • Understanding virtualization and various ways of using virtualization • Implementation of private cloud platform using virtualization • Use virtual machines of public cloud platform
Ethical Hacking (PSIT304b)	• Students will learn the underlying principles and techniques associated with the cybersecurity practice known as penetration testing or ethical hacking. • They will become familiar with the entire penetration testing process including planning, reconnaissance, scanning, exploitation, post-exploitation and result reporting.
Semester – IV	

Artificial Intelligence Embedded Systems (PSIT401)	• Demonstrate knowledge of the building blocks of AI as presented in terms of intelligent agents. • Analyze and formalize the problem as a state space, graph, design heuristics and select amongst different search or game based techniques to solve them. • Develop intelligent algorithms for constraint satisfaction problems and also design intelligent systems for Game Playing. • Attain the capability to represent various real life problem domains using logic based techniques and use this to perform inference or planning. • Formulate and solve problems with uncertain information using Bayesian approaches. • Apply concept Natural Language processing to problems leading to understanding of cognitive computing.
IT Infrastructure Management (PSIT402)	• Describe the key principles of IT service management. • Outline the important processes of IT service management. • Demonstrate the comprehension of a framework of IT service management. • Analyze an IT service organization in terms of processes and functions. • Discuss the roles involved in IT service management. • Practice IT asset and service cataloguing. • Draft a component in an IT service management agreement.
Computer Forensics (PSIT403c)	• Define and discuss the concepts of computer forensics. • Explain the career of a computer forensics professional. • Explain and apply the concepts of computer investigations. • Setup and operate in an investigator's office and laboratory. • Select and apply current computer forensics tools. • Identify and apply current practices for processing crime and incident scenes. • Explain and apply digital evidence controls. • Explain and perform forensic analysis in various operating system environments. • Explain the boot processes and disk structures of various operating system environments. • Identify and apply current practices for data discovery recovery and acquisition. • Conduct basic computer forensic analysis. • Demonstrate the recovery of image files. • Conduct basic network forensic analysis. • Perform e-mail investigations. • Act as expert witness and report results of investigations. • Explain how to conduct a digital forensics investigation, including the concept of the chain of evidence. • Report findings from digital forensic investigations. • Perform recovery of digital evidence from various digital devices using a variety of software utilities.

Cloud Management (PSIT404c)	• Define Cloud Computing and memorize the different Cloud service and deployment models • Describe importance of virtualization along with their technologies. • Use and Examine different cloud computing services • Analyze the components of open stack & Google Cloud platform and understand Mobile Cloud Computing • Describe the key components of Amazon web Service • Design & develop backup strategies for cloud data based on features.