

## Department of Information technology

### Regulation 2021

| S.NO | COURSE NAME                     | COURSE OUTCOMES |  |
|------|---------------------------------|-----------------|--|
| 1    | C101 – Professional English - I | C101.1          | Apply Elements of Communication to LSRW on Self Introduction and Introduction of others                |
|      |                                 | C101.2          | Comprehend complex academic texts for narrating personal experiences and events                        |
|      |                                 | C101.3          | Describe non verbal processes and products transferring into verbal texts                              |
|      |                                 | C101.4          | Make notes to prepare Reports, Essays and Minutes  |
|      |                                 | C101.5          | Infer denotative and connotative meanings of technical words to write descriptive and narrative essays |
| 2    | C102 – Matrices and Calculus    | C102.1          | Use the matrix algebra methods for solving practical problems.   |
|      |                                 | C102.2          | Apply differential calculus tools in solving various application problems.                             |
|      |                                 | C102.3          | Able to use differential calculus ideas on several variable functions.                                 |
|      |                                 | C102.4          | Make use of different integration methods in solving practical problems.                               |
|      |                                 | C102.5          | Utilize multiple integral ideas in solving areas, volumes and other practical problems.                |
| 3    | C103 - Engineering Physics      | C103.1          | Explain the basic concepts of multi particle dynamics and non-linear oscillations.                     |
|      |                                 | C103.2          | Illustrate and Interpret the propagation of electromagnetic waves in various media.                    |
|      |                                 | C103.3          | Demonstrate a strong fundamental knowledge in oscillation, optics and Lasers.                          |
|      |                                 | C103.4          | Explain the basics of quantum mechanics to determine the motion of electrons and its probabilities.    |
|      |                                 | C103.5          | Comprehend and apply Quantum Mechanic principles towards the formation of energy bands.                |
| C104 | En                              | C104.1          | Explain the types of water and water treatment techniques  |

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| 4 |   | C104.2 | Demonstrate the basic principle of Nanotechnology and preparatory methods of nanomaterials |
|   |   | C104.3 | Apply the knowledge of phase rule and describe the components of composites                |
|   |   | C104.4 | Explain the types of fuels and the manufacturing of secondary fuels                        |
|   |   | C104.5 | Illustrate the types of energy resources   |
| 5 | C105 – Problem Solving & Python Programming     | C105.1 | Define algorithmic solutions to computational problems                                     |
|   |   | C105.2 | Demonstrate simple python programs for expressions and statements                          |
|   |   | C105.3 | Develop python programs using conditional, loop and functions                              |
|   |   | C105.4 | Construct compound data type using lists, tuples and dictionaries.                         |
|   |   | C105.5 | Experiment the files in python programming   |
| 6 | C106 – Heritage in Tamil                        | C106.1 | Brief the significance and contributions of Tamil language and literature                  |
|   |   | C106.2 | Comprehend the heritage of Tamil through Rock paintings and Sculpture                      |
|   |   | C106.3 | Identify the folks and martial arts of Tamil people  |
|   |   | C106.4 | Brief the concepts of Thina in Tamil   |
|   |   | C106.5 | Explain the contributions of Tamil People to Indian national movement and Indian Culture   |
| 7 | C107 – Problem Solving & Python Programming Lab | C107.1 | Develop algorithmic solutions to simple computational problems                             |
|   |   | C107.2 | Develop and execute simple python programs   |
|   |   | C107.3 | Implement programs in python using conditionals, loops and functions for solving problems. |
|   |   | C107.4 | Process compound data using python data structures   |

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|    |  | C107.5 | Utilize python packages in developing software applications   |
| 8  | C108 – Physics Chemistry Laboratory      | C108.1 | Analyze the modulus of elasticity of different types of materials   |
|    |  | C108.2 | Demonstrate the concepts of laser diffraction and fiber optics  |
|    |  | C108.3 | Apply interference pattern to determine the thickness of thin material  |
|    |  | C108.4 | Determine the velocity of ultrasonic waves in liquid  |
|    |  | C108.5 | Apply instrumentation method to determine the strength of the given solution  |
|    |  | C108.6 | Apply volumetric analysis method to estimate hardness, alkalinity, chloride, copper content present in a given solution   |
| 9  | C109 – English Laboratory                | C109.1 | Listen and respond appropriately  |
|    |  | C109.2 | Describe personal experiences , requirements and abilities  |
|    |  | C109.3 | Make an effective presentation on products and processes  |
|    |  | C109.4 | Communicate with appropriate communicative strategies.  |
|    |  | C109.5 | Participate in group discussion or debates  |
| 10 | C110 – Professional English - II         | C110.1 | Compare and Contrast products and ideas in technical texts.   |
|    |  | C110.2 | Identify cause and effect in longer text for technical communication  |
|    |  | C110.3 | Analyze problems in order to ensue solutions in oral and written professional communication   |
|    |  | C110.4 | Make oral and written Report of Events and Technical process  |
|    |  | C110.5 | Create job applications and resume  |
| 11 | C 111 – Statistics and Numerical Methods | C111.1 | Apply the concept of testing of hypothesis for small and large samples in real life problems  |
|    |  | C111.2 | Apply the basic concepts of classifications of design of experiments in the field of agriculture  |
|    |  | C111.3 | Appreciate the numerical of techniques of interpolation in various intervals and apply the numerical techniques of differentiation and integration for engineering problems |
|    |  | C111.4 | Comprehend various techniques and solving first and second order ordinary differential equation   |

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|    |   | C111.5 | Solve the partial and ordinary differential equation with initial and boundary condition by using certain technique with engineering applications |
| 12 | C 112 – Physics for information science             | C112.1 | Explain classical and quantum electron theories for the formation of energy band structures in solids.  |
|    |   | C112.2 | Explain basics of semiconductor physics and Hall Effect and Demonstrate the function of semiconductor devices.                                    |
|    |   | C112.3 | Illustrate the magnetic and dielectric properties of materials.   |
|    |   | C112.4 | Demonstrate the functioning of optical materials for opto-electronics.  |
|    |   | C112.5 | Interpret the basics of quantum structures and their applications in nano-devices and quantum computing.  |
| 13 | C113 – Basic Electrical and Electronics Engineering | C113.1 | Compute the electric circuit parameters for simple problems   |
|    |   | C113.2 | Explain the working principle and applications of electrical machine  |
|    |   | C113.3 | Analyze the characteristic of analog electric devices   |
|    |   | C113.4 | Explain the basic concepts of digital electronics   |
|    |   | C113.5 | Explain the operating principles of measuring instruments   |
| 14 | C114 – Engineering Graphics                         | C114.1 | Use Bis Conventions and specifications for engineering drawing  |
|    |   | C114.2 | Construct the conic curves, involutes and cycloid   |
|    |   | C114.3 | Solve practical problems involving projection of lines  |
|    |   | C114.4 | Draw the orthographic, isometric and perspective projections of simple solids   |
|    |   | C114.5 | Draw the development of simple solids   |
| 15 | C115 – Programming in C                             | C115.1 | Demonstrate knowledge on C Programming constructs x   |
|    |   | C115.2 | Develop simple applications in C using basic constructs   |
|    |   | C115.3 | Design and implement applications using arrays and strings  |
|    |   | C115.4 | Develop and implement modular applications in C using functions.  |
|    |   | C115.5 | Develop applications in C using structures and pointers   |

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| 16 | C116 - Tamils and Technology      | C116.1 | Explain about the weaving and ceramic technology of Tamil people   |
|    |                                   | C116.2 | Explain the traditional design and construction of Tamil people  |
|    |                                   | C116.3 | Explain the manufacturing technology practiced by tamils   |
|    |                                   | C116.4 | Comprehend and brief about the tamil agriculture and irrigation technology of tamil people   |
|    |                                   | C116.5 | Brief about the tamil virtual academy and digital library.   |
| 17 | C117 – Engineering Practices Lab  | C117.1 | Draw pipe line plan: lay and connect various pipe fittings used in common house hold plumbing work. Saw, Plan, make joints in wood materials used in common house hold wood work.  |
|    |                                   | C117.2 | Wire various electrical joints in common household electrical wire work  |
|    |                                   | C117.3 | Weld various joints in steel plates using arc welding work; Machine various simple processes like turning drilling, tapping in parts; Assemble simple mechanical assembly of common house hold equipments; make a tray out of metal sheet using sheet metal work |
|    |                                   | C117.4 | Solder and test simple electronic circuits; assemble and test simple electronic components on PCB  |
| 18 | C118 –Programming in C Laboratory | C118.1 | Demonstrate knowledge on C programming constructs.   |
|    |                                   | C118.2 | Develop programs in C using basic constructs.  |
|    |                                   | C118.3 | Develop programs in C using arrays..   |
|    |                                   | C118.4 | Develop applications in C using strings, pointers, functions.  |
|    |                                   | C118.5 | Develop applications in C using structures   |
| 19 | C118 – Communication Laboratory   | C119.1 | Speak effectively in group discussions held in formal/semi formal contexts.  |
|    |                                   | C119.2 | Write emails and effective job applications  |
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