



Mahavir Education Trust's  
**Shah & Anchor Kutchhi Engineering College,**  
Chembur, Mumbai 400 088  
**UG Program in Information Technology**

**Academic Year 2019-20**

**Semester - VI**

**Unique Course Number: ITC601**

**Course Name: Software Engineering with Project Management**

Unique CO Number	Course Outcome (CO) Statement
ITC601.1	To understand the nature of software development and software life cycle process models, agile software development, SCRUM and other agile practices.
ITC601.2	To Explain methods of capturing, specifying, visualizing and analyzing software requirements
ITC601.3	To understand concepts and principles of software design and user-centric approach and principles of effective user interfaces.
ITC601.4	To analyze basics of testing, understanding the concept of software quality assurance, software configuration management process and to Design test cases.
ITC601.5	To exemplify the need of project management and project management life cycle.
ITC601.6	To apply project scheduling concept and risk management associated to various type of projects.

**Unique Course Number: ITC602**

**Course Name: Data Mining and Business Intelligence**

Unique CO Number	Course Outcome (CO) Statement
ITC602.1	Demonstrate an understanding of the importance of data mining and the principles of business intelligence
ITC602.2	Organize and Prepare the data needed for data mining using pre preprocessing techniques
ITC602.3	Perform exploratory analysis of the data to be used for mining.
ITC602.4	Implement the appropriate data mining methods like classification, clustering or Frequent Pattern mining on large data sets
ITC602.5	Define and apply metrics to measure the performance of various data mining algorithms.
ITC602.6	Apply BI tools for data acquired from data mining process

**Unique Course Number: ITC603**

**Course Name: Cloud Computing & Services**

Unique CO Number	Course Outcome (CO) Statement
4. ITC603.1	Define Cloud Computing and memorize the different Cloud service and deployment models.
4. ITC603.2	Describe importance of virtualization along with their technologies.
4. ITC603.3	Use and Examine different cloud computing services.
4. ITC603.4	Analyze the components of open stack & Google Cloud platform and understand Mobile Cloud Computing.
4. ITC603.5	Describe the key components of Amazon web Service.
4. ITC603.6	Design & develop backup strategies for cloud data based on features.



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**Unique Course Number: ITC604**

**Course Name: Wireless Networks**

Unique CO Number	Course Outcome (CO) Statement
ITC604.1	To understand basic concepts of wireless network and wireless generations
ITC604.2	To explain spread spectrum and its applications.
ITC604.3	To explain various standards of wireless technology.
ITC604.4	To describe the architecture of cellular networks.
ITC604.5	To demonstrate the wireless network design considerations.
ITC604.6	To choose appropriate wireless network security technique for a given application.

**Unique Course Number: ITDLO6023**

**Course Name: Digital Forensics**

Unique CO Number	Course Outcome (CO) Statement
ITDLO6023.1	Understand the concept of ethical hacking and its associated applications in Information Communication Technology (ICT) world
ITDLO6023.2	Describe the need for digital forensic and the role of digital evidence.
ITDLO6023.3	Explain the methodology of incident response and various security issues in ICT world
ITDLO6023.4	Discuss the method to generate legal evidence and supporting investigation reports
ITDLO6023.5	Apply the digital forensic tools for data collection, data duplication etc. in window and Linux operating systems
ITDLO6023.6	Apply the knowledge of IDS to secure network and performing router and network analysis.

**Unique Course Number: ITDLO6025**

**Course Name: Green IT**

Unique CO Number	Course Outcome (CO) Statement
ITDLO6025.1	Describe awareness among stakeholders and promote green agenda and green initiative In their working environments leading to green movement along with various services and roles of green it
ITDLO6025.2	Identify IT Infrastructure Management and Green Data Centre Metrics for software development
ITDLO6025.3	Analyse Objectives of Green Network Protocols for Data communication
ITDLO6025.4	Use Green IT Strategies and metrics for ICT development
ITDLO6025.5	Identify various green IT services and its roles
ITDLO6025.6	Examine new career opportunities available in IT profession, audits and others with special skills such as energy efficiency, ethical IT assets disposal, carbon



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	footprint estimation, reporting and development of green products, applications and services.
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**Unique Course Number: ITL601**

**Course Name: Software Design Lab**

Unique CO Number	Course Outcome (CO) Statement
ITL601.1	To understand the statement of problem its feasibility, specifications and process model used.
ITL601.2	Deploy Structural Modeling.
ITL601.3	Deploy Behavioral Modeling
ITL601.4	Deploy Architectural Modeling
ITL601.5	Examine estimation about schedule and cost for project development
ITL601.6	Select project management tool and design test cases.

**Unique Course Number: ITL602**

**Course Name: Business Intelligence Lab**

Unique CO Number	Course Outcome (CO) Statement
ITL602.1	Identify sources of Data for mining and perform data exploration
ITL602.2	Organize and prepare the data needed for data mining algorithms in terms of attributes and class inputs, training, validating, and testing files.
ITL602.3	Implement the appropriate data mining methods like classification, clustering or association mining on large data sets using open source tools like WEKA
ITL602.4	Implement various data mining algorithms from scratch using languages like Python/ Java etc.
ITL602.5	Evaluate and compare the performance of some available BI packages
ITL602.1.6	Apply BI to solve practical problems : Analyze the problem domain, use the data collected in enterprise apply the appropriate data mining technique, interpret and visualize the results and provide decision support.

**Unique Course Number: ITL603**

**Course Name: Cloud Service Design Lab**

Unique CO Number	Course Outcome (CO) Statement
ITL603.1	Define & implement Virtualization using different types of Hypervisors
ITL603.2	Describe steps to perform on demand Application delivery using Ulteo .
ITL603.3	Examine the installation and configuration of Open stack cloud
ITL603.4	Analyze and understand the functioning of different components involved in Amazon web services cloud platform.
ITL603.5	Describe the functioning of Platform as a Service
ITL603.6	Design & Synthesize Storage as a service using own Cloud



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**Unique Course Number: ITL604**

**Course Name: Sensor Network Lab**

Unique CO Number	Course Outcome (CO) Statement
5.ITL604.1	Study open source WSN simulators.
5.ITL604.2	Discuss the requirements for the real-world problems.
5.ITL604.3	Explore basic programs for connecting sensors.
5.ITL604.4	Demonstrate and build the project successfully by hardware/sensor requirements, coding, emulating and testing.
5.ITL604.5	Documents and Validate the findings of the study conducted in the Preferred Domain.
5.ITL604.6	Cultivate an ability to work in teams and manage the conduct of the research study.