GUJARAT TECHNOLOGICAL UNIVERSITY (GTU)

Competency-focused Outcome-based Green Curriculum-2021 (COGC-2021)
Semester- IV

Course Title: Essentials of Digital Marketing
(Course Code: 4341601)

Diploma programme in which this course is offered	Semester in which offered
Information Technology	4th Semester

1.   RATIONALE

An exponential growth in the internet and mobile phone users during recent times has opened a wide range of communication opportunities for individuals and organizations. Today, individuals and organizations have started using the internet and digital media as their main marketing strategy in the form of digital marketing. In today's world, everyone is connected in a digital way. Digital Marketing enables us to utilize the capabilities of every online platform in the best possible way. Therefore, there is a need to understand the essentials of Digital Marketing and to inculcate the skills of digital marketing among students.

This course provides a detailed understanding of the basics of Digital Marketing concepts, digital marketing platforms, search engine optimization, web analytics, and social media tools and marketing, email marketing, etc. This course will sensitize students to formulate digital marketing strategies and use appropriate tools in an integrated manner. The students will also learn to measure the effectiveness of their digital campaigns using various analytical tools.

2.   COMPETENCY

The course content should be taught and implemented with the aim to develop various types of related skills leading to the achievement of the following competency

- Explain the role and importance of digital marketing in a rapidly changing world.
- Demonstrate advanced practical skills in common digital marketing tools and online platforms.

3.   COURSE OUTCOMES (COs)

The practical exercises, the underpinning knowledge, and the relevant soft skills associated with this competency are to be developed in the student to display the following COs:

The practical experiences and relevant soft skills associated with this course are to be taught and implemented so that the student demonstrates the following industry-oriented COs associated with the above-mentioned competency:

a)   Explain the role of Digital Marketing in the rapidly changing digital landscape.
b)   Apply Search Engine Optimization techniques in digital marketing.
c)   Use website analytics to improve the effectiveness of advertisement and conversion rate.
d)   Create Digital Marketing Campaigns using various social media marketing platforms and measure their effectiveness.
e)   Apply Search engine marketing techniques for creating effective advertising campaigns.

4. TEACHING AND EXAMINATION SCHEME

Teaching Scheme (In Hours)			Total Credits (CI+T/2+P/2)	Examination Scheme				
				Theory Marks		Practical Marks		Total Marks
CI	T	P	C	CA	ESE	CA	ESE	
3	0	4	5	30	70	25	25	150

Out of 30 marks under the theory CA, 10 marks are for assessment of the micro-project To facilitate the integration of COs and the remaining 20 marks is the average of 2 tests to be taken during the semester for the assessing the attainment of the cognitive domain UOs required for the attainment of the COs.

Legends: CI-Classroom Instructions; T – Tutorial/Teacher Guided Theory Practice; P - Practical; C – Credit, CA - Continuous Assessment; ESE - End Semester Examination.

5. SUGGESTED PRACTICAL EXERCISES

The following practical outcomes (PrOs) that are the subcomponents of the COs.*Some of the PrOs marked '*' are compulsory, as they are crucial for that particular CO. These PrOs need to be attained at least at the 'Precision Level' of Dave's Taxonomy related to the 'Psychomotor Domain'.*

Sr. No	Practical Outcomes (PrOs)	Unit No.	Approx. Hrs. Req
1	Prepare Report on P.O.E.M. framework and its benefits in digital marketing.	I	02
2	Analyze Amazon, Flipkart, Snapdeal, or any three e-commerce sites for the following: (i) Do a comparative analysis of their product offerings (ii) Do a comparative analysis of their landing pages (iii) Do a comparative analysis of their call to action (CTA) (iv) Do a comparative analysis of website loading and website navigation (v) Find the rankings of Amazon, Flipkart, Snapdeal using Alexa.com	II	04
3	Use any SERP simulator tool to check SERP snippet preview of any website for title tag and meta tag descriptions. (https://popupsmart.com/tools/serp-preview-tool/)	II	02
4	Pick up the website name of any two top TV brands you like and conduct an SEO audit (with any of the free available audit sites) on key On-Page and Off-Page impact parameters. Prepare a report on your key observations.	II	04
5	Conduct an audit of any website for performance, accessibility, progressive web apps, and SEO using Lighthouse Tool or other similar tools. (https://developer.chrome.com/docs/lighthouse/overview/)	II	06

6	Use the Google Tag Manager to insert the tracking code in the sample web pages of your website.	III	02
7	Use Google Analytics to analyze website performance.	III	04
8	Create a Facebook ad campaign and analyze the performance of your Facebook ad accounts and campaigns with AdsReport.(https://adsreport.agorapulse.com/home)	IV	04
9	Compare your Facebook page performance pages using the Barometer Facebook page analytics tool or other similar tools (https://barometer.agorapulse.com/home)	IV	02
10	Design infographics, ads, covers, and posts for social networks using Canva tool.	IV	04
11	Create an engaging video using Loom or any other tool and share it on social media. (https://www.loom.com/)	IV	02
12	Create a proxy YouTube ad and measure the success using YouTube Analytics.	IV	04
13	Create an Email marketing campaign for the blood donation camp at your institute. You are required to identify the ideal target audience and develop proper email messages which will increase open email rate, engagement, and ultimately registration and attendance to the event. You can useMailChimp, sender, or any of the available tools for designing and testing campaign success.	V	04
14	Design an email marketing campaign to reactivate dormant users for gym membership/ Library and measure the effectiveness of this campaign.	V	04
15	Create a proxy ad campaign using Google Ads and measure the effectiveness.	V	04
16	Optimize your Google Ad campaign results with the use of the Google Analytics tool, proper keyword selections, Ad groups, and bid adjustments.	V	04
	Total		**56**

Note

i. *More* **Practical Exercises** *can be designed and offered by the respective course teacher to develop the industry-relevant skills/outcomes to match the COs. The above table is only a suggestive list***.***

ii. *The following are some* **sample** *'Process' and 'Product' related skills (more may be added/deleted depending on the course) that occur in the above-listed* **Practical Exercises** *of this course required which are embedded in the COs and ultimately the competency.*

S. No.	Sample Performance Indicators for the PrOs	Weightage in %
1	Analyze and identify a suitable approach for the problem-solving	25
2	Use of appropriate technology/software/tools	25
3	Relevance and quality of output	20
4	Interpret the result and conclusion	15
5	Prepare a report/presentation for the given problem	15
Total		**100**

6.   MAJOR EQUIPMENT/ INSTRUMENTS AND SOFTWARE REQUIRED

These major equipment/instruments and Software required to develop PrOs are given below with broad specifications to facilitate procurement of them by the administrators/management of the institutes. This will ensure the conduction of practical in all institutions across the state in a proper way so that the desired skills are developed in students.

S. No.	Equipment Name with Broad Specifications	PrO. No.
1	Computer system with an operating system and Internet Facility	All
2	SERP simulator tool	2
3	https://www.seoptimer.com/, https://www.semrush.com/siteaudit/	3
3	Google Tag Manager	6
4	https://www.sender.net/, MailChimp	13, 14

7.   AFFECTIVE DOMAIN OUTCOMES

The following *sample* Affective Domain Outcomes (ADOs) are embedded in many of the above-mentioned COs and PrOs. More could be added to fulfill the development of this competency.
a)   Work as a leader/team member.
b)   Follow ethical practices.

The ADOs are best developed through laboratory/field-based exercises. Moreover, the level of achievement of the ADOs according to Krathwohl's 'Affective Domain Taxonomy' should gradually increase as planned below:
i.   'Valuing Level' in 1st year
ii.   'Organization Level' in 2nd year.
iii.   'Characterization Level' in 3rd year.

8.   UNDERPINNING THEORY

The major Underpinning Theory is formulated as given below and only higher level UOs of *Revised Bloom's taxonomy* are mentioned for the development of the COs and competency in the students by the teachers. (Higher level UOs automatically includes lower level UOs in them). If required, more such higher-level UOs could be included by the course teacher to focus on the attainment of COs and competency.

Unit	Unit Outcomes (UOs)	Topics and Sub-topics
Unit –1: Introduction to Digital Marketing	1a. Differentiate traditional and digital marketing. 1b. Describe the framework and skills for digital marketing. 1c. Explain the importance of data privacy in digital marketing.	1.1 Concept of Digital Marketing 1.2 Evolution of Digital Marketing 1.3 Digital Marketing Strategy: P.O.E.M. Framework 1.4 Skills required in Digital Marketing 1.5 Digital Marketing Plan 1.6 Digital Advertising market in India 1.7 Dignified Digital Marketing: Ethics and Data privacy

Unit– 2: Introduction to Search Engine Optimization (SEO)	2a. Describe the need and process of SEO.
	
	 2b. Compare different methods of SEO.
	
	 2c. Explain different optimization techniques.
	
	 2d. Discuss various aspects of search engine marketing.
	
	 2e. Explain how social media is related to SEO.
		2.1 Introduction to SEO
		     i. Overview of SEO
		     ii. Need of SEO
		     iii. How does a search engine work?
		 2.2 SEO Tactics and Methods
		     i. White Hat SEO
		     ii. Black Hat SEO
		 2.3 Optimization
		     i. On-page optimization
		     ii. Off-page optimization
		 2.4 Introduction to Search Engine Ranking
		     i. What is SEO ranking
		     ii. Important Factors for SEO ranking
		     iii. Different ways to improve SEO rankings
		 2.5 Social media and SEO

Unit– 3: Website Analytics	3a. Select proper metrics for Web Analytics 3b. Use various web analytics tools	3.1 Data collection, Weblogs & Page tagging, Key metrics: Unique visitors, Pageviews, Pages/visit, Avg Visit Duration, Bounce rate, New Visits 3.2 Types of web analytics Tools: Content analytics tools, Customer analytics tools, Usability (UX) analytics tools, A/B and multivariate testing tools, social media analytics tools, SEO analytics tools, General enterprise analytics tools, Open-source web analytics tools, Product

		analytics tools
	3c. Analysis goals and its success	3.3 Setting up goals and conversion rate, goal reports in Google Analytics

	3d. Manage Multi-channel Attributions for effective ad campaign	3.4 Attribution models
		  i. Single-touch attribution models: First-click, Last-click, Last non-direct click
		  ii. Multi-touch attribution models: Linear, Time decay, Position-based
		  iii. Connect offline with online

	3e. Use Tracking Codes for analysis	3.5 Long tracking code, Obfuscated tracking code, their pros, and cons, UTM codes

Unit– 4:
 	
Social Media Marketing
	4a. Explain the importance of social media marketing
	
	4b. Use Facebook for digital marketing
	
	4c. Use Twitter for digital marketing
	
	4d. Use LinkedIn for digital marketing
	
	4e. Use Instagram for digital marketing
	
	4f. Use YouTube for digital marketing
		4.1 Introduction to social media marketing
		  i. importance and benefits of social media marketing
		  ii. Types of social media marketing
		  iii. Building a better Social Media Marketing Strategy
		4.2 Introduction to Facebook Marketing
		  i. Understanding the Facebook Algorithm for delivery of ads
		  ii. Facebook Marketing Assets (Facebook Page, Business Manager, Facebook Ads)
		  iii. Facebook Ads Strategy
		  iv. Creating & optimizing advertising campaigns
		  v. Facebook Insights and pixel
		4.3 Introduction to Twitter Marketing
		  i. Types of Twitter Ads
		  ii. Twitter Advertising Campaigns
		  iii. Twitter analytics
		4.4 Introduction to LinkedIn Marketing
		  i. Introduction and Importance of LinkedIn Marketing
		  ii. Types of LinkedIn ads
		  iii. LinkedIn's Campaign Manager
		  iv. LinkedIn Analytics
		4.5 Introduction of digital marketing Strategies through Instagram
		  i. Types of Instagram Content
		  ii. Instagram Ads
		  iii. Instagram insights
		4.6 Importance of Video Marketing
		  i. Types of YouTube Ads
		  ii. Setting up Video campaign
		  iii. YouTube Analytics

Unit–5: Digital Promotions	5a. Apply Email Marketing techniques	5.1 Importance of Email Marketing
		  i. Types of Email marketing
		  ii. Email marketing campaign
		  iii. Email marketing analytics

	5b. Apply Search Engine Marketing techniques	5.2 Introduction to SEM and pay-per-click (PPC)
		  i. PPC vs SEO
		  ii. Introduction to Google Ads
		  iii. Types of Google Ads Campaigns
		  iv. Ad Extensions
		  v. Creating ad campaigns
		  vi. Google Ads Bidding and Ranking Strategies
		  vii. Performance Reports

Note: *The UOs need to be formulated at the 'Application Level' and above of Revised Bloom's Taxonomy' to accelerate the attainment of the COs and the competency.*

9.   SUGGESTED SPECIFICATION TABLE FOR QUESTION PAPER DESIGN

Unit No.	Unit Title	Teaching Hours	Distribution of Theory Marks			
			R Level	U Level	A Level	Total Marks
I	Introduction to Digital Marketing	04	04	06	00	10
II	Search Engine Optimization	10	04	08	04	16
III	Website Analytics	08	06	06	02	14
IV	Social Media Marketing	12	06	08	04	18
V	Digital Promotions	08	02	06	04	12
Total		**42**	**22**	**34**	**14**	**70**

Legends: *R=Remember, U=Understand, A=Apply and above (Revised Bloom's taxonomy)*
Note: *This specification table provides general guidelines to assist students for their learning and to teachers to teach and question paper designers/setters to formulate test items/questions assess the attainment of the UOs. The actual distribution of marks at different taxonomy levels (of R, U, and A) in the question paper may vary from the above table.*

10.   SUGGESTED STUDENT ACTIVITIES
Other than the classroom and laboratory learning, the following are the suggested student-related *co-curricular* activities that can be undertaken to accelerate the attainment of the various outcomes in this course: Students should conduct the following activities in groups and prepare short reports (of 1 to 5 pages for each activity). For micro projects, the report should be as per the suggested format, for other activities students and teachers together can decide the format of the report. Students should also collect/record physical evidence

such as photographs/videos of the activities for their (student's) portfolio which will be useful for their placement interviews:

a) Undertake micro-projects in teams.

b) Prepare charts to explain the use/process of the identified topic.

c) Students are encouraged to prepare infographics, posters, certificates, or banners for promoting college activities and events.

d) Students are encouraged to register themselves in various MOOCs such as Swayam, edx, Coursera, Udemy, etc. to further enhance their learning and to do the certification course on Digital Marketing.

e) Students are encouraged to make a blog or any social media page of their college or department to promote the events.

11.   SUGGESTED SPECIAL INSTRUCTIONAL STRATEGIES

These are sample strategies, which the teacher can use to accelerate the attainment of the various outcomes in this course:

a) Massive open online courses (**MOOCs**) may be used to teach various topics/subtopics.

b) Guide student(s) in undertaking micro-projects.

c) Managing Learning Environment

d) Diagnosing Essential Missed Learning concepts that will help students.

e) Guide Students to do Personalized learning so that students can understand the course material at their pace.

f) Encourage students to do Group learning by sharing so that teaching can easily be enhanced.

g) *'CI" in section No. 4* means different types of teaching methods that are to be employed by teachers to develop the outcomes.

h) About **20% of the topics/sub-topics** which are relatively simpler or descriptive in nature is to be given to the students for **self-learning** but to be assessed using different assessment methods.

i) With respect to **section No.10**, teachers need to ensure the creation of opportunities and provisions for **co-curricular activities**.

j) Guide students on how to address issues on environment and sustainability using the knowledge of this course

12.   SUGGESTED MICRO-PROJECTS

Only one micro-project is planned to be undertaken by a student that needs to be assigned to him/her at the beginning of the semester. In the first four semesters, the micro-project is group-based (groups of 3 to 5). However, **in the fifth and sixth semesters**, the number of students in the group should **not exceed three.**

The micro-project could be industry application-based, internet-based, workshop-based, laboratory-based or field-based. Each micro-project should encompass two or more COs which are in fact, an integration of PrOs, UOs, and ADOs. Each student will have to maintain a dated work diary consisting of individual contributions to the project work and give a seminar presentation of it before submission. The total workload on each student due to the micro-project should be about **16 (sixteen) student engagement hours** (i.e., about one hour per week) during the course. The students ought to submit a micro-project by the end of the semester (so that they develop the industry-oriented COs).

A suggestive list of micro-projects is given here. This should relate highly to the competency of the course and the COs. Similar micro-projects could be added by the concerned course teacher:

a) Prepare a report on Tools to Analyze Digital Marketing Competitors
b) Perform analysis of Visual Keyword Tools for Search Engine Marketing
c) Design Social Media Strategies for Online Shopping Carts using remarketing techniques
d) Create SEO friendly Blog on any topic or product
e) Prepare a case study on Search Engine marketing techniques
f) Prepare SEO study of various websites.
g) Prepare a small website for an event at your institute, analyze users' behavior and prepare statistical reports.
h) Design a website, host it on a free server, measure page views, visitors, repeat visitors, bounce rate, etc., and prepare reports.

13. SUGGESTED LEARNING RESOURCES

Sr. No.	Title of Book	Author	Publication with place, year and ISBN
1	Digital Marketing	Seema Gupta	McGraw Hill, 3rd Edition 935532040X · 9789355320407 Published: August 5, 2022
2	The Art of Digital Marketing: The Definitive Guide to Creating Strategic, Targeted, and Measurable Online Campaigns	Ian Dodson	Wiley Publication ISBN: 978-1-119-26570-2, May 2016
3	Fundamentals of Digital Marketing	Puneet Singh Bhatia	Pearson 2nd Edition – 2019
4	Understanding digital marketing strategies for online success	Dishek J.Mankad	BPB Publications (August 26, 2019)
5	eMarketing: The Essential Guide to Marketing in a Digital World	Rob Stokes	ISBN 13: 9780620565158, Publisher: Red & Yellow
6	Practical Web Analytics for User Experience: How Analytics Can Help You Understand Your Users	Michael Beasley	Morgan Kaufmann; 1st edition (2013) ISBN: 978-0124046191

14. SUGGESTED LEARNING WEBSITES

a) https://learndigital.withgoogle.com/digitalgarage/courses?category=digital_marketing
b) https://onlinecourses.swayam2.ac.in/ugc19_hs26/preview
c) https://onlinecourses.swayam2.ac.in/cec23_mg08/preview
d) https://digitalagencynetwork.com/work/case-studies/
e) https://www.digitalvidya.com/blog/google-analytics-case-studies/ (For web analytics)
f) https://www.facebook.com/business/learn/courses
g) https://www.javatpoint.com/seo-tutorial
h) https://www.pageonepower.com/search-glossary/seo-search-ranking

15. PO-COMPETENCY-CO MAPPING

Semester IV	Essentials of Digital Marketing (4341601)						
	POs and PSOs						
Competency & Course Outcomes	PO 1 Basic & Discipline specific knowledge	PO 2 Problem Analysis	PO 3 Design / development of solutions	PO 4 Engineering Tools, Experimentation and Testing	PO 5 Engineering practices for society, sustainability & environment	PO 6 Project Management	PO 7 Life-long learning
Competency ● Explain the role and importance of digital marketing in a rapidly changing world. Demonstrate advanced practical skills in common digital marketing tools and online platforms.							
Course Outcomes CO a) Explain the role of digital marketing in the rapidly changing digital landscape.	2	1	-	-	-	-	2
CO b) Apply Search Engine Optimization techniques in digital marketing.	2	2	2	2	-	2	2
CO c) Use website analytics to improve the effectiveness of advertisement and conversion rate.	2	2	2	-	-	-	1
CO d) Create Digital Marketing Campaigns using various social media marketing platforms and measure their effectiveness.	3	2	2	3	-	-	2
CO e) Apply Search engine marketing techniques for creating effective advertising campaigns.	3	2	2	3	-	-	2

Legend: '**3**' for high, '**2**' for medium, **'1'** for low, or **'-'** for the relevant correlation of each competency, CO, with PO/ PSO

16. COURSE CURRICULUM DEVELOPMENT COMMITTEE

GTU Resource Persons

S. No.	Name and Designation	Institute	Contact No.	Email
1	Dr. G. V. Lakhani	Government Polytechnic, Bhuj	9426851961	gvlakhani1@gmail.com
2	Mr. Saifee Vohra	Government Polytechnic, Ahmedabad	9426786555	saifeevohra@gmail.com
3	Mr. Chintan Gajjar	SSGP, Surat	9426331221	cagajjar.it@gmail.com
4	Vishakha Sanghavi	LECP, Morbi	9624634834	sanghavi.vishakha.it@gmail.com