

## ABOUT GNITS

G. Narayanamma Institute of Technology & Science (GNITS), a leading Engineering college in Hyderabad for women, named after the wife of late Sri G. Pulla Reddy garu, a great Philanthropist, in 1997 with a deep sense of thought that empowering women will empower many generations to come. The college is devoted to excellence in teaching, research, and innovation, and to developing leaders with the courage, wisdom, and technologies to meet the challenges in the future and make a difference to the world. The vision of the institute is to become a center of quality education in Engineering and Technology for women's empowerment. Since its inception, for the last 25 years, the institution is providing excellent learning facilities for Technical Education among women to enhance and build up a new generation of thinkers, innovators, and planners in the realms of Science and Technology. Along with Excellent Placements and internships, students have won National Level top prizes from CSI, JHUB, SIH, and TalentSprint. GNITS has its proud Alumni serving as IAS officers, Gazetted officers in Govt and Public Sector organizations, and Global leadership roles in reputed MNCs. It is today considered one of the best engineering colleges in Telugu states, providing excellent placements, nurturing young women towards industry-oriented roles, and promoting Women in Leadership and Entrepreneurship.

## ABOUT IT DEPARTMENT

The Department of Information Technology at G. Narayanamma Institute of Technology and Science (GNITS) was established in 1997 with the vision of establishing a premier transformative learning community that promptly responds to the challenges of Information Technology. It is a proudly affiliated institution with Jawaharlal Nehru Technological University in Hyderabad and has received accreditation from the All India Council for Technical Education (AICTE). The department has remarkable milestones and recognition in recent years. Our B. Tech (IT) and M. Tech (CNIS) programs have been accredited by the National Board of Accreditation (NBA) for three years, demonstrating the quality and excellence of our academic offerings. The National Assessment and Accreditation Council's (NAAC) accreditation from 2019 to 2023 is a further indication of our dedication to providing a conducive learning environment. Our department's highly qualified and devoted faculty, with a 100% ratification rate and an impressive 90% retention rate, ensures that our students receive the best possible education.

## ORGANIZING COMMITTEE:

### PATRONS

Sri. G. Raghava Reddy, Chairman, GNITS.  
Smt. G. Srividya Reddy, Vice Chairman, GNITS.

### CHAIRMAN

Dr. K. Ramesh Reddy, Principal, GNITS.

### CONVENER

Dr. S. Ramacharan,  
Professor & Head, Dept. of IT, GNITS

### COORDINATOR

Dr. Supriya Vaddi, Associate Professor,  
IT, GNITS.

### CO-COORDINATOR

Ms. D. Vandana Assistant Professor,  
IT, GNITS

### IMPORTANT DATES:

Last Date of submission : 25-01-2024  
Information of acceptance : 30-01-2024

**FDP DATES** : 05-02-2024 to 10-02-2024

**Mode of Conduct** : OFFLINE

### Registration Fee:

Free for all participants and e-certificate will be issued by ATAL.

### Registration Link:

<https://forms.gle/CZBcxwqPvSiaqX7J6>

### Contact us:

Dr. V. Supriya,  
Associate Professor & Dept. of IT,  
GNITSPH: 9949572198



## ONE WEEK ATAL FDP ON

### Vulnerability Assessment and Penetration Testing of Web Applications using Tools

5<sup>th</sup> February to 10<sup>th</sup> February, 2024

Organized by  
**Department of IT**



## G. Narayanamma Institute of Technology & Science

Autonomous (For Women)

Accredited by NAAC of UGC&NBAA An ISO  
9001:2015 Certified Institute Shaikpet,  
Hyderabad – 500 104, Telangana State, India.



# ONE WEEK ATAL FDP ON

## Vulnerability Assessment and Penetration Testing of Web Applications using Tools

### Abstract:

The ATAL FDP on “Vulnerability Assessment and Penetration Testing of web applications using tools” aims at training faculty and post graduate students in field of cyber security. As the complexity of systems is increasing day by day more and more systems are vulnerable to attacks. Attackers use these vulnerabilities to exploit the victim's system. It is better to find out these vulnerabilities in advance before attackers do. The power of Vulnerability assessment is usually underestimated, but Vulnerability Assessment and Penetration Testing can be used as a cyber-defense technology to provide proactive cyber defense.

This FDP would focus on imparting knowledge and skills to identify and mitigate security vulnerabilities in web applications through assessment and testing phases.

"Vulnerability Assessment and Penetration Testing on Web Applications using Tools" suggests a research or development direction that aims to discover and prioritize the security vulnerabilities or potential threats to each asset.

The planned research articles, hands on and industrial visit would enable the participants to take up research in this area.

### Objectives:

1. To provide exposure to Faculty, Research scholars, Students, and Industry persons in the areas of Vulnerability Assessment and Penetration Testing.
2. To provide hands on for different security tools.
3. Provide fundamentals on designing a safe system, performing secure coding, and testing operational security.
4. To Discover and prioritization of the security vulnerabilities or potential threats to each asset.
5. To build trust in the cyber security tools capabilities by providing understandable explanations.

### Expected Outcome:

1. The faculty would be aware of different vulnerabilities and their assessment.
2. Practical knowledge on usage of tools for penetration testing.
3. Fundamentals on designing a safe system for preventing attacks
4. Secure coding
5. Testing operational security of built in applications
6. Entire life cycle of Vulnerability Assessment and Penetration Testing.
7. Industrial exposure
8. The faculty would gain good knowledge both in theory, practical and practice thus enabling them to each better, guide projects and perform research in this area.

### Topics:

The workshop major topics comprehend, but are not limited to:

- Basics of Penetration Testing
- Introduction to vulnerability assessment in web applications.
- Security testing of web applications.
- Web application pen testing.
- Penetration testing of a web application.
- Vulnerability Assessment.
- Information security and cryptography.
- Designing a secured software.
- Testing operational security of application.
- Network analysis and Packet sniffing.
- Attacks.
- Bypassing Antivirus Applications and Post Exploitation.
- Case Studies.
- Literature Review

### Resource Persons:

Resource persons are Professors from IIT, Central University, NIT, and other reputed State Universities.

### LOCATION & TRANSPORT:

The college is located 5kms from Mehdipatnam (on the way to HCU) near Darga bus stop. BUS Route Nos (from Mehdipatnam): 116,118G, 216, 217, 6C, 126.