



# SHREE DEVI INSTITUTE OF TECHNOLOGY

(Affiliated to Visvesvaraya Technological University & Recognized by AICTE)

**AIRPORT ROAD, KENJAR, MANGALORE – 574 142**

Phone: 0824 – 2254104 Website: www.sdc.ac.in, E-mail : sdit\_kenjar@rediffmail.com

## 15 SCHEME - INFORMATION SCIENCE AND ENGINEERING

<b>MANAGEMENT AND ENTREPRENEURSHIP FOR IT INDUSTRY</b> [As per Choice Based Credit System (CBCS) scheme] (Effective from the academic year 2016 -2017) <b>SEMESTER – V</b>			
Subject Code	15CS51	IA Marks	20
Number of Lecture Hours/Week	4	Exam Marks	80
Total Number of Lecture Hours	50	Exam Hours	03
<b>CREDITS – 04</b>			
<b>Course outcomes:</b> The students should be able to:			
<ul style="list-style-type: none"><li>• Define management, organization, entrepreneur, planning, staffing, ERP and outline their importance in entrepreneurship</li><li>• Utilize the resources available effectively through ERP</li><li>• Make use of IPRs and institutional support in entrepreneurship</li></ul>			

<b>COMPUTER NETWORKS</b> [As per Choice Based Credit System (CBCS) scheme] (Effective from the academic year 2016 -2017) <b>SEMESTER – V</b>			
Subject Code	15CS52	IA Marks	20
Number of Lecture Hours/Week	4	Exam Marks	80
Total Number of Lecture Hours	50	Exam Hours	03
<b>CREDITS – 04</b>			
<b>Course outcomes:</b> The students should be able to:			
<ul style="list-style-type: none"><li>• Explain principles of application layer protocols</li><li>• Recognize transport layer services and infer UDP and TCP protocols</li><li>• Classify routers, IP and Routing Algorithms in network layer</li><li>• Understand the Wireless and Mobile Networks covering IEEE 802.11 Standard</li><li>• Describe Multimedia Networking and Network Management</li></ul>			

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<b>DATABASE MANAGEMENT SYSTEM</b> [As per Choice Based Credit System (CBCS) scheme] (Effective from the academic year 2016 -2017) <b>SEMESTER – V</b>			
Subject Code	15CS53	IA Marks	20
Number of Lecture Hours/Week	4	Exam Marks	80
Total Number of Lecture Hours	50	Exam Hours	03
<b>CREDITS – 04</b>			
<b>Course outcomes:</b> The students should be able to:			
<ul style="list-style-type: none"><li>• Identify, analyze and define database objects, enforce integrity constraints on a database using RDBMS.</li><li>• Use Structured Query Language (SQL) for database manipulation.</li><li>• Design and build simple database systems</li><li>• Develop application to interact with databases.</li></ul>			

<b>AUTOMATA THEORY AND COMPUTABILITY</b> [As per Choice Based Credit System (CBCS) scheme] (Effective from the academic year 2016 -2017) <b>SEMESTER – V</b>			
Subject Code	15CS54	IA Marks	20
Number of Lecture Hours/Week	4	Exam Marks	80
Total Number of Lecture Hours	50	Exam Hours	03
<b>CREDITS – 04</b>			
<b>Course outcomes:</b> The students should be able to:			
<ul style="list-style-type: none"><li>• Acquire fundamental understanding of the core concepts in automata theory and Theory of Computation</li><li>• Learn how to translate between different models of Computation (e.g., Deterministic and Non-deterministic and Software models).</li><li>• Design Grammars and Automata (recognizers) for different language classes and become knowledgeable about restricted models of Computation (Regular, Context Free) and their relative powers.</li><li>• Develop skills in formal reasoning and reduction of a problem to a formal model, with an emphasis on semantic precision and conciseness.</li><li>• Classify a problem with respect to different models of Computation.</li></ul>			

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<b>SOCIAL NETWORK ANALYSIS</b>			
<b>[As per Choice Based Credit System (CBCS) scheme]</b>			
<b>(Effective from the academic year 2016 -2017)</b>			
<b>SEMESTER – V</b>			
Subject Code	15IS552	IA Marks	20
Number of Lecture Hours/Week	03	Exam Marks	80
Total Number of Lecture Hours	40	Exam Hours	03
<b>CREDITS – 03</b>			
<ul style="list-style-type: none"><li>• Define notation and terminology used in network science.</li><li>• Demonstrate, summarize and compare networks.</li><li>• Explain basic principles behind network analysis algorithms.</li><li>• Analyzing real world network.</li></ul>			

<b>PROGRAMMING LANGAUGES</b>			
<b>[As per Choice Based Credit System (CBCS) scheme]</b>			
<b>(Effective from the academic year 2016 -2017)</b>			
<b>SEMESTER – V</b>			
Subject Code	15IS554	IA Marks	20
Number of Lecture Hours/Week	3	Exam Marks	80
Total Number of Lecture Hours	40	Exam Hours	03
<b>CREDITS – 03</b>			
<b>Course outcomes:</b> The students should be able to:			
<ul style="list-style-type: none"><li>• Select appropriate languages for given applications</li><li>• Demonstrate usage and justification of different languages</li><li>• Compare and contrast the strengths and weaknesses of different languages</li></ul>			

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<b>COMPUTER NETWORK LABORATORY</b> [As per Choice Based Credit System (CBCS) scheme] (Effective from the academic year 2016 -2017) <b>SEMESTER – V</b>			
Subject Code	15CSL57	IA Marks	20
Number of Lecture Hours/Week	01I + 02P	Exam Marks	80
Total Number of Lecture Hours	40	Exam Hours	03
<b>CREDITS – 02</b>			
<b>Course outcomes:</b> The students should be able to:			
<ul style="list-style-type: none"><li>• Analyze and Compare various networking protocols.</li><li>• Demonstrate the working of different concepts of networking.</li><li>• Implement, analyze and evaluate networking protocols in NS2 / NS3</li></ul>			

<b>ADVANCED JAVA AND J2EE</b> [As per Choice Based Credit System (CBCS) scheme] (Effective from the academic year 2016 -2017) <b>SEMESTER – V</b>			
Subject Code	15CS553	IA Marks	20
Number of Lecture Hours/Week	3	Exam Marks	80
Total Number of Lecture Hours	40	Exam Hours	03
<b>CREDITS – 03</b>			
<b>Course outcomes:</b> The students should be able to:			
<ul style="list-style-type: none"><li>• Interpret the need for advanced Java concepts like enumerations and collections in developing modular and efficient programs</li><li>• Build client-server applications and TCP/IP socket programs</li><li>• Illustrate database access and details for managing information using the JDBC API</li><li>• Describe how servlets fit into Java-based web application architecture</li><li>• Develop reusable software components using Java Beans</li></ul>			

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<b>DBMS LABORATORY WITH MINI PROJECT</b> [As per Choice Based Credit System (CBCS) scheme] (Effective from the academic year 2016 -2017) <b>SEMESTER – V</b>			
Subject Code	15CSL58	IA Marks	20
Number of Lecture Hours/Week	01I + 02P	Exam Marks	80
Total Number of Lecture Hours	40	Exam Hours	03
<b>CREDITS – 02</b>			
<b>Course outcomes:</b> The students should be able to:			
<ul style="list-style-type: none"><li>• Create, Update and query on the database.</li><li>• Demonstrate the working of different concepts of DBMS</li><li>• Implement, analyze and evaluate the project developed for an application.</li></ul>			

<b>CRYPTOGRAPHY, NETWORK SECURITY AND CYBER LAW</b> [As per Choice Based Credit System (CBCS) scheme] (Effective from the academic year 2016 -2017) <b>SEMESTER – VI</b>			
Subject Code	15CS61	IA Marks	20
Number of Lecture Hours/Week	4	Exam Marks	80
Total Number of Lecture Hours	50	Exam Hours	03
<b>CREDITS – 04</b>			
<b>Course outcomes:</b> The students should be able to:			
<ul style="list-style-type: none"><li>• Discuss cryptography and its need to various applications</li><li>• Design and develop simple cryptography algorithms</li><li>• Understand cyber security and need cyber Law</li></ul>			

<b>FILE STRUCTURES</b> [As per Choice Based Credit System (CBCS) scheme] (Effective from the academic year 2016 -2017) <b>SEMESTER – VI</b>			
Subject Code	15IS62	IA Marks	20
Number of Lecture Hours/Week	4	Exam Marks	80
Total Number of Lecture Hours	50	Exam Hours	03
<b>CREDITS – 04</b>			
<b>Course outcomes:</b> The students should be able to:			
<ul style="list-style-type: none"><li>• Choose appropriate file structure for storage representation.</li><li>• Identify a suitable sorting technique to arrange the data.</li><li>• Select suitable indexing and hashing techniques for better performance to a given problem.</li></ul>			

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<b>SOFTWARE TESTING</b>			
<b>[As per Choice Based Credit System (CBCS) scheme]</b>			
<b>(Effective from the academic year 2016 -2017)</b>			
<b>SEMESTER – V</b>			
Subject Code	15IS63	IA Marks	20
Number of Lecture Hours/Week	4	Exam Marks	80
Total Number of Lecture Hours	50	Exam Hours	03
<b>CREDITS – 04</b>			
<b>Course outcomes:</b> The students should be able to:			
<ul style="list-style-type: none"><li>• Derive test cases for any given problem</li><li>• Compare the different testing techniques</li><li>• Classify the problem into suitable testing model</li><li>• Apply the appropriate technique for the design of flow graph.</li><li>• Create appropriate document for the software artefact.</li></ul>			

<b>OPERATING SYSTEMS</b>			
<b>[As per Choice Based Credit System (CBCS) scheme]</b>			
<b>(Effective from the academic year 2016 -2017)</b>			
<b>SEMESTER – VI</b>			
Subject Code	15CS64	IA Marks	20
Number of Lecture Hours/Week	4	Exam Marks	80
Total Number of Lecture Hours	50	Exam Hours	03
<b>CREDITS – 04</b>			
<b>Course outcomes:</b> The students should be able to:			
<ul style="list-style-type: none"><li>• Demonstrate need for OS and different types of OS</li><li>• Apply suitable techniques for management of different resources</li><li>• Use processor, memory, storage and file system commands</li><li>• Realize the different concepts of OS in platform of usage through case studies</li></ul>			

<b>DATA MINING AND DATA WAREHOUSING</b>			
<b>[As per Choice Based Credit System (CBCS) scheme]</b>			
<b>(Effective from the academic year 2016 -2017)</b>			
<b>SEMESTER – VI</b>			
Subject Code	15CS651	IA Marks	20
Number of Lecture Hours/Week	3	Exam Marks	80
Total Number of Lecture Hours	40	Exam Hours	03
<b>CREDITS – 03</b>			
<b>Course outcomes:</b> The students should be able to:			
<ul style="list-style-type: none"><li>• Identify data mining problems and implement the data warehouse</li><li>• Write association rules for a given data pattern.</li><li>• Choose between classification and clustering solution.</li></ul>			

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## SYSTEM SOFTWARE

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### SEMESTER – VI

Subject Code	15IS652	IA Marks	20
Number of Lecture Hours/Week	3	Exam Marks	80
Total Number of Lecture Hours	40	Exam Hours	03

### CREDITS – 03

**Course outcomes:** The students should be able to:

- Explain system software such as assemblers, loaders, linkers and macro processors
- Design and develop lexical analyzers, parsers and code generators
- Utilize lex and yacc tools for implementing different concepts of system software

## OPERATIONS RESEARCH

[As per Choice Based Credit System (CBCS) scheme]  
(Effective from the academic year 2016 -2017)

### SEMESTER – VI

Subject Code	15CS653	IA Marks	20
Number of Lecture Hours/Week	3	Exam Marks	80
Total Number of Lecture Hours	40	Exam Hours	03

### CREDITS – 03

**Course outcomes:** The students should be able to:

- Select and apply optimization techniques for various problems.
- Model the given problem as transportation and assignment problem and solve.
- Apply game theory for decision support system.

## DISTRIBUTED COMPUTING SYSTEM

[As per Choice Based Credit System (CBCS) scheme]  
(Effective from the academic year 2016 -2017)

### SEMESTER – VI

Subject Code	15CS654	IA Marks	20
Number of Lecture Hours/Week	3	Exam Marks	80
Total Number of Lecture Hours	40	Exam Hours	03

### CREDITS – 03

**Course outcomes:** The students should be able to:

- Explain the characteristics of a distributed system along with its and design challenges
- Illustrate the mechanism of IPC between distributed objects
- Describe the distributed file service architecture and the important characteristics of SUN NFS.
- Discuss concurrency control algorithms applied in distributed transactions

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## FILE STRUCTURES LABORATORY WITH MINI PROJECT

[As per Choice Based Credit System (CBCS) scheme](Effective from the academic year 2016 -2017)

**SEMESTER – VI**

Subject Code	15ISL68	IA Marks	20
Number of Lecture Hours/Week	01I + 02P	Exam Marks	80
Total Number of Lecture Hours	40	Exam Hours	03

**CREDITS – 02**

**Course outcomes:** The students should be able to:

- Implement operations related to files
- Apply the concepts of file system to produce the given application.
- Evaluate performance of various file systems on given parameters.

## SOFTWARE TESTING LABORATORY

[As per Choice Based Credit System (CBCS) scheme](Effective from the academic year 2016 -2017) **SEMESTER – VI**

Subject Code	15ISL67	IA Marks	20
Number of Lecture Hours/Week	01I + 02P	Exam Marks	80
Total Number of Lecture Hours	40	Exam Hours	03

**CREDITS – 02**

**Course outcomes:** The students should be able to:

- List out the requirements for the given problem
- Design and implement the solution for given problem in any programming language(C,C++,JAVA)
- Derive test cases for any given problem
- Apply the appropriate technique for the design of flow graph.
- Create appropriate document for the software artefact.

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**WEB TECHNOLOGY AND ITS APPLICATIONS**  
[As per Choice Based Credit System (CBCS) scheme]  
(Effective from the academic year 2016 -2017)  
**SEMESTER – VII**

Subject Code	<b>15CS71</b>	IA Marks	20
Number of Lecture Hours/Week	04	Exam Marks	80
Total Number of Lecture Hours	50	Exam Hours	03

**CREDITS – 04**

**Course Outcomes:** After studying this course, students will be able to

- Adapt HTML and CSS syntax and semantics to build web pages.
- Construct and visually format tables and forms using HTML and CSS
- Develop Client-Side Scripts using JavaScript and Server-Side Scripts using PHP to generate and display the contents dynamically.
- Appraise the principles of object oriented development using PHP
- Inspect JavaScript frameworks like jQuery and Backbone which facilitates developerto focus on core features.

**SOFTWARE ARCHITECTURE AND DESIGN PATTERNS**  
[As per Choice Based Credit System (CBCS) scheme]  
(Effective from the academic year 2016 -2017)  
**SEMESTER – VII**

Subject Code	15IS72	IA Marks	20
Number of Lecture Hours/Week	4	Exam Marks	80
Total Number of Lecture Hours	50	Exam Hours	03

**CREDITS – 04**

**Course outcomes:** The students should be able to:

- Design and implement codes with higher performance and lower complexity
- Be aware of code qualities needed to keep code flexible
- Experience core design principles and be able to assess the quality of a designwith respect to these principles.
- Capable of applying these principles in the design of object-oriented systems.
- Demonstrate an understanding of a range of design patterns. Be capable of comprehending a design presented using this vocabulary.
- Be able to select and apply suitable patterns in specific contexts

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<b>MACHINE LEARNING</b> [As per Choice Based Credit System (CBCS) scheme] (Effective from the academic year 2016 -2017) <b>SEMESTER – VII</b>			
Subject Code	15CS73	IA Marks	20
Number of Lecture Hours/Week	03	Exam Marks	80
Total Number of Lecture Hours	50	Exam Hours	03
<b>CREDITS – 04</b>			
<b>Course Outcomes:</b> After studying this course, students will be able to			
<ul style="list-style-type: none"><li>• Identify the problems for machine learning. And select the either supervised, unsupervised or reinforcement learning.</li><li>• Explain theory of probability and statistics related to machine learning</li><li>• Investigate concept learning, ANN, Bayes classifier, k nearest neighbor, Q,</li></ul>			

<b>NATURAL LANGUAGE PROCESSING</b> [As per Choice Based Credit System (CBCS) scheme] (Effective from the academic year 2016 -2017) <b>SEMESTER – VII</b>			
Subject Code	15CS741	IA Marks	20
Number of Lecture Hours/Week	3	Exam Marks	80
Total Number of Lecture Hours	40	Exam Hours	03
<b>CREDITS – 03</b>			
<b>Course outcomes:</b> The students should be able to:			
<ul style="list-style-type: none"><li>• Analyze the natural language text.</li><li>• Generate the natural language.</li><li>• Do Text mining.</li><li>• Apply information retrieval techniques.</li></ul>			

<b>CLOUD COMPUTING AND ITS APPLICATIONS</b> [As per Choice Based Credit System (CBCS) scheme] (Effective from the academic year 2016 -2017) <b>SEMESTER – VII</b>			
Subject Code	15CS742	IA Marks	20
Number of Lecture Hours/Week	3	Exam Marks	80
Total Number of Lecture Hours	40	Exam Hours	03
<b>CREDITS – 03</b>			
<b>Course outcomes:</b> The students should be able to:			
<ul style="list-style-type: none"><li>• Explain cloud computing, virtualization and classify services of cloud computing</li><li>• Illustrate architecture and programming in cloud</li><li>• Describe the platforms for development of cloud applications and List the application of cloud.</li></ul>			

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<b>INFORMATION AND NETWORK SECURITY</b> [As per Choice Based Credit System (CBCS) scheme] (Effective from the academic year 2016 -2017) <b>SEMESTER – VII</b>			
Subject Code	15CS743	IA Marks	20
Number of Lecture Hours/Week	3	Exam Marks	80
Total Number of Lecture Hours	40	Exam Hours	03
<b>CREDITS – 03</b>			
<b>Course outcomes:</b> The students should be able to:			
<ul style="list-style-type: none"><li>Analyze the Digital security lapses</li><li>Illustrate the need of key management</li></ul>			

<b>UNIX SYSTEM PROGRAMMING</b> [As per Choice Based Credit System (CBCS) scheme] (Effective from the academic year 2016 -2017) <b>SEMESTER – VII</b>			
Subject Code	15CS744	IA Marks	20
Number of Lecture Hours/Week	3	Exam Marks	80
Total Number of Lecture Hours	40	Exam Hours	03
<b>CREDITS – 03</b>			
<b>Course outcomes:</b> The students should be able to:			
<ul style="list-style-type: none"><li>Ability to understand and reason out the working of Unix Systems</li><li>Build an application/service over a Unix system.</li></ul>			

<b>SOFT AND EVOLUTIONARY COMPUTING</b> [As per Choice Based Credit System (CBCS) scheme] (Effective from the academic year 2016 -2017) <b>SEMESTER – VII</b>			
Subject Code	15CS751	IA Marks	20
Number of Lecture Hours/Week	3	Exam Marks	80
Total Number of Lecture Hours	40	Exam Hours	03
<b>CREDITS – 03</b>			
<b>Course outcomes:</b> The students should be able to:			
<ul style="list-style-type: none"><li>Understand soft computing techniques</li><li>Apply the learned techniques to solve realistic problems</li><li>Differentiate soft computing with hard computing techniques</li></ul>			

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<b>COMPUTER VISION AND ROBOTICS</b> [As per Choice Based Credit System (CBCS) scheme] (Effective from the academic year 2016 -2017) <b>SEMESTER – VII</b>			
Subject Code	15CS752	IA Marks	20
Number of Lecture Hours/Week	3	Exam Marks	80
Total Number of Lecture Hours	40	Exam Hours	03
<b>CREDITS – 03</b>			
<b>Course outcomes:</b> The students should be able to:			
<ul style="list-style-type: none"><li>• Implement fundamental image processing techniques required for computer vision</li><li>• Perform shape analysis</li><li>• Implement boundary tracking techniques</li><li>• Apply chain codes and other region descriptors</li><li>• Apply Hough Transform for line, circle, and ellipse detections.</li><li>• Apply 3D vision techniques.</li><li>• Implement motion related techniques.</li><li>• Develop applications using computer vision techniques.</li></ul>			

<b>INFORMATION MANAGEMENT SYSTEM</b> [As per Choice Based Credit System (CBCS) scheme] (Effective from the academic year 2016 -2017) <b>SEMESTER – VII</b>			
Subject Code	15IS753	IA Marks	20
Number of Lecture Hours/Week	4	Exam Marks	80
Total Number of Lecture Hours	40	Exam Hours	03
<b>CREDITS – 03</b>			
<b>Course outcomes:</b> The students should be able to:			
<ul style="list-style-type: none"><li>• Describe the role of information technology and information systems in business</li><li>• Record the current issues of information technology and relate those issues to the firm.</li><li>• Interpret how to use information technology to solve business problems</li></ul>			

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## STORAGE AREA NETWORKS

[As per Choice Based Credit System (CBCS) scheme]

(Effective from the academic year 2016 -2017)

**SEMESTER – VII**

Subject Code	15CS754	IA Marks	20
Number of Lecture Hours/Week	3	Exam Marks	80
Total Number of Lecture Hours	40	Exam Hours	03

**CREDITS – 03**

**Course outcomes:** The students should be able to:

- Identify key challenges in managing information and analyze different storage networking technologies and virtualization
- Explain components and the implementation of NAS
- Describe CAS architecture and types of archives and forms of virtualization
- Illustrate the storage infrastructure and management activities

## MACHINE LEARNING LABORATORY

[As per Choice Based Credit System (CBCS) scheme]

(Effective from the academic year 2016 -2017) SEMESTER

**– VII**

Subject Code	15CSL76	IA Marks	20
Number of Lecture Hours/Week	01I + 02P	Exam Marks	80
Total Number of Lecture Hours	40	Exam Hours	03

**CREDITS – 02**

**Course outcomes:** The students should be able to:

1. Understand the implementation procedures for the machine learning algorithms.
2. Design Java/Python programs for various Learning algorithms.
3. Apply appropriate data sets to the Machine Learning algorithms.
4. Identify and apply Machine Learning algorithms to solve real world problems.

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<b>WEB TECHNOLOGY LABORATORY WITH MINI PROJECT</b> [As per Choice Based Credit System (CBCS) scheme] (Effective from the academic year 2016 -2017) <b>SEMESTER – VII</b>			
Subject Code	15CSL77	IA Marks	20
Number of Lecture Hours/Week	01I + 02P	Exam Marks	80
Total Number of Lecture Hours	40	Exam Hours	03
<b>CREDITS – 02</b>			
<b>Course outcomes:</b> The students should be able to:			
<ul style="list-style-type: none"><li>• Design and develop dynamic web pages with good aesthetic sense of designing and latest technical know-how's.</li><li>• Have a good understanding of Web Application Terminologies, Internet Tools other web services.</li><li>• Learn how to link and publish web sites</li></ul>			

<b>INTERNET OF THINGS TECHNOLOGY</b> [As per Choice Based Credit System (CBCS) scheme] (Effective from the academic year 2016 -2017) <b>SEMESTER – VIII</b>			
Subject Code	15CS81	IA Marks	20
Number of Lecture Hours/Week	04	Exam Marks	80
Total Number of Lecture Hours	50	Exam Hours	03
<b>CREDITS – 04</b>			
<b>Course Outcomes:</b> After studying this course, students will be able to			
<ul style="list-style-type: none"><li>• Interpret the impact and challenges posed by IoT networks leading to new architectural models.</li><li>• Compare and contrast the deployment of smart objects and the technologies to connect them to network.</li><li>• Appraise the role of IoT protocols for efficient network communication.</li><li>• Elaborate the need for Data Analytics and Security in IoT.</li><li>• Illustrate different sensor technologies for sensing real world entities and identify the applications of IoT in Industry</li></ul>			

Principal

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## BIG DATA ANALYTICS

[As per Choice Based Credit System (CBCS) scheme]

(Effective from the academic year 2016 -2017)

### SEMESTER – VIII

Subject Code	15CS82	IA Marks	20
Number of Lecture Hours/Week	4	Exam Marks	80
Total Number of Lecture Hours	50	Exam Hours	03

### CREDITS – 04

**Course outcomes:** The students should be able to:

- Master the concepts of HDFS and MapReduce framework
- Investigate Hadoop related tools for Big Data Analytics and perform basic Hadoop Administration
- Recognize the role of Business Intelligence, Data warehousing and Visualization in decision making
- Infer the importance of core data mining techniques for data analytics
- Compare and contrast different Text Mining Techniques

## GH PERFORMANCE COMPUTING

[As per Choice Based Credit System (CBCS) scheme]

(Effective from the academic year 2016 -2017)

### SEMESTER – VIII

Subject Code	15CS831	IA Marks	20
Number of Lecture Hours/Week	3	Exam Marks	80
Total Number of Lecture Hours	40	Exam Hours	03

### CREDITS – 03

**Course outcomes:** The students should be able to:

- Illustrate the key factors affecting performance of CSE applications, and
- Make mapping of applications to high-performance computing systems, and
- Apply hardware/software co-design for achieving performance on real-world applications

## INTERFACE DESIGN

[As per Choice Based Credit System (CBCS) scheme]

(Effective from the academic year 2016 -2017)

### SEMESTER – VIII

Subject Code	15IS832	IA Marks	20
Number of Lecture Hours/Week	3	Exam Marks	80
Total Number of Lecture Hours	40	Exam Hours	03

### CREDITS – 03

**Course outcomes:** The students should be able to:

- Design the user interface, design, menu creation and windows creation and connection between menu and windows

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<b>VIRTUAL REALITY</b>			
<b>[As per Choice Based Credit System (CBCS) scheme]</b>			
<b>(Effective from the academic year 2016 -2017)</b>			
<b>SEMESTER – VIII</b>			
Subject Code	15IS833	IA Marks	20
Number of Lecture Hours/Week	3	Exam Marks	80
Total Number of Lecture Hours	40	Exam Hours	03
<b>CREDITS – 03</b>			
<b>Course outcomes:</b> The students should be able to:			
<ul style="list-style-type: none"><li>• Illustrate technology, underlying principles, its potential and limits and to learn about the criteria for defining useful applications.</li><li>• Explain process of creating virtual environments</li></ul>			
<b>SYSTEM MODELLING AND SIMULATION</b>			
<b>[As per Choice Based Credit System (CBCS) scheme]</b>			
<b>(Effective from the academic year 2016 -2017)</b>			
<b>SEMESTER – VIII</b>			
Subject Code	15CS834	IA Marks	20
Number of Lecture Hours/Week	3	Exam Marks	80
Total Number of Lecture Hours	40	Exam Hours	03
<b>CREDITS – 03</b>			
<b>Course outcomes:</b> The students should be able to:			
<ul style="list-style-type: none"><li>• Explain the system concept and apply functional modeling method to model the activities of a static system</li><li>• Describe the behavior of a dynamic system and create an analogous model for a dynamic system;</li><li>• Simulate the operation of a dynamic system and make improvement according to the simulation results.</li></ul>			

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<b>INTERNSHIP / PROFESSIONAL PRACTISE</b> [As per Choice Based Credit System (CBCS) scheme] (Effective from the academic year 2016 -2017) <b>SEMESTER – VIII</b>			
Subject Code	15CS84	IA Marks	50
Duration	4 weeks	Exam Marks	50
		Exam Hours	03
<b>CREDITS – 02</b>			
<b>Course objectives:</b> This course will enable students to			

<b>PROJECT WORK PHASE II</b> [As per Choice Based Credit System (CBCS) scheme] (Effective from the academic year 2016 -2017) <b>SEMESTER – VIII</b>			
Subject Code	15CSP85	IA Marks	100
Number of Lecture Hours/Week	06	Exam Marks	100
Total Number of Lecture Hours	--	Exam Hours	03
<b>CREDITS – 05</b>			
<b>Course objectives:</b> This course will enable students to			

<b>SEMINAR</b> [As per Choice Based Credit System (CBCS) scheme] (Effective from the academic year 2016 -2017) <b>SEMESTER – VIII</b>			
Subject Code	15CSS86	IA Marks	100
Number of Lecture Hours/Week	04	Exam Marks	--
Total Number of Lecture Hours	--	Exam Hours	--
<b>CREDITS – 02</b>			
<b>Course objectives:</b> This course will enable students to			

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