

**Department of Information Technology**

**Course Outcomes [CO'S]**

**SUBJECT/CODE: INFORMATION AND CYBER SECURITY [414453]**

1. Students shall be able to understand what are the common threats faced today.
2. What is the foundational theory behind information security?
3. What are the basic principles and techniques when designing a secure system?
4. How today's attacks and defenses work in practice.
5. How to assess threats for their significance.
6. How to gauge the protections and limitations provided by today's technology.

**SUBJECT/CODE: SOFTWARE MODELING AND DESIGN [414454]**

1. Understand the usage of various UML diagrams to build a model
2. Prepare an object oriented model in business domain of an application.
3. Prepare an object oriented model in solution domain.
4. Apply object oriented principles in the design of software system.
5. Get started on study of GOF design patterns.
6. Understand different types of software testing.

**SUBJECT/CODE: MACHINE LEARNING [414455]**

1. Students will be able to model the learning primitives.
2. Students will be able to build the learning model.
3. Student will be able to tackle real world problems in the domain of Data Mining, Information
4. Retrieval, Computer vision, Linguistics and Bioinformatics.

**SUBJECT/CODE: ELECTIVE I CLOUD COM [414456 E]**

1. Understand and Familiar with the basic concepts of cloud computing.
2. Understand how to build large scale distributed systems and cloud applications.

3. Comprehend the importance of cloud security.
4. Understand Ubiquitous Computing and applications.

**SUBJECT/CODE: ELECTIVE II BUSINESS INTELLIGENCE [414457 A]**

5. Design and implement OLTP, OLAP and Warehouse concepts.
6. Design and develop Data Warehouse using Various Schemas & Dimensional modelling.
7. Use the ETL concepts, tools and techniques to perform Extraction, Transformation, and Loading of data.
8. Report the usable data by using various reporting concepts, techniques/tools, and use charts, tables for reporting in BI.
9. Use Analytics concepts like data mining, Exploratory and statistical techniques for predictive analysis in Business Intelligence.
10. Demonstrate application of concepts in BI.

**SUBJECT/CODE: SOFTWARE LABORATORY – III [414458]**

1. The students will be able to implement and port controlled and secured access to software systems and networks.
2. The students will be able to build learning software in various domains.

**SUBJECT/CODE: SOFTWARE LABORATORY – IV [414459]**

3. Students will be able to identify classes and collaboration from requirements.
4. Students will be able to prepare analysis and design model and implement.
5. Students will be able to use the test driven development approach in implementation.
6. Students will be able to experience Object Oriented Software Development life cycle activities.

**SUBJECT/CODE: PROJECT PHASE – I [414460]**

1. At the end of this course the student should be able to show preparedness to study independently in chosen domain of Information Technology and programming languages and apply to variety of real time problem scenarios.

**SUBJECT/CODE: DISTRIBUTED SYSTEM [414461]**

1. Understand the principles on which the internet and other distributed systems are based.
2. Understand and apply the basic theoretical concepts and algorithms of distributed systems in problem solving.

**SUBJECT/CODE: ADVANCED DATABASES [414462]**

1. Understanding of Advances in Database Architectures for Big data.
2. Master the basics of web and object oriented database using XML and JDOQL.
3. Master the basic concepts of NoSQL Databases.
4. Understand how analytics and big data affect various functions now and in the future.
5. Appreciate the impact of analytics and big data on the information industry and the external ecosystem for analytical and data services.
6. Understanding of current trends in databases.

**SUBJECT/CODE: ELECTIVE III- IT ENABLED SERVICES [414463 D]**

1. Students will be able to understand the process of IT Industry
2. Students will be able to understand Indian laws of IT industry
3. Student will be able to study current trends and services in IT industry
4. Student will be able to understand programming concept of IT Web services.

**SUBJECT/CODE: ELECTIVE IV: GREEN IT – PRINCIPLES AND PRACTICES [414464 C]**

1. Students will be able to create awareness among stakeholders and promote green agenda and green initiatives in their working environments leading to green movement.
2. This green movement will create new career opportunities for IT professionals, auditors and others with special skills such as energy efficiency, ethical IT assets disposal, carbon footprint estimation, reporting and development of green products, applications and services.

**SUBJECT/CODE: SOFTWARE LABORATORY – V [414465]**

1. Understand the principles on which the internet and other distributed systems are based.
2. Understand and apply the basic theoretical concepts and algorithms of distributed systems in problem solving.

**SUBJECT/CODE: SOFTWARE LABORATORY – VI [414466]**

1. Understanding of Advanced Database Programming Languages.
2. Master the basics of web and object oriented database languages and construct queries using XML and JDOQL.
3. Master the basic concepts of No SQL Databases.
4. Understand how analytics and big data affect various functions now and in the future.
5. Appreciate the impact of analytics and big data on the information industry and the external ecosystem for analytical and data services.