THIAGARAJAR COLLEGE OF ENGINEERING, MADURAI – 15

(A Govt. Aided ISO 9001 – 2008 Certified, Autonomous Institution Affiliated to Anna University)

COURSE REPORT

1	Subject Code	14IT2B0
2	Subject Name	Secure Network Management
3	No. of Students Participated	60 Nos.
4.	Name & Organization of the Resource Person	Mr. Manigandan S, Symantec Corporation
5.	Date and Duration of the Programme	29, 30 September & 1,2 October, 2017 & 4 - Days Programme.
6.	Objective of the Course	This course provides the fundamental knowledge to analyze risks to the system and implement a workable security policy that protects the information assets from potential intrusion, damage or theft. Topics include secure routing and switching, Firewall technologies, VPN Technology, Intrusion Prevention/Detection systems.
6.	Contents covered in Day 1	**Fundamentals of Network Security:** Objectives - Cost benefit analysis - Classifying Assets, Vulnerabilities, Countermeasures - Recognizing Network Threats - Applying Security Principles to Network Design - Good security practices - Security methodology. **Securing Networking Devices:** Authentication and Authorization controls - Accounting - Logging files - NTP.
7.	Contents covered in Day 2	**Secure Routing and Switching:** Network design considerations - Network Hardening. Secure routing infrastructure - Secure Switching Infrastructure (VLAN, STP & Port security) - IP Spoofing prevention - DHCP Snooping - Dynamic ARP Inspection.
8.	Contents covered in Day 3	**Firewall Technologies:** Objectives - Justifications - The Defense-in-Depth Approach - Methodologies - NAT. Firewall Technologies - Design Considerations - Access Rules - Packet-Filtering Access Rule Structure - Rule Design Guidelines - Rule Implementation Consistency.

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9.	Contents covered in Day 4	**VPN Technology:** Types - Benefits - Protocols - Vulnerabilities and Threats - IPsec and SSL - PKI - IP Security. IPSec site to site VPNs: Planning and Preparing - Implementing and Verifying - Troubleshooting. Remote access VPN Services. **Intrusion Prevention/Detection System (IPS/IDS):** Types - Detection Models - Features - Deployment considerations. IPS Versus IDS: What Sensors Do - Difference Between IPS and IDS - Sensor Platforms - True/False Negatives/Positives - Positive/Negative Terminology. Identifying Malicious Traffic on the Network - Managing Signatures - Monitoring and Managing Alarms and Alerts.
10.	Outcomes of the Course	Students able to, • Infer the need of security for network management. • Identify the preventive measures to secure routing and switching. • Examine the design of firewall, VPN and IDS / IPS for the given network.
11.	Name and Address of the expert	Mr. S. Manigandan, Symantec, Chennai sendmanigandan@gmail.com
12.	Financial Support Availed	Yes, Rs.29,208/-

Forwarded to the Dean (TL &FD)

Signature of the Coordinator   **Prof. & Head, Dept. of IT**

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REPORT

ONE DAY STUDENT WORKSHOP

1	Workshop On	"Web Service Standards and REST APIs"
2	Subject Name	One Day student Workshop on Webservices
3	No. of Students Participated	112
4	Name & Organization of the Resource Person	Mr.Aswin Vairavan, Founder and CEO,Deducely Ltd,Madurai.
5	Date and Duration of the Programme	22.09.17 & 1 - Day Programme.
6	Objective of the Course	This Course will provide an insight about Web Services and REST APIs.After Completion of the course individual can able develop write a simple web service and convert it into a back-end restful service.
7	Contents covered for FN Session	Deconstructing the web, HTML Source code of Web, Tools to Analyze HTTP Requests, Source Control GIT.
8	Contents covered for AN Session	**Web servers** • Focus on Apache and nginx • File Servers • Time Servers • DB Servers • Introduction to NodeJS • Understanding async nature of nodejs • Simple app in nodejs. **Protection and Security** XSS, CSRF, SQL injection, Url manipulation, Fake request, session Hijacking, remote system execution, cookie visibility, File Upload abuse, DOS.
9	Outcomes of the Course	Students able to, • Understand the web and its components –server , clients (A human and Machine perspective). • Understand what happens in the backend of an application. • Understand the MVC framework • Write a simple server in NodeJS • Evaluation of a language / DB and choosing what is best for the application. • Write a Simple Web Service and Convert back-end into a restful service.
10	Expenses	NIL

Signature of the Coordinator

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Head, Dept. of IT

Workshop Organized report

1	Name & Designation of Staff Member	T.Manju, Assistant Professor
2	Title of the programme	Two day workshop on "Virtual Reality Applications in Cognitive Science"
3	Date and duration of the programme	27 &28 September 2017 (2 days)
4	Name and address of the Organizer(s)	Department of Information Technology
5	Name of the Co-ordinator(s)	T.Manju, Dr.D.Tamilselvi
6	Nature of participation	Coordinator
7	Programme coverage (List the major topics/areas)	Virtual Reality, Augmented Reality Demonstration of applications in Virtual Reality
8	Name & address of the experts contacted/interacted/met at the programme	Mr.Ajith, Mr.Joshy, Mr.Sasi Kumar, Kewaunee Labway India Pvt Ltd., Bangalore
9	Benefits of the Programme	Gain the practical Knowledge on virtual reality
10	Details of the Documents/Proceedings submitted to the department library	NIL
11	Suggestion for follow up : Introduction of new subjects/experiments/laboratories/organization of courses/conferences/training	UG students training at their industry premises, PG Student Internship - 2
12	Financial support availed/ Sanctioned	Rs.26000/-

Signature of the Candidate   **Head of the Department**

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COURSE REPORT

Subject Code	14IT1RO
Subject Name	Mobile Application Test Automation
No. of Students Participated	53 Nos.
Name & Organization of the Resource Person	Mr.P.Arun Kumar, Zebra Technologies, Bengaluru.
Date and Duration of the Programme	10 - 11 March, 2018 & 2 - Days Programme.
Objective of the Course	The course provides knowledge and skill on mobile application testing through UI Automator libraries with the Robot test automation framework.
Outcomes of the Course	Students able to, • Develop apps and test using the framework • Apply test automation for the given app • Practice the app testing for the given set of code

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COURSE REPORT

1	Subject Code	14IT1M0
2	Subject Name	One credit course on Augmented Reality
3	No. of Students Participated	55 Nos.
4.	Name & Organization of the Resource Person	Mr.Utkarsh Mankad,CDAC, Bangalore.
5.	Date and Duration of the Programme	24th & 25th March 2018, 2 - Days Programme.
6.	Objective of the Course	This Course will provide an up-to-date view on augmented reality and its application development. Emphasis will be given for developing mobile apps on augmented reality and also to give exposure on app development using Unity.
7.	Contents covered in Day 1	**Augmented Reality –** Definition – Types – Context – Content – Types – Merge Context with Content – Application – Research Issues.
8.	Contents covered in Day 2	**Unity –** AR Mobile app Creation **-** Creation of content – Linking with Context - Animation – Virtual Buttons
9.	Outcomes of the Course	Students able to, • Describe the features and components of Unity • Explain the various ways for AR mobile app development • Explore the technologies that will support AR mobile app development
10	Expenses	Rs.24000/-

Signature of the Coordinator   **Head, Dept. of IT**