

| Computer Engineering | | | | |
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| Sem | Course Code | Course Name | CO Number | Course Outcome Statements |
| VI | CSC601 | Software Engineering | CSC6011 | Understand and demonstrate basic knowledge in software engineering. |
| | | | CSC6012 | Identify requirements, analyze and prepare models. |
| | | | CSC6013 | Plan, schedule and track the progress of the projects. |
| | | | CSC6014 | Design to help development of the software projects. |
| | | | CSC6015 | Identify risks; manage the change to assure quality in software projects. |
| | | | CSC6016 | Apply testing principles on software project and understand the maintenance concepts. |
| VI | CSC602 | System Programming & Compiler Construction | CSC6021 | Identify the relevance of different system programs. |
| | | | CSC6022 | Describe & Apply the various data structures and passes of assembler design |
| | | | CSC6023 | Identify the need for different features and designing of macros |
| | | | CSC6024 | Distinguish different loaders and linkers and their contribution in developing efficient user applications |
| | | | CSC6025 | Construct different parsers for given context free grammars |
| | | | CSC6026 | Justify the need synthesis phase to produce object code optimized in terms of high execution speed and less memory usage |
| VI | CSC603 | Data Warehousing & Mining | CSC6031 | Understand Data Warehouse fundamentals, Data Mining Principles |
| | | | CSC6032 | Design data warehouse with dimensional modelling and apply OLAP operations. |
| | | | CSC6033 | Identify appropriate data mining algorithms to solve real world problems |
| | | | CSC6034 | Compare and evaluate different data mining techniques like classification, prediction, clustering and association rule mining |
| | | | CSC6035 | Describe complex data types with respect to spatial and web mining. |
| | | | CSC6036 | Benefit the user experiences towards research and innovation. |
| | | | CSC6041 | Describe system security goals, concepts, classical encryption techniques and acquire fundamental knowledge on the concepts of modular arithmetic and number theory. |
| | | | CSC6042 | Describe and apply different encryption and decryption techniques. |

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| VI | CSC604 | Cryptography & System Security | CSC6043 | Explain working different message digest algorithms. |
| | | | CSC6044 | Discuss different authentication protocols, Digital signature and digital certificate. |
| | | | CSC6045 | Describe network security, different attacks on networks and security protocols like SSL, IPsec and PGP. |
| | | | CSC6046 | Explain various software vulnerabilities. |
| VI | CSDLO6021 | Machine Learning | CSDLO60211 | Express knowledge about basic concepts of Machine Learning. Identify machine learning techniques suitable for a given problem. |
| | | | CSDLO60212 | Describe different learning rules of artificial neural network, a information processing system that models human brain. |
| | | | CSDLO60213 | Solve optimization problems using machine learning based techniques. |
| | | | CSDLO60214 | Solve optimization problems using machine learning based techniques. |
| | | | CSDLO60215 | Apply various machine learning algorithms for classification and clustering of data. |
| | | | CSDLO60216 | Apply dimensionality reduction techniques to optimize the performance of machine learning algorithms. |
| VI | CSDLO6024 | Advance Computer Network | CSDLO60241 | Demonstrate the understanding of advance data communication technologies. |
| | | | CSDLO60242 | Demonstrate the understanding of WAN Technology typically ATM. |
| | | | CSDLO60243 | Demonstrate the understanding of packet switching protocols such as X.25, X.75. |
| | | | CSDLO60244 | Explore the issues of advance internet routing protocols and also quality of service based protocols. |
| | | | CSDLO60245 | Analyze issues of traffic requirements and perform capacity planning. |
| | | | CSDLO60246 | Demonstrate the understanding of protocol used for management of network. |
| VI | CSL601 | Software Engineering Lab | CSL6011 | Define problem statements and identify requirements for software projects. |
| | | | CSL6012 | Schedule and plan, with risk identification of the software project. |
| | | | CSL6013 | Classify requirements by user types and use tools to develop diagrams of analysis. |
| | | | CSL6014 | Illustrate design solutions for software project using UML diagrams. |
| | | | CSL6015 | Demonstrate software change and version management. |
| | | | CSL6016 | Test software project case using tool. |

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| VI | CSL6012 | System software Lab | CSL6021 | Apply the knowledge of Symmetric cryptography to implement ciphers. |
| | | | CSL6022 | Implement asymmetric key algorithms for confidentiality and digital signatures. |
| | | | CSL6023 | Achieve integrity and authentication by calculating message digest and checking strength of password. |
| | | | CSL6024 | Explore different network reconnaissance tools to gather information about networks. |
| | | | CSL6025 | Explore and use tools like sniffers, port scanners and other tools for analyzing packets in a network. |
| | | | CSL6026 | Explore web application attacks. |
| VI | CSL603 | Data Warehousing & Mining Lab | CSL6031 | Design data warehouse and perform various OLAP operations. |
| | | | CSL6032 | Implement classification, prediction, clustering and association rule mining algorithms. |
| | | | CSL6033 | Demonstrate classifications, prediction, clustering and association rule mining algorithms on a given set of data sample using data mining tools |
| | | | CSL6034 | Implement spatial and web mining algorithms. |
| VI | CSL604 | System Security Lab | CSL6041 | Apply the knowledge of Symmetric cryptography to implement ciphers. |
| | | | CSL6042 | Demonstrate asymmetric key algorithms for confidentiality and digital signatures. |
| | | | CSL6043 | Demonstrate integrity and authentication by calculating message digest and checking strength of password. |
| | | | CSL6044 | Explore different network reconnaissance tools to gather information about networks. |
| | | | CSL6045 | Explore and use tools like sniffers, port scanners and other tools for analyzing packets in a network. |
| | | | CSL6046 | Explore web application attacks. |
| VI | CSP605 | Mini-Project | CSP6051 | Acquire practical knowledge within the chosen area of technology for project development. |
| | | | CSP6052 | Identify, analyze, formulate and handle programming projects with a comprehensive and systematic approach. |
| | | | CSP6053 | Contribute as an individual or in a team in development of technical projects. |
| | | | CSP6054 | Develop effective communication skills for presentation of project related activities. |