

FACULTY OF INFORMATION AND COMMUNICATION ENGINEERING

M.C.A. MASTER OF COMPUTER APPLICATIONS (R 2021)

SEMESTER – I

Course Code: MC4111 Course Title: Advanced Data Structures and Algorithms Laboratory		
Sl. No.	Description of Equipment	Required numbers (for batch of 25 students)
1.	HARDWARE/SOFTWARE REQUIREMENTS 1. 64-bit Open source Linux or its derivative 2. Open Source C++ Programming tool like G++/GCC	25

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SEMESTER – I

Course Code: MC4112		Course Title: Python Programming Laboratory
Sl. No.	Description of Equipment	Required numbers (for batch of 25 students)
1.	HARDWARE/SOFTWARE REQUIREMENTS 1: Processors: Intel Atom® processor Intel®Core™i3processor 2: Disk space: 1GB. 3: Operating systems: Windows 7,macOS and Linux 4: Python versions:2.7, 3.6, 3.8	25

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SEMESTER – II

MC4211 Advanced Database Technology Laboratory

Sl. No.	Description of Equipment	Required numbers (for batch of 25 students)
1.	INTEL based desktop PC with min. 8GB RAM and 500 GB HDD, 17” or higher TFT Monitor, Keyboard and mouse and GPU as required	25
2.	Windows 10 or higher operating system / Linux Ubuntu 20 or higher	
3.	Java / Python 3.9 or later / R / Scala	
4.	SQL Server 13.0 / MySQL 5.7 / Oracle / MongoDB, Casandra, Hive / MySQL WorkBench	

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SEMESTER – II

MC4212 Full Stack Web Development Laboratory

Sl. No.	Description of Equipment	Required numbers (for batch of 25 students)
1.	INTEL based desktop PC with min. 8GB RAM and 500 GB HDD, 17" or higher TFT Monitor, Keyboard and mouse	25
2.	Windows 10 or higher operating system / Linux Ubuntu 20 or higher	25
3.	Node js ,Express, Angular, MongoDB, React, Web Server, XAMPP latest version / Equivalent web server	

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SEMESTER – III

MC4311 Machine Learning Laboratory

Sl. No.	Description of Equipment	Required numbers (for batch of 25 students)
1.	INTEL based desktop PC with min. 8GB RAM and 500 GB HDD, 17” or higher TFT Monitor, Keyboard and mouse and GPU as required	25
2.	Windows 10 or higher operating system / Linux Ubuntu 20 or higher	
3.	Python 3.9 or later /ML tools like R	25
4.	Keras/scikit-learn/pytorch/Tensor Flow Python , Numpy, Scipy ,Matplotlib, Pandas, seaborn, statsmodels Python3.9 and above, Anaconda Distribution	

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SEMESTER – III

MC4312 Internet of Things Laboratory

Sl. No.	Description of Equipment	Required numbers (for batch of 25 students)
1.	The universal microcontroller development board	
2.	8051 Daughter Board	
3.	Raspberry Pi 3B+ Original / Xively	
4.	Arduino Daughter Board	
5.	Humidity + IR Sensor Interface	
6.	Ultrasonic Sensors	
7.	Open source softwares Django Framework	
8.	Open cloud architectures like Bluemix, Development platforms like Firebase	