Course : Understanding IT professions and activities

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

This seminar provides a practical overview of the various components of the IT world. By the end of the course, you'll have a clear understanding of the basics of IT, the different professions in the sector, and the organization and activities of an IT department.

🎯 Teaching objectives

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

- ✓ Understand the principle of aligning IS with business processes
- ✓ Clearly identifying the roles and missions of the various departments within an IS department
- ✓ Be familiar with the main IS best practice guidelines and their scope of application
- ✓ Gain an overview of the different building blocks that make up an IT infrastructure
- ✓ An introduction to IS architecture and underlying technologies
- ✓ Understand the major families of applications most commonly used in today's enterprise computing, and trends in their use

Intended audience
Project owners, delegated project owners, users, IT correspondents, organizers.

Prerequisites
No special knowledge required.

Course schedule

1 **The information system**

- From business processes to IT infrastructures. Definitions, purposes.
- Alignment with the organization's objectives and operations.

PARTICIPANTS
Project owners, delegated project owners, users, IT correspondents, organizers.

PREREQUISITES
No special knowledge required.

TRAINER QUALIFICATIONS
The experts leading the training are specialists in the covered subjects. They have been approved by our instructional teams for both their professional knowledge and their teaching ability, for each course they teach. They have at least five to ten years of experience in their field and hold (or have held) decision-making positions in companies.

ASSESSMENT TERMS
The trainer evaluates each participant's academic progress throughout the training using multiple choice, scenarios, hands-on work and more.
Participants also complete a placement test before and after the course to measure the skills they've developed.

2) The IT Department: roles, organization, businesses

- Users' expectations of their IT department, and the division of MOE-MOA roles.
- Various departments (design, development, etc.). Project management and maintenance in operational condition.
- Project management and agile methods. Standards: ITIL®, Prince®, CMMi, PMP®, COBIT®.

3) IT infrastructures

- Mainframes, servers, workstations, smartphones...
- Operating systems (Linux, Windows, Unix, etc.) and networks.
- Programming languages. Data. Main security risks.
- High availability concepts: Mirroring, Raid, SAN, NAS, backups.

Example
Classification of infrastructure components.

4) IT architectures and integration

- Types of architectures. Service-oriented architectures.
- Application servers. Architecture-related activities and professions.

5) The main solutions available to companies

- Specific developments, software, software packages.
- Enterprise resource planning (ERP). Business intelligence (BI).
- Datawarehouse, datamining, predictive analysis, dataweb, OLAP. Electronic document management.

Case study
Position solutions in a business example.

6) The opportunities

- Social networks (Facebook, Instagram, X (formerly Twitter)...).
- Mobility (laptops, smartphones, etc.). Rationalization of IT costs.
- IS governance.
- Trends: big data, artificial intelligence, blockchain, connected objects, 5G possibilities, etc.

7) Summary

- Review of key course points.
- How to keep your IT knowledge up to date: websites, books, reading material.

Dates and locations

REMOTE CLASS
2026 : 26 May, 17 Nov.