

**Bachelor of Computer Application**  
**(Semester – 3 and Semester - 4)**  
**Saurashtra University**  
**Effective from June - 2023**

<b>CS – 21 WEB SEARCHING TECHNOLOGY AND OPTIMIZATION</b>				
<b>Objectives:</b>				
<ol style="list-style-type: none"> <li>1. Understand basic of search engines and reflecting</li> <li>2. Understand SEO objectives and defining site audience.</li> <li>3. Apply and Implement SEO friendly website with all SEO concept.</li> <li>4. Understand keyword research and apply it for website developments.</li> <li>5. Understand the new trends of digital technologies.</li> </ol>				
<b>Prerequisites:</b>				
Basic knowledge of SEO, search engine and E-commerce.				
No	Topics	Details	Marks weight In %	Min Lec.
1	<b>The Search Engines: Reflecting Consciousness and Connecting Commerce Search Engine Basics</b>	<ul style="list-style-type: none"> <li>• The Mission of Search Engines The Market Share of Search Engines</li> <li>• The Human Goals of Searching</li> <li>• Determining Searcher Intent: A Challenge for Both Marketers and Search Engines</li> <li>• How People Search?</li> <li>• How Search Engines Drive Commerce on the Web?</li> <li>• Eye Tracking: How Users Scan Results Pages?</li> <li>• Click Tracking: How Users Click on Results? Natural Versus Paid</li> <li>• Understanding Search Engine Results</li> <li>• Algorithm-Based Ranking Systems: Crawling, Indexing, and Ranking</li> <li>• Determining Searcher Intent and Delivering Relevant</li> <li>• Fresh Content</li> <li>• Analyzing Ranking Factors</li> <li>• Using Advanced Search Techniques</li> <li>• Vertical Search Engines</li> <li>• Country-Specific Search Engines</li> </ul>	20	12

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<b>2</b>	<b>Determining SEO Objectives and Defining Site's Audience First Stages of SEO</b>	<ul style="list-style-type: none"> <li>• Setting SEO Goals and Objectives</li> <li>• Developing an SEO Plan Prior to Site Development</li> <li>• Understanding Audience and Finding Niche</li> <li>• SEO for Raw Traffic</li> <li>• SEO for E-Commerce Sales</li> <li>• SEO for Mindshare/Branding</li> <li>• SEO for Lead Generation and Direct Marketing</li> <li>• SEO for Reputation Management</li> <li>• SEO for Ideological Influence</li> <li>• The Major Elements of Planning</li> <li>• Identifying the Site Development Process and Players</li> <li>• Defining Site's Information Architecture</li> <li>• Auditing an Existing Site to Identify SEO Problems</li> <li>• Identifying Current Server Statistics Software and Gaining Access</li> <li>• Determining Top Competitors</li> <li>• Assessing Historical Progress</li> <li>• Benchmarking Current Indexing Status</li> <li>• Benchmarking Current Rankings</li> <li>• Benchmarking Current Traffic Sources and Volume</li> <li>• Leveraging Business Assets for SEO</li> <li>• Combining Business Assets and Historical Data to Conduct SEO/Website SWOT Analysis</li> </ul>	<b>20</b>	<b>12</b>
<b>3</b>	<b>Developing an SEO-Friendly Website</b>	<ul style="list-style-type: none"> <li>• Making Site Accessible to Search Engines</li> <li>• Creating an Optimal Information Architecture</li> <li>• Root Domains, Subdomains, and Microsites</li> <li>• Optimization of Domain Names/URLs</li> <li>• Keyword Targeting</li> </ul>	<b>20</b>	<b>12</b>

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		<ul style="list-style-type: none"> <li>• Content Optimization</li> <li>• Duplicate Content Issues Controlling Content with Cookies and Session IDs</li> <li>• Content Delivery and Search Spider Control</li> <li>• Redirects, Content Management System (CMS) Issues</li> <li>• Optimizing Flash</li> <li>• Best Practices for Multilanguage/Country Targeting</li> </ul>		
<b>4</b>	<b>Keyword Research, Optimizing for Vertical Search</b>	<ul style="list-style-type: none"> <li>• The Theory Behind Keyword Research</li> <li>• Traditional Approaches: Domain Expertise</li> <li>• Site Content Analysis</li> <li>• Keyword Research Tools</li> <li>• Determining Keyword Value/Potential ROI, Leveraging the Long Tail of Keyword Demand, Trending, Seasonality, and Seasonal Fluctuations in Keyword Demand</li> <li>• The Opportunities in Vertical Search</li> <li>• Optimizing for Local Search</li> <li>• Optimizing for Image Search</li> <li>• Optimizing for Product Search</li> <li>• Optimizing for News, Blog, and Feed Search</li> <li>• Others: Mobile, Video/Multimedia Search</li> </ul>	<b>20</b>	<b>12</b>
<b>5</b>	<b>Tracking Results and Measuring Success An Evolving Art Form: The Future of SEO</b>	<ul style="list-style-type: none"> <li>• Why Measuring Success Is Essential to the SEO Process</li> <li>• Measuring Search Traffic</li> <li>• Tying SEO to Conversion and ROI</li> <li>• Competitive and Diagnostic Search Metrics Key Performance</li> <li>• Indicators for Long Tail SEO</li> </ul>	<b>20</b>	<b>12</b>

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		<ul style="list-style-type: none"> <li>• The Ongoing Evolution of Search</li> <li>• More Searchable Content and Content Types, Search becoming More Personalized and User-Influenced</li> <li>• Increasing Importance of Local, Mobile, and Voice</li> <li>• Recognition Search</li> <li>• Increased Market Saturation and Competition</li> <li>• SEO As an Enduring Art Form</li> </ul>		
		<b>Total</b>	100	60

Students seminar - 5 Lectures  
 Expert Talk - 5 Lectures  
 Students Test - 5 Lectures

**TOTAL LECTURES 60+15=75**

**Course outcomes:**

- Understand the main elements that help a website rank organically and in the paid search space in Google.
- Learn how to perform keyword research using Google's free tools.
- Learn how to develop landing pages that are search engine friendly.
- Learn how to carry out inbound linking practices.

**Reference Books:**

- (1) The Art of SEO : Mastering Search Engine Optimization By Eric Enge, Stephan Spencer, Rand Fishkin, Jessie C Stricchiola, O'Reilly Media, 3rd Edition October, 2015
- (2) Google SEO Bible, Beginner's Guide to SEO, ISBN-978-1700098733, moaml mohammed, 2019
- (3) SEO Warrior: Essential Techniques for Increasing Web Visibility By John I Jerkovic, O'Reilly Media, November, 2009