About FDP:
The aim of this program is to promote research aspects in internet security, familiarize with tools available for network scanning, identify and synthesize needs for internet security techniques (firewall, honeypots etc.), share information and practical awareness for data and system protection from cyber-attacks (prevent, detect and respond) etc. The FDP will start with an overview of cybersecurity aspects to help the audience understand the importance in real life scenarios. This FDP is planned into two parts: ethical hacking hands-on sessions and technical cyber security sessions. The technical session part of the FDP will focus on the most challenging contemporary issues in cybersecurity, Cyber Forensics and Cyber Crime in real world. The hands-on session part will extend the discussion to address the practical evaluation of security tools and techniques.

Objectives of FDP:
1. The aim of the course is to introduce the methodologies and framework of ethical hacking for enhancing the security.
2. The course includes - Impacts of Hacking; Information Security Models; Information Security Program; Business Perspective; Planning a Controlled Attack; Framework of Steps (Reconnaissance, Enumeration, Vulnerability Analysis, Exploitation, Deliverable and Integration).

Topics Covered:
1. Understanding Cyber Security and its need of the hour.
2. Linux and its various server configuration
3. Website and Web Server Hacking and Security
4. Vulnerability Assessment and Penetration Testing (VAPT)
5. Android and Windows OS Hacking and its Security
7. Cyber Forensics - Principles / Forensics Analysis / Registry Analysis / Forensic
8. Recent Trends and Research Directions with real life Cyber Crime.
About Institute:
Xavier Institute of Engineering (XIE), a sister institute of St. Xavier’s College, Fort, Mumbai was established in 2005, and is a part of an international network of Jesuit Educational Institutions which includes 138 universities and 3413 educational institutions in 120 countries. XIE ranked among the top 30 Engineering colleges [the 30 include 10 IIT’s and 7 NIT’s] in the country (about 3800 colleges) with high "PERCEPTUAL SCORE" according to Times Engineering Survey 21 May 2018. XIE is now NAAC accredited. XIE is the only Engineering college in India to have a Gait laboratory. This laboratory is sponsored by Marquette University, USA.

Vision of XIE:
To nurture the Joy of Excellence in a world of High Technology

Mission of XIE:
To strive to match global standards in Technical Education by Interaction with Industry, Continuous Staff training and Development of quality of life.

About Computer Engineering Department:
This department started functioning from the year 2005 with an intake of 60, offering bachelor degree in Computer Engineering. The department has a mission to provide knowledge of computer engineering and with related technical skills to solve various computer engineering problems along with industry interaction. Also, motivate all learners to acquire additional soft skills to sharpen their technical and professional skills that make them employable under the guidance of trained and experienced faculty members and well equipped laboratories.

Resource Persons:
Dr. Deven Shah,
Vice-Principal, TCET, Mumbai.
Shri. Sangankal Veeresh Prabhu, IPS
Addl. Commr. of Police
Dr. Dayanand Ambavade,
Assoc. Prof., SPIT, Mumbai.
Mr. John D’Annunzio,
Cyber Range Solution Inc.
Dr. Thomas Schwarz
Marquette University, USA.
Dr. Saurabh Patil,
Assoc. Prof., XIE, Mumbai.
Prof. Kunal Meher,
Asst. Prof., XIE, Mumbai.

About Cyber Range Solutions Inc. (CRS):
Cyber Range Solutions provides a la carte and bundled Cybersecurity education programs for Colleges, Universities, Vocational Schools and Workforce Development Programs that accelerate students mastery across all cybersecurity disciplines.

CRS combines industry leading cybersecurity framework curriculum [ NIST (National Institute of Standards and Technology) MITRE ATT & CK (Adversarial Tactics, Techniques, and Common Knowledge)] with globally recognized, immersive cyber range to rapidly develop cybersecurity professionals with hands-on experience.

Important Dates
Last date to apply : 28th December 2020
Intimation of Selection : 2nd January 2021
FDP : 4th - 9th January 2021

Apply

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<table>
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<th>Weekdays</th>
<th>10:00 AM - 12:00 PM</th>
<th>2:00 PM - 04:00 PM</th>
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| 04 Jan 2021 | Cyber Security - Need of the Hour  
Dr. Deven Shah  
Vice-Principal, TCoE | Hands-On Network Tools and FTP and HTTP Configuration  
Hands-On Firewall setup and Configuration  
Dr. Dayanand Ambawade,  
Assoc Prof., SPIT, Mumbai |
| 05 Jan 2021 | Ethical Hacking - Emerging Attacks  
1. Website Phishing Attacks  
2. Email Spoofing and Detection  
Dr. Saurabh Patil  
Xavier Institute of Engg. | Ethical Hacking - Emerging Attacks  
3. Exploiting Windows OS  
4. Exploiting Android OS  
Mr. Kunal Meher  
Xavier Institute of Engg. |
| 06 Jan 2021 | Ethical Hacking - Emerging Attacks  
7. Password Cracking  
8. Windows Password Cracking  
Dr. Saurabh Patil  
Xavier Institute of Engg. | Ethical Hacking - Emerging Attacks  
9. Man in The Middle (MiTM) attack  
Mr. Kunal Meher  
Xavier Institute of Engg. |
| 07 Jan 2021 | Cyber Crime threats in the Banking sector  
Shri. Sangankal Veeresh Prabhu, IPS  
Addl. Commr. of Police, Mumbai, Cyber Crime | Ethical Hacking - Emerging Attacks  
10. Wireless Enumeration  
Dr. Saurabh Patil  
Xavier Institute of Engg. |
| 08 Jan 2021 | Cyber Forensics Tools and Digital Investigation  
Dr. Thomas Schwarz  
Marquette University, USA. | Ethical Hacking - Emerging Attacks  
5. Website Database enumeration  
6. Social Engineering attack Case Study  
Dr. Saurabh Patil  
Xavier Institute of Engg. |
| 09 Jan 2021 | Recent Trend and Research Directions in Cyber Security  
Mr. John D'Annunzio  
Business Development  
Cyber range Solution Inc, Texas, USA | Online Exam Slot (1 hour)  
Valedictory-Certificate Distribution Function |