

**Shree Manibhai Virani and Smt. Navalben Virani Science College, Rajkot
(Autonomous)
Affiliated to Saurashtra University, Rajkot**

Syllabi & Evaluation norms for Part-III courses

Offering Department : Department of Computer Science & Information Technology

SEC – II Co-curricular Courses

ANY SEMESTER BETWEEN II TO V

16UCSCOC1	Network Administration	80 hrs	1 Credit
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Objectives:

To enable the students to

1. Understand basic concepts of network
2. Understand how network works
3. Understand requirements and importance of different transmission media
4. Understand role of different network devices
5. Install and configure server
6. Learn different network simulator tools
7. Learn to simulate and monitor network using tools
8. Learn to configure the basic server and DNS in detail with implementation

Unit -1 Basics of network & Transmission media (10 hrs)

- Network concepts
 - What is network, Network model-Peer to peer, Client-server
- Network Services- File service, Print service, Communication service, Database service, Security service, Application service
- Network models and LAN sharing
 - OSI reference model
 - Disk quota, compression, mapping of network drive, File and print sharing
- Network Cable
 - Guided media
 - Co-axial cable, Twisted pair cable, Fibre optic cable
 - Unguided media
 - Infrared, laser, microwave, Bluetooth

Unit – 2 Network Devices Switching concepts (10 hrs)

- Network devices
 - LAN card, MODEM, DSL & ADSL, HUB (Active, passive and smart), Repeater, switch, bridge, router, Wireless switch, wireless router, access point
- Switching technology
 - Circuit switching, Message switching, Packet switching

Unit – 3 Network devices, Protocols and Simulators Tools (20 hrs)

- Protocols
 - HTTP, FTP, SMTP, POP3, TCP /IP,
- IP addressing
 - IPv4 with class structure
 - Migration from IPv4 to IPv6
- Network Monitoring Tools (Online/ Offline)
 - WireShark
 - OpenNMS
 - Zenoss Core etc
 - Monitor Network performance

Unit – 4 Server Administration (20 hrs)

- Installation of Server
- Installation and configuration of Active Directory
 - Active Directory Installation & Configuration
 - Securing active directory domain services
 - Domains, Trees, Forests concept
 - Accounts(User, Group, Computer)
 - Policy (Security and audit)
 - Logging Events
 - Creating network drive
 - DNS & Installing DNS

Unit – 5 Network Administration, Configuration & Troubleshooting (20 hrs)

- Network Simulation Tools details
- Network Simulation applications(Using Tool)
 - Basic router setup
 - Setting up router name and password
 - Basic switch setup
 - Switch configuration
 - Setting up telnet
 - Interfaces Configuration
 - VLAN & VTP setup

Reference Books

1. *Glenn Berg*, 1998, **MCSE Networking Essential**, Glenn Berg Tech. Media
2. *Behrouz A. Forouzan*, 2006, **Data Communication and Networking (SIE)**, McGraw-Hill
3. *Andrew S. Tanenbaum*, 2002, **Computer Networks** [Fourth Edition], Pearson Publication

16UCSCOC2	E-Marketing	80 hrs	1 Credit
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Objectives:

To enable the students to

1. Work with a general model of online marketing and place online marketing tools, instruments and theories into a broader theoretical model/framework
2. Understand what the importance is of online marketing and social media to contemporary marketing
3. Learn how to use the internet as a research method and learn and practice on how to publish information on the internet themselves
4. Learn how to advertise in websites
5. Understand how to generate revenue from advertisement

Unit 1 Overview of E-Marketing (10hrs)

- Introduction
- Objectives, Definition of e-marketing, features of e-marketing
- Scope and Benefits of e-marketing
- Problems in e-marketing
- E-marketing techniques
- Digital marketing and Internet Marketing

Unit 2 Building Websites using Wordpress & Social Media Marketing (20 hrs)

- Building websites for e-marketing
- Introduction & Installation of Wordpress
- Working with content
- Creating basic theme
- Creating Widgets and Plugins
- Introduction to Social Media
- Social Networking Platforms
- Blogging
- Microblogging using twitter
- Facebook Marketing
- Youtube Marketing

Unit 3 Search Engine Optimization (10hrs)

- What is SEO
- what is search_marketing
- white hat SEO
- what is black SEO
- Browser Addon
- SEO project management
- Determining Top Competitors
- Benchmarking Current Indexing Status
- Benchmarking Current Rankings

- Benchmarking Current Traffic Sources and Volume
- Conduct SEO/Website SWOT Analysis
- The Theory Behind Keyword Research
- Traditional Approaches: Domain Expertise
- Site Content Analysis
- Keyword Research Tools
- Google Tag Manager in detail with tagging

Unit 4 Analytics Using Webmaster Tools

(20hrs)

- Webmaster Tools (Google, Bing)
- Google AdSense
 - Understanding Google AdSense,
 - Configuring your First Add,
 - Using Advance Add Placement Strategy,
 - Allowing and Blocking Ads, Using Performance Report,
 - Advanced Administration(Accessing Messages, Reviewing Payment Setting)

Unit 5 Other E-marketing Techniques

(20hrs)

- E-mail marketing
- Google Site(site.google)
- Google Adword
 - Introduction,
 - Exploring where ads show up
 - Understanding the structure
 - Creating an account,
 - Choosing between billing options, Starting Your First Campaign,
 - Customizing Your Campaign Settings
 - Creating Your First Ad Group , Optimizing Your Ads, Working Offline with AdWords Editor

Reference Books

1. *Lorrie Thomas*, 2011, **The McGraw-Hill 36-Hour Course: Online Marketing**, McGraw-Hill Education
2. *Stephanie Leary*, 2010, **Beginning WordPress 3**, Apress
3. *Dan Zarrella*, 2009, **The Social Media Marketing Book**, O'Reilly Media
4. *Eric Enge, Stephan Spencer, Rand Fishkin, Jessie C Stricchiola*, 2009 , **The Art of SEO : Mastering Search Engine Optimization**, O'Reilly Media
5. *Jerri L. Ledford*, 2009, **SEO: Search Engine Optimization Bible [2nd Edition]**, Wiley India

Evaluation norms for Co-Curricular Courses

Both the theory and practical examination will be conducted to evaluate the students in the following way.

1. Theory

Theory examination will be of total 50 marks and will have only Continuous Internal Evaluation (CIE) component.

Sr.	Component	Content	Duration	Marks	Sub Total
a)	Test-I	Any 2 units	1.5 hrs	10 (set for 30)	30
	Test-II	All 5 units	2 hrs	20 (set for 50)	
b)	Assignment-I	-	-	10	20
	Assignment-II	-	-	10	
Grand Total					50 Marks

2. Practical

Practical examination will be of total 50 marks and will have only Continuous Internal Evaluation (CIE) component.

Sr.	Component	Content	Duration	Marks	Sub Total
a)	Test-I	50% of experiments	2 hrs	10 (set for 30 marks)	30
	Test-II	All experiments	3 hrs	20 (set for 50 marks)	
b)	Practical Assignments	-	-	20	20
Grand Total					50 Marks

Guidelines for completion of the course

1. Only remarks will be given at the end of the course
2. A separate certificate on completion of each course will be issued by the CoE
3. All above are compulsory components
4. In event of non-completion of course, the student has to re-do the course or opt for another one.

At the end of the semester no marks will be given, only remarks will be given as follows:

Range of Marks (Theory + Practical)	Remarks
90-100	Excellent
75-89	Very Good
60-74	Good
40-59	Fair
39 & Below	Not Completed