Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT)

Call for Registration and Participation

One Week Faculty Development Programme on “Cyber Security”

For Faculty in Universities, Colleges and Institutes of Higher Education

(14th October to 19th October, 2019)

Venue: Department of CSE, NIT Silchar, Assam

Jointly Organized by Shivaji University, Kolhapur

and

Department of CSE, National Institute of Technology Silchar

under TEQIP-III
About Shivaji University, Kolhapur
Shivaji University, established in 1962, is named after the Great Maratha Warrior and founder of the Maratha empire Chhatrapati Shivaji. One of the major objectives behind foundation of this University was to cater to the regional needs of South Maharashtra. The jurisdiction of the University is spread over three districts viz. Kolhapur, Sangli and Satara with strength of about 3,00,000 students studying in 280 affiliated colleges and recognized institutes. The recent phase of the University can be termed as "a pursuit of academic excellence". Since last 4-5 years, several attempts are being made to overcome the image of University as a regional University.

The University's efforts towards excellence are being recognized by the substantial grants received from funding agencies like UGC, DST, DBT etc. Another indicator of recognition of University is collaborations with premier institutes in the country. Shivaji University has recently signed MOU with Bhabha Atomic Research Centre, Mumbai for research in Material Science. It has also joined hands with Indian Institute of Geo-Magnetism, Mumbai and industries like Phyto-Pharma. Prestigious institutes like Maharashtra Police Academy, Nashik and Centre for Social Studies, Surat have sought affiliation with the Shivaji University. Shivaji University has been re-accredited by National Assessment and Accreditation Council (NAAC) Bangalore, with "A" Grade (CGPA-3.16) (2014). Shivaji University has bagged the 28th position in the rankings announced by the National Institutional Ranking Framework (NIRF) of Union Ministry of Human Resource Development (MHRD). As per the INFLIBNET report, Shivaji University stands second in use of Nature publications Group's (NPG) e-journal usage in the country. The University has also signed MoU with Centre for Development of Advanced Computing (C-DAC), Pune. Under the agreement, the two institutions will exchange information and communication technology.

About Department of CSE, National Institute of Technology Silchar
National Institute Of Technology, Silchar (राष्ट्रीय प्रौद्योगिकी संस्थान, सिलचर) is one of the 31 National Institutes of Technology in India and was established in 1967 as a Regional Engineering College in Assam. In 2002 it was upgraded to the status of National Institute of Technology and was declared as Institute of National Importance under the National Institutes of Technology Act, 2007. NIT Silchar stands 51st Rank in NIRF 2019.

The undergraduate program in Computer Science and Engineering started with the admission of its first batch of B.E. students in the year 1987. It was then under the Department of Electrical Engineering from which it along with the undergraduate program in Electronics and Communication Engineering got separated under the Department of Electronics and Communication Engineering in the year 2000. From the year 2000 till 2008 the department was under the Department of Electronics and Communication Engineering. In the year 2008 the Department of Computer Science and Engineering became an independent department. The department offers B. Tech., M. Tech. and Ph. D. programmes. With sound Vision and Mission, this department provides a platform for nurturing Engineers and researchers to lead the country in particular and the entire World in general. The department is well-equipped with ultra-modern facilities for research. To name a few the department has Blade Server (IBM 7 blades), Thermal Cameras, Workstations, latest configured Desktop PCs, etc. Furthermore, the department has procured dozens of software, namely, IBM Rational Rose, QUALNET, Red Hat Linux, Windows, Matlab, etc. The faculties and the students of the department work in tandem to create a unique identity in the country.
About Resource Centre in Cyber Security and Data Sciences:
National Resource Centre in Cyber Security and Data Sciences is established under the guidance RUSA Maharashtra from the grants received from the MHRD, Government of India under the 'Pandit Madan Mohan Malviya National Mission on Teachers and Teaching (PMMMNMTT)' scheme. Objective of this centre is capacity building of human resource which is recognized as a critical element to strengthen not only the organization/ institutions but even the people at grassroots level by spreading awareness on Cyber security. There is a large gap between demand and availability of trained human resource in Cyber Security, who can beneficially utilize the available information for cyber safety. Cyber security trained human resource is needed both as the provider and user of Technology. This is vital for sustainable development so that informed decision making can be done at all levels.

About the Training:
Cyber security is need of the time, as estimated by National Association of Software and Services Companies (NASSCOM)'s Cyber security Task Force, there is need of 1 million trained cyber security professionals in India by 2025. But, currently there are only 62,000, so to fill this gap there is need to introduce cyber security courses at graduate and postgraduate levels. Our aim is to train teachers with practical skills so that more and more cyber security experts can be shaped every year. It is expected that the 'Train the Trainers' approach shall percolate to the students in colleges and make them suitable to take up challenges in the domain of Cyber Security which is the need of this decade and will thus improve their employability enhancing campus placement. In addition, Cyber Security courses will help in start-ups and employment opportunities. The faculty shall be also trained specifically as knowledge creator with strong practical 'skills' and theoretical details.
The trainers are NASSCOM approved and certified by Sector Skill Council (SSC) in Cyber security.

Objectives of the Training:
• Train 40 Faculty Members on Cyber Security
• Building networks of professional
• Forming consortium of industries specialized in cyber security which will interface with Shivaji University Kolhapur
• Sensitizing cyber security to masses at large for strengthening cashless transactions.

Eligibility:
Faculty Members from Engineering, Science and Technology, Humanities, Social Sciences, Commerce and Management discipline from Universities, Colleges, NITs, IIITs, Engineering Colleges and other Institutions of Higher Education.

Programme Schedule:
**Dates:** 14th October to 19th October 2019   **Venue:** Department of CSE, NIT Silchar

<table>
<thead>
<tr>
<th>Day</th>
<th>Day and Date</th>
<th>Course Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day 1</td>
<td>Monday, 14/10/2019</td>
<td>Introduction and Computer Security- I</td>
</tr>
<tr>
<td>Day 2</td>
<td>Tuesday, 15/10/2019</td>
<td>Network Security I</td>
</tr>
<tr>
<td>Day 3</td>
<td>Wednesday, 16/10/2019</td>
<td>Network Security II and Email Security, I</td>
</tr>
<tr>
<td>Day 4</td>
<td>Thursday, 17/10/2019</td>
<td>Website Security I</td>
</tr>
<tr>
<td>Day 5</td>
<td>Friday, 18/10/2019</td>
<td>Website Security II and Cyber Law,</td>
</tr>
<tr>
<td>Day 6</td>
<td>Saturday, 19/10/2019</td>
<td>Mobile Security and Cloud Security</td>
</tr>
</tbody>
</table>
Laboratory assignments:
1. Installing, Configuring and Commissioning of Proxy Server using FOSS. Studying issues like Browser security, email security, difference between http, https etc.
2. Perform port scanning using NMAP (Network Mapper).
3. Analyse the network traffic using wireshark or any other network sniffer.
4. Collect the Owner’s information using spyware.
5. Steganography: Perform data hiding using covered writing
6. Identification of virus infected file using virustotal.com
7. Understanding trace route functionality using open visual trace route
8. Vulnerability analysis in web application using Zed Attack Proxy
9. Isolating WLAN Traffic using Separate Firewall for VPN Connection
10. To Create a Virtual Private Network (VPN) over WAN
11. To evaluate application response time in the presence and absence of a firewall.
14. Group Policy management
15. ICMP Ping
16. Subnetting
17. Firewalls
18. RIP
19. OSPF
20. VPN
21. VLAN
22. Case study on IT Act 2000
23. Case study on cyber attack / cyber crime

Registration:
Participants must register through online web-portal only. No need to send any printed documents to the Resource Center Shivaji University. Preference will be given on First Come First Serve basis. Registration and participation is free of cost.
Registration Link: [http://sangnaksuraksha.com](http://sangnaksuraksha.com)
The confirmation of participation will be made available on web-portal and it will also be informed through email.

Instructions for the Participants:
- Attendance at all sessions is mandatory. Lunch and Tea will be provided.
- Outstation participants will be provided accommodation on payment basis. You can send the request to ldsingh.cse@gmail.com
- No TA/DA will be given to participants

Technical Requirements from participants:
- Participants should carry their own laptop as well as debit cards, credit cards, payment wallets, net banking, UPI, mobile banking, paypal, Aadhar, PAN card with them for sample demos.
- Participants should carry Smartphone either android / ios with them.
- Participant should focus on smartphone apps like True caller, PayTM, PhonePe, Google Pay, PayZApp, Authenticator, Facebook, WhatsApp, Instagram.

Important Note: This FDP under PMMMNMTT is applicable for CAS promotions as per UGC gazette.
Organizing Committee

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Hon. Prof. Dr. D. B. Shinde
Vice Chancellor
Shivaji University, Kolhapur

Hon. Prof. Sivaji Bandyopadhyay
Director
National Institute of Technology Silchar

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