

**ST. JOSEPH'S COLLEGE (AUTONOMOUS),
DEVAGIRI, CALICUT**



CURRICULUM & SYLLABI

FOR

**B.Sc. COMPUTER SCIENCE &
MATHEMATICS (DOUBLE MAIN)**

**(UNDER CHOICE BASED CREDIT & SEMESTER SYSTEM UG- 2019)
(EFFECTIVE FROM 2022 ADMISSION)**

Programme Outcomes

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POs	PROGRAMME OUTCOMES
PO1	Apply mathematical concepts and techniques to solve complex problems in computer science, including areas such as discrete mathematics, calculus, linear algebra, and probability.
PO2	Develop and analyze algorithms to solve computational problems and apply algorithmic thinking to design efficient solutions.
PO3	Use the knowledge and skills necessary to support their career in software development, web development, databases, and entrepreneurship in recent trends like data analytics, artificial intelligence, Image processing, Networking, Embedded systems etc.
PO4	An ability to understand the core concepts of computer science and to enrich problem solving skills to analyze, design and implement software-based systems of varying complexity.
PO5	An understanding of professional, ethical, legal, security, and social issues and responsibilities for the computing profession.
PO6	Recognize the need for and develop the ability to engage in continuous learning in the context of technological change.
PO7	An ability to apply mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computational systems in a way that demonstrates comprehension of the trade-offs involved in design choices.
PO8	Design and implement database systems and demonstrate proficiency in managing and querying databases.
PO9	Student will be equipped with mathematical modeling ability, problem solving skills, creative talent, and power of communication necessary for various kinds of employment.
PO10	A student will be able to recall basic facts about mathematics and will be able to display knowledge of conventions such as notations, terminology and will get adequate exposure to global and local concerns that explore them many aspects of mathematical sciences.
PO11	Enable students to develop a positive attitude towards mathematics as an interesting and valuable subject of study.