



# TECHNOLOGY ASSURANCE CERTIFICATE



ENHANCING DIGITAL TRUST AND CYBER RESILIENCE

*ONLINE - COHORT 7*

 Online Zoom

 Saturday - Sunday

 10:00 am - 02:00 pm (PST)



Scan to Register

An initiative of The Digital Assurance and Accounting Board of ICAP



## Program Overview:

Digital Assurance and Accounting Board of ICAP has designed first of its kind, Technology Assurance Certificate, program to provide nexus between finance and evolving needs of Information Technology.

Technology Assurance Certificate, is specifically tailored to acquaint and equip professionals with the skills and knowledge required to effectively assess and improve the security and risk management of their organization's technology systems.

The Program is designed to provide an understanding of the concepts, principles, and best practices associated with technology assurance. The program covers a wide range of domains, including Cybersecurity, Risk Management, Auditing, assurance, including to control change IT related change management and logical access.

Upon completion of the course, participants will be able to identify and evaluate potential risks to their organization's technology systems, implement effective information security controls, and ensure compliance with relevant regulations and standard.

## Program Format:

Technology Assurance Certificate course is delivered by experienced professionals both onsite and online. The course spans over 48 hours and includes a combination of pre-class reading material, handouts, quizzes, case studies and hands-on exercises followed by mock exam and final assessment.

## Target Audience:



**IT & IT Security Professionals.**



**IT Professional with Audit Understanding.**



**Risk Management Professionals**



**For Chartered Accountants and Affiliates or any Finance professional with an Audit Background**

## Building Knowledge base for Cyber Security:

As organizations push the bounds of disruption, internal audit functions are evolving their approaches to not only deliver assurance to stakeholders but also to advise as consultants on critical business issues and related technology risks. Are you ready for the future of internal audit?

## Cyber Security Threats:

Cyber threats are on the rise, with 50% of small businesses experiencing a data breach. Malware and ransomware attacks increased by 300%. Phishing attacks account for 90% of data breaches.

## Consequences of Breaches:

Data breaches can be costly, with the average cost per breach estimated at \$3.86 million. Reputation damage and customer trust loss are also significant consequences, with 60% of companies going out of business within 6 months of a breach.



# Evolving role of Internal and External Auditors, Risk Managers and Custodians of Controls in the Digital Age

The role of auditors has been changing rapidly as technology continues to evolve at an increasing pace. Technological advancements have made it possible for businesses to automate many of their processes, which has led to increased efficiency and accuracy in financial reporting. However, it has also created new risks and challenges that auditors must address. Accordingly, they need to upskill themselves in the following areas.



Investors and regulators alike will expect auditors to be experts in technology related risks and all the ways technology can be leveraged to enhance the audit process. At the same time, clients will demand an audit experience that only a tech-enabled audit can offer.

As digital technologies and data analysis become increasingly central to the audit process — as well as to companies' business models — audit firms, corporate sector, banks and financial institutions will require a more diverse range of skills. They have traditionally recruited people with business backgrounds but, in the future, all auditors will need an increased level of technological understanding.

# Become Proficient in Addressing Technological Risk with Appropriate Controls



**Cyber Smart,  
Cyber Safe**



**Become a Trained  
IT Auditor**



**Combating Cyber  
Crimes & Ensure  
Resilience**



**Information Security  
Controls Compliance**



**Audit / Secure ERP  
and Emerging  
Technology**

## Course Objectives:

- ▶ Understand Information / Cybersecurity, IT Compliance, and the Regulations that Govern them.
- ▶ In-depth Knowledge of IT Governance, IT Risk Management, and IT Controls
- ▶ Understand the Role of IT in Organizations and the Importance of IT Audit and Assurance.
- ▶ Learn About the Technology and Tools used in IT Audit and Assurance.
- ▶ Gain Practical Experience in IT Audit and Assurance through Case Studies and Hands-On exercises.

## Skills and Knowledge Gained:

- ▶ Understand the Principles and Practices of Information Technology and Audit.
- ▶ Identify and Evaluate Potential Risks to Organization's Information Technology Systems.
- ▶ Implement Effective IT Security Controls.
- ▶ Ensure Compliance with relevant Regulations and Standards.
- ▶ Conduct IT Audit and Prepare Reports.
- ▶ Understand IT Governance and Cybersecurity.

# TAC Topics Covered & Learning Outcomes

## Learning Outcomes: Data Privacy, Information and Cyber Security

**Topics covered:** Information Security Management, Data Governance, Logical Access Mechanism, Cyber Crimes, Remote Users security, Security Awareness Training.

### In Module, participants will learn:

- ▶ Importance of Information Security Management for Confidentiality, Integrity and Availability, Physical Access and Environmental Controls, Identity and Access Management, Network and End-point Security.
- ▶ Data Governance, Data Privacy and Data Protection, importance of Data ownership and Data Classification.
- ▶ Logical Access as a key IT General Control, and its Criticality as Primary Means used to Manage and Protect Information Assets, Access Control Models, Remote access controls.
- ▶ Common Information System Threats, Attack Methods and Techniques of cyber crime and information and cyber risks.
- ▶ Security Monitoring Approaches, importance of Tools and Techniques including Security Information & Event Management (SIEM), Penetration Testing and Vulnerability Assessments, Incident Response Management, Evidence Collection, Forensics , and Security Awareness Training and Awareness, and its criticality.

# Learning Outcomes: Business Resilience

**Topics covered:** Business Continuity Management and IT Disaster Recovery arrangements (BCP and DRP), Business Impact Analysis (BIA), BCP and Critical Factors for Business Continuity.

## In Module, participants will learn:

- ▶ How Business Resilience is established through Business Continuity Plan (BCP) and Disaster Recovery Plan (DRP), and the Difference between these Plans.
- ▶ Business Impact Analysis of the Business Functions, and the Classification of Risks for Systems (Critical, Vital, Sensitive, Non-sensitive).
- ▶ Criticality of Auditing BCP and DRP, how to review BCP and Test Drills.
- ▶ Disaster Recovery Planning Process and Test Drills



# Learning Outcomes: Role of Technology Auditor & the Technology Auditing process

**Topics covered:** IT Audit Program, Risk Based IT Audit Planning, Types of IT Audits, Role of IT Auditor, Role of Financial Auditors in IT Audit, IT Audit Function, Process of IT Audit, IT Controls & Testing Methods, Audit Follow-up, IT Audit Standards & Frameworks.

## In Module, participants will learn:

- ▶ To establish an IT Audit Program, including the IT Audit Charter and related governance and management structure in accordance with IT Audit standards & framework.
- ▶ To develop a Risk-based IT Audit Strategy while considering effects of relevant Business imperatives, Different IT Risks and, controls, related laws, regulations, international standard, frameworks, IT risk assessments, risk-based IT Audit Engagements.
- ▶ Different types of Audits, including Integrated IT Audits, and How to determine whether Information Systems are Protected, Controlled, and Provide Value to the Organization.
- ▶ The Difference between Continuous Monitoring and Continuous Auditing in Audits, and how they can be established.
- ▶ The role of IT auditor in external auditing, how to cover technology risk, manage and conduct IT audits as part of External/Statutory audits, as well as review IT controls in operational, financial and administrative functions.

# Learning Outcomes: Technology Governance and Risk Management

**Topics covered:** Technology Governance, IT Governance Structures, Global IT Governance Frameworks, IT and Information Security Strategy, IT Policies and Procedures, Legal, Regulatory and Contractual Requirements.

## In Module, participants will learn:

- ▶ Technology related Governance, Risk and Compliance, its relationship to Corporate Governance, what drives IT governance, who is responsible for it, and the Role of IT Governance in creating Value for the Organization.
- ▶ IT governance structures and the Three Lines of Defense (3LoD), including the role of the Board, senior management, internal/external auditors and regulators in IT assurance practices.
- ▶ Global IT Governance frameworks (COBIT, ISO Standards, ITIL).
- ▶ Importance of IT strategic planning, alignment with business strategies and the responsibilities of the IT Strategy Committee, IT Steering Committee as well as Board oversight of IT.
- ▶ Understanding of SBP and SECP Requirements for IT Governance, including Overview of SBP's Enterprise Technology Governance & Risk Management Framework for Financial Institutions.
- ▶ Audit of IT Governance, Management practices and policies and procedures.

# Learning Outcomes: Information systems Acquisition, Development and Implementation

**Topics covered:** Importance of Business Case for Technology Projects and related Return on Investment & Benefits Realization, System Development Methodologies, Software Testing, Software Development Life Cycle (SDLC), System Acquisition Process, Enterprise Architecture.

## In Module, participants will learn:

- ▶ Alignment of Project Objectives with Business objectives, High level understanding of Return on Investment (ROI) and Benefits Realization of IT Projects, Assessment of Business Case and the "Make or Buy" Decision and the Importance of reviewing this in an audit.
- ▶ Alternative forms of system development methodologies – SCRUM, Agile, Incremental and Iterative development, Prototyping.
- ▶ Major risk of any software development project, Phases of the traditional Software Development Lifecycle (SDLC), and IT Auditor's approach and focus.
- ▶ Approach for acquisition of a system, including RFP, software baselining, and reviewing these in an IT Audit.
- ▶ Understand the concept of Enterprise Architecture and how to review the software control parameters.

# Learning Outcomes: IT Infrastructure, Operations and Support

**Topics covered:** IT Infrastructure, Different Types of Information Systems Hardware, Data Backups, Licensing – Hardware/Software/ERP/Cloud, IT Network Infrastructure, Network Devices, Remote Access, Wireless Networks.

## In Module, participants will learn:

- ▶ Components of IT Infrastructure including Hardware, Software, Operating Systems, Databases, Networking, and how these are deployed in an organization.
- ▶ Understanding risks, controls and IT Auditing Infrastructure, Operations and relevant documentation.
- ▶ Role and importance of Virtual Private Networks (VPNs) and virtualization, cloud computing the rationale for remote access and their risks for an organization.
- ▶ Importance of licensing for Hardware, Software, ERP, Cloud, and its audit.



# Learning Outcomes Digitalization, Emerging Technologies and Management of IT

**Topics covered:** Applications and Implementations of Emerging Technologies, Enterprise Resource Planning (ERP), Audit of ERPs, Auditing Application Controls, Journal Entry Testing.

## In Module, participants will learn:

- ▶ Applications and implementations of emerging technologies, including Cloud Computing, Blockchain, Robotic Process Risk and Controls Automation (RPA), Artificial Intelligence (AI), Gamification, and Internet of Things (IoT).
- ▶ Digitalization and transformation initiatives using emerging technologies.
- ▶ How emerging technologies are implemented and used, and how they should be reviewed.
- ▶ Enterprise Resource Planning Systems (ERP) fundamentals, concepts, principles, controls and audit.
- ▶ Key Application Controls, Integration Controls and Security Controls, and how to audit them and Identify Improvements. Journal Entry Testing, their role in External audit and approach for IT Auditor.

## Meet the Advisor



### Hussein Hassanali

CIA | CISA | CISM | CGEIT | CRISC | CDPSE.

Advisor - DAAB (ICAP)

President - ISACA (Karachi Chapter)

Hussein Hassanali, CIA, CISA, CISM, CGEIT, CRISC & CDPSE is the President of ISACA Karachi Chapter, and Managing Partner & Principal Consultant at StrataG Consulting. He is an experienced, hands-on Governance Professional with over 28 years of international experience of Information Security, Assurance, Risk Management, and Compliance. Previously he has been General Manager & Head of IT Audit at HBL, and has also served as Chief Information Security Officer of Bank AL Habib Limited, and in senior roles with Ernst & Young (UK) and Aga Khan Development Network (AKDN).

For his efforts in promoting Technology Governance, IT Assurance, and Information Security for over 26 years, Hussein was awarded a "Life Time Achievement Award" at InfoSec 2021, and "Legend Award" at 2023 CIO 200 Summit. He has served the assurance and technology community from ISACA and IIA's platforms with leading roles at the Karachi Chapter.

Presently he is also Advisor to ICAP's DAAB, and member of key Educational and Business bodies including ICAP's Education & Training Committee, FPCCI's Cyber Crime Prevention Standing Committee, Academic Council of UIT University, Advisory Boards of Pakistan Freelancer Association (PAFLA) and CISO Forum, PIPFA's Digital Board, and mentors students of Technology institutes and Universities.

# Meet the Trainer



**Syed Abdul Qadir**

Executive Director – IT Consulting &  
Cybersecurity Risk  
A. F. Ferguson & Co.

Syed Abdul Qadir is a distinguished recipient of the Global IT Leaders Excellence Award. He is an honorary Vice President of World CISO Forum. He has 22+ years experience in Digital Transformation, Enterprise IT Governance and Strategy, along with the implementation of Cyber Risk Management. He is 22301 (Lead Auditor), BE, MBA, PMP, CISA, ISO 27001 and MCITP, HPCP.

He has served a diverse range of global and local clients in sectors including Financial Services, Energy, Manufacturing, FMCGs and Telecommunications.

His Core Expertise Include end-to-end digital transformation, IT and Cybersecurity Strategy, IT Governance and Risk Management, IT Operations and Project Management, Cyber security Risk assessments, GDPR, overarching IT reviews, IT Due diligence, Business Continuity and DR planning, Business Solutions Selection and Quality Assurance, Data Governance, and Analytics.

# Meet the Trainer



## Zainab Hameed

EdTech - Founder  
TeeSquare - CoFounder  
ISACA - IT Governance Chair

Zainab Hameed is the IT Governance Chair and She Leads Tech Liaison for ISACA Karachi Chapter. After being associated with GSK, Engro Foods and Ernst & Young Global in senior management roles of IT for last 2 decades, she has ventured into entrepreneurship and has started TeeSqaure, an edTech company and runs STRATAG - an IT Governance and IT Security consulting firm.

An entrepreneurial and achievement driven IT professional, Zainab has worked across board in IT including Technology Management, IS Governance, ERP Implementation, Program Management, Information Systems Security and has won local and international ICT awards.

She is Project Management Professional (PMP), Certified IT Governance professional and IS Auditor, and an alumnus of FAST And IBA, Karachi.

# Meet the Trainer



## Naushad Siddiqi

Head of Technology Audits  
Sui Southern Gas Company (SSGC)

Naushad Siddiqi is the Head of Technology Audits at Sui Southern Gas Company. He is an experienced, delivery focused Assurance, Governance and Information Security Professional with over 27 years of diverse International and local industry experience, specializing in Enterprise Systems Development, IT Project Management, IS Audits, Risk Management, IT Governance, BCP j DRP, Policies development, ISO Standards Implementation.

Naushad is an alumnus of FAST, and also possesses international credentials such as Certified IS Auditor (CISA), Certified in Risk & Control (CRISC), Certified in Emerging Technologies (CET), PMP, ITIL, ISO 27001 LA.

He is a visiting faculty member of NED University and also delivers workshops on Information Security, Audit topics at different forums. He is an ISACA / APMG Accredited Trainer for CISA, CRISC & CET, and is also part of ISACA Karachi Board as Chair CISA program.

# Meet the Trainer



## Aamir Shaukat Hussain

Founder & Partner  
Value Source LLP

Aamir Shaukat Hussain is a Chartered Accountant with 17 years of professional experience. He is a public speaker, certified trainer, LinkedIn influencer and a mentor. Aamir has provided trainings through platforms such as International Finance Corporation (UK), Association of Certified Fraud Examiners (Oman), Aga Khan Development Network, The Institute of Bankers Pakistan and The Institute of Chartered Accountants of Pakistan.

Aamir also provides training to the Board of Directors of listed companies on emerging topics such as Enterprise Risk Management and GRC as part of Directors Training Program. He has served renowned universities in Pakistan as motivational speaker.

He distinguishes himself by providing practical and interactive trainings. Aamir Shaukat Hussain and workshops with a tag line 'Just Practical - No Theories'. Aamir has been a board member at Aga Khan Agency for Habitat and is serving at various professional member committees at The Institute of Chartered Accountants of Pakistan.

He also worked as Senior Vice President at United Bank Limited and was associated with PwC and Habib Bank Limited as well. He is currently working as founder and partner at value source LLP.

## Details

CPD hours

Classroom + Exam Prep + Mock

Dates

Time

Course Pre - Requisite

Course Guidelines

## Technology Assurance Certificate

48 hours

40 + 4 + 4 hours

Classes Commencing from January 17, 2026

Online via Zoom: Saturday and Sunday 10:00 am to 2:00 pm (PST)

Audit Background and knowledge is required

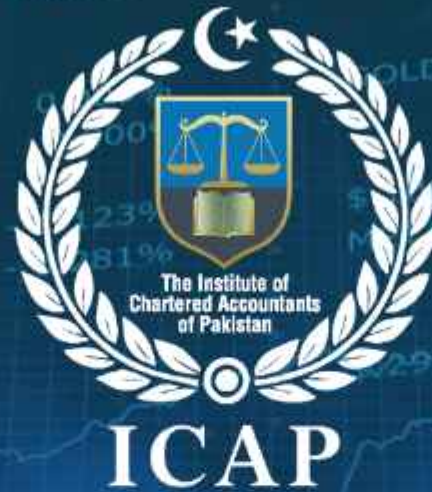
1. Minimum 75% attendance is to be maintained to be eligible for the assessment.
2. Cameras to be turned ON during the lecture for attendance.
3. Certificate will only be awarded to participants meeting 75% attendance along with passing criteria of assessment.
4. The training material shall only be accessible for the duration of the training program. (Recordings, Manual, Class files)
5. No Transfers or referrals allowed during the course.
6. The sessions will not be recorded; hence participants are advised to prepare their own notes.

Course Fee for Member/Affiliate **Rs. 60,000 + Tax**

Course Fee for Non Member **Rs. 75,000 + Tax**

*Nominate 5 or more participants from your organization and avail 10% Corporate Discount!*

*\*Registration are on first come first serve basis, subject to payment only, and registrations will be closed as soon as the class size is filled.*



**Register now**

**For further inquiry or details:**

DAAB Team: | UAN: (021) 111-000-422 ext. 406 | WhatsApp # 0301-5039776

Email: [daab@icap.org.pk](mailto:daab@icap.org.pk)