# K.S.Rangasamy College of Technology, Tiruchengode – 637215 (Autonomous)

## Department of Computer Science and Engineering

#### VISION:

• To produce competent software professionals, academicians and researchers through Quality Education.

#### **MISSION:**

- To produce competent software developers, system designers and network programmers.
- To keep abreast of the latest developments and technological transformations in computer science and engineering for social benefits.

### **Programme Educational Outcomes (PEOs):**

**PEO1:** Graduates will provide effective solutions for software and hardware industries by applying the concepts of basic science and engineering fundamentals.

**PEO2:** Graduates will be professionally competent and successful in their career through life-long learning.

**PEO3:** Graduates will contribute individually or as member of a team in handling projects and demonstrate social responsibility and professional ethics.

### **Programme Specific Outcomes (PSOs):**

**PSO1:** Apply standard Software Engineering practices and strategies in software project development using open-source programming environment and deliver a quality product for business success.

**PSO2:** Analyze and Interpret data by applying advanced data analytic models for decision making in Complex Problems and facilitate inter disciplinary research.

#### **Programme Outcomes (POs):**

**PO1:** Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex engineering problems.

**PO2: Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

**PO3: Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

**PO4: Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

**PO5: Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

**PO6:** The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

**PO7:** Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

**PO8: Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

**PO9: Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

**PO10:** Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

**PO11:** Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

**PO12: Life-long learning**: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

# INDEX

Exp No	List of Experiments	Date	Marks (100)	Faculty Signature
1	Implementation of Substitution Techniques to perform Encryption and Decryption operations			
2	Implementation of Transposition Techniques to perform Encryption and Decryption operations			
3	Perform Encryption operations using Data Encryption Standard Techniques			
4	Perform Encryption and decryption operations using Secure Hash Algorithm			
5	Implementation of Authentication process to perform encryption using Message Digest 5 Algorithm.			
6	Demo: Firewall			

Signature of the faculty Incharge