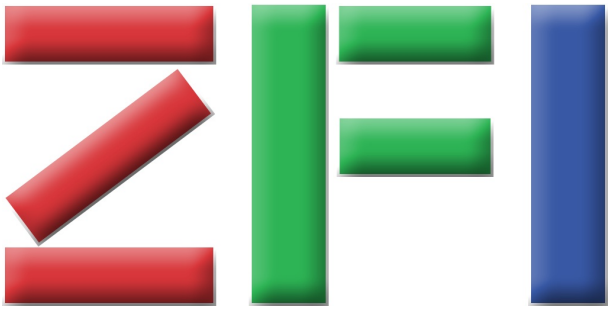
Kurs-Dokumentation



Zentrum für Informatik ZFI AG

Windows Azure Solutions with Microsoft Visual Studio 2010 (NWAZ-0212) -IT Ausbildung nach Mass

http://www.zfi.ch/NWAZ-0212

Weitere Infos finden Sie unter www.zfi.ch oder via Adresse:

Zentrum für Informatik ZFI AG
Zentralsekretariat
Technoparkstrasse 1
CH-8005 Zürich
Telefon: 044 732 40 00
Telefax: 044 732 40 09

Zürich, Basel, Bern, Zürich, Schweiz

Titel	**Windows Azure Solutions with Microsoft Visual Studio 2010**
Untertitel	**Einführung in Cloud Computing für Entwickler**
Einleitung	**Unternehmen begreifen die Cloud (das Internet und die zugrunde liegende Infrastruktur) immer mehr als eine wichtige Komponente ihrer Entwicklungsstrategie. Dafür gibt es einfache Gründe mit grossen Auswirkungen. Vom Reduzieren der Kosten für die Infrastruktur und das IT-Personal, die für die Beschaffung und Wartung einer Computerinfrastruktur erforderlich sind, bis zu dem Argument, nur für die tatsächlich verbrauchten Computerressourcen zu zahlen, gibt es viele Aspekte, die die Cloud immer weiter an Bedeutung gewinnen lassen. Mit der Azure-Plattform bietet Microsoft den Entwicklern eine Cloud mit Tools, die zum Erstellen neuer Applikationen benötigt werden sowie Tools zur Erweiterung bestehender Anwendungen, die somit von der Leistungsfähigkeit der Cloud profitieren.**
Ihr Nutzen	**After completing this course, students will be able to:** **- Understand cloud computing in its various forms and how Windows Azure fits in the cloud computing space.** **- Learn why organizations want to run applications in the Azure cloud.** **- Understand the architecture of Azure.** **- Explore the Azure SDK and DevFabric development environment.** **- See how to develop applications for Azure and how that varies from "normal" .NET application development.** **- Write and deploy a ASP.NET Web application (Web Role) to Azure.** **- Explore Azure storage capability.** **- Learn how to create and deploy background computational applications (Worker Role) in Azure.** **- Explore SQL Azure capability.**
Vorausetzungen	**Before attending this course, students must have:** **- Experience with Visual Studio 2008 or better** **- Knowledge and experience in a .NET language (C# or VB)** **- Knowledge of ASP.NET**
Teilnehmerkreis	**This class is designed for .NET developers with Web application experience that are exploring developing new applications or porting existing applications to Windows Azure**
Unterlagen	**Orginal Microsoft-Unterlagen**
Folgekurse	**andere Kurse aus dem Bereich Spezialisierung, siehe Bildungsweg**
Inhalt	**- Cloud Computing Define cloud computingLearn the benefits of cloud computingUnderstand the different types of cloud computing servicesExplore where computing clouds might existHear about potential concerns with cloud computingLearn where cloud computing can and cannot be appliedPlace Windows Azure in light of general cloud computingKnow how Windows Azure compares to other cloud environments** **Windows Azure ArchitectureSee a simple Windows Azure applicationLearn about the Microsoft data centersExplore the hardware,**

servers and virtualization (the Fabric) that host cloud applications and dataUnderstand the role of the Fabric Controller in managing the Windows Azure cloudKnow the general architecture and components of the Windows Azure PlatformUnderstand the tools used to create and deploy Windows Azure services and data stores

Windows Azure Web RolesExplore the purpose of Windows Azure Web roles.Understand how to create Web roles in a cloud service projectSee how to configure a Web roleLearn how to test Web roles run in the Dev FabricStart exploring the Windows Azure API

Local StorageExamine Windows Azure local storageSee how local storage differs from normal server file systemsLearn how to configure local storage.Understand the limitations of local storage and where/when to use itExplore the API to access local storageLearn about Windows Azure Drive (formerly X-Drive)

Windows Azure Storage and QueuesUnderstand the purpose of Windows Azure StorageLearn how to create a Windows Azure Storage accountExplore Windows Azure Storage costsUnderstand Dev Storage, how to use it, and how it is different from Windows Azure StorageSee how to access Windows Azure Storage using both the REST API and the Storage Client LibraryExamine Windows Azure Storage QueuesLearn how to get messages in and out of Windows Azure Queues

Blob StorageUnderstand the rationale for using blob storageExplore how to access blob storage with both the Storage Client and REST APIExamine blob storage containers and how they are used to organize and control access to blobsLearn about the different types of blobs: block and page blobs.

Table StorageExplore Windows Azure Storage?s structural data serviceUnderstand the reason for table storageExamine the differences between table storage and traditional relational databases (as exhibited by SQL Azure)Learn how to access table storage with both the Storage Client and REST APIUnderstand entities as they relate to table storageExamine how to save and retrieve entities in table storageSee how to use table storage for session management in Windows Azure Web applications

Worker RolesExplore the purpose of Windows Azure worker rolesUnderstand how to create worker roles in a cloud service projectSee how to configure a worker roleLearn how to test worker roles run in the Dev FabricExplore how to setup worker role endpointsLearn how to communicate with worker role internal and input endpoints

SQL AzureLearn what SQL Azure is and why you want to use itUnderstand SQL Azure in comparison to SQL Server and Windows Azure table storageLearn how to provision a SQL Azure server and databasesExamine costs associated with SQL AzureSee how to use familiar tools and APIs to work in SQL AzureExplore how to create and

	manage database objects in SQL AzureKnow how to limit SQL Azure accessUnderstand options for performing database backupsSee how to migrate data to SQL Azure **Diagnostics and LoggingLearn how to accomplish debugging and logging in Windows AzureExamine Windows Azure Diagnostic ServiceUnderstand the role of the MonAgentHost process in the diagnostic serviceLearn how to configure the diagnostic serviceSee how to transfer diagnostic data to Windows Azure Storage**
Beitrag	**Der Teilnehmerbeitrag versteht sich rein netto. Das ZFI ist (gemäss MwSt-Gesetz) nicht Mehrwertsteuerpflichtig und erhebt somit keine MwSt. Bei länger als einen Monat dauernden Lehrgängen ist die Zahlung des Teilnehmerbeitrages in mehreren Raten möglich (pro rata temporis).**

Bildungsweg Visual Studio .NET