



IT Essentials (for non IT-Professionals)

Duration: 0 Days **Course Code: GKITESS** **Delivery Method: e-Learning**

Overview:

Nederlands:

We kunnen tegenwoordig niet zonder IT. IT is essentieel voor een modern bedrijf en IT heeft een grote invloed op ons dagelijks leven. In deze e-learning variant van de klassikale IT Essentials training leert u hoe u controle krijgt over de IT beslissingen in uw bedrijf, bijvoorbeeld bij de keuze van nieuwe programmatuur. U bent in staat mee te praten in discussies over IT en in staat IT professionals uit te dagen in design keuzes. Na het volgen van deze training krijgt u grip op uw IT kosten.

IT'ers zijn geneigd te spreken in hun eigen "taal", waardoor het moeilijk te begrijpen is waar het over gaat. Dat kan behoorlijk frustrerend zijn. In deze IT Essentials training leert u de "taal" en terminologie van IT professionals.

Deze IT Essentials e-Learning training verklaart de basis van Informatie Technologie: van ruwe data naar informatie. De laatste trends in IT zoals Cloud, Big Data en IoT (Internet of Things) worden toegelicht.

N.B.: Geef svp bij uw bestelling aan in of u de e-Learning in het Nederlands of Engels wilt ontvangen.

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English:

We cannot do without IT these days. IT is essential for a modern business and IT has a major impact on our daily lives. In this e-learning variant of the classroom IT Essentials training you will learn how to gain control over the IT decisions in your company, for example when choosing new software. You will be able to participate in discussions about IT and challenge IT professionals in design choices. After attending this training you will get a grip on your IT costs.

IT professionals tend to speak in their own "language", which makes it difficult to understand what it is all about. This can be quite frustrating. In this IT Essentials training you will learn the "language" and terminology of IT professionals.

This IT Essentials e-Learning training explains the basics of Information Technology: from raw data to information. The latest trends in IT such as Cloud, Big Data and IoT (Internet of Things) are explained.

Remark: Please indicate with your order whether you would like to receive the e-Learning in Dutch or English.

Target Audience:

Nederlands:

Deze e-learning cursus is ontwikkeld voor professionals die vaak gesprekspartner zijn van een IT'er. Dit kunnen teamleiders of managers zijn, maar ook mensen die op een Finance afdeling werkzaam zijn en zich bijvoorbeeld afvragen waarom IT zo duur is.

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English:

This e-learning course has been developed for professionals who are often interlocutors with an IT professional. These can be team leaders or managers, but also people working in a finance department and wondering, for example, why IT is so expensive.

Objectives:

■ Nederlands:

■ Na afloop van deze training bent u in staat om mee te praten in discussies over IT en in staat IT professionals uit te dagen in ontwerp keuzes. U krijgt met deze cursus controle over de IT beslissingen in uw organisatie.

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■ English:

■ At the end of this training you will be able to participate in discussions about IT and challenge IT professionals in design choices. With this course you will gain control over the IT decisions in your organisation.

Prerequisites:

Nederlands:

Er is geen specifieke vooropleiding vereist.

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English:

No specific prior training is required.

Testing and Certification

Content:

1. Introduction, agenda and download the App

- Introduction
- Agenda
- Study where you want: download the App

2. IT Basics

- Communication
- Hardware middleware software
- PC-Server-Mainframe, vendor lock in and scalability
- Mainframe - Moore's Law
- Requirements, NFRs, Java Dotnet
- Open Source - Closed Source
- Batch vs Online, interface, protocol, port and host
- Waterfall versus Scrum
- Continuous Integration, DevOps and the Spotify model
- Checkpoint questions
- Slides

3. Virtualization

- Virtualization basics (VMWare, Hyper-V, etc.)
- Overcommit
- Costs and drawbacks
- Conclusion
- Checkpoint questions
- Slides

4. Cloud Computing

- IaaS / PaaS / SaaS
- Characteristics
- Responsibilities
- Deployment models: Public, Private etc.
- Pros and cons
- Cost and conclusion
- Checkpoint questions
- Slides

5. Internet and IT Infrastructure

- IP address, DNS and BGP
- Firewall
- DDOS
- Load balancer, security proxy, LDAP and Active Directory
- Caching proxy and HTTP server
- DMZ and network zone
- Application server and ESB
- Content Management System (CMS)
- Cookies and Sessions
- Cookie flow and stateful
- Stateless and Stateful
- Tracking cookies
- Checkpoint questions
- Slides

6. SSL / TLS and encryption

- Shared secret, symmetric encryption
- Asymmetric encryption, PKI, Public and Private key
- SSL Flow and SSL Handshake
- SSL Flow 2
- Personal Certificate
- Two way SSL or Mutual TLS
- Encryption at transport level
- Integrity: MAC, Hash and Checksum
- Considerations
- Conclusion
- Checkpoint questions
- Slides

7. Web Applications and Application design best practices

- Static-dynamic-active web pages
- Javascript and Client Side Development (Angular / Polymer)
- Java Application Servers (Websphere / JBoss / Tomcat)
- Java Application Servers and DTAP
- Tomcat
- Synchronous - Asynchronous
- Ajax Asynchronous
- Application design best practices: MV
- Application design best practices: KISS, design for failure
- Checkpoint questions
- Slides

8. Messaging and File Transfer

- Messaging (MQ)
- Publish Subscribe
- JMS and Kafka
- HTTP versus Messaging
- File Transfer
- Checkpoint questions
- Slides

9. APIs, Web Services, Enterprise Service Bus (ESB)

- Service Oriented Architecture (SOA)
- Loosely coupled - tightly coupled
- Enterprise Service Bus (ESB), Mediation and Orchestration (Tibco / Mule etc.)
- SOAP Web Services
- SOAP - WSDL - UDDI
- Governance
- REST APIs
- Microservices
- Producers - consumers
- Checkpoint questions
- Slides

10. Databases, Big Data and NoSQL datastores

- Databases (RDBMS, Oracle, SQLServer, DB2 etc.)
- Databases continued and virtualization
- Big Data and NoSQL Datastores (Cassandra / Hadoop etc.)
- NoSQL and virtualization
- Checkpoint questions
- Slides

11. High availability, Disaster Recovery, backup restore

- High availability active - passive
- DTAP - testing
- Request-Reply chains
- Event Driven Architecture
- Horizontal and vertical clustering, anti-affinity
- Data replication, backup restore
- Data integrity
- Disaster recovery
- DR Active - Active
- Operational management - active passive monitoring
- OPS Tools (event collectors, CMDB etc.)
- Log collectors (Logstash / Splunk etc.)
- Checkpoint questions
- Slides

12. IT Security

- Threats: APT and Zero Day attacks
- Owasp top ten and AVG (GDPR)
- Business Impact Analysis and Risk Assessment
- Layered defenses, Defense in Depth and Authentication - Authorization
- Data security
- Application security
- Host security
- Network security
- Data in transport, virus scanner and IDS
- Checkpoint questions
- Slides

Additional Information:

Nederlands:

Beschikbaarheid: Nadat u de training bent gestart is de e-Learning training 8 weken beschikbaar.

Studieinspanning: De studieinspanning is ca. 3 uur per week.

Studeren waar u wilt: Er is tevens een app voor IOS en Android beschikbaar zodat u overal uw kennis kunt opdoen.

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English:

Availability: After you have started the training, the e-Learning course is available for 8 weeks.

Study effort: The study effort is approx. 3 hours per week.

Study wherever you want: There is also an app for IOS and Android available so that you can acquire your knowledge anywhere.

Further Information:

For More information, or to book your course, please call us on 0800/84.009

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www.globalknowledge.com/en-be/