

SUBBALAKSHMI LAKSHMIPATHY COLLEGE OF SCIENCE

An Autonomous Institution

(Affiliated to Madurai Kamaraj University & Re-Accredited with B+ Grade by NAAC)

T.V.R. NAGAR, ARUPPUKOTTAI ROAD, MADURAI-22



Program Outcomes, Program Specific Outcomes & Course Outcomes

B.Sc Computer Science (Security System Specialization)

Batch: 2019 -2020

Department of Computer Science

Programme Code: CS1002

B.Sc Computer Science (Security System Specialization)

ProgrammeCode : CS1002

ACADEMIC YEAR 2019-2020

(BATCH 2019 -2022)

Programme Outcomes (PO)

The Programme Outcomes of the B.Sc Computer Science (Security System Specialization) degree are

- i. To attract young minds to the potentially rich & employable field of computer Science & SecuritySystems.
- ii. To Train & Equip the students by providing highest quality education and professional experience to meet the requirement of the Industrial standards and excel in theircareer.
- iii. To develop skills in the fields of Software Development & Cyber Security, which enable the students to take up employment in Indian & globalmarket.
- iv. To provide a strong foundation to pursue Post Graduation Programme in Computer Science/Applications.

Programme Specific Outcomes (PSO)

The Programme Specific Outcomes of the B.Sc Computer Science (Security System Specialization) degree are to make the graduates to become

- i. SoftwareDeveloper.
- ii. WebProgrammer.
- iii. Mobile ApplicationDeveloper
- iv. Cyber SecurityProfessional.

Course Outcomes (CO)

Course Outcomes (CO)

SEMESTER - I

I B.Sc Computer Science (Security System Specialization)

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|-----------------------|---------------------|-----------------------|---------------------------|
| Semester | : I | Batch | : 2019-2022 |
| Subject code | :19CS103 | Subject | : Programming in C |
| Internal Marks | : 25 | External Marks | : 75 |
| Part | : III [CORE] | Credits | : 4 |

Course Outcomes:

This subject will enable the students to

CO1: Understand the basic programming structure (K2)

CO2: Implementing arrays (K3)

CO3: Applying functions in structure (K3)

CO4: Compare pointers and arrays (K3)

CO5: Build and design programs using files (K3)

I B.Sc Computer Science (Security System Specialization)

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|-----------------------|---------------------|-----------------------|--------------------------------|
| Semester | : I | Batch | : 2019-2022 |
| Subject code | : 19CS104 | Subject | : Computer Organization |
| Internal Marks | : 25 | External Marks | : 75 |
| Part | : III [CORE] | Credits | : 4 |

Course Outcomes:

This subject will enable the students to

CO1: Understand the basic structure of computer (K2)

CO2: Demonstrate I/O devices and its functionalities (K2)

CO3: Illustrate Memory System (K2)

CO4: Summarize the Number System and Arithmetic Operations (K2)

CO5: Make use of processing unit (K3)

I B.Sc Computer Science (Security System Specialization)

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|-----------------------|-------------------------------|-----------------------|---|
| Semester | : I | Batch | : 2019-2022 |
| Subject code | : 19CS106 | Subject | : Secure Programming using C – Lab |
| Internal Marks | : 25 | External Marks | : 75 |
| Part | : III [Core Practical] | Credits | : 4 |

Course Outcomes:

This subject will enable the students to

- CO1: Understand input and output statements (K3)
- CO2: Apply Conditional statements (K3)
- CO3: Build Applications using Functions and Structures (K3)
- CO4: Experiment with pointers and files (K3)
- CO5: Interpret Encryption and Decryption techniques.(K2)

I B.Sc Computer Science (Security System Specialization)

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|-----------------------|-------------------------------|-----------------------|---|
| Semester | : I | Batch | : 2019-2022 |
| Subject code | : 19CS107 | Subject | : Office Automation & HTML Lab |
| Internal Marks | : 25 | External Marks | : 75 |
| Part | : III [Core Practical] | Credits | : 3 |

Course Outcomes:

By the end of this semester, the student will be able to

- CO1: Build various types of documentations (K3)
- CO2: Utilize formulas and graphs for data manipulation (K3)
- CO3: Create presentation with animation (K6)
- CO4: Construct relations and query extraction (K3)
- CO5: Design static Web pages (K6)

I B.Sc Computer Science (Security System Specialization)

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|---------------------|------------------------|-----------------|--------------------------|
| Semester | : I | Batch | : 2019-2022 |
| Subject code | :19VE109 | Subject | : Value Education |
| Internal | : 25(Practical) | External | : 75(Theory) |
| Part | : IV | Credits | : 2 |

Course outcomes:

The student will be able to

- CO1: Inculcate significance of value education (K3)
- CO2: Infer value education for nation building (K2)
- CO3: Understand human rights with Indian constitution (K2)
- CO4: Learn moral values, ethics and good manners (K1)
- CO5: Realize religious values and yoga (K1)

Course Outcomes (CO)

SEMESTER - II

I B.Sc Computer Science (Security System Specialization)

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|-----------------------|---------------------|-----------------------|---|
| Semester | : II | Batch | : 2019-2022 |
| Subject code | :19CS203 | Subject | : Object Oriented Programming with C++ |
| Internal Marks | : 25 | External Marks | : 75 |
| Part | : III [CORE] | Credits | : 4 |

Course Outcomes:

This subject will enable the students to

- CO1: Understand OOPs Concepts (K3)
- CO2: Interpret Classes and Objects (K2)
- CO3: Relate concepts of polymorphism (K1)
- CO4: Infer the Inheritance and its types (K2)
- CO5: Make use of files(K3)

I B.Sc Computer Science (Security System Specialization)

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|-----------------------|---------------------|-----------------------|---------------------------|
| Semester | : II | Batch | : 2019-2022 |
| Subject code | :19CS204 | Subject | : Operating System |
| Internal Marks | : 25 | External Marks | : 75 |
| Part | : III [CORE] | Credits | : 4 |

Course Outcomes:

This subject will enable the students to

- CO1: Define Operating System structure (K1)
- CO2: Demonstrate Process Management (K2)
- CO3: Show Process coordination with synchronization and deadlocks (K2)
- CO4: Explain Memory Management (K2)
- CO5: Outline of Storage Management (K2)

I B.Sc Computer Science (Security System Specialization)

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|-----------------------|-----------------------------------|-----------------------|---|
| Semester | : II | Batch | : 2019-2022 |
| Subject code | :19CS206 | Subject | : Object Oriented Programming with C++ Lab |
| Internal Marks | : 40 | External Marks | : 60 |
| Part | : III [CORE PRACTICAL] | Credits | : 4 |

Course Outcomes:

This subject will enable the students to CO1: Apply classes and objects(K3)

CO2: Experiment with Polymorphism (K3)

CO3: Experiment with constructors and destructors (K3)

CO4: Build Applications using types of inheritance (K3)

CO5: Interpret files and templates (K2)

I B.Sc Computer Science (Security System Specialization)

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|-----------------------|-------------------------------|-----------------------|--------------------|
| Semester | : II | Batch | : 2019-2022 |
| Subject code | :19CS207 | Subject | : Linux Lab |
| Internal Marks | : 40 | External Marks | : 60 |
| Part | : III [Core Practical] | Credits | : 3 |

Course Outcomes:

This subject will enable the students to

CO1: Apply file manipulation commands (K3)

CO2: Demonstrate utility commands (K2)

CO3: Illustrate pipes and filter commands (K2)

CO4: Outline process commands(K2)

CO5: Make use of shell scripts for various applications (K3)

I B.Sc Computer Science (Security System Specialization)

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|---------------------|-------------------|-----------------|--------------------------------|
| Semester | : II | Batch | : 2019-2022 |
| Subject code | : 19ES210 | Subject | : Environmental Studies |
| Internal | : 25 marks | External | : 75 marks |
| Part | : IV | Credits | : 2 |

Course Outcomes:

The Student will be able to

- CO1: Understand the significances of Multidisciplinary nature of environmental studies (K1)
- CO2: Inculcate the concept of Natural resources and its associated problems (K2)
- CO3: Understand the concept of Environmental Pollution and its preventive measures (K2)
- CO4: Relate the Social Issues (K2)
- CO5: Build the Legal Awareness (K3)

Course Outcomes (CO)

SEMESTER – III

II B.Sc COMPUTER SCIENCE (SECURITY SYSTEM SPECIALIZATION)

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|-----------------------|---------------------|-----------------------|---------------------------|
| Semester | : III | Batch | : 2019-2022 |
| Course code | : 19CS301 | Course Name | : Java Programming |
| Internal Marks | : 25 | External Marks | : 75 |
| Part | : III [CORE] | Credits | : 4 |

Course Outcomes:

This course will enable the students to

- CO1: Demonstrate the basic concepts in Java Programming (K2)
- CO2: Illustrate the real time implementation of classes and methods (K2)
- CO3: Build the concept of inheritance, interfaces and packages (K3)
- CO4: Interpret the importance of Multithreading and Exception handling (K5)
- CO5: Develop a GUI based interface using applets, AWT and swing (K6)

II B.Sc Computer Science (Security System Specialization)

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|-----------------------|---------------------|-----------------------|---|
| Semester | : III | Batch | : 2019-2022 |
| Course code | : 19CS302 | Course Name | : Computer Networks & Cryptography |
| Internal Marks | : 25 | External Marks | : 75 |
| Part | : III [CORE] | Credits | : 4 |

Course Outcomes:

This course will enable the students to

- CO1: Summarize the fundamentals of networks and reference models (K2)
- CO2: Demonstrate the transmission media in physical layer (K2)
- CO3: Apply the concept of network security & cryptography (K3)
- CO4: Experiment with block cipher algorithms (K3)
- CO5: Apply public key cryptography algorithms in security systems (K3)

II B.Sc Computer Science (Security System Specialization)

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|-----------------------|---------------------------|-----------------------|--------------------------|
| Semester | : III | Batch | : 2019-2022 |
| Course code | : 19CS303 | Course Name | : Data Structures |
| Internal Marks | : 25 | External Marks | : 75 |
| Part | : III [Elective I] | Credits | : 4 |

Course Outcomes:

This course will enable the students to

- CO1: Analyze the abstract properties of various data structures. (K4)
- CO2: Demonstrate the various operations on Stacks and Queues. (K2)
- CO3: Determine the different techniques of Sorting and Searching. (K5)
- CO4: Design the implementation of Linked Lists with its operations. (K6)
- CO5: Discuss the functionalities of Tree structure and its applications. (K6)

II B.Sc Computer Science (Security System Specialization)

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|-----------------------|----------------------------|-----------------------|----------------------------------|
| Semester | : III | Batch | : 2019-2022 |
| Course code | : 19CS304 | Course Name | : Client Server Computing |
| Internal Marks | : 25 | External Marks | : 75 |
| Part | : III [Elective II] | Credits | : 4 |

Course Outcomes:

This Course will enable the students to

- CO1: Get the knowledge on Client / Server Concepts (K2).
- CO2: Understand various components of client / server Applications (K2).
- CO3: Know the benefits and requirements of Client server technology (K2).
- CO4: Gain the knowledge about different types of servers (K2).
- CO5: Understand the concepts of development & deployment of networks (K2).

II B.Sc Computer Science(Security System Specialization)

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|-----------------------|-------------------------------|-----------------------|--|
| Semester | : III | Batch | : 2019-2022 |
| Course code | : 19CS305 | Course Name | : Secure Programming using Java Lab |
| Internal Marks | : 40 | External Marks | : 60 |
| Part | : III [Core Practical] | Credits | : 3 |

Course Outcomes:

This course will enable the students to

- CO1: Examine the fundamentals of programming such as variables, conditional and iterative execution, methods (K4)
- CO2: Interpret the fundamentals of object-oriented programming in Java, including defining classes, invoking methods, using class libraries (K5)
- CO3: Analyze the importance of inheritance, packages and interfaces (K4)
- CO4: Build the concepts of multithreading and exception handling (K6)
- CO5: Develop a GUI application using applet, AWT and swing (K6)

II B.Sc Computer Science (Security System Specialization)

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|-----------------------|-------------------------------------|-----------------------|--------------------|
| Semester | : III | Batch | : 2019-2022 |
| Course code | : 19CS306 | Course Name | : DHTML Lab |
| Internal Marks | : 25 | External Marks | : 75 |
| Part | : IV [Skill Based Practical] | Credits | : 2 |

Course Outcomes:

This course will enable the students to

- CO1: Experiment the fundamentals of web designing (K3)
- CO2: Inspect CSS properties, attributes and styles for web designing (K4)
- CO3: Evaluate dynamic web applications using scripts (K5)
- CO4: Assess with objects in Java script (K5)
- CO5: Create web applications using cookies in Java script (K6)

II B.Sc COMPUTER SCIENCE(SEcurity SYSTEM SPECIALIZATION)

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|-----------------------|--|-----------------------|----------------------------------|
| Semester | : III | Batch | : 2019-2022 |
| Course code | : 19CS307 | Course Name | : Office Automation Lab-I |
| Internal Marks | : 25 | External Marks | : 75 |
| Part | : IV [Non Major Elective – I] | Credits | : 2 |

Course Outcomes:

This course will enable the students to

CO1: Determine the use of table, shapes, smart art, clip art in MS-Word document **(K5)**

CO2: Build a newspaper using bullets, numbering, borders, drop cap in MS-Word document **(K6)**

CO3: Create certificates, pamphlets using templates in the MS-Word document **(K6)**

CO4: Analyze the student marks using the functions of MS-Excel **(K4)**

CO5: Analyze the data using sorting, filtering, functions & charts in MS-Excel **(K4)**