

Doctor Harisingh Gour Vishwavidyalaya

(A Central University)

Sagar (M.P.)

Accredited with 'A' grade by NAAC

Announces

Five Day Workshop

On

Cyber Security

October 14-18, 2019



Under Scheme of

AICTE Training And Learning (ATAL) Academy

Programmes

Organized by:

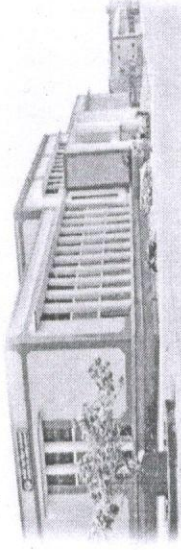
Department of Computer Science and Applications

Doctor Harisingh Gour Vishwavidyalaya

(A Central University)

Sagar: 470003(M.P.)

ABOUT VISHWAVIDYALAYA



Doctor Harisingh Gour Vishwavidyalaya (A Central University) Sagar, formerly known as University of Saugar, was established on 18th July 1946 by Dr. Sir Hari Singh Gour (Nov. 26, 1870 – Dec. 25, 1949) by his lifetime saving. This 18th University of India and the oldest and the biggest University of Madhya Pradesh has perhaps the singular distinction of being founded by the munificence of a single person's hard earned money of about two crore of rupees.

Doctor Harisingh Gour Vishwavidyalaya, Sagar, campus is spread over about 1300 acres. It was upgraded to a Central University on 15th January 2009 and was accredited 'A' Grade (3.04 score) by NAAC in the third cycle in 2015. The University offers multidisciplinary academic programmes at undergraduate, postgraduate and doctoral levels through its 11 Schools with sound infrastructure for innovative approach of teaching. The University has laboratories equipped with modern and sophisticated instruments to encourage quality research.

ABOUT DEPARTMENT

Department of Computer Science and Applications was established in academic year 1996-97 with a program DCA (Diploma in computer Applications) and BCA (Bachelor in Computer Applications). Subsequently Master of Computer Application (MCA) course was introduced in the year 1998. Presently, department offering three courses BCA, MCA and Ph.D. in Computer Science and very soon going to start Post Graduate Diploma in Big Data Analytics (PG-DBDA) programme which is theoretical and practical based course.

HOW TO REACH SAGAR

Sagar well connected by rail and roads. Sagar railway station is mentioned as Saugar (SGO) in railway time table is located in Bina-Katni section of west central railway. There is direct train connectivity for Delhi, Mumbai and Kolkata. Sagar is also connected with excellent road from Bhopal (190 Km), Jabalpur (185 Km), Jhansi (200 Km) and Bina (75 Km). the nearest airport is Bhopal and Jabalpur.

CHIEF PATRON

Prof. Raghavendra. P. Tiwari

Hon'ble Vice Chancellor,

Doctor Harisingh Gour Vishwavidyalaya (DHSGV),
Sagar (M.P.)

PATRON

Prof. Diwakar Shukla,

Dean (School of Mathematical and Physical Sciences)
DHSGV, Sagar

ADVISORY COMMITTEE

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Dr. Jai Singh, DHSGV, Sagar

COORDINATOR

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All India Council of Technical Education

(AICTE),

New Delhi

gkrsingh

COURSE CONTENTS

Cyber Security Concepts and Need: Essential Terminologies: CIA, Risks, Breaches, Threats, Attacks, Exploits, Global Political and Economical effect. Open Source/ Free/ Trial Tools: nmap, zenmap, Port Scanners, Network scanners.

Cryptography and Cryptanalysis: Introduction to Cryptography, Symmetric key Cryptography, Asymmetric key Cryptography, Message Authentication, Digital Signatures, Applications of Cryptography, Overview of Firewalls, User Management, VPN Security, Security Protocols: - security at the Application Layer- PGP and S/MIME, Security at Transport Layer- SSL and TLS, Security at Network Layer-IPSec. Open Source/ Free/ Trial Tools: Implementation of Cryptographic techniques, OpenSSL, Hash Values Calculations MD5, SHA1, SHA256, SHA 512, Steganography (Stools)

Network Infrastructure Security: Introduction to System Security, Server Security, OS Security, Physical Security, Introduction to Networks, Network packet Sniffing, DOS/ DDOS attacks, Assets Management and Audits, Vulnerabilities and Attacks, Intrusion detection and Prevention Techniques, Host based Intrusion prevention Systems, Security Information Management, Network Session Analysis, System Integrity Validation.

Vulnerabilities & Safe Guards: Vulnerabilities-Overview, vulnerabilities in software, System administration, Complex Network Architectures, Open Access to Organizational Data, Weak Authentication, Authorization, Unprotected Broadband communications, Poor Cyber Security Awareness.

Malware: Malware, Types of Malware: Virus, Worms, Phishing, Trojans, Rootkits, Robots, Adware's, Spywares, Ransom wares, Zombies etc., OS Hardening (Process Management, Memory Management, Task Management, Windows Registry/ services another configuration), Malware Analysis.

Security in Evolving Technology: Biometrics, Mobile Computing and Hardening on android and ios, IOT Security, Web server configuration and Security. Introduction, Basic security for HTTP Applications and Services, Basic Security for Web Services like SOAP, REST etc., Identity Management and Web Services, Authorization Patterns, Security Considerations, Challenges.

Cyber Laws: Cyber Security Regulations, Roles of International Law, the state and Private Sector in Cyberspace, Cyber Security Standards. The INDIAN Cyberspace, National Cyber Security Policy 2013.

Cyber Forensics: Need of Cyber Forensics, Cyber Evidence, Documentation and Management of Crime Scene, Image Capturing and its importance, Partial Volume Image, Web Attack Investigations, Denial of Service Investigations, Internet Crime Investigations, Internet Forensics, Steps for Investigating Internet Crime, Email Crime Investigations.

WHO SHOULD ATTEND

Faculty member working in AICTE approved Institutions/Colleges are eligible for the workshop. Students studying in AICTE approved institutions/Colleges are also eligible for the workshop.

RESOURCE PERSONS

The course content will be delivered from a pool of experts from Internal Faculties, Industry and other institutions of repute.

SELECTION PROCESS

A limited number of seats (50) will be there on first-cum-first-serve basis and selected candidates will be intimated through email only.

**No fees will be charged from participants for workshop.*

GENERAL INFORMATION

Accommodation and travelling expenses are to be borne by the participants/ sponsoring agency. Limited accommodation on actual charges may be available at DHSGVV Guest House. A request for this need is to be made in advance. The participant will not be paid any TA/DA. The organizers will provide working lunch.

REGISTRATION

Registration is open to Faculty and Students (MCA / M. Tech. / Ph. D) from any fields. Participants will be admitted on first-come first-served basis. Registration Link: <https://forms.gle/6t8VUfxLDfCoRn7y9>

To confirm participation please send the scanned copy of the filled Registration Form to: gksrinh@gmail.com or submit in person to coordinator latest by 30th September 2019 positively.

Registration Form Five Day AICTE Sponsored Workshop on Cyber Security (October 14-18, 2019)

Name:
(In block letters)

Faculty Student

Designation (In case of Faculty):

Program and Branch (in Case of Student):

Organization:

Department:

Department/Institution is Recognized by AICTE (Yes/No):

Qualification:

Specialization (If any):

Mailing Address:

Mobile:

Email:

Accommodation Required (Yes/No)

Date

Signature of Applicant

Signature of HOD/Principal / Authority with seal.