



VIJAYANAGARA SRI KRISHNADEVARAYA UNIVERSITY
JNANA SAGARA CAMPUS, BALLARI-583105

Department of Studies in Computer Science

SEC Syllabus

Cyber Security

With Effect from the Academic Year 2023-24 onwards

Approved in BOS dated on 30.08.2023

Cyber Security (3) (2+0+2)

Course Title: Cyber Security	Course code: SEC-4
Total Contact Hours: 42	Course Credits: 03
Formative Assessment Marks: 40	Duration of SEE/Exam: 02 Hours
Summative Assessment Marks: 60	

Course Outcomes (COs):

At the end of the course, students will be able to:

- CO1. After completion of this course, students would be able to understand the concept of Cyber security and issues and challenges associated with it.
- CO2. Students, at the end of this course, should be able to understand the cyber crimes, their nature, legal remedies and as to how report the crimes through available platforms and procedures.
- CO3. On completion of this course, students should be able to appreciate various privacy and security concerns on online Social media and understand the reporting procedure of inappropriate content, underlying legal aspects and best practices for the use of Social media platforms.

Voc-1: Digital Marketing

Unit	Description	Hours
1	Introduction to Cyber security: Defining Cyberspace and Overview of Computer and Web-technology, Architecture of cyberspace, Communication and web technology, Internet, World wide web, Advent of internet, Internet infrastructure for data transfer and governance,	8
2	Internet society, Regulation of cyberspace, Concept of cyber security, Issues and challenges of cyber security. Cyber crime and Cyber law: Classification of cyber crimes, Common cyber crimes- cyber crime targeting computers and mobiles, cyber crime against women and children, financial frauds, social engineering attacks	10
3	Malware and ransomware attacks, zero day and zero click attacks, Cybercriminals modus-operandi, Reporting of cyber crimes, Remedial and mitigation measures, Legal perspective of cyber crime, IT Act 2000 and its amendments,	8
4	Cyber crime and offences, Organizations dealing with Cyber crime and Cyber security in India, Case studies. Social Media Overview and Security: Introduction to Social networks. Types of Social media, Social media platforms, Social media monitoring, Hashtag, Viral content,	8
5	Social media marketing, Social media privacy, Challenges, opportunities and pitfalls in online social network, Security issues related to social media, Flagging and reporting of inappropriate content, Laws regarding posting of inappropriate content, Best practices for the use of Social media, Case studies.	8

References:

1. Cyber Crime Impact in the New Millennium, by R. C Mishra , Auther Press. Edition 2010
2. Cyber Security Understanding Cyber Crimes, Computer Forensics and Legal Perspectives by Sumit Belapure and Nina Godbole, Wiley India Pvt. Ltd. (First Edition, 2011)
3. Security in the Digital Age: Social Media Security Threats and Vulnerabilities by Henry A. Oliver, Create Space Independent Publishing Platform. (Pearson , 13th November, 2001)
4. Cyber Laws: Intellectual Property & E-Commerce Security by Kumar K, Dominant Publishers.
5. Fundamentals of Network Security by E. Maiwald, McGraw Hill.
6. Network Security Bible, Eric Cole, Ronald Krutz, James W. Conley, 2nd Edition, Wiley India Pvt. Ltd.