Mahavir Education Trust's

SHAH & ANCHOR KUTCHHI ENGINEERING COLLEGE

Affiliated to University of Mumbai, Approved by D.T.E. & A.I.C.T.E.| Awarded 'A' Grade by D.T.E., M.S. | Electronics Enginering Program Accredited by N.B.A.,
New Delhi for 2 years w.e.f. 6th Aug.,2014 | Computer Engineering Program Re-Accredited by N.B.A.,New Delhi for 3 yeas w.e.f. 1st July 2019 | Information Technology
Program Accredited by N.B.A.,New Delhi for 3 years w.e.f. 1st July 2019

RINA
ISO 9001
Certified Quality System
Member of CISQ Federation
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DEPARTMENT OF COMPUTER ENGINEERING

Semester – VI

Unique Course Number: **CSC601**   **Course Name: Software Engineering**

Unique CO Number	Course Outcome (CO) Statement
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.

Unique Course Number: CSC602   **Course Name: System Programming & Complier Construction**

Unique CO Number	Course Outcome (CO) Statement
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

Unique Course Number: **CSC603**   **Course Name: Data Warehousing & Mining**

Unique CO Number	Course Outcome (CO) Statement
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.

Unique Course Number: CSC604   **Course Name: Cryptography & System Security**

Unique CO Number	Course Outcome (CO) Statement
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.
CSC6043	Explain working different message digest algorithms.

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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.

Unique Course Number: CSDLO6021   **Course Name: Machine Learning**

Unique CO Number	Course Outcome (CO) Statement
CSDLO60211	Express knowledge about basic concepts of Machine Learning.
CSDLO60212	Identify machine learning techniques suitable for a given problem.
CSDLO60213	Solve optimization problems using machine learning based techniques.
CSDLO60214	Solve the problems using regression and decision trees.
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.

Unique Course Number: CSDLO6024   **Course Name: Advance Computer Network**

Unique CO Number	Course Outcome (CO) Statement
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.

Unique Course Number: CSL601   **Course Name: Software Engineering Lab**

Unique CO Number	Course Outcome (CO) Statement
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.

Unique Course Number: CSL602   **Course Name: System software Lab**

Unique CO Number	Course Outcome (CO) Statement
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.

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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.

Unique Course Number: **CSL603** **Course Name: Data Warehousing & Mining Lab**

Unique CO Number	Course Outcome (CO) Statement
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.

Unique Course Number: **CSL604** **Course Name: System Security Lab**

Unique CO Number	Course Outcome (CO) Statement
CSL6041	Apply the knowledge of Symmetric cryptography to implement ciphers.
CSL6042	Implement asymmetric key algorithms for confidentiality and digital signatures.
CSL6043	Achieve 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.

Unique Course Number: **CSP605** **Course Name: Mini-Project**

Unique CO Number	Course Outcome (CO) Statement
CSM6051	Acquire practical knowledge within the chosen area of technology for project development.
CSM6052	Identify, analyze, formulate and handle programming projects with a comprehensive and systematic approach.
CSM6053	Contribute as an individual or in a team in development of technical projects.
CSM6054	Develop effective communication skills for presentation of project related activities.