

Student Learning Centre, IQAC Hansraj College University of Delhi



Launches an online

Certificate Course on CYBER SECURITY & ETHICAL HACKING (SLC-05)

Dates:- 10 August 2020 to 21 August 2020

Duration: 30 Hours

Registration Link:- <https://forms.gle/ZpmVDycadu3ueQqS8>

Course Coordinator

Ms. Sunita Chand

Course Co-Coordinator

Mr. Suyash Kumar

Program Convenor

Dr. Mona Bhatnagar
(Director, IQAC)

Patron

Prof. (Dr.) Rama
(Principal, Hansraj College)

About the College

Hansraj college is one of the largest constituent colleges of the University of Delhi. The college has been ranked as one of the top five colleges for science, arts and commerce several times in the last decade. The faculty and students of the college have contributed immensely in the academics, sports and culture.

Eminent authors and academicians have been part of our college and have contributed towards making it one of the finest institutions of the country. The College has completed 73 years in the realm of imparting higher education. It has made significant and unparalleled contribution to society in terms of producing numerous dignitaries scholars, intellectuals and sports persons who served different domains not only in our own country but even at international levels.

About the Course

This course will provide an overview of information security, ethical hacking, cyber attacks and countermeasures, wireless networks security, social networking security, mobile hacking, Intrusion Detection Systems and malware analysis. Through extensive hands-on sessions, the participants will learn to scan, test, hack and secure their own systems. The lab intensive environment will give each participant a practical experience of cyber ethics, email hacking & security, malware (viruses and Trojans) attacks, windows system attacks, online data Investigation, credit card frauds & cases, playing with Google by Google hacking and android mobile hacking etc. Participants will also learn about Intrusion Detection, Policy Creation, Social Engineering, DDoS Attacks, Buffer Overflows and Virus Creation through open source tools.

Deliverables



Live lectures



Activities



Recorded Videos



Assessment



Presentations and other relevant material



Certification



Doubt Sessions

Who can attend?

Any student affiliated to any Course / College / University may enroll for this course.

Resource Persons

Dr Jagan Reddy D. (Associate Professor)

Dr Jagan Reddy D. is an Associate Professor at LBRCE, Mylavaram with specializations as Information Security and Data Science. He has received Ph.D from Birla Institute of Technology and Science, Pilani in 2017 and MTech (CSc) from Jadavpur University in 2010. Dr. Reddy has worked as a Data Scientist in IT and also various R & D projects. He was involved in government projects such as 1100 - People First, Govt. of AP and as an analyst in Punjab elections, 2016 & Gujarat Elections, 2017. He regularly conducts security based workshops and training programs for faculty and students.

Aman Mittal

Aman Mittal is associated with TechSpur as a Consultant. He is a dedicated information security professional with knowledge of audit & compliance management with proven ability to identify, analyze and solve problems to client's satisfaction. He also has a hunger for cyber security and had proven his capabilities in the past on multiple cyber security engagements. Worked with different organizations to perform penetration testing on WebApp or API wherever necessary, and provided assistance to the users related to the findings. Identifying the counterfeit software's and helping clients both in terms of License Compliance and from Cyber Security aspects is his expertise. Aman has practical knowledge of security tools like Nessus, Nmap, BurpSuite etc.

Kiran Kumar Parmar

Kiran Kumar Parmar is a Cyber Security expert associated with TechSpur. He has done Bachelor in computer engineering & later professional training courses such as CCNA/CCNP Security, CEH (Certified Ethical Hacker), Oracle Database Expert- OCA, OCP, RHCSA/RHCE Linux System Administration, MCSE 2012/2016. He has a vast professional Experience in Computer Network and System Security at various reputed organizations. He possesses a mix of required experience, knowledge, and skills in the Teaching learning & Research areas. Having worked within the IT industry for over 12 years, he has developed a wide range of skills for the role of a Professional Trainer.

Tushar Rana

Tushar is associated with TechSpur as a Consultant. He is an information security professional with experience in planning and performing vulnerability assessment & Penetration Testing for web applications, APIs, Mobile applications and network devices. He has led several end to end information security testing engagements and has a wide experience in identifying key and critical business specific vulnerabilities, providing remediation support for the vulnerabilities identified and retesting the same to confirm the remediation status. He has practical knowledge on configuration and working on security tools like Nessus, Nmap, Burp Suite, Sqlmap, SSLScan, Metasploit etc., and tool suited Operating System like Kali Linux. He has been part of Bug Bounty hunting on the side with many Hall of Fame like Topcoder, etc and has also performed Red Teaming exercises for clients.

Registration Details

- **Fee: INR 1200 (For Students of Hansraj College)**
INR 1500 (For Others)
- **Mode of Payment:- Online (NEFT/RTGS)**
Beneficiary Name:- Principal, Hansraj College
Account No.:- 2848101000314
IFSC Code:- CNRB0002848
Bank Name and Branch:- Canara Bank, Hansraj College, Delhi
- **Limited Seats. Confirmation to be on first- come- first-served basis.**
- **For any query write on:-**
sunita@hrc.du.ac.in,
suyash@hrc.du.ac.in

Certification and Assessment

- **Certificate of participation to be awarded on successful completion of the course**
- **Attendance in 80% of the sessions is mandatory for successful completion**
- **Assessment Criterion shall be 70% of the total marks**

DETAILED SCHEDULE

DAY	MODULE	LIST OF TOPICS	Duration
1 (10-08-2020)	INTRODUCTION TO NETWORKING AND INFORMATION SECURITY	Elements of Information Security, The Security, Functionality, and Usability Triangle, Security Threats, Coding threats, Networking threats, Application security, Web security, Privileges, Foot Printing, Understanding the legal implications of hacking.	03 Hrs. (3:00 PM - 4:30PM 4:45PM - 6:15PM)
2 (11-08-2020)	SCANNING	Introduction to network security, Network Traffic Analysis: reconnaissance, scanning, Use of nmap, SNORT, Process Monitor tools	03 Hrs. (3:00 PM - 4:30PM 4:45PM - 6:15PM)
3 (12-08-2020)	SNIFFERS	Overview, Packet sniffer or network protocol analyzer, Use of Wireshark packet sniffer tool	03 Hrs. (3:00 PM - 4:30PM 4:45PM - 6:15PM)
4 (13-08-2020)	MALWARE DETECTION SYSTEMS AND IDS	Malware Analysis: Worms, Virus Detection, Intrusion Detection Systems, Evading IDS, Firewalls, Honeypots	03 Hrs. (3:00 PM - 4:30PM 4:45PM - 6:15PM)
5 (14-08-2020)	SPOOFING	IP and MAC spoofing techniques, Enumeration Concepts	03 Hrs. (3:00 PM - 4:30PM 4:45PM - 6:15PM)

DETAILED SCHEDULE

DAY	MODULE	LIST OF TOPICS	Duration
6 (17-08-2020)	VULNERABILITY ASSESSMENT	System hacking: Password cracking and system security, Google Hacking, Kali Linux	03 Hrs. (3:00 PM - 4:30PM 4:45PM - 6:15PM)
7 (18-08-2020)	ENCRYPTION	Cryptography and Steganography	03 Hrs. (3:00 PM - 4:30PM 4:45PM - 6:15PM)
8 (19-08-2020)	WEB ACCESS THREATS	Web Browser Attacks Types, Web Attacks Targeting Users, Obtaining User or Website Data, Social Engineering attacks, Email Attacks, DDOS attacks buffer and stack overflow	03 Hrs. (3:00 PM - 4:30PM 4:45PM - 6:15PM)
9 (20-08-2020)	TYPES OF COMMON ATTACKS	ATM, Credit card and Debit card attacks, Ransomwares, SQL Injection	03 Hrs. (3:00 PM - 4:30PM 4:45PM - 6:15PM)
10 (21-08-2020)	WIRELESS NETWORKS SECURITY	Hacking wireless networks, Mobile Hacking, Security Compliance and Auditing, Physical Security Threats	03 Hrs. (3:00 PM - 4:30PM 4:45PM - 6:15PM)