



Semester – VIII

Unique Course Number: CSC801

Course Name: Human Machine Interaction

| Unique CO Number | Course Outcome (CO) Statement |
|------------------|---|
| | Students will be able to, |
| CSC8011 | Identify the importance of human characteristics in GUI design process. |
| CSC8012 | Describe Graphical user interface and Web user interface. |
| CSC8013 | Apply interactive design process in real world application. |
| CSC8014 | Apply the principles of HMI for developing the user interfaces. |
| CSC8015 | Use interactive design styles to produce effective screen designing. |

Unique Course Number: CSC802

Course Name: Distributed Computing

| Unique CO Number | Course Outcome (CO) Statement |
|------------------|---|
| | Students will be able to, |
| CSC8021 | Demonstrate knowledge of the basic elements and concepts related to distributed system Technologies. |
| CSC8022 | Illustrate the middleware technologies that support distributed applications such as RPC, RMI and Object based middleware. |
| CSC8023 | Analyze the various techniques used for clock synchronization and mutual exclusion. |
| CSC8024 | Demonstrate the concepts of Resource and Process management and synchronization Algorithms. |
| CSC8025 | Demonstrate the concepts of Consistency and Replication Management. |
| CSC8026 | Apply knowledge of Distributed File System to analyze various file systems like NFS, AFS and the experience in building large-scale distributed applications. |

Unique Course Number: CSDLO8012

Course Name: Natural Language Processing

| Unique CO Number | Course Outcome (CO) Statement |
|------------------|--|
| | Students will be able to, |
| CSDLO80121 | Understand broadly the field of natural language processing. |
| CSDLO80122 | Understand capabilities and limitations of current natural language technologies. |
| CSDLO80123 | Model linguistic phenomena with formal grammars. |
| CSDLO80124 | Design, implement and test algorithms for NLP problems. |
| CSDLO80125 | Understand the mathematical and linguistic foundations underlying approaches to the various areas in NLP. |
| CSDLO80126 | Apply NLP techniques to design real world NLP applications such as machine translation, text categorization, text summarization, information extraction...etc. |

Unique Course Number: ILO8021

Course Name: Project Management

| Unique CO Number | Course Outcome (CO) Statement |
|------------------|--|
| | Students will be able to, |
| ILO80211 | Express characteristics of a project and life cycle of the project. |
| ILO80212 | Apply selection criteria and select an appropriate project from different options. |
| ILO80213 | Develop work break down structure for a project and develop a schedule and budget based on it. |
| ILO80214 | Identify opportunities, challenges and threats to the project and decide on an approach to deal with them strategically. |
| ILO80215 | Evaluate project with the use of Earned value technique and predict its status. |
| ILO80216 | Create documents after identifying lessons learned during various project phases for future reference. |



Unique Course Number: CSL801 Course Name: Human Machine Interaction Lab

| Unique CO Number | Course Outcome (CO) Statement |
|------------------|--|
| | Students will be able to, |
| CSL8011 | Design user centric interfaces |
| CSL8012 | Design innovative and user friendly interfaces |
| CSL8013 | Apply HMI in their day-to-day activities. |
| CSL8014 | Criticize existing interface designs, and improve them |
| CSL8015 | Design application for social task. |
| CSL8016 | Design application for technical tasks. |

Unique Course Number: CSL802 Course Name: Distributed Computing Lab

| Unique CO Number | Course Outcome (CO) Statement |
|------------------|--|
| | Students will be able to, |
| CSL8021 | Implement client-server communication programs based on socket. |
| CSL8022 | Implement the middleware technologies that support distributed applications. |
| CSL8023 | Implement a load balancing algorithm. |
| CSL8024 | Implement the main underlying components of distributed systems (like group communication, name resolution). |
| CSL8025 | Implement algorithms used for clock synchronization. |
| CSL8026 | Implement algorithms used for mutual exclusion. |

Unique Course Number: CSL803 Course Name: Cloud Computing

| Unique CO Number | Course Outcome (CO) Statement |
|------------------|---|
| | Students will be able to, |
| CSL8031 | Describe the concept of Cloud computing and its architecture. |
| CSL8032 | Describe the concept of Virtualization |
| CSL8033 | Demonstrate private clouds using open-source technologies. |
| CSL8034 | Demonstrate IaaS, SaaS, PaaS service models in cloud. |
| CSL8035 | Identify security issues on cloud. |
| CSL8036 | Implement real world applications of cloud computing |

Unique Course Number: CSL804 Course Name: Computational Lab – II (Natural Language Processing)

| Unique CO Number | Course Outcome (CO) Statement |
|------------------|---|
| | Students will be able to, |
| CSL8041 | Implement various methods of text preprocessing |
| CSL8042 | implement computational models for morphological word analysis |
| CSL8043 | Implement probabilistic language model using N Grams |
| CSL8044 | Find part of speech tags of a given natural language sentence |
| CSL8045 | Extract fragments from a given natural language sentence |
| CSL8046 | Apply NLP techniques to design real world NLP applications such as machine translation, text categorization, text summarization, information extraction, etc. |

Unique Course Number: CSP805 Course Name: Major Project - II

| Unique CO Number | Course Outcome (CO) Statement |
|------------------|--|
| | Students will be able to, |
| CSP8051 | Select and use appropriate engineering tools/components for solving the identified engineering problem |
| CSP8052 | Implement and test various modules of the system. |
| CSP8053 | Analyze and interpret results of the system to arrive at valid conclusions |
| CSP8054 | Demonstrate an ability to work as an individual and a team |
| CSP8055 | Demonstrate effective written communication through project report and technical paper on the work done. |
| CSP8056 | Demonstrate effective oral communication through presentation of the project work. |