Cyber Security

- ## Introduction to Ethical Hacking
  - Introduction to essential terminology
  - Discussion for 'CIA' triad
  - Types of hacker
  - Introduction to hacking phases (detailed discussion)

- ## Introduction to Kali Linux
  - Introduction to Virtual box
  - Kali Linux installation
  - Comprehensive introduction of Kali

- ## Foot printing and Reconnaissance
  - Foot printing objectives
  - Foot printing methodologies
  - People search websites (practical)
  - Website foot printing practical with netcraft.com, Shodan.io, censys.io
  - DNS foot printing with online services(practical)
  - Introduction to 'Knockpy' software with installation and use

- ## Scanning Networks and Enumeration
  - Overview of Network Scanning
  - Ping sweeping on windows and kali
  - Introduction to 'Angry IP Scanner' (Windows and Kali)
  - Network scanning with 'Nmap' (Windows and kali practical)
  - Sub-domain enumeration with 'Dnsenum' and 'Dmitry' softwares kali

- ## Vulnerability Analysis
  - Introduction to Vulnerability Analysis
  - Introduction to 'Kioptrix'
  - 'Java Vulnerable lab' Introduction and installation
  - Vulnerability scan on Java vulnerable lab with the following softwares:
    - Zap Proxy
    - Nikto
    - Nmap
    - Burpsuite

- ## System Hacking
  - Introduction to System hacking
  - System defending techniques:
    - Mac address changing
    - Tor Browser
  - System password erasing with 'Hiren's boot' (software practical)

- Malware Threats
  - Virus: The Principle
  - Types of Virus
  - Key loggers and Scanners:
    - Ardamax Key logger (software Practical)
  - Windows virus creation and exploit (practical):
    - Msf venom
    - Metasploit

- Sniffing
  - Discussion on 'Man in the middle attack'
  - Working with the following:
    - Wireshark
    - Ettercap

- Social Engineering
  - Introduction to web crawlers
  - Advance google hacking (practical)
  - Introduction to Phishing
    - Live network hosting (Manual phishing with Facebook page)
    - Phishing with 'Setoolkit' of kali

- Hacking Web Servers (SQL injection)
  - SQL injection theory
  - OR sql injection practical
  - SQl injection on java vulnerable lab with sqlmap

- Hacking Mobile Platforms and spoofing
  - Emkaei fake emailer
  - Call spoofing
  - Sms spoofing
  - Android lost

- Steganography
  - History and concept
  - Steganpeg
  - Windows stegnography