

GUJARAT TECHNOLOGICAL UNIVERSITY
Integrated-MCA

Year – V (Semester – IX) (W.E.F. JUNE 2017)

Subject Name: Search Engine Techniques (SET)

Subject Code: 4490608

1. Objectives:

1. To understand basics of SEO and how search engines work
2. To learn the steps you need to prepare for, execute, and evaluate SEO initiatives.
3. To examine a number of advanced strategies and tactics

2. Prerequisites: basics concepts Web Application development

3. Course Contents:

Sr. No.	Course Content	No. of sessions
1	Unit 1: Introduction to The Search Engines The Mission of Search Engines, The Market Share of Search Engines, The Human Goals of Searching, Determining Searcher Intent: A Challenge for Both Marketers and Search Engines How People Search, How Search Engines Drive Commerce on the Web, Eye Tracking: How Users Scan Results Pages, Click Tracking: How Users Click on Results, Natural Versus Paid	02
2	Unit 2: Search Engine Basics: Understanding Search Engine Results, Algorithm-Based Ranking Systems: Crawling, Indexing, and Ranking, Determining Searcher Intent and Delivering Relevant, Fresh Content, Analyzing Ranking Factors, Using Advanced Search Techniques, Vertical Search Engines, Country-Specific Search Engines	05
3	Determining SEO Objectives and Defining Site's Audience: Setting SEO Goals and Objectives, Developing an SEO Plan Prior to Site Development, Understanding Audience and Finding Niche, SEO for Raw Traffic, SEO for E-Commerce Sales, SEO for Mindshare/Branding, SEO for Lead Generation and Direct Marketing, SEO for Reputation Management, SEO for Ideological Influence	03
4	First Stages of SEO: The Major Elements of Planning, Identifying the Site Development Process and Players, Defining Site's Information Architecture, Auditing an Existing Site to Identify SEO Problems, Identifying Current Server Statistics Software and Gaining Access, Determining Top Competitors, Assessing Historical Progress, Benchmarking Current Indexing Status Benchmarking Current Rankings, Benchmarking Current Traffic Sources and Volume, Leveraging Business Assets for SEO, Combining Business Assets and Historical Data to Conduct SEO/Website SWOT Analysis.	03
5	Keyword Research: The Theory Behind Keyword Research, Traditional Approaches: Domain Expertise, Site Content Analysis, Keyword Research Tools, Determining Keyword Value/Potential ROI, Leveraging the Long Tail of Keyword Demand, Trending, Seasonality, and Seasonal Fluctuations in Keyword Demand	06

6	Developing an SEO-Friendly Website: Making Site Accessible to Search Engines, Creating an Optimal Information Architecture, Root Domains, Subdomains, and Microsites, Optimization of Domain Names/URLs, Keyword Targeting, Content Optimization, Duplicate Content Issues Controlling Content with Cookies and Session IDs, Content Delivery and Search Spider Control, Redirects, Content Management System (CMS) Issues, Optimizing Flash, Best Practices for Multilanguage/Country Targeting.	06
7	Optimizing for Vertical Search: The Opportunities in Vertical Search, Optimizing for Local Search, Optimizing for Image Search, Optimizing for Product Search, Optimizing for News, Blog, and Feed Search, Others: Mobile, Video/Multimedia Search	06
8	Tracking Results and Measuring Success: Why Measuring Success Is Essential to the SEO Process, Measuring Search Traffic, Tying SEO to Conversion and ROI, Competitive and Diagnostic Search Metrics, Key Performance, Indicators for Long Tail SEO	09

4. Text Book(s):

1. Eric Enge, Stephan Spencer, Rand Fishkin, Jessie C Stricchiola, "The Art of SEO : Mastering Search Engine Optimization", O'Reilly Media, October, 2009

5. Other Reference Books:

1. David Amerland, Google Semantic Search, Pearson
2. Jerri L. Ledford, "SEO: Search Engine Optimization Bible", 2nd Edition, Wiley India, April, 2009
3. John I Jerkovic, "SEO Warrior: Essential Techniques for Increasing Web Visibility", O'Reilly

6. Unit wise coverage from Text book(s):

Unit 1	Topics
I	Chapter. 1
II	Chapter 2
III	Chapter 3
IV	Chapter 4
V	Chapter 5
VI	Chapter 6
VII	Chapter 8
VIII	Chapter 9,13

7. Accomplishment

Student will understand fundamentals of Search Engine Optimization and techniques used for it