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

Academic Year 2018-19
Semester - VI

Unique Course Number: ITC603	Course: Cloud Computing & Services
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.
Unique Course Number: ITL603	**Course: Cloud Service Design Lab**
4.ITL603.1	Define & implement Virtualization using different types of Hypervisors.
4.ITL603.2	Describe steps to perform on demand Application delivery using Ulteo.
4.ITL603.3	Examine the installation and configuration of Open stack cloud
4.ITL603.4	Analyze and understand the functioning of different components involved in Amazon web services cloud platform.
4.ITL603.5	Describe the functioning of Platform as a Service.
4.ITL603.6	Design & Synthesize Storage as a service using own Cloud.
Unique Course Number: ITDLO6023	**Course: Digital Forensics**
7.ITDLO6023.1	Define the concept of ethical hacking and its associated applications in Information Communication Technology (ICT) world.
7.ITDLO6023.2	Underline the need of digital forensic and role of digital evidences.
7.ITDLO6023.3	Explain the methodology of incident response and various security issues in ICT world, and identify digital forensic tools for data collection.
7.ITDLO6023.4	Recognize the importance of digital forensic duplication and various tools for analysis to achieve adequate perspectives of digital forensic investigation in various applications /devices like windows/Unix system.
7.ITDLO6023.5	Apply the knowledge of IDS to secure network and performing router and network analysis.
7.ITDLO6023.6	List the method to generate legal evidence and supporting investigation reports and will also be able to use various digital forensic tools.
Unique Course Number: ITC602	**Course: Database Mining and Business Intelligence**
3.ITC602.1	Demonstrate an understanding of the importance of data mining and the principles of business intelligence
3.ITC602.2	Organize and Prepare the data needed for data mining using pre preprocessing techniques
3.ITC602.3	Perform exploratory analysis of the data to be used for mining
3.ITC602.4	Implement the appropriate data mining methods like classification, clustering or Frequent Pattern mining on large data sets
3.ITC602.5	Define and apply metrics to measure the performance of various data mining algorithms.
3.ITC602.6	Apply BI to solve practical problems : Analyze the problem domain, use the data collected in enterprise apply the appropriate data mining technique, interpret and isualize the results and provide decision support.
Unique Course Number: ITL602	**Course : Business Intelligence Lab**
3.ITL602.1	Identify sources of Data for mining and perform data exploration.
3.ITL602.2	Organize and prepare the data needed for data mining algorithm in term of attributes and class inputs, training , validating and testing files.
3.ITL602.3	Implement the appropriate data mining methods like classification, clustering or association mining on large data sets using open source tools like WEKA

3.ITL602.4	Implement various data mining algorithms from scratch using languages like Python/ Java etc.
3.ITL602.5	Evaluate and compare performance of some available BI packages
3.ITL602.6	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: ITDLO6025	**Course: Green IT**
9. ITDLO6025.1	Describe awareness among stakeholders and promote green agenda and green initiatives in their working environments leading to green movement
9. ITDLO6025.2	Identify IT Infrastructure Management and Green Data Centre Metrics for software development
9. ITDLO6025.3	Recognize Objectives of Green Network Protocols for Data communication
9. ITDLO6025.4	Use Green IT Strategies and metrics for ICT development.
9. ITDLO6025.5	Illustrate various green IT services and its roles.
9. ITDLO6025.6	Use new career opportunities available in IT profession, audits and others with special skills such as energy efficiency, ethical IT assets disposal, carbon footprint estimation, reporting and development of green products, applications and services.
Unique Course Number: ITC601	**Course: Software Engineering with Project Management**
9.ITC 601.1	To understand the nature of software development and software life cycle process models, agile software development, SCRUM and other agile practices.
9.ITC 601.2	To Explain methods of capturing, specifying, visualizing and analyzing software requirements
9.ITC 601.3	To understand concepts and principles of software design and user-centric approach and principles of effective user interfaces
9.ITC 601.4	To know basics of testing and understanding concept of software quality assurance and software configuration management process.
9.ITC 601.5	To understand need of project management and project management life cycle.
9.ITC 601.6	- To understand project scheduling concept and risk management associated to various type of projects.
Unique Course Number: ITL601	**Course: Software Design Lab**
9. ITL601.1	Sketch a Modeling with UML and different process model used in software development
9. ITL601.2	Deploy Structural Modeling
9. ITL601.3	Deploy Behavioral Modeling
9. ITL601.4	Deploy Architectural Modeling
9. ITL601.5	Examine estimation about schedule and cost for project development
9. ITL601.6	Select project development tool
Unique Course Number: ITC604	**Course: Wireless Network**
5.ITC604.1	Explain the basic concepts of wireless network and wireless generations.
5.ITC604.2	Demonstrate the different wireless technologies such as CDMA, GSM, GPRS etc.
5.ITC604.3	Appraise the importance of Ad-hoc networks such as MANET and VANET and Wireless Sensor networks
5.ITC604.4	Describe and judge the emerging wireless technologies standards such as WLL, WLAN, WPAN, WMAN.
5.ITC604.5	Explain the design considerations for deploying the wireless network infrastructure
5.ITC604.6	Differentiate and support the security measures, standards. Services and layer wise security considerations.
Unique Course Number: ITL604	**Course: Sensor Network Lab**
5.ITL604.1	To practice WSN opensource simulators

5.ITL604.2	To write basic programs for connecting sensors.
5.ITL604.3	To identify the requirements for the real world problems.
5.ITL604.4	To Demonstrate and build the project successfully by hardware/sensor requirements, coding, emulating and testing.
5.ITL604.5	To report and present the findings of the study conducted in the preferred domain
5.ITL604.6	To Demonstrate an ability to work in teams and manage the conduct of the research study.