	Master of Computer Applications

Report
On
Value Added Course: Certificate Course in Web Security

ACTIVITY :Value Added Course

TITLE : Certificate Course in Web Security

VALUES: Domain Knowledge; Modern Tool Usage;Professional Ethical Edification

OBJECTIVE: The purpose of the course is to give an overview to the students about the Web attacks that can cause harm to the important data present over Internet. The course will enable the students to conduct web security risk assessment, measure the performance and troubleshoot web security systems. It aims to allow the students implement web security solutions and develop basic understanding of security, cryptography, system attacks and defenses against them.

Organized by : Department of Computer Applications

Program Theme : Certificate Course in Web Security

Internal Expert : Dr. Vishal Khatri

Internal Resource Person Profile: Dr. Vishal Khatri is currently working in Tecnia Institute of Advanced Studies as Head of Department in MCA. He has more than 10 years of teaching experience. His expertise is in Web Security, Web Development, Computer Networks and Java, etc.

External Expert : Dr. Shalini Goel

External Resource Person Profile: Dr. Shalini Goel is currently working in HMR Institute of Technology and Management, Delhi as an Associate Professor. She has 18 years of teaching experience. Her expertise is in DBMS, Programming, Object-oriented Programming, Operating System, Computer Architecture, etc. She has published several research papers and authored 2 books.

Date	: 24.02.2020 to 27.04.2020
Time	: 2:00 pm to 3:00 pm
Venue	: Hybrid (Offline - Room No. 2203, Online – Zoom app)

Poster/Flyer/Notice*

Social media link *(promoting in any one Facebook/Instagram/Twitter is mandatory)*	https://www.instagram.com/tecniaofficial?igsh=MXdxdzZwb2EwaWszNg==
No. of Students* *(only no. to be written, list in excel or word should be maintain at department level as proof for any further requirement)*	50
No. of Faculty* *(only no. to be written , list in excel or word should be maintain at department level as proof for any further requirement)*	02
No. of External Participants (students + faculty) *[write NA if not applicable]*	NA

(Geotag) Photograph*

Photograph of the Event with the Caption	Delhi, Delhi, India Tecnia Institute of Advanced Studies 3 PSP, Institutional Area Madhuban Chowk, Bhagwan Mahavir Marg, Sector 14, Rohini, New Delhi Lat 35.246525° Long 75.565246° 24/02/20 02:30 PM
Report: Description in (min 250 to max 800 words)*	Web security refers to protecting networks and computer systems from damage to or the theft of software, hardware, or data. It includes protecting computer systems from misdirecting or disrupting the services they are designed to provide. The course started with the introduction of World wide web and Internet. The resource person Dr. Vishal Khatri made the students aware of the concepts of hacking and hence security of data over Internet. The students learnt various types of web attacks and their countermeasures. They were taught about the pervasive insecurity of the modern web landscape and the need for programmers and system designers to improve their understanding of web security issues. The course covered all crucial topics related to web security which included, topics like Principles of web security, attacks and countermeasures, the browser security model, web app vulnerabilities, injection, denial-of-service, TLS attacks, privacy, fingerprinting, same-origin policy, cross site scripting, authentication, JavaScript security, emerging threats, defense-in-depth, and techniques for writing secure code. Course projects include writing security exploits, defending insecure web apps, and implementing emerging web standards. Additionally, students were trained on Methods for testing the security of web applications (e.g., penetration testing, vulnerability scanning). They were taught about the tools and techniques used in security assessments.

	They were made aware of common security protocols (e.g., HTTPS, SSL/TLS) which were in compliance with security standards (e.g., OWASP Top 10, PCI DSS). The entire course was covered in 30 Hrs with using a variety teaching pedagogies such as lecture, powerpoint presentations, case studies and real-world examples. Other methods used for teaching were interactive elements, such as group discussions, or practical labs that enhanced the learning experience. The students were given hands-on training on the systems to prevent and detect the various attacks. Finally, the students were assessed on the basis of Quiz, Practical and Viva voce. All the eligible students were given certificates based on their evaluation.
Learning Outcomes	The learning outcomes of the Value Added Course is as under: • Understanding of Web Security Principles • Application of Secure Coding Practices • Implementation of Authentication and Authorization Mechanisms • Knowledge of Encryption and Data Protection Techniques • Proficiency in Security Testing and Assessment • Adherence to Security Protocols and Standards
Attendance Sheet*	*Attached at the end of Report*
Feedback	*Sample feedback Attached at the end of Report*
Report Submitted by Convener *(write faculty coordinator name)*	Ms. Sania Sachdeva
For Office Use	
Sania **Signature of VAC Coordinator**	*Vishal,* HoD MCA-TIAS **Signature of School/Department Head** *(With Seal)*