

Enterprise Applications Architecture Introduction and Overview

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Introduction

This module is intended to develop your knowledge in of Enterprise Software (and Applications) Architecture. We emphasise the development of practical lab-based skills.

Module Structure

Week	Lecture Topic	Lab Topic
1	Introduction & Enterprise Architecture Review	bash
2	EI Patterns #1	bash
3	EI Patterns #2	git, branching, git patches, bash
4	Architecture of NiFi	NiFi
5	Architecture of Solr	NiFi
6	Architecture of Active MQ	NiFi & Solr & AMQ
7	Performance #1 Math Modelling	Mon Tools
8	Performance #2 Math Modelling	Jmeter
9	Performance #3 Java VM	Java VM
10	Infrastructure as Code #1	Puppet
11	Infrastructure as Code #2	/ CI / DevOps /Puppet
12	DevOps	Jenkins
13	Revision	

Module Structure

- There are 13 weeks in the semester
- 2 hr lecture, 2 hour lab. Labs goal-based are self-directed study based on individual or team activities ¹
- Breakdown of marks: 40% CA, 60% Exam
- 2 x CAs Week 5 & Week 11 (20% + 20%)

¹The best way to learn is to do

Module Reading Material

- Test-Driven Infrastructure with Chef, 2nd Edition Bring Behavior-Driven Development to Infrastructure as Code Publisher: O'Reilly Media By:Stephen Nelson-Smith ISBN: 978-1-4493-0481-2 Year: 2011
- Cloud Capacity Management. Publisher: Apress By: Navin Sabharwal, Prashant Wali ISBN: 978-1-4302-4923-8 Year: 2013
- Pro Bash Programming Scripting the Linux Shell Publisher: Apress By: Chris Johnson ISBN: 978-1-4302-1997-2 Year: 2009