



## Six Week Summer Internship on

# Cyber Security: Operations and Technological Solutions

(Online Mode)

12<sup>th</sup> June –25<sup>th</sup> July, 2021 (including Project Work)

Organized by
Department of IT
Indira Gandhi Delhi Technical University for Women

Under the aegis of ISEA Project (Sponsored by Ministry of Electronics and IT, Govt. of India)

In association with
Anveshan Foundation, IGDTUW
Patron

Dr (Mrs.) Amita Dev, Hon'ble Vice Chancellor, IGDTUW

### **Organizing Committee**

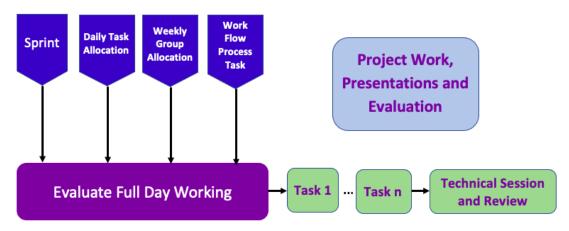
Prof. R K Singh, Chief Investigator, ISEA Project, IGDTUW
Prof. A K Mohapatra, HoD (IT), IGDTUW
Ms. Charu Gupta, Assistant Professor, Co-ordinator

#### **About the Summer Internship Program**

The technical sessions for Summer Internship program will be conducted from 12<sup>th</sup> June - 11<sup>th</sup> July 2021. The students will be learning the Concepts of Information Security Standard, Security Architecture, Threat Modelling, Identification, Detection and Mitigation of Security Vulnerabilities etc. at the end of the technical sessions, the students will carry out the project work 12<sup>th</sup> July - 23<sup>rd</sup> July 2021.

#### INTERNSHIP PEDAGOGY:

- The internship will be carried out in Online Mode with weekly off on Monday and Tuesday.
- Students will be placed in a Virtual Company and will report to a supervisor. Everyday a Sprint meeting and expert session will be conducted and the work of the day will be assigned to every intern.



- During daytime, intern will carry out the assigned job/work and submit the same.
- In the evening session, the technical concepts will be explained and queries of the students will be taken.
- Each student will beassigned a project. Students are required to submit a project report. The project report will be evaluated on 24<sup>th</sup> and 25<sup>th</sup> July 2021.
- The Best Project will be suitably rewarded.

#### **Course Contents**

## Technical Sessions (12<sup>th</sup> June – 11<sup>th</sup> July 2021)

Building Cyber Security skill-set through various case studies in:

- Introduction to Information Security Management System (ISMS), ISO27001, NIST, NCSC
- Build a strong Security Architecture and Analyzing a security architecture for deficiencies
- Threat Modelling
- OWASP Top 10
  - Injection / Broken Authentication / Sensitive
     Data Exposure
  - XML External Entities / Broken Access Control / Security Misconfiguration
  - XSS / Insecure Deserialization / Components with known vulnerabilities / Insufficient Logging & Monitoring
- Firewall, IPS/IDS, SIEM, Server Logs
- Use cases of Log Monitoring & Analysis

## Project Work (12<sup>th</sup> July -23<sup>rd</sup> July 2021)

Project Work

Objective Type Test(s) on various topics will be conducted for successful completion of the first phase of the Internship. The Project Work will be evaluated forsuccessful completion of the Internship.

#### **Resource Persons**

Experts from premier National and International academic institutions and Industry with vast experience in the area of Information Security.

#### Who can Apply

Internship is open to M.Tech., B.Tech., MCA students having knowledge of Programming, Computer Network and Information Security.

#### **How to Apply**

Interested candidates should fill the online registration form latest by <a href="mailto:09.06.2021">09.06.2021</a> by <a href="mailto:05:00">05:00</a> pm at the following link:

http://bit.ly/IGDTUW-ISEA-Internship-2021

#### **Registration Fee:**

Rs 1,500/- (for IGDTUW students)

Rs 2,000/- (for outside IGDTUW students)

#### **Bank Details for Registration Fee Payment**

Name and Address of Beneficiary : IGDTUW, Anveshan Foundation

Bank Account Number : 0900100 0021199

IFS Code : PSIB 000 1098

Name and Address of Bank : Punjab and Sind Bank, Kashmere

Gate, Delhi 110006

#### Certificate

On successful completion of the Internship certificate shall be awarded.

#### **Contact Us**

For any Query, please write to <a href="mailto:isea@igdtuw.ac.in">isea@igdtuw.ac.in</a>

#### **About the University**

Indira Gandhi Delhi Technical University for Women (IGDTUW) is a State University of Government of Delhi. The University facilitates and promotes studies, research, technology, innovation, incubation and extension work in emerging areas of professional education among women. The objective of the University is to foster industry relevant research and innovations and empower the women of our country through value based higher education making them employable, self reliant, responsible citizen of the country.

#### **About the Department**

Department of IT aims to prepare students to undertake careers involving innovation and problem solving using IT, or to undertake advanced studies for research careers in IT. The department has established its expertise in the emerging areas like Information Security, Machine Learning, Big Data Analytics, Software Developmentand Cryptography to name a few.

#### **ISEA Project:**

Department of IT has been awarded ISEA project from Ministry of Electronics and Information Technology, Govt. of India and is continuously engaged in capacity building in the area of information security to address the human resource requirement of the Nation.

#### **Anveshan Foundation:**

IGDTUW Anveshan Foundation is incorporated as a Section 8 company under the Company's Act 2013, MCA, Gol. It is promoted by 'Indira Gandhi Delhi Technical University for Women (IGDTUW)' andrecently received status of DST — TBI. Prime objective of IGDTUW Anveshan Foundation is to motivate and facilitate budding entrepreneurs towards their successful entrepreneurial journey, proving their success story, contributing entrepreneurial spawning and ultimately converging benefits to the society.