

Sathaye College

Teaching Plan: 2019 - 20

Department:I.T.

Class:M.Sc.(I.T.)PartII

Semester:III

Subject:Artificial Neural Network

Name of the Faculty:Mr DhanrajJadhav

Month	Topics to be Covered	Internal Assessment	Number of Lectures
July	Unit I: The Brain Metaphor, Basic of Neuroscience, Artificial Neurons, Neural Networks and architectures		12
August	Unit II: Geometry of Binary Threshold Neurons and their Networks, Supervised Learning I, Perceptrons and LMS,Supervised Learning II: Backpropagation and Beyond		18
September	Unit III: Neural Networks Unit IV: Dynamical systems Review, Attractor Neural Networks, Adaptive Resonance Theory		18
October nmb	Unit V: Towards Self Organizing Feature Map, Fuzzy Sets and Fuzzy Systems, Evolutionary Systems		12

Sign of Faculty

Sign of Coordinator

M.L. Dahanukar College of Commerce

Teaching Plan: 2019 - 20

Department: I.T.

Class: M.Sc.(I.T.)

Semester:III

Subject: ETHICAL HACKING

Name of the Faculty:LARISSA PEGADO

Month	Topics to be Covered	Internal Assessment	Number of Lectures
July- August	Introduction to Ethical Hacking, Footprinting and Reconnaissance, Scanning Networks, Enumeration.		12
September	System Hacking, Trojans and Backdoors, Viruses and Worms, Sniffing. Social Engineering, Denial of Service	Internal Test 1	18
October	Session Hijacking, Hacking Webserver. Hacking Web Applications, SQL Injection, Hacking Wireless Networks, Hacking Mobile Platforms.	Internal Test 2	18
November	Evading IDS, Firewalls and Honeypots, Buffer Overflows, Cryptography, Penetration Testing.		12

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M.L.Dahanukar College of Commerce

Teaching Plan: 2019 –20

Department: I.T.

Class: M.Sc.(I.T.)

Semester: III

Subject: Embedded Systems

Name of the Faculty: Srushty Padte

Month	Topics to be Covered	Internal Assessment	Number of Lectures
July	Unit 1- Introduction to embedded systems, ES vs general computing, Core of the embedded systems.		4 lectures
August	Memory , sensors, actuators, firmware. Characteristics and quality attributes. Embedded product development life cycle Unit 2- Fundamentals issues in hw/sw co design, UML, hardware and software trade off. Analog and digital components, EDA and PCB layout design.		12 lectures
September	Software design and development and RTOS. UNIT 3- Memory, classification, ROM, RAM, SRAM, DRAM, Memory Map, Architecture , Caching, memory allocation and Testing memory.		14 lectures
October	Unit 4- ALP , C , Header, Source file, directives, macros, functions, data structures , pointers, loops etc. Unit 5- processor trends , OS trends, Language trends , PIC family and ARM family		14 lectures

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P.T.V.A.'s
Sathaye College

Teaching Plan: 2019 – 20

Department: Information Technology

Class: M.Sc. (I.T.) – Semester III

Subject: Information Security Management

Name of the Faculty: ArvindKhadye

Month	Topics to be Covered	Number of Lectures
July	Security risk management, Reactive approach, proactive approach, quantitative and qualitative approach, Octave, Cobit approach, Risk assessment	08
August	Network security management, firewall, IDS, IPS, IDPS, Kerberos, password management, key management, access control models, role based models, web and wireless security management, technical controls, authentication, confidentiality, server configuration guidelines, symmetric key, asymmetric key, VPN	20
September	Public key infrastructure, PKI Applications, S/MIME, PGP, log management, malware handling, vulnerability management, specifying and enforcing security policies	20
October	Auditing, business continuity planning, disaster recovery, backup and recovery techniques, computer forensics, forensic science, forensic process, file systems, NESSUS, NMAP, Information security standards, ISO 17799, Legal and ethical issues	12

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