About the Department of Computer Science and Engineering
Department of Computer Science and Engineering has MoUs for Research, Consultancy and training with multinational companies and government agencies such as CISCO, Citrix, Nihon, Gnostice, Sapient ,Infosys Technologies and Karnataka Forest department. Department has industry sponsored labs from CISCO, IBM and Nvidia GPU research centre. Students are encouraged to take up interdisciplinary research in various domains of computer science like computer vision, Data Mining, Networking, high performance computing etc. and are placed in reputed companies. The department has partnership with EC-Council: a cybersecurity certification, education, training, and services company based in Albuquerque, New Mexico.

About the workshop
India assumed the presidency of G20, the grouping which brings together 20 of the world’s largest economies. Enhanced cybersecurity cooperation at the G20 forum can contribute to ensuring the security and integrity of critical infrastructure and digital public platforms. Therefore, cybersecurity must be a key focus area in the digital agenda under India’s presidency in 2023. With this motivation a 6-days workshop on Cybersecurity in Industry 4.0 is proposed

Industry 4.0, also known as the fourth industrial revolution, is characterized by the integration of advanced technologies, such as the Internet of Things (IoT), artificial intelligence, big data, cloud computing, and automation, into traditional manufacturing and industrial processes. While these technologies bring tremendous opportunities for efficiency and productivity, they also introduce new cybersecurity challenges. The objectives of a Faculty Development Program (FDP) on cybersecurity and Industry 4.0 are to equip educators and researchers with the knowledge, skills, and tools necessary to understand, address, and mitigate the cybersecurity challenges arising from the integration of advanced technologies in the context of Industry4.0.
Workshop Content

Understanding Industry 4.0: Provide participants with a comprehensive understanding of the key concepts, technologies, and applications of Industry 4.0, including the Internet of Things (IoT), artificial intelligence (AI), big data, cloud computing, and automation, Information security Act.

Vulnerability Analysis: Identify security loopholes in a target organization’s network, communication infrastructure, and end systems.

Hacking Web Servers, Web Applications: Web server attacks, including a comprehensive attack methodology used to audit vulnerabilities in web server infrastructures and counter measures.

Securing Cyber-Physical Systems: Explore the unique challenges and best practices for securing cyber-physical systems in manufacturing, energy, transportation, and other Industry 4.0 sectors.

AI and Machine Learning Security: Explore the intersection of artificial intelligence, machine learning, and cybersecurity, including potential AI-based attack vectors and AI-driven defense mechanisms.

Best Practices and Case Studies: Present real-world case studies and best practices from industry and academia to illustrate successful cybersecurity implementations in Industry 4.0 settings.

BlockChain Security and Cyber Forensics. (Most of the sessions include hands-on training on CyberSecurity tools)


Patrons:
Dr. M P Shyam, President, RSST, Bengaluru
Dr. A V S Murthy, Hon Secretary, RSST, Bengaluru
Sri. D P Nagaraj, Joint Secretary, RSST, Bengaluru

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Dr. Geetha K S, Vice Principal, RVCE
Dr. Shannukha Nagaraj, Dean Academics, RVCE
Dr. Uma B V, Dean Student Affairs, RVCE

Main Coordinator:
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2. Dr. Satish V. Motammanavar Assistant Professor, Department of Mathematics, RVCE
3. Mr. Vasanth M L, CSE, RVCE
4. Ms. Priyanka R, CSE, RVCE

Objectives of the workshop:
1. The aim of the FDP is to introduce the methodologies and framework of Cybersecurity in the context of Industry 4.0.
2. The FDP includes- Impacts of Hacking; vulnerability analysis, securing CPS and USE of AI/ML in Cybersecurity
AICTE Training and Learning Academy (ATAL) Sponsored One week Faculty Development Program on CyberSecurity for Industry 4.0
9th to 14th October 2023
Technically supported by EC Council

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<td><strong>Day/Date</strong></td>
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<td><strong>October 9th, 2023 Monday</strong></td>
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<td><strong>October 11th, 2023 Wednesday</strong></td>
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| October 12th, 2023 Thursday | Research Methodology  
Dr. K N Subramanya, Principal  
R.V.College of Engineering | MCQs, reflective journal and feedback | Industry Visit Dell Technologies Ltd. |
| October 13th, 2023 Friday | AI and Machine Learning Security  
Mini TT Technologist at Dell Technologies  
Bengaluru, Karnataka, India | Threat Intelligence and Incident Response  
Kiran Kumar  
Chief Architect Cyber Recovery Solution, Distinguished Engineer  
at Dell EMC  
Bengaluru, Karnataka, India | Hands on Training  
Tools and techniques to demonstrate  
IDS and IDPS system  
Dr. Minal Moharir  
Dr. Ashok Kumar A R  
Dr. Mohana  
| Article discussion |
| October 14th, 2023 Friday | Blockchain Security  
Gaurav Yellure  
Software Developer  
JP Morgan  
Bengaluru, Karnataka, India | Best Practices and Case Studies  
Akshay Koshy  
Arcesium Technologies Pvt Ltd  
Bengaluru, Karnataka, India | MCQs, reflective journal and feedback  
| Valedictory And Feedback |
AICTE Training and Learning Academy (ATAL) Sponsored One week Faculty Development Program on CyberSecurity for Industry 4.0

The objectives of a Faculty Development Program (FDP) on cybersecurity and Industry 4.0 are to equip educators and researchers with the knowledge, skills, and tools necessary to understand, address, and mitigate the cybersecurity challenges arising from the integration of advanced technologies in the context of Industry4.0.

**Confirmation Link**
https://forms.gle/9jKJSySGpHwWJYKP9

**Date**
9th October 2023 - 14th October 2023

**Timings**
9:00 am - 4:45 pm

**Venue**
Department of Computer Science and Engineering, R.V. College of Engineering