

INFS 3204/7204 Service-Oriented Architecture



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ITEE, UQ
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M11: Course Review

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Week Number	Lecture Number	Lecture Topic
1	M1	Introduction to Web Service & SOA
2	M2	EAI and B2B interaction: the Business Case for SOA
3	M3	.NET Basic: Programming Environment, Framework, C#
5	M4	.NET Advance: ADO.NET, ASP.NET, Web form, MVC, etc
6	M5	Web Service Basic: SOAP, WSDL, UDDI, etc
7	M6	Web Service Advance: Composition & Orchestration
8	M7	SOA Development
9	M8	Cloud Computing Basic: Concepts
10	M9	Cloud Computing Advance: Core Technologies and Platforms
11		Guest Lecture on Workflow
12	M10	Semantic Web Service
13	M11	Course Review

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M1 Topics

- SOA
- Web Service
- Business and technical motivation

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M2 Topics

- Supply Chain, EAI, B2B, B2C, EDI, business logic, workflow management
- Integration
 - Middleware
 - Web service
- Web 2.0, Mashup, and SOA 2.0

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M3 Topics

- .NET Basics
 - Fundamentals
 - Platform
 - Framework
 - Environments
 - Window forms
 - Web forms
- C#
 - Basic syntax

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M4 Topics

- .NET advances
 - ADO.NET
 - LINQ
 - ASP.NET
 - Web Forms
 - MVC

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M5 Topics

- WS Basics
 - Basic concepts
 - Deploying web services
 - Web service stack – 8 steps
 - SOAP
 - Purpose, message structure, how it works, etc.
 - WSDL
 - Purpose, schema, delineation, etc.
 - UDDI
 - Purpose, schema, information model, etc.

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M6 Topics

- WS Advances
 - Composition
 - Composition middleware
 - Limits of conventional composition
 - Composition Models
 - Orchestration
 - Activity diagram
 - Statecharts
 - Petri Nets
 - Activity Hierarchy
 - Choreography

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M7 Topics

- SOA development
 - Basic Concepts
 - Development of SOA
 - Analysis
 - Design
 - Implementation
 - Industrial standards

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M8 Topics

- Cloud computing
 - Concepts
 - Advantages and disadvantages
 - Cloud services
- A business case for cloud
- SOA meets cloud

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M9 Topics

- Core technologies
 - Distributed File System
 - MapReduce
- Commercial platforms
 - Windows Azure
 - Google AppEngine
 - Amazon EC2
- Open source platforms
 - Hadoop

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M10 Topics

- Semantic Web Service
 - Concepts
 - RDF
 - Ontology
 - Semantic WS

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Guest Lecture

- Not examined

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Exam

- Total 60 marks
- Total 6 questions
- Roughly
 - 50% on concepts,
 - 30% on understanding
 - 20% on application

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Exam

- **Close book**
- When:
 - 14 Nov, 5:45PM
- Where:
 - 69-110

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Assessment of this course

- On-hand experiences and skills on building web applications by SOA
 - Prac – 40%
- Concepts and understanding
 - Exam – 60%
 - To be prepared:
 - Lecture notes
 - Previous year papers

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Your grade

- Total marks
 - 40%+60%=100%
- Grade

Total mark	85-100	75-84	65-74	50-64	45-49	20-44	0-19
Grade	7	6	5	4	3	2	1

- **Not percentage based**
- **No minimal requirements on individual component**

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Consultation

- Drop me an email
- Pass by my office
- New groups
- Course websites
- **Check your pracs marks now**

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Where to go from here?

- Other study
 - Large scale project like final year project?
- Research
 - PhD or master?
- Job
 - Software (SAP, Microsoft, IBM, Oracle, etc)
 - Finance (Banks, insurance, ebay, etc.)
 - Start-up (web/online service/system)

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GOOD LUCK!

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