

**Thangal Kunju Musaliar College of Engineering
Kollam, Kerala**



CSL203 – OBJECT ORIENTED PROGRAMMING LAB IN JAVA

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

2020 - 2021

**Thangal Kunju Musaliyar College of Engineering
Kollam, Kerala**



CSL203

**OBJECT ORIENTED
PROGRAMMING LAB IN JAVA**

CERTIFICATE

Certified that this is a bonafide record of the work done by **Dinoy Raj K** of **Third** semester, roll no **TKM19CS021** in the OBJECT ORIENTED PROGRAMMING Laboratory during the academic year 2020 - 2021

Reg no: **190723**

Name of the Examination: **Third** Semester B.Tech Degree Examination

Staff in Charge

External Examiner

VISION

To be a centre of excellence imparting quality education in Computer Science and Engineering and transforming students to critical thinkers and lifelong learners capable of developing environment friendly and economically feasible solutions to real world problems

MISSION

- To provide a strong foundation in Computer Science and Engineering, prepare students for professional career and higher education, and inculcate research interest.
- To be abreast of the technological advances in a rapidly changing world.
- To impart skills to come up with socially acceptable solutions to real world problems, upholding ethical values.

PROGRAMME EDUCATIONAL OBJECTIVES(PEOs)

PEO 1: Excel in professional career by acquiring knowledge in mathematics, science and, engineering and applying the knowledge in the design of hardware and software solutions for challenging problems of the society, adapting to the current trends by engaging in lifelong learning

PEO 2: Pursue higher studies and research in the area of Computer Science and Engineering

PEO 3: Ability to provide socially acceptable and economically feasible computer-oriented solutions to real world problems with teamwork, while maintaining environmental balance, quality and cognizance of the underlying principles of ethics

PROGRAM SPECIFIC OUTCOMES

- ❑ **PSO 1:** Apply mathematical and algorithmic principles, data structure concepts, software and hardware techniques in designing and developing optimized and secure computer-based solutions.
- ❑ **PSO 2:** Design and develop system software and provide exposure to various tools and programming languages to facilitate efficient computing environment which adds to the case of human life.
- ❑ **PSO 3:** Use the knowledge of various data processing, communication and intelligent systems to provide solutions to new ideas and innovations.

PROGRAMME OUTCOMES

- ❑ **PO 1 - Engineering Knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problem.
- ❑ **PO 2 - Problem Analysis:** Identify formulate, review research literature and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering.
- ❑ **PO 3 - Design Development of Solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specific needs with appropriate consideration for the public health and safety, and the cultural, societal, environmental considerations.
- ❑ **PO 4 - Conduct Investigation of Complex Problem:** Use research-based knowledge and reached including design of experiments analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- ❑ **PO 5 - 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.

- ❑ **PO 6 - 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.
- ❑ **PO 7 - Environment and Sustainability:** Understand the impact of professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- ❑ **PO 8 - Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- ❑ **PO 9 - Individual and Team Work:** Function effectively as an individual and as a member or leader in diverse and in multidisciplinary settings.
- ❑ **PO 10 - 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.
- ❑ **PO 11 - Project Management and Finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, member and leader in a team, to manage multidisciplinary environment.
- ❑ **PO 12 - 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.