# TECNIA INSTITUTE OF ADVANCED STUDIES
## NAAC ACCREDITED GRADE "A" INSTITUTE
### Master of Computer Applications

TIAS/MCA/VAC/2019-20/44                                           Dated: 27/04/2020

### Academic Session: 2019-20

Status on Date 27/04/2020

This is to certify that the course module for Value Added Course, entitled Certificate Course in Web Securityscheduled from 24.02.2020 to 27.04.2020 comprising of 30 hours deliverance has been completed by the resource person Dr. Vishal Khatri, Faculty in Department of Computer Applications with the module contents as under:

| S.No. | Contents Deliverance | Learning Outcomes |
|-------|----------------------|-------------------|
| 1 | Introduction to Web Security (1 Hrs) | Understand the fundamental concepts of web security, including common vulnerabilities and threats specific to web applications. |
| 2 | Web ApplicationArchitecture andTechnologies (4 Hrs) | Identify and mitigate security risks in webapplications, such as cross-site scripting (XSS), SQL injection, cross-site request forgery (CSRF), and insecure direct object references. |
| 3 | Injection Attacks (2 Hrs) | Implement secure coding practices to develop robust and secure web applications, including input validation, output encoding, and proper error handling. |
| 4 | Cross-Site Request Forgery (CSRF) (2 Hrs) | Apply web applicationsecuritytestingmethodologies and tools to identify vulnerabilities and assess the security posture of web applications. |
| 5 | Cross-Origin Resource Sharing (CORS) and Same-Origin Policy (4 Hrs) | Understand the principles of secureauthentication and authorization mechanisms, including session management, password hashing, and access control. |
| 6 | Authentication and Session Management (4 Hrs) | Configure and secure web servers, including HTTP security headers, SSL/TLS encryption, and secure configurations for popular web servers like Apache or Nginx. |

| | | |
|---|---|---|
| | Access Control (1 Hrs) | Implement security measures for securing APIs and web services, including authentication, authorization, and input validation. |
| 8 | Secure Coding Practices (3 Hrs) | Understand the importance of secure datastorage and transmission, including encryption secure protocols,and secure handlingof |
| 9 | Secure Communication(1 Hrs) | Conduct secure code reviews and vulnerability assessments to identify and remediate security weaknesses in web applications. |
| 10 | Web Application Firewalls (WAF) (2 Hrs) | Stay updatedwiththelatest web securityvulnerabilities, exploits, and best practices to proactively protect web applications. |
| 11 | Security Testing and Vulnerability Assessment (2 Hrs) | Understand the legal and ethical considerations in web security, including compliance with data protection laws, responsible disclosure, and ethical hacking guidelines. |
| 12 | Best Practices and Security Frameworks (4 Hrs) | Develop incident response skills to effectively respond to and handle security incidents related to web applications. |

All the above contents are delivered to the best of my knowledge and belief and nothing is withheld.

**Signature of Faculty**

**Name of Faculty: Dr. Vishal Khatri**

**Dated: 27/04/2020**

**Submitted to HoD-MCA, Department of Computer Applications**

## Students' Declaration

We would like to declare, that the course module for Value Added Course for the Certificate Course in Web Security scheduled from 24.02.2020 to 27.04.2020comprising of 30 hours, has been completed by the resource person Dr. Vishal Khatri, Faculty in Department of Computer Applications to our satisfaction and is able to help in developing our domain knowledge and capacity building.

| S.No. | Enrollment No. | Student's Name | Signature |
|-------|---------------|----------------|-----------|
| 1 | 00117004418 | ABHISHEK KUMAR | |
| 2 | 00117024418 | AASHNA CHOUDHARY | |
| 3 | 00217004418 | HIMANSHI RATHI | |
| 4 | 00317004418 | MANIK BHARDWAJ | |
| 5 | 00317024418 | KARTIK SANG | |
| 6 | 00417004418 | PRABAL SETHI | |
| 7 | 00517004418 | PRATEEK MITTAL | |
| 8 | 00517024418 | ANKIT SHARMA | |
| 9 | 00617024418 | PRATEEK CHHITORIA | |
| 10 | 00817024418 | ANJALI DOGRA | |
| 11 | 35117004418 | ANKITA BAJPAI | |
| 12 | 35217004418 | ASHIKA KARIWAL | |
| 13 | 35317004418 | GAURAV KRISHAN | |
| 14 | 35417004418 | RASHMI | |
| 15 | 35517004418 | UTKARSH AWASTHI | |
| 16 | 90117004418 | SUSHMITA | |
| 17 | 00617004418 | PRIYA | |
| 18 | 00521324418 | SAJAL TRIPATHI | |
| 19 | 00621324418 | ARJAN SINGH | |
| 20 | 00721324418 | PRIYAM MONDAL | |
| 21 | 00821324418 | ANJALI GUPTA | |
| 22 | 00921324418 | PULKIT GUPTA | |
| 23 | 40117004418 | RIJO ABRAHIM ROY | |
| 24 | 00117002019 | MANAV  GUPTA | |
| 25 | 00217002019 | SHIVAM  BHANDARI | |
| 26 | 00317002019 | ANANDITA | |

| | | | |
|---|---|---|---|
| 27 | 00417002019 | YASH  PARASHAR | Yash |
| 28 | 00517002019 | VANSHITA  VERMA | Vanshita |
| 29 | 00617002019 | NITIKA BHOLA | Nitika |
| 30 | 00717002019 | ISHA  BATRA | Isha |
| 31 | 00917002019 | DARSH  VERMA | Dveema |
| 32 | 01017002019 | AYUSH  JAGGA | Ayush |
| 33 | 01117002019 | SHUBHAM  CHAUDHARY | Shubham |
| 34 | 01217002019 | TUSHAR  SOHAL | TSohal |
| 35 | 01317002019 | YASH  BISHT | Yash Bisht |
| 36 | 01417002019 | SHIVAM  THAKRAN | Shivam |
| 37 | 01517002019 | SARTHAK  VIJ | Sarthak |
| 38 | 01617002019 | ADITYA  GOYAL | A. Goyal |
| 39 | 01717002019 | BHUMIKA  GOGNA | Bhumike |
| 40 | 01817002019 | SANTOSH  VERMA | Santosh |
| 41 | 01917002019 | ANJALI  JAIN | Anjali |
| 42 | 02017002019 | ADITYA  TIWARI | Aditya |
| 43 | 02117002019 | ROHIT  VERMA | Rohit |
| 44 | 02217002019 | ABHINAV  PAL | Abhinav |
| 45 | 02317002019 | ROHANDEEP | Rohandeep |
| 46 | 02417002019 | DIKSHA  DUREJA | Diksha |
| 47 | 02117002019 | KESHAV GULATI | keshav |
| 48 | 02217002019 | VANSHIKA  AGGARWAL | Vanshika |
| 49 | 02317002019 | JANUAL | Janual |
| 50 | 02417002019 | KUNIKA | kunika |