



Ganpat University
॥ विद्यया समाजोत्कर्षः ॥

Faculty of
Computer Applications



Programme		B. Sc. Honours (CA & IT)				Branch	Computer Applications		
Semester		VI				Version	1.0.0.0		
Effective from Academic Year				2026-27		Effective for the batch Admitted in		June 2024	
Subject code		U16A2SEO		Subject Name		SEARCH ENGINE OPTIMIZATION			
Teaching scheme						Examination scheme(Marks)			
(Per week)	Lecture (DT)		Practical (Lab.)		Total		CCE	SEE	Total
	L	TU	P	TW					
Credit	2	-	2	-	4	Theory	50	50	100
Hours	2	-	4	-	6				

Objective:

To equip students with the fundamental knowledge and practical skills of Search Engine Optimization (SEO) for improving website visibility, search engine rankings, and online presence.

Pre-requisites:

Basic knowledge of Internet & Website Development.

Learning Outcome:

Name of CO	Description
CO1	To study & analysis the basic of Search Engine Optimization.
CO2	Apply On-Page SEO techniques on live Websites.
CO3	Implement the Off-Page SEO techniques on business websites.
CO4	Demonstrate Technical SEO practices on Live projects.
CO5	Explore the different SEO tools & Analytics techniques.

Mapping of CO and PO:

Cos	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	2	2	1	1	2	1	1	2	1	1	2	1
CO2	2	1	1	1	2	1	1	1	1	1	1	2
CO3	2	1	2	2	2	1	1	2	2	1	1	1
CO4	2	1	1	1	1	1	1	1	1	1	2	1
CO5	1	1	1	1	1	1	1	1	1	1	2	1

Content:

Unit	Content	Hrs.
1	Introduction to Search Engine Optimization: Evolution, Introduction, Search Engine, Working mechanism of Search Engines. Crawling, Indexing & Ranking, Types of SEO, Search Engine Algorithms, Google Search Essentials & Webmaster Guidelines, Search Engine Results Page, Organic Search vs Paid Search.	06
2	On-Page SEO Techniques: Introduction, Keyword Research, Competitor Analysis, URL Optimization, Meta Description, ALT attribute, Header Tag, Content Optimization, Image Optimization, Internal Linking, External Linking.	06
3	Off-Page SEO Techniques: Introduction to Off-Page SEO, Link Building, Types of Back links, Guest Blogging, Local SEO, Social Media, Forum Posting, Influencer Outreach, Google Search Console, Local Listing, Directory Submission, Competitor Back-link Analysis.	06

4	Technical SEO Techniques: Technical SEO Fundamentals, HTML & XML Sitemap, Robots.txt, HTTPS and Website Security, Mobile-Friendly Website Optimization, Website Speed Optimization, Broken Links, Canonical Tags, Redirect Management, SSL Certificate, Google Search Console.	06
5	SEO Tools & Analytics: SEO Free Tools, Features, Importance, Web Analytics, Website Audit Reports, Keyword Research Tools, Website Audit & Technical SEO Tools, Backlink Analysis Tools, Rank Tracking Tools, AI-Powered SEO Tools, SEO Plugins, Website Performance & Monitoring Tools.	06
Practical Content:		
List of programs specified by subject teacher based on the above-mentioned topics.		
Reference Books:		
1	Search Engine Optimization (SEO), by Shashank Shekhar – BPB Publications.	
2	SEO 2025: Search Engine Optimization Made Easy, by Amit Tiwari – BPB Publications.	
3	Digital Marketing, by Seema Gupta – McGraw Hill Education India.	
4	Digital Marketing, by Puneet Singh Bhatia – Pearson India.	
5	Digital Marketing Strategy, by Dr. Hemant Urdhwareshe – Oxford University Press India.	
Web Reference:		
1	www.semrush.com/blog/what-is-seo	
2	www.geeksforgeeks.org/techtips/seo-search-engine-optimization	
3	www.moz.com/learn/seo/what-is-seo	
MOOC/Certificate Course:		
1	www.coursera.org/specializations/seo	
2	www.yoast.com/academy/free-seo-training-seo-for-beginners	
3	www.mygreatlearning.com/academy/learn-for-free/courses/seo-for-beginners1	
4	www.semrush.com/blog/free-seo-courses/	
Question Paper Scheme:		
	End Semester Examination Duration: (2 Hours Theory Examination) Note for Examiner: - Q-1 Any Five out of Seven (25 Marks) Q-2 Any Two out of Three (06 Marks) Q-3 Mandatory question (05 Marks) Q-4 Any Two out of Three (08 Marks) Q-5 Any Two out of Three (06 Marks) *The question paper must comprehensively address all Course Outcomes (COs), align with Bloom's Taxonomy levels, and ensure complete syllabus coverage.	