



# Engineering Staff College of India (Autonomous Organ of the Institution of Engineers (India)

INFORMATION TECHNOLOGY DIVISION



# About the Program

In today's digital age, cyber security is playing a pivotal role in business and individuals. The rise in cyber-attacks has made companies realize the need to secure their data and networks against potential threats. As a result, the demand for cyber security professionals has skyrocketed, and it's expected to keep rising in 2023.

With more businesses embracing digital transformation, cyber security has become a top priority. In the past few years, we have seen a significant increase in cyber attacks, data breaches, and other security incidents that have caused severe damage

to organizations worldwide. Companies have suffered financial losses, reputational damage, and legal consequences due to these incidents

To prevent such incidents from happening in the future, companies are investing more in cyber security infrastructure and resources. This investment includes hiring skilled professionals who can help detect, prevent and respond to security threats. Cyber security professionals are essential for keeping organizations safe from potential threats and ensuring business continuity.

According to recent studies, the demand for cyber security professionals has surged significantly, and this trend is expected to continue in 2023. The US Bureau of Labor Statistics reports that employment in the cyber security field is projected to grow by 31% from 2019 to 2029, which is much faster than the average for all occupations.

# Benefits of Cyber Security Program

- To provide a deeper knowledge on various aspects pertaining to cyber security.
- To cover vulnerability detection and analysis of web applications, mobile applications and other computer systems.
- Study aspects concerning the freedom of expressions using digital technology, the use and abuse of the Internet and the issues of digital piracy, data usage and privacy.
- Discuss the role of multiple cyber agencies, spanning the civil, government and defence domains
- To acquaint with the basic concepts of research methodology and help they develop the spirit of scientific inquiry.
- To identify vulnerabilities, learn to assess the risk to data and self.
- To introduce the principles, procedures and processes of cyber -forensics and cyber- crime investigations.

## **Admission Procedure**

- Written Test
- Interview

## **Course Duration**

The duration of the programme is one year and the maximum period for completion of the programme is three years including the year of admission subject to payment of Continuation Fee as per the Rules.

# Eligibility

- a. Any Graduate with minimum of 50% Marks
- b. Bachelor's Degree or an equivalent Degree from any recognized University or
- c. Candidates appearing for the final year examination of Graduation are also eligible to apply.

## Fee Structure Course FEE: Rs.1.20 lakh

- Convocation fee will be charged separately as per the Rules.
- Re-peat exam fee / Supplementary Exam fee will be charged @ Rs.500/- per paper
- Continuation fee beyond the minimum duration of the course till the maximum period is Rs.3000/- per year for Post-Graduate Certification of Cyber Security.
- Boarding & Lodging charges at campus (subject to availability) during classes/exam will be extra as per the Rules.

**NOTE:** The Institute reserves the right to revise the Fee structure from time to time.

Sale of Application Forms: 1st June, 2024 onwards Last Date of Submission: 30th July 2024

### Course Structure

The course syllabus is broadly divided into 6 subjects, 2 Semester course, Mini Project & Project work.

#### **SEMESTER I**

SI. No	Sub. Code	Name of the Subject	Credits
1	1.1	Operating Systems	4
2	1.2	Network Security Administration	4
3	1.3	Cyber Security & Ethical Hacking	4
4	1.4	Web Application Security	3
5	1.5	Cyber Security LAB	2
6	1.6	Cloud Fundamentals & Cloud Security	3
		Total	20

#### **SEMESTER II**

SI. No	Sub. Code	Name of the Subject	Credits
1	2.1	Programming & Database Concepts	4
2	2.2	Cyber Forensic & Crime Investigation	4
3	2.3	Web Application Penetrating Testing	3
4	2.4	Cyber Forensic Lab	2
5	2.5	Cyber Security Policies & Cyber Laws	3
6	2.6	Project	4
		Total	20

# Conduct of the Program

The advance certification program will be a period of one year.410 Hours blended mode Training (Offline/ Online) with 96 hours of Offline Training & 314 Hours of Online Training. Online session will be conducted for Week Ends 4 Hours per day (Sat & Sun). Classroom session will be conducted for 48 Hours in each Semester

### **Evaluation Scheme**

Based on these 6 subjects examination in 5 papers is held for 100 marks each and Lab 50 Marks each & Project Work 100 Marks.

Sub. Code	Paper Code	Name of the Subject	Total Marks	
		SEMESTER - I		
1.1	CS 1.1	Operating Systems	100	
1.2	CS 1.2	Network Security Administration	100	
1.3	CS 1.3	Cyber Security & Ethical Hacking	100	
1.4	CS 1.4	Web Application Security	100	
1.5	CS 1.5	Cyber Security LAB	50	
1.6	CS1.6	Cloud Fundamentals & Cloud Security	100	
SEMESTER - II				
2.1	CS 2.1	Programming & Database Concepts	100	
2.2	CS 2.2	Cyber Forensic & Crime Investigation	100	
2.3	CS 2.3	Web Application Penetrating Testing	100	
2.4	CS 2.4	Cyber Forensic Lab	50	
2.5	CS 2.5	Cyber Security Policies & Cyber Laws	100	
2.6	CS 2.6	Project Work	100	

## **Award of Grades**

The performance of the students would be evaluated on with corresponding grades as mentioned below:

Percentage of Marks	Grade	
90% and above	O (outstanding)	
Below 90% but not > 80%	A + (Excellent)	
Below 80% but not > 70%	A (Very Good)	
Below 70% but not > 60%	B + (Good)	
Below 60% but not > 50%	B (above Average)	
Below 50%	F(Fail)	

A student to be successful should obtain a minimum of 50% marks or the equivalent grade, i.e., B in every subject. However, the candidate who fails to obtain the minimum grade (i.e., B) shall be given chance(s) to reappear for the examination whenever the same is conducted till the completion of the maximum period, i.e., three years from the date of admission on payment of repeat examination fee and Continuation Fee as prescribed.

## Award of the PG Certification

A student to be eligible for the award of the PG Certification should complete all courses obtaining at least 50% marks or the equivalent grade, i.e., B in every subject.

A student admitted to the program has to complete all the prescribed requirements within a maximum period of three years from and including the year of admission in order to be eligible for the award of the PG Certificate.

# Procedure for Re-counting / Re-evaluation

The candidates desiring of revaluation have to apply along with re-evaluation fee within 15 days from the date of declaration of results by written submission to the Registrar.

On receipt of request for revaluation, the paper would be sent to subject expert other than the evaluator and the results of the same will be communicated within 45 days. The Re-evaluation result is final and there will be no further appeal to the same. No candidate who has secured 50 marks or above in the examination is allowed to re-appear in the examination or apply for re-evaluation for improving marks / grade.

The recounting of the paper would be done without collecting any fee but on the written request to the Director by the candidate.

# **Faculty Details**

- Dr.Indrasana Rao, ISMS Lead Auditor, Advocate
- Mr Uday Kiran Kumar, Cyber Security Consultant, Trainer.
- Mr Syed Azgar, Senior Faculty& Head IT, ESCI
- Mr. Ram Ganesh, Director, CyberEye Research
- Mr Mohd Irfan Ali, Network Security Consultant.
- Mr Prasanth Saxsana, Engineer RRVPNL.
- Mr Syed Hussain, Cyber Crime Advisor for Law Enforcement Authorities & CID Cyber Cell.



Contact Details:

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