

## **Training course "IT Audit"**

**Version:** 2021-07-06

**Author:** Glib Pakharenko

**Duration:** 3 days

The "IT Audit" training allows participants to gain a wide set of knowledge to plan, perform IT audits and manage IT audit enterprise programs. You will have all required skills to face the most difficult problems, which include:

- audit planning and reporting
- business continuity audit
- software development and system implementation lifecycle audit
- operating systems, databases, network equipment configuration audit.

This is solely practical training! You will work immediately. The training is adopted for an audience which represents students with completely different background. If you are just a novice, you will solve simple tasks. If you are professional, you will have a set of very sophisticated tasks. The obtained experience will mandatorily increase your value for employees and customers and bring a tremendous level of a professional confidence to you personally.

### **The training course is designed for:**

- IT auditors
- IT security specialists
- IT quality specialists
- IT managers.

## **Course syllabus: "IT Audit"**

### **Section 1. IT audit**

1. IT assurance framework (ITAF)
2. Audit charter/mandate for the audit
3. Auditor independence
4. Professional due care
5. Audit assertions
6. Audit criteria
  - ISACA audit programs
  - IIA audit guidelines
  - Trust services principles and criteria
  - COBIT
  - ISO 27001
  - Other sources of criteria
7. Audit planning. Risk-based planning
8. Audit performance
9. Materiality of audit findings
10. Audit evidence
11. Evidence collection methods
12. Audit sampling
13. Using the work of other experts
14. Reporting
15. Handling illegal acts
16. Audit follow-up
17. Control environment
18. Control design
19. Control effectiveness
20. Control monitoring
21. Practical workshop.

## **Section 2. IT governance and management**

1. IT strategy
2. IT architecture
3. IT metrics
4. IT organisation
5. IT service management
6. Service catalogue
7. Incident management
8. Change management
9. Release management
10. Problem management
11. IT investments
12. IT risks
13. End-user computing
14. Shadow IT
15. Cloud IT
16. BYOD
17. IT outsourcing
18. Practical workshop.

## **Section 3. Information systems development and implementation**

1. System implementation and development lifecycle
2. Project management control frameworks
3. System development methodologies
4. Project business case
5. Feasibility study
6. Requirements' specification
7. Design and architecture
8. Procurement process
9. Coding
10. Implementation
11. Testing
12. Handover to production
13. Operational support
14. Decommissioning
15. Migrations
16. Project closure
17. Practical workshop

## **Section 4. IT operations**

1. Inventory and asset management
2. Patch management
3. Hardware maintenance
4. Licensing
5. Capacity planning
6. Performance and availability monitoring
7. Utilities
8. Datacenter management
9. Network physical infrastructure
10. Practical workshop.

## **Section 5. Business continuity and disaster recovery**

1. Business continuity management
2. Business continuity project initiation and management
3. Business impact assessment
4. RTO/RPO

This syllabus can be modified according to the needs of the company/organisation.

5. Recovery strategies
6. Business continuity plan testing
7. Disaster phases:
  - Preparation
  - Initial response
  - Restoration
  - Recovery
  - Post-incident activities
8. Practical workshop.

### **Section 6. Information security assurance**

1. Information security policies, standards, and procedures
2. Information security roles and organizational structures
3. Human resource security
4. Data classification and handling
5. Key processes
6. Information security risk management
7. Incident handling
8. Awareness programs
9. Identity and access management
10. IDS/IPS
11. DLP
12. SIEM
13. PKI
14. 802.11x, NAP and network access control
15. Remote access and teleworking risks
16. Rights management
17. Antimalware solutions
18. Physical security controls
19. Fraud controls
20. Practical workshop.

### **Section 7: Audit considerations**

1. ERP audit
2. CRM audit
3. VOIP
4. Virtualization
5. Practical workshop.

### **Labs:**

- Windows audit
- Linux audit
- Networking, VPN and Firewall audit
- PKI audit
- Database audit (MySQL and Oracle)
- Web application audit (PHP)
- Mobile application audit (Android).