



SOUTH EAST ASIAN EDUCATION TRUST (R)

S.E.A College of Science, Commerce and Arts

Affiliated to Bangalore North University

Recognized by UGC under 2(f): Accredited by NAAC at 'B' Grade

UG Department
B.Sc. Computer Science
PO, PSO & CO

BSc (COMPUTER SCIENCE)	
PROGRAMME OUTCOME	<p>PO1: It aims to develop a widely applicable skill set in computing with strong programming and mathematics skills, as well as wide ranging skills in project management, effective presentations and teamwork. Graduate with a portfolio of work fit to present to potential employers.</p> <p>PO2: It focus on particular areas of interest such as machine learning, web development, data science and video games.</p> <p>PO3: This program develops human resource for government organizations, IT industries as well as equipped students to start their own business as a software developer, database administrator, programmer, system analyst, data scientist, web application developer, system programmer, software testing, expert system designer.</p> <p>PO4: The explosive and ever-growing use of technology in business and commerce means that there's a whole range of different career possibilities for computing graduates.</p>

COURSE OUTCOMES

Course Code: DSC-1 Course Title: Computer Fundamentals and Programming in C and C programming Lab.

Course Outcomes (COs):

CO1.Confidently operate Desktop Computers to carry out computational tasks

CO2. Understand working of Hardware and Software and the importance of operating systems

CO3.Understand programming languages, number systems, peripheral devices, networking, multimedia and internet concepts.

CO4. Read, understand and trace the execution of programs written in C language

CO5. Write the C code for a given problem

CO6. Perform input and output operations using programs in C

CO7. Write programs that perform operations on arrays

Course Code: DSC-2

Course Title: Data Structures using C and Data Structure Lab.

Course Outcomes (COs):

CO1.Describe how arrays, records, linked structures, stacks, queues, trees, and graphs are represented in memory and used by algorithms

CO2.Describe common applications for arrays, records, linked structures, stacks, queues, trees, and graphs

CO3. Write programs that use arrays, records, linked structures, stacks, queues, trees, and graphs

CO4. Demonstrate different methods for traversing trees

CO5. Compare alternative implementations of data structures with respect to performance

CO6. Describe the concept of recursion, give examples of its use

CO7. Discuss the computational efficiency of the principal algorithms for sorting and searching.

<p>Course code: DSC3</p> <p>Course Title: Object Oriented Programming Concepts and Programming in Java and Java programming Lab</p>	<p>Course Outcomes (COs):</p> <p>CO1. Explain the object-oriented concepts and JAVA.</p> <p>CO2. Write JAVA programs using OOP concepts like Abstraction, Encapsulation,</p> <p>CO3. Inheritance and Polymorphism.</p> <p>CO4. Implement Classes and multithreading using JAVA.</p> <p>CO5.Demonstrate the basic principles of creating Java applications with GUI.</p>
<p>Course code: DSC4</p> <p>Course Title: Database Management System and DBMS Lab.</p>	<p>Course Outcomes (COs):</p> <p>At the end of the course, students will be able to:</p> <p>CO1. Explain the various database concepts and the need for database systems.</p> <p>CO2. Identify and define database objects, enforce integrity constraints on a database using DBMS.</p> <p>CO3. Demonstrate a Data model and Schemas in RDBMS.</p> <p>CO4. Identify entities and relationships and draw ER diagram for a given real-world problem.</p> <p>CO5. Convert an ER diagram to a database schema and deduce it to the desired normal form.</p> <p>CO6. Formulate queries in Relational Algebra, Structured Query Language (SQL) for database manipulation.</p> <p>CO7. Explain the transaction processing and concurrency control techniques.</p>