Course : Understanding IT for non-computer professionals

Synthesis course - 2d - 14h00 - Ref. CNI
Price : 2020 CHF E.T.

★★★★⯪ 4,5 / 5

BEST

This course offers a simple, interactive presentation, ideal for grasping the concepts and terms used by IT specialists. It will provide you with the basics you need to understand and communicate with anyone working in the world of information systems.

⊚ Teaching objectives

At the end of the training, the participant will be able to:

- ✓ Understand the different IT sectors, organizations and professions
- ✓ Understanding the main IT infrastructures
- ✓ Identify different IT architectures
- ✓ Be familiar with the main IT technologies and solutions
- ✓ Identify the main safety risks

Intended audience

Business engineers, recruitment managers, SME/BU managers, buyers, project managers. Anyone dealing with IT specialists.

Prerequisites

No special knowledge required.

Practical details

Exercise
Summaries in the form of MCQs, quizzes and mini-studies to help you assimilate concepts and vocabulary.

Teaching methods
Presentation, small-group discussions, summary.

Course schedule

① Introduction: IT in the company

- The different IT worlds: management, industrial, scientific, embedded...
- Links between businesses and technical infrastructures.
- Possible organizations: classic V, agile (Scrum).
- Frameworks: PMP, ITIL, PRINCE2®, CMMI, etc.

Group discussion
An overview of the different IT environments and their specific features.

② IT infrastructures

- Hardware types: mainframes, servers, workstations, smartphones, tablets...
- What is a datacenter? Virtualization: Vmware, Hyper-V, Citrix.
- Operating systems: Windows, Unix, Linux, MacOs...
- Networks: PAN, LAN, WAN, hardware, standards and main protocols.
- Telephony and telecommunications: ToIP, VoIP.
- Information storage: files, databases, NAS, SAN...

Role-playing
Reconstruction of an insurance company's infrastructure.

③ The principle of computer architectures

- Centralized, client-server, 3-tier and n-tier architectures.
- Service-oriented" and web services architectures.
- Application servers.

Exercise
Identifying architectures.

④ Web technologies

- Internet basics : IP", routing, domain names...
- Web page components: HTML, XML, static and dynamic pages, cookies.
- Internet, intranet, extranet.
- Web services: messaging, file transfer, directories, search engines...
- Web ergonomics and application accessibility.

Demonstration
Component presentation.

⑤ The main solutions available to companies

- Development and languages: C, C++, C#, Java, PHP, Python, Ruby, Julia, Basic, Cobol, etc.
- Software packages: ERP, SCM, CRM, GRH. Open-source software.
- Free software.
- Outsourcing: offshore, cloud computing, IaaS-PaaS-SaaS.
- The offerings: AWS, Google Apps, Apple Apps, Azure, Office 365...
- Business intelligence and decision-making: datawarehouse, data lake, OLAP...
- Mobility: smartphones, tablets...

Group discussion
Classification of terms and acronyms.

6 Safety

- Security risks: malware, viruses, encryption...
- Protection: anti-virus, firewall, encryption, DMZ, PKI, SSO, LDAP, AD, etc.

Case study
Analysis of the security measures required for a computer system.

7 Summary and trends

- Summary of topics covered.
- Trends: big data, artificial intelligence, blockchain, connected objects, 5G possibilities, etc.
- Information sources: websites and books.

Exercise
Quizzes on the terms and vocabulary covered.

Dates and locations

REMOTE CLASS
2026 : 28 May, 25 June, 1 Oct., 15 Oct., 10 Dec.