



**Hindi Vidya Prachar Samiti's  
Ramniranjan Jhunjhunwala College  
of Arts, Science & Commerce  
(Empowered Autonomous College)**

**Affiliated to**

**UNIVERSITY OF MUMBAI**

**Program Code: RJCUCSDF**

**Syllabus for the**

**B.Sc Cyber Security & Digital Forensics (under NEP)**

**Course Codes: RJOECCSDF111 & RJOECCSDF121**

**New Program to be started from the academic year 2026-2027**

## **Preamble**

The National Education Policy 2020 aims at imparting skill-based learning and caters to the multiple entry and exit facility for the students thus empowering them to acquire knowledge at their pace. In the three-year UG program, the student has two exit options. Students also have the option for choosing the Honors program of four years study in a given discipline and later converting it to five year integrated PG degree program. As undergraduate student, he/she learns the core subject (Major), subject complementing the core subject (Minor), a course from other discipline (OEC or GEC) Vocational and Skill Enhancement course from the Major (VSEC). The remaining verticals under NEP 2020 are IKS (Indian Knowledge System), AEC ( Ability Enhancement Course), VEC ( Value Enhancement Course) and with progressive three years of UG, student also completes at different levels OJT ( On Job Training), FP ( Field Projects), CEP ( Community Engagement Program) , RP ( Research Project) which helps him/her in understanding their roots, application of the knowledge for the benefit of self and the society. Vertical CC (Co-curricular activities and activities related to yoga and human well-being) helps in preparing youth with good character and interpersonal relationships.

## SEMESTER I

### Generic/Open Elective – Stress and Anxiety Management

Course Code	Course Title	Course Type	Credits	Duration
• RJOECCSDF111	Stress and Anxiety Management	Generic/Open Elective (Theory)	4	60 Hours

### Course Objectives

Sr. No.	Course Objective
1	Understand the psychological, physiological, and sociological aspects of stress and anxiety.
2	Explore theories of stress management and their application to daily life.
3	Learn relaxation techniques, mindfulness, and coping strategies for diverse populations.
4	Analyze causes, effects, and interventions for stress-related disorders.
5	Develop skills for personal resilience and promoting well-being in professional contexts like cybersecurity.

### Unit-wise Detailed Syllabus

Unit	Detailed Contents	Hours
I	Introduction to Stress and Anxiety <ul style="list-style-type: none"><li>• Definitions and Types: Eustress vs. distress, acute vs. chronic stress; anxiety disorders (generalized, panic) per DSM-5.</li><li>• Physiological Responses: Fight-or-flight mechanism, HPA axis, cortisol effects on health.</li><li>• Sociological Factors: Work-life balance, cultural influences on stress perception.</li></ul> Theories: Selye's General Adaptation Syndrome, Lazarus' Transactional Model.	15
II	Causes and Impacts <ul style="list-style-type: none"><li>• Personal Causes: Lifestyle, genetics, trauma; environmental triggers (e.g., high-pressure jobs in IT).</li><li>• Health Impacts: Psychoneuroimmunology, links to cardiovascular disease, mental health.</li><li>• Diverse Populations: Stress in students, professionals, marginalized groups.</li></ul> Assessment Tools: Perceived Stress Scale, anxiety inventories.	15
III	Management Techniques	15

	<ul style="list-style-type: none"> <li>Relaxation Methods: Progressive muscle relaxation, deep breathing, guided imagery.</li> <li>Cognitive Strategies: CBT basics, reframing negative thoughts, journaling.</li> <li>Lifestyle Interventions: Exercise, nutrition, sleep hygiene; time management.</li> </ul>	
IV	<p>Advanced Interventions and Applications</p> <ul style="list-style-type: none"> <li>Mindfulness and Meditation: MBSR program, apps like Headspace.</li> <li>Social Support: Building networks, seeking professional help.</li> <li>Workplace Applications: Stress audits, resilience training in cyber teams.</li> </ul> <p>Case Studies: Real-world examples from high-stress fields like forensics.</p>	15

### Course Outcomes (CO)

CO No.	Course Outcome	Bloom's Level	PSO Mapped
CO1	Describe theories, types, and physiological aspects of stress and anxiety.	Remember (L1), Understand (L2)	PSO1, PSO5
CO2	Explain causes, impacts, and assessment methods for stress in diverse contexts.	Understand (L2)	PSO1, PSO3, PSO5
CO3	Apply relaxation and cognitive techniques to manage personal stress.	Understand (L2), Apply (L3)	PSO1, PSO3, PSO5
CO4	Analyze interventions for workplace and societal stress reduction.	Apply (L3), Analyze (L4)	PSO1, PSO2, PSO3, PSO5
CO5	Evaluate resilience strategies for long-term well-being in professional settings.	Understand (L2), Analyze (L4)	PSO1, PSO3, PSO5

### Textbooks & References

Sr. No.	Title	Author / Source
1	Stress Management: A Comprehensive Handbook of Techniques and Strategies	Loraine Alden Seaward / Jones & Bartlett Learning
2	The Relaxation Response	Herbert Benson / HarperCollins
3	Why Zebras Don't Get Ulcers	Robert M. Sapolsky / Holt Paperbacks
4	Full Catastrophe Living	Jon Kabat-Zinn / Bantam

5	Stress and Anxiety Management Syllabus (UG Level)	University of Florida / Internal Publication
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## SEMESTER II

### Generic/Open Elective – Digital Marketing Fundamentals

Course Code	Course Title	Course Type	Credits	Hours
RJOECCSDF121	Digital Marketing Fundamentals	Generic/Open Elective (Theory)	4	60

### Course Objectives

Sr. No.	Course Objective
1	Understand digital marketing channels and strategies for brand promotion.
2	Learn SEO, SEM, and content marketing for online visibility.
3	Explore social media and email marketing for audience engagement.
4	Apply analytics tools for campaign performance measurement.
5	Develop awareness of ethical digital marketing in cyber-secure contexts.

### Unit-wise Detailed Syllabus

Unit	Detailed Contents	Hours
I	<ul style="list-style-type: none"><li>Digital Marketing Overview</li><li>Introduction: Digital vs. traditional marketing; 4Ps in digital (product, price, place, promotion); consumer journey (awareness, consideration, conversion).</li><li>SEO Basics: On-page (keywords, meta tags), off-page (backlinks); tools like Google Keyword Planner.</li><li>Content Marketing: Blogging, video for storytelling; content calendars.</li></ul>	15
II	<ul style="list-style-type: none"><li>Paid and Social Strategies</li><li>SEM: Google Ads setup, bidding (CPC/CPM); ad copywriting.</li><li>Social Media: Platforms (Facebook, Instagram, LinkedIn); organic/paid posts, influencer collaborations.</li><li>Email Marketing: Newsletters, automation (Mailchimp basics); segmentation.</li></ul>	15
III	<ul style="list-style-type: none"><li>Engagement and Analytics</li><li>Influencer and Affiliate: Partnership models, tracking ROI.</li><li>Analytics: Google Analytics for traffic/engagement; metrics (bounce rate, conversion).</li><li>Mobile Marketing: App promotion, SMS; responsive design.</li></ul>	15
IV	<ul style="list-style-type: none"><li>Ethics and Campaigns</li><li>Ethical Issues: Data privacy (GDPR in marketing), fake news; secure practices.</li></ul>	15

	<ul style="list-style-type: none"> <li>• Campaign Planning: Full-funnel strategy; A/B testing.</li> <li>• Case Studies: Successful cyber-brand campaigns (e.g., antivirus promotions).</li> </ul>	
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### Course Outcomes (CO)

CO No.	Course Outcome	Bloom's Level	PSO Mapped
CO1	Describe digital channels and consumer journeys.	Remember (L1), Understand (L2)	PSO1, PSO5
CO2	Explain SEO/SEM and content strategies.	Understand (L2)	PSO1, PSO3, PSO5
CO3	Apply social/email tools for engagement.	Understand (L2), Apply (L3)	PSO1, PSO3, PSO5
CO4	Analyze campaign metrics and ROI.	Apply (L3), Analyze (L4)	PSO1, PSO2, PSO3, PSO5
CO5	Identify ethical practices in digital campaigns.	Understand (L2), Analyze (L4)	PSO1, PSO3, PSO5

### Textbooks & References

Sr. No.	Title	Author / Source
1	Digital Marketing (4th Ed., 2023)	Dave Chaffey, Fiona Ellis-Chadwick / Pearson
2	This is Marketing	Seth Godin / Portfolio
3	Digital Marketing Strategy	Simon Kingsnorth / Kogan Page
4	SEO 2023	Adam Clarke / Independently Published
5	Digital Marketing for Dummies	Ryan Deiss, Russ Henneberry / For Dummies