

# Software and System Testing

## Course Objectives

Data protection laws around the globe require 'reasonable' security. To determine what 'reasonable' means, regulators often refer to (simple) risk assessment models. Actual guidance on what is deemed 'reasonable' tends to be couched in list taken from established security engineering frameworks, like Open Web Application Security Project (OWASP) Top10. However, in actual enforcement decisions one rarely finds a 'risk assessment failure' mentioned; more frequently one sees examples around case specifics, such as 'lack basic protection against vulnerabilities like Structured Query Language (SQL)-injection'. In contrast, many decisions raise issues with 'insufficient testing', or 'lack of oversight during system approval' (sometimes infelicitously called 'inadequate User Acceptance Testing (UAT)'), and even direct organisations to conduct Vulnerability Assessments or Penetration Tests. These issues are not limited to small or non-Information Technology (IT) savvy enterprises. Software and system testing are by nature risk based, and a separate engineering discipline. This course provides an overview on core concepts specific to software and system testing, critical for the operational side (in terms of functionality, security, and data protection) as well as contractual considerations.

This course is ideal for busy Data Protection Officers (DPOs), managers, project, and compliance officers, who are responsible for project approvals and system deployments. The course explains the typical engineering jargon, common misunderstandings, and technical details in an understandable and practical manner useful for non-IT audience.

## Who should attend?

- Privacy Engineers, Technical Staff, Developers, Data Analysts, Data Architects, and Project Managers
- DPOs, Compliance Professionals, and Corporate / In-house Counsels

## Course Details

Course Code: CS102

Title: Software and System Testing

Duration: ½ day (approximately 3.5 contact hours)

Mode of Training: In-person

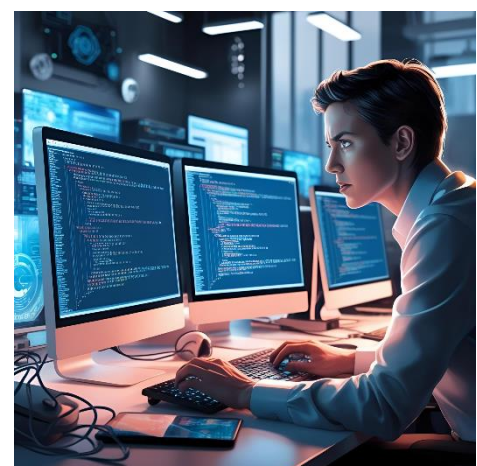
Venue: Drew & Napier LLC

10 Collyer Quay, 10th Floor, Ocean Financial Centre

Singapore 049315

Course Fee: S\$300.00 (excluding GST)

To view available dates and register for this course, please click [here](https://www.drewnapier.com/Academy). You may view all available courses and our course schedule(s) on our Academy webpage (<https://www.drewnapier.com/Academy>).



# Risk ASSESSMENT



## Course Outline

- **What makes testing different and difficult**
- **Test Fundamentals**
  - Manual, automated, or smart
  - Black box, Gray box, and White box
  - Test Coverage
- **Test Scope**
  - Functional Testing
  - Integration Testing
  - System Testing
  - Regression Testing
  - System Acceptance Testing
  - User Acceptance Testing
  - Security Testing
  - Privacy and Data Protection Testing
- **Third Party Testing**
  - Testing versus Monitoring (Security Operations Centre (SOC))
  - Vulnerability Assessment (VA)
  - Penetration Testing (PT)
  - Singapore's Cybersecurity Service Provider's Licence

## Course Facilitator



**Albert Pichlmaier** is Senior Learning Technology Designer with Drew Academy and concurrently Senior Cybersecurity & Privacy Engineer with Drew & Napier's Data Protection, Privacy & Cybersecurity practice. He holds a degree in Computer Science from a German tertiary institution. He is a Certified Information Systems Security Professional (CISSP), a Certified Data Privacy Solutions Engineer (CDPSE), a holder of the Singapore WSQ Advanced Certificate in Learning and Performance (ACLP), and a certified Blockchain Developer. Albert is credited as an inventor of two patents granted in Germany and other countries. His technical expertise covers a wide-ranging area of matters involving Cybersecurity, Privacy Engineering, Cryptography, Quantum Computing, Artificial Intelligence / Machine Learning, Blockchain Development, Data Analytics, Big Data, and Data Visualisation. For the courses and webinars under the Drew Academy, he draws from this pool of knowledge and experience to explain technical content to non-technical audiences, develop proof-of-concept and learning tools, and engage with experts on finer details.

Albert was formerly an Executive Manager with the Personal Data Protection Commission (PDPC), where he was involved in technology assessments for data breach investigations, research into trending / disruptive technologies and advising on technical aspects of various PDPC guidelines and publications (amongst other matters). Prior to his role with the PDPC, Albert worked in technology-related organisations in the private and public sector in Germany, Spain, and Singapore. He was also a technopreneur, having set up a company to provide testing tools for embedded systems and smartcard applications.