

## B.TECH.5<sup>th</sup>SEM

### SIGNALS AND SYSTEM Course Code: ESC-IT-301G

Course Outcome (CO)	Details of Course Outcomes
(CO1)	Understand the concepts of continuous time and discrete time systems.
(CO2)	Analyze systems in complex frequency domain.
(CO3)	Understand sampling theorem and its implications.
(CO4)	Understanding the fundamental characteristics of signals and systems.
(CO5)	Development of the mathematical skills to solve problems involving convolution, filtering, modulation and sampling.

### Computer Networks Course Code: PCC-CSE-303G

Course Outcome (CO)	Details of Course Outcomes
(CO1)	Explain the functions of the different layer of the OSI Protocol
(CO2)	Draw the functional block diagram of wide-area networks (WANs), local area networks (LANs) and Wireless LANs (WLANs) and describe the function of each.
(CO3)	Identify and connect various connecting components of a computer network.
(CO4)	Configure DNS DDNS, TELNET, EMAIL, File Transfer Protocol (FTP), WWW, HTTP, SNMP, Bluetooth, Firewalls using open source available software and tools.
(CO5)	To develop an understanding of modern network architectures from a design and Performance perspective.

Course: Design & Analysis of Algorithms  
 Course Code: PCC-CSE-307G

<b>Course Outcome (CO)</b>	<b>Details of Course Outcomes</b>
<b>(CO1)</b>	<b>To identify and justify correctness of algorithms and to analyze running time of algorithms based on asymptotic analysis.</b>
<b>(CO2)</b>	<b>To understand when an algorithmic design situation calls for the divide-and-conquer paradigm. Synthesize divide-and-conquer algorithms.</b>
<b>(CO3)</b>	<b>Describe the greedy paradigm and dynamic-programming paradigm. Explain when an algorithmic design situation calls for it.</b>
<b>(CO4)</b>	<b>Developing greedy algorithms/dynamic programming algorithms, and analyze it to determine its computational complexity.</b>
<b>(CO5)</b>	<b>To write the algorithm using Backtracking and Branch and Bound strategy to solve the problems for any given model engineering problem.</b>

Course: Programming in Java  
 Course Code: PCC-CSE-309G

<b>Course Outcome (CO)</b>	<b>Details of Course Outcomes</b>
<b>(CO1)</b>	<b>Knowledge of the structure and model of the Java programming language,</b>
<b>(CO2)</b>	<b>Use the Java programming language for various programming technologies (understanding)</b>
<b>(CO3)</b>	<b>To The use of Java in a variety of technologies and on different platforms.</b>
<b>(CO4)</b>	<b>To understand the Programming in the Java programming language</b>
<b>(CO5)</b>	<b>To Describe the basics of object-oriented programming using JAVA.</b>

Course: Software Engineering (Elective-I)  
 Course Code: PEC-CSE-311G

<b>Course Outcome (CO)</b>	<b>Details of Course Outcomes</b>
<b>(CO1)</b>	<b>How to apply the software engineering lifecycle by demonstrating competence in communication, planning, analysis, design, construction, and deployment</b>
<b>(CO2)</b>	<b>An ability to work in one or more significant application domains</b>
<b>(CO3)</b>	<b>Work as an individual and as part of a multidisciplinary team to develop and deliver quality software</b>
<b>(CO4)</b>	<b>Demonstrate an understanding of and apply current theories, models, and techniques that provide a basis for the software lifecycle</b>
<b>(CO5)</b>	<b>Demonstrate an ability to use the techniques and tools necessary for engineering practice</b>

Course: Computer Networks Lab  
 Course Code: LC-CSE-323G

<b>Course Outcome (CO)</b>	<b>Details of Course Outcomes</b>
<b>(CO1)</b>	<b>To Demonstrate the function(s) of each layer of the OSI model and TCP/IP.</b>
<b>(CO2)</b>	<b>To Describe the different types of network topologies and protocols.</b>
<b>(CO3)</b>	<b>To Analyze the various routing algorithms.</b>
<b>(CO4)</b>	<b>To Construct a simple network by using any modern Open Source Network Simulation Tool.</b>
<b>(CO5)</b>	<b>To Design and implement a peer-to-peer file sharing application utilizing application layer protocols such as HTTP, DNS, and SMTP and transportation layer protocol.</b>

Course: DESIGN & ANALYSIS OF ALGORITHMS USING C++  
Course Code: LC-CSE-325G

<b>Course Outcome (CO)</b>	<b>Details of Course Outcomes</b>
<b>(CO1)</b>	<b>The course will help in improving the programming skills of the students.</b>
<b>(CO2)</b>	<b>The design of algorithms for any problem will inculcate structured thinking process in the students and improve the analytical power.</b>
<b>(CO3)</b>	<b>To Implementation of various algorithms and to analyze the performance of algorithms.</b>
<b>(CO4)</b>	<b>To Apply important algorithmic design paradigms and methods of analysis.</b>
<b>(CO5)</b>	<b>To Synthesize efficient algorithms in common engineering design situations.</b>

Course: Programming in Java Lab  
Course Code: LC-CSE-327G

<b>Course Outcome (CO)</b>	<b>Details of Course Outcomes</b>
<b>(CO1)</b>	<b>To Identify of the structure and model of the Java programming language.</b>
<b>(CO2)</b>	<b>To Identify classes, objects, members of a class and relationships among them needed for a specific problem.</b>
<b>(CO3)</b>	<b>To Demonstrate the concepts of polymorphism and inheritance.</b>
<b>(CO4)</b>	<b>To Design Java programs to implementer or handling techniques using Exception handling.</b>
<b>(CO5)</b>	<b>To Design Java application programs using OOP principles and proper program structuring.</b>

Course: WEB TECHNOLOGY  
Course Code: PCC-IT-303G

<b>Course Outcome (CO)</b>	<b>Details of Course Outcomes</b>
<b>(CO1)</b>	<b>Acquainted with the basics of internet &amp; search engines</b>
<b>(CO2)</b>	<b>Have a hands on HTML</b>
<b>(CO3)</b>	<b>Learned the need and basics of CSS</b>
<b>(CO4)</b>	<b>Learned the concepts of client side and server side scripting.</b>
<b>(CO5)</b>	<b>To familiarize the students with the basic concepts of internet, its history,</b>

Course: WEB TECHNOLOGY (LAB)  
Course Code: LC-IT-317G

<b>Course Outcome (CO)</b>	<b>Details of Course Outcomes</b>
<b>(CO1)</b>	<b>Develop web pages using HTML, DHTML and Cascading Styles sheets</b>
<b>(CO2)</b>	<b>Develop web pages using HTML, DHTML and Cascading Styles sheets.</b>
<b>(CO3)</b>	<b>Develop a dynamic web pages using JavaScript (client side programming).</b>
<b>(CO4)</b>	<b>Develop an interactive web applications using ASP.NET.</b>
<b>(CO5)</b>	<b>Build and consume web services.</b>