

COURSE CODE	COURSE TITLE	L	T	P	C
1152IT143	CLOUD MIDDLEWARE	3	0	0	3

UNIT 1 CONCEPTS & SOA

The concepts of object, component, service. SOA. - Web Service Description Language (WSDL) and selected WS-* specifications. Representational State Transfer (REST) and its implementation RESTful - compared with WSDL. Process modeling - workflow patterns - Business Process Execution Language (BPEL).

UNIT 2 ARCHITECTURES

Architectures for middleware: Middleware Software / Platforms - Conducting a PaaS Comparison - Understanding PaaS Software- Managed Private Cloud- Open Source PaaS – Benefits and Solutions - ESB,P / S, MQ. - Reliability and scalability of applications. - P2P systems, Skype case study.

UNIT 3 DB MIDDLEWARES

Commercial software vs. SaaS model. - Cloud computing - the architecture of modern applications- Infrastructure as a Service (IaaS) - distributed computing and distributed file system. Oracle Middleware in the Cloud.

UNIT 4 PLATFORM & MIDDLEWARE

Middleware as a Platform - Database Middleware with PaaS- Grid middleware - Key Features of the PaaS System

UNIT 5 APPLICATIONS

Platform as a Service (PaaS), Google case study. - Software as a Service (SaaS) - Salesforce & GoodData case studies.

TEXT / REFERENCE BOOKS

1. Frank Munz. "Middleware and Cloud Computing: Oracle on Amazon Web Services (AWS), Rackspace Cloud and RightScale : Volume 1 Paperback – Import, 1 Jan 2011
3. Honbo Zhou, "The Internet of Things in the Cloud: A Middleware Perspective", 2012 by CRC Press ,ISBN 9781439892992 .
4. www.appenda.com
<http://www.oracle.com/technetwork/topics/cloud/middleware-084242.html>