

7th Semester

7th Semester	RCS7D002	Cyber Security and Privacy	L-T-P 3-0-0	3 CREDITS
------------------------------------	-----------------	-----------------------------------	------------------------	----------------------

Module I:**(10 Hours)**

Introduction to Cyber Space, Introduction to Information Systems, Need for Cyber Security , Introduction to Cyber Attacks , Classification of Cyber Attacks, Classification of Malware, Threats, Vulnerability Assessment, Intrusion Detection Systems, Intrusion Prevention Systems

Module II:**(10 Hours)**

Introduction to User Authentication Methods, Biometric Authentication Methods, Biometric Systems, Different Security Models and Security Mechanisms, Information Security and Network Security, Operating System Security, Web Security, Email Security, Mobile Device Security, Cloud Security

Module III:**(10 Hours)**

IoT Security, Cyber Physical System Security, Social Media Security, Virtual Currency, Block Chain Technology, Security Auditing, Cyber Crimes, Different Types of Cyber Crimes, Scams and Frauds, Analysis of Crimes, Human Behavior, Stylometry, Incident Handling

Module IV:**(10 Hours)**

Investigation Methods, Criminal Profiling, Cyber Trails, Digital Forensics, History, Challenges, Branches of Digital Forensics, Digital Forensic Investigation Methods, Reporting, Management of Evidence, Cyber Law-Basics, Information Technology Act 2000, Amendments to IT Act 2000, Evidentiary value of Email/SMS, Cybercrimes and Offenses dealt with IPC, RBI Act and IPR Act in India, Jurisdiction of Cyber Crime, Cyber Security Awareness Tips

Books:

- [1] https://heimdalsecurity.com/pdf/cyber_security_for_beginners_ebook.pdf
- [2] <http://larose.staff.ub.ac.id/files/2011/12/Cyber-Criminology-Exploring-Internet-Crimes-and-Criminal-Behavior.pdf>

Digital Learning Resources:

Course Name: Cyber Security
 Course Link: https://onlinecourses.swayam2.ac.in/cec21_cs14/preview
 Course Instructor: Dr.G.PADMAVATHI

Course Name: Introduction to Cyber Security
 Course Link: https://onlinecourses.swayam2.ac.in/nou21_cs08/preview
 Course Instructor: Dr. Jeetendra Pande