

**INSTITUTE OF FORENSIC SCIENCE
GUJARAT FORENSIC SCIENCES UNIVERSITY**



**IFS-GFSU CERTIFIED
INFORMATION SECURITY PROFESSIONAL**

ISSP

Document date: 14th July, 2016

IFS-GFSU Certification #14001 Information Security Professional

An objective of the Indian National Cyber Security Policy – 2013:

To create a workforce of 500,000 professionals skilled in cyber security in the next 5 years through capacity building, skill development and training.



DATES FOR EXAMS

The exam for the IFS-GFSU Certification #14001 Information Security Professional may be taken online at any time.

SUMMARY OF EXAM INFORMATION

Exam Duration: **3 hours**
Passing Marks: **70%**

One-time registration fees: **Rs 1,200**

Exam Fees: **Rs 4,500** for students
Exam Fees: **Rs 10,000** for others

Re-exam Fee: **Rs 1,000**

ABOUT IFS-GFSU

This certification is provided by Institute of Forensic Science, Gujarat Forensic Sciences University (IFS-GFSU). The Government of Gujarat, under the flagship of the Home Department of the Government of Gujarat, has established GFSU. GFSU is the only university across the world, dedicated to Forensic & Investigative Science.

ABOUT THIS DOCUMENT

This document is issued in pursuance of the IFS-GFSU Certification Policy.

This document is issued as a guide to candidates pursuing an IFS-GFSU certification. IFS-GFSU does not make any representations or warranties that the use of this document will assure candidates of passing any IFS-GFSU certification.

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Quick Guide to Earning & maintaining your IFS-GFSU certification



1	Obtain your one-time Permanent Registration Number.
2	Apply for the examination.
3	Prepare for the exam by studying the reference material comprising the IFS-GFSU Common Body of Knowledge for Information Security (CBOKIS).
4	Appear for the certification exam and obtain 70% in each section.
5	Earn your certification. Earn the right to use ISP . Get upgraded to ISP+ after 6 years.
6	Earn 120 Continuing Education Units (CEUs) every 3 years and submit proof of the same.

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A. Benefits of IFS-GFSU Certifications

A1. Benefits to individuals

- ✓ Achieve a higher position, raise, and promotion faster¹
- ✓ Become more employable²
- ✓ Affirm your professional expertise³
- ✓ Increase job security
- ✓ Demonstrate that you possess essential domain knowledge
- ✓ Boost relevance by staying current in the profession with continuing education requirements.
- ✓ Advance your career potential due to recognition as a certified professional
- ✓ Recognition of professional competence by professional peers and management
- ✓ Increase your value and income
- ✓ Keep up with ever-changing standards and technologies
- ✓ Validate your knowledge
- ✓ Differentiate yourself from your peers
- ✓ Boost your confidence
- ✓ Show that you know the most current principles and practices of your field
- ✓ Personal satisfaction of accomplishing a milestone in your career
- ✓ Stand out against other applicants in a tough job market.
- ✓ Get prepared for greater on-the-job responsibilities
- ✓ Potentially earn higher income for being formally recognized as a certified professional
- ✓ Demonstrate Your Commitment
- ✓ Build and enhance your credibility
- ✓ Build & Showcase Your Skills
- ✓ Become more marketable when you compete for top positions
- ✓ Raise your prestige among your staff and your peers
- ✓ Improve overall performance, remove uncertainty and widen market opportunities
- ✓ Ensure you are continually improving and refining your activities
- ✓ Become part of a professional network
- ✓ Enjoy better career flexibility
- ✓ Be recognized as being knowledgeable and skilled
- ✓ Open the doors of opportunity; enhance your career

¹ Salary surveys show that the majority of hiring managers consider certifications a factor in hiring decisions, and that obtaining relevant certifications often leads to a salary increase.

² According to an IDC white paper, "63% of hiring managers believe certified individuals are more productive than their non-certified counterparts."

³ Your employer, clients, employees and peers will recognize your GFSU credential as an indication of the skills and knowledge you've gained through certification.

A2. Benefits to organizations

- ✓ **Benchmark**
With GFSU certifications, your organization will have a benchmark to compensate, measure and evaluate employees' skills for roles within the organization. GFSU certifications also provide a recognized benchmark of skills that can be aligned to organisational skills frameworks.
- ✓ **Consistency**
With GFSU certifications, your teams are trained to consistent skill levels.
- ✓ **Staff motivation**
The regular assessment process will improve staff responsibility, commitment and motivation and ensure competent employees.
- ✓ **Increased Productivity**
GFSU certified professionals are typically more productive and work to consistent standards.
- ✓ **Assurance**
GFSU certifications assure that the certified professional has the knowledge and skills needed to perform the allotted tasks.
- ✓ **Performance-related pay**
Gaining GFSU certifications can be aligned to performance-related pay.
- ✓ **Customer satisfaction**
GFSU certifications can ensure greater customer satisfaction (internal and external customers).
- ✓ **Employee satisfaction**
GFSU certifications provide professional development, advancement and recognition opportunities for staff. This can also lead to lower staff turnover.
- ✓ **Higher quality**
GFSU certifications lead to more reliable, higher quality results produced with increased efficiency and consistency by professionals who use industry standard techniques.
- ✓ **Culture of learning**
GFSU certifications empower a culture of learning and improvement that increases return on investment.
- ✓ **Increased credibility**
GFSU certifications demonstrate to customers, competitors, suppliers, staff and investors that you use industry-standard practices.
- ✓ **Stakeholder satisfaction**
GFSU certifications demonstrate to your stakeholders that your business is run effectively.

B. About the Certification

B1. Importance of Information Security

An Information Security Professional is skilled in understanding and analyzing information security threats and implementing best practices for Information Security. The importance of Information Security can be understood from the following extract from the *Indian National Cyber Security Policy – 2013*:

Cyberspace is vulnerable to a wide variety of incidents, whether intentional or accidental, manmade or natural, and the data exchanged in the cyberspace can be exploited for nefarious purposes by both nation- states and non-state actors.

Cyber attacks that target the infrastructure or underlying economic well-being of a nation state can effectively reduce available state resources and undermine confidence in their supporting structures.

A cyber related incident of national significance may take any form; an organized cyber attack, an uncontrolled exploit such as computer virus or worms or any malicious software code, a national disaster with significant cyber consequences or other related incidents capable of causing extensive damage to the information infrastructure or key assets.

Large-scale cyber incidents may overwhelm the government, public and private sector resources and services by disrupting functioning of critical information systems. Complications from disruptions of such a magnitude may threaten lives, economy and national security. Rapid identification, information exchange, investigation and coordinated response and remediation can mitigate the damage caused by malicious cyberspace activity.

Some of the examples of cyber threats to individuals, businesses and government are identity theft, phishing, social engineering , hactivism , cyber terrorism, compound threats targeting mobile devices and smart phone, compromised digital certificates, advanced persistent threats, denial of service, bot nets, supply chain attacks, data leakage, etc.

The protection of information infrastructure and preservation of the confidentiality, integrity and availability of the information in cyberspace is the essence of a secure cyber space.

B2. Required competence

To earn this certification, candidates must take the certification exam and obtain a minimum of 70% marks.

B3. Abilities

Candidate's vision, hearing, mobility and other abilities must be such that would permit him to work efficiently in information security in an organizational environment.

B4. Prerequisites

The candidate must be a graduate in any stream from a recognized University. This criterion can be relaxed in case the candidate has a minimum of 3 years of work experience in a relevant field.

B5. Code of Professional Ethics

All IFS-GFSU certified professionals should:

1. Encourage implementation of measures for control of corporate crime.
2. Perform duties to the best of their knowledge, skills and capabilities.
3. Maintain high standards of moral character.
4. Preserve the privacy and confidentiality of information obtained in the course of professional assignments, subject to regulatory requirements.
5. Ensure compliance with regulatory and legal framework.

Failure to comply with this Code of Professional Ethics may result in suspension and subsequent withdrawal of certification.

B6. Criteria for initial certification

1. Demonstrating mastery of IFS-GFSU Common Body of Knowledge for Information Security by successfully taking the certification exam with a score of at least 70%.
2. Being a graduate in any stream from a recognized University. Students pursuing graduation may appear for the certification exam and on successfully passing the exam will be issued a provisional certificate. Such applicants will be certified on submitting proof of graduation.
3. Accepting the IFS-GFSU Code of Professional Ethics.

B7. Criteria for renewal of certification

1. Earn 120 CEUs (Continuing Education Units) every 3 years.
2. Submit documentary evidence in respect of CEUs earned.
3. Submit administrative fee of Rs. 2,000 plus applicable taxes (every 3 years).
4. Compliance with IFS-GFSU Code of Professional Ethics.

B8. Grounds for suspending and withdrawing certification

The Certification Management Committee, Institute of Forensic Science, Gujarat Forensic Sciences University (IFS-GFSU) may suspend and withdraw a certification for any of the following reasons:

1. Violation of the terms of any undertaking made to IFS-GFSU.
2. Failure to obtain the required CEUs (Continuing Education Units) every 3 years.
3. Failure to submit documentary evidence every 3 years of CEUs earned along with the applicable administrative fee.
4. Violating any provision of the IFS-GFSU Code of Professional Ethics.
5. Providing any false information to IFS-GFSU.

B9. Exam Overview

The Information Security Professional (ISP) certification from Institute of Forensic Science, Gujarat Forensic Sciences University (IFS-GFSU) proves specialist level expertise in information security. An *IFS-GFSU Certified Information Security Professional* is skilled in understanding and analyzing information security threats and implementing best practices for Information Security.

B10. Development of the exam

The Certification Management Committee of IFS-GFSU is responsible for operational policies and procedures, implementation of the policies and procedures, resources for certification activities (personnel, outsourcing, premises, including examination sites, equipment and resources for carrying out certification activities), assessment activities, decisions on certification, including the granting, maintaining, recertifying, expanding, reducing, suspending or withdrawing of the certification, contractual arrangements. The Certification Development Committee of IFS-GFSU is responsible for development and maintenance of the certification schemes. Subject Matter Experts come under the Certification Development Committee.

B11. Subject Matter Experts

Subject Matter Experts for certification programs conducted by Institute of Forensic Science, Gujarat Forensic Sciences University advise in the development and review of the certification scheme⁴.

B12. Type of questions

The examination comprises objective questions.

B13. Preparation for the Exam

On registering for the certification exam, you will be provided comprehensive reference material in electronic form.

B14. Common Body of Knowledge for Information Security (CBOKIS)

The IFS-GFSU Common Body of Knowledge for Information Security (CBOKIS) establishes a baseline for the body of knowledge for Information Security. CBOKIS is a comprehensive description of the sum of knowledge and professional practices and techniques that are generally accepted within the Information Security profession. CBOKIS is not static and will be constantly evolving as the field of Information Security develops.

B15. Fees

Particulars	Fee
One-time Permanent Registration Fee	1,200
Exam Fees (For students pursuing graduation)	4,500
Exam Fees (For others)	10,000

⁴ This includes criteria for initial certification and recertification; curriculum for certification examinations and tests; assessment methods for initial certification and recertification; surveillance methods and criteria (if applicable); criteria for suspending and withdrawing certification; criteria for changing the scope or level of certification (if applicable); submitting questions for inclusion in the certification examinations and tests (optional).

Note:

1. In case a registrant fails the certification exam, he / she will be required to pay Rs. 1000 re-exam fee for each subsequent attempt.
2. No fee refunds will be made to any registrant.
3. On registering for a certification, the registrant shall be provided the list of recommended reference material.
4. No contact lectures or classes shall be provided.

B16. Exam Duration

The certification exam has a length of 3 hours.

B17. Passing Score

To pass, a candidate must obtain a minimum of 70%.

B18. Dates

The exam can be taken online at any time.

B19. Overview of Examination Syllabus

The Information Security Professional (ISP) certification is based on NIST Special Publication 800-53, Revision 4 (*800-53 Rev4*). *800-53 Rev4* provides a more holistic approach to information security and risk management by providing organizations with the breadth and depth of security controls necessary to fundamentally strengthen their information systems and the environments in which those systems operate. This contributes to systems that are more resilient in the face of cyber attacks and other threats.

800-53 Rev4 provides a catalog of security and privacy controls for information systems and organizations. It also provides a process for selecting controls to protect organizational operations (including mission, functions, image, and reputation), organizational assets, individuals, other organizations from a diverse set of threats including hostile cyber attacks, natural disasters, structural failures, and human errors.

The controls are customizable and implemented as part of an organization-wide process that manages information security and privacy risk. *800-53 Rev4* also describes how to develop specialized sets of controls, or overlays, tailored for specific types of missions/business functions, technologies, or environments of operation.

800-53 Rev4 addresses security from both a functionality perspective (the strength of security functions and mechanisms provided) and an assurance perspective (the measures of confidence in the implemented security capability). Addressing both security functionality and security assurance ensures that information technology products and the information systems built from those products using sound systems and security-engineering principles are sufficiently trustworthy.

Issues covered include:

1. Security control structure, organization, baselines and assurance

2. Selection and specification of security controls

3. Security Control Baselines

4. Security Controls under 800-53 Rev4

- Access Control
- Awareness & Training
- Audit & Accountability
- Security Assessment & Authorization
- Configuration Management
- Contingency Planning
- Identification & Authentication
- Incident Response
- Maintenance
- Media Protection
- Physical & Environmental Protection
- Planning
- Personnel Security
- Risk Assessment
- System & Services Acquisition
- System And Communications Protection
- System & Information Integrity
- Information Security Program Plan
- Authority & Purpose
- Accountability, Audit, & Risk Management
- Data Quality & Integrity
- Data Minimization & Retention
- Individual Participation & Redress
- Security
- Transparency
- Use Limitation

5. Framework for Improving Critical Infrastructure Cybersecurity

C. The IFS-GFSU Continuing Education Program

The IFS-GFSU Continuing Education Program (CEP) is designed to keep your expertise and skills updated. You are required to obtain 120 CEUs (Continuing Education Units) every 3 years to maintain your GFSU certification.

You are required to submit documentary evidence every 3 years of CEUs earned by you. Enclose administrative fee of Rs 2,000 plus taxes along with the documentary evidence of CEUs.

#	Activity	CEUs earned	Documentary Evidence to be submitted	Maximum CEUs in a 3 year period
1	Teaching, training or instructing in a relevant field	3 CEUs per hour of actual teaching, training or instructing	1. Description of content covered 2. Delivery date(s) 3. Number of attendees	42 CEUs
2	Delivering an Industry Presentation in a relevant field	3 CEUs per hour of actual presentation	1. Description of content covered 2. Delivery date(s) 3. Number of attendees 4. Copy of presentation	42 CEUs
3	Participation in a GFSU approved Industry Event, Seminar, Workshop or Conference	1 CEU for each hour spent in a relevant session	1. The type of activity attended (event, seminar, workshop or conference) 2. Description of the activity 3. Date of Activity 4. Proof of completion provided by activity host (where applicable)	42 CEUs
4	Work Experience	1 CEU for each month in a relevant profile	Following details on employer letterhead: 1. Current job title 2. Brief description of work profile 3. Duration in this job (start and end dates) 4. Confirmation by employer that the candidate is meeting the expectations 5. Signature of the candidates supervisor	36 CEUs
5	Publishing of a relevant professional Article, White Paper or Book	4 CEUs per article or white paper; 20 CEUs per published book	Description of the content covered Link to or copy of the published work	42 CEUs
6	Active membership of a GFSU approved relevant Committee / Board / Chapter / Association	0.25 CEU for each month of membership	1. Committee / Board / Chapter / Association details 2. Proof of membership 3. Timeframe of active membership	9 CEUs

D. About GFSU



This certification is provided by Institute of Forensic Science, Gujarat Forensic Sciences University (GFSU).

GFSU is established by the Government of Gujarat, under the flagship of the Home Department - Government of Gujarat.

The GFSU is a highly specialized higher education institution that came into existence through an Act: No. 17, passed by the Gujarat State Legislative Assembly, dated the 30th of September 2008.

The University runs in parallel association with the Directorate of Forensic Science (DFS) - Gujarat State, to provide hands-on training.

DFS - Gujarat State is a state-of-the-art; NABL accredited; ISO-IEC 17025:2005 certified laboratory, maintaining international standards in terms of infrastructure and facilities for Computer Forensics, Narco-analysis and Polygraph Examination, Brain Electrical Oscillation Signature Profiling.

It also has Suspect Detection System (SDS), Audio Video Tape Authentication System, Voice Spectrograph, Speech Lab, Integrated Ballistics Identification System, Computerized Petroleum Testing Facilities,

Fully Automated Alcohol Estimation System (GC-HS) FT-Raman, LC-MS, GC-MS, FT-IR for Narcotic/Explosive/Poisons Analysis, Computerized Photographic Image Analysis System, Video Spectral Comparator for Document Examination, Accredited Cow-meat testing mobile laboratories, Accredited Mobile Investigation Vans, Ballistics Data Acquisition System (Computerized firing range) and Automated Fingerprint Identification System.

GFSU is the only university across the world, dedicated to Forensic & Investigative Science.

The GFSU has an ultramodern campus, near the DFS premises, on a government allocated land of 50,000 Square Meters.

The University is headed by its Director General Dr. J. M. Vyas (M.Sc., Ph.D., LL.B.). Dr. Mohinder Singh Dahiya (M.Sc., Ph.D.) is the Director for the Institute of Forensic Science, Gujarat Forensic Sciences University. Shri Mehul K. Dave is the first Registrar of the Gujarat Forensic Sciences University.

The university has been granted recognition by the University Grants Commission wide its letter no. F.9-7/2011 (CPP-I/PU) dated 16th May 2011.

E. Application Process

The application process is explained at:
<http://www.lexcode.in/gfsu/process.php>