

**AICTE SPONSORED SHORT-TERM COURSE**

on

**"Network Security - Theoretical & Practical Perspective"**  
(August 2-7, 2010)  
(One Week)

Organised by

**Continuing Education Programme (CEP)**  
Indian Institute of Technology, Kharagpur 721302, India

in

**School of Information Technology**  
Indian Institute of Technology, Kharagpur 721302, India

<http://sit.iitkgp.ernet.in/~netsec2010>

**Coordinators**

**Dr. S.K. Ghosh**

Associate Professor  
School of Information Technology  
IIT Kharagpur 721302  
Email: skg@iitkgp.ac.in

**Dr. Debdeep Mukhopadhyay**

Assistant Professor  
Department of Computer Science & Engineering  
IIT Kharagpur 721302  
Email: depdeep@cse.iitkgp.ernet.in

**Contact details**

Email: [netsec2010@gmail.com](mailto:netsec2010@gmail.com)

Website: <http://sit.iitkgp.ernet.in/~netsec2010>

## **OVERVIEW**

Communication networks are often used to transfer valuable and confidential information for a variety of purposes. As a consequence, they attract the attention of attackers to steal or misuse information, or to disrupt or destroy the information flow. Some attacks are planned and specifically targeted, whereas others may be opportunistic, resulting from eavesdropping activities. Further, the threats to network are continually increasing with discovery of new vulnerabilities, and solutions to counter those threats are needed. This course attempts to provide an insight into the enduring principles of network security and will introduce some of the theoretical and practical concepts of network security.

## **TOPICS TO BE COVERED**

- TCP/IP Protocols & Internetworking
- Security Issues in TCP/IP
- Overview of Cryptography
- Secret-key & public-key cryptography
- Block ciphers, Stream ciphers, Digital signature
- Cryptanalysis of Classical Cryptosystems
- Certification, Public-Key Infra-structure (PKI)
- Security Policies / Models
- Network-layer, transport-layer, application-layer security
- Attack graph, Vulnerability, Exploitation framework
- Overview of Wireless security, Cloud security

## **COURSE MATERIALS**

Necessary course materials will be provided to the participants during the course.

## **WHO CAN ATTEND**

The course is meant for

- (1) Teachers of AICTE approved Engineering Colleges/Universities

Few seats will be available to (please check website for details)

- (2) Faculty from other engineering colleges
- (3) Students with minimum qualification of BE/BTech in CS/IT/ECE/EE (Final year student with good academic career may also be considered)
- (4) Executives from Industry, Corporate, Government Organizations.

All applicants are expected to have basic knowledge of (i)Computer Networks and (ii)Engineering Mathematics.

## **HOW TO APPLY**

The filled registration form (along with Demand Draft, if applicable) should reach the course coordinator on or before **July 10, 2010**.

## **COURSE FEE**

**AICTE Teachers: No Registration Fee** will be charged from the teachers nominated by the AICTE approved Engineering Colleges/ Universities. The selected teachers from AICTE approved Engineering Colleges/ Universities will be paid a maximum of AC-3 tier by the shortest route. [As per rule of CEP, IIT Kharagpur]

For other interested participants, a separate notification will be available in the website - <http://sit.iitkgp.ernet.in/~netsec2010>

## **NOTIFICATION OF PARTICIPATION**

All **Selected Participants** will be informed through **email** by 20-July-2010. The list of participants will be available in the course website also.

## **FOOD & ACCOMMODATION**

All Participants will be provided food (breakfast, lunch, dinner) & accommodation (Non-AC Twin sharing, Dormitory) in the Institute campus. Details of accommodation will be sent to the participants in due course.

## **IMPORTANT DATES**

Last date for receiving applications	July 10, 2010
Notification to Selected Participants	July 20, 2010
Course dates	August 02 to August 07, 2010

## REGISTRATION FORM

### AICTE SPONSORED SHORT-TERM COURSE ON **“Network Security – Theoretical & Practical Perspective”**

School of Information Technology  
Indian Institute of Technology, Kharagpur 721302, India  
**August 2-7, 2010**

*Application form, duly filled (in BLOCK letter) should reach the course coordinator on or before **July 10, 2010***

1. Name (in Full) : \_\_\_\_\_
2. Male or Female : \_\_\_\_\_ (for accommodation purpose)
3. Designation : \_\_\_\_\_
4. Specialization : \_\_\_\_\_
5. Institute/Organization : \_\_\_\_\_  
\_\_\_\_\_
6. Mailing Address : \_\_\_\_\_  
\_\_\_\_\_ State \_\_\_\_\_ PIN \_\_\_\_\_
7. Email : \_\_\_\_\_
8. Telephone No. : \_\_\_\_\_ Mobile No: \_\_\_\_\_
9. Highest Educational Qualification: \_\_\_\_\_
10. Professional Experience (in years) : \_\_\_\_\_

Please register me for the course on “*Network Security – Theoretical & Practical Perspective*”, to be conducted at IIT Kharagpur **during August 2-7, 2010.**

\_\_\_\_\_  
Signature of the Applicant & Date

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## **Certificate**

*(on your Institute Letter Head)*

Certified that Mr/Ms/Dr. \_\_\_\_\_ is being nominated for attending short-term course on “*Network Security – Theoretical & Practical Perspective*” at IIT Kharagpur during **August 2-7, 2010**. Our Institute/College/University is approved by AICTE.

\_\_\_\_\_  
Signature of the

**Head of the Institution / Competent Authority**

Name :

Designation:

Institute:

*[Seal of the Institute]*