# London South Bank University

Enterprise Architecture

BIF-5-ENA

https://vle.lsbu.ac.uk/

School of Engineering

2015/16

Level 5

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# 1. MODULE DETAILS

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|---|---|
| **Module Title:** | Enterprise Architecture |
| **Module Level:** | Level 5 |
| **Module Reference Number:** | BIF-5-ENA |
| **Credit Value:** | 20 |
| **Student Study Hours:** | 200 |
| **Contact Hours:** | 75 |
| **Private Study Hours:** | 125 |
| **Pre-requisite Learning (If applicable):** | None |
| **Co-requisite Modules (If applicable):** | None |
| **Course(s):** | Informatics Framework |
| **Year and Semester** | 2013/4 Semester 1 |
| **Module Coordinator:** | Nigel Phillips |
| **MC Contact Details (Tel, Email, Room)** | 7437, phillinp@lsbu.ac.uk, FW202 |
| **Teaching Team & Contact Details (If applicable):** | Fintan Culwin, 7446, fintan@lsbu.ac.uk, FW207 |
| **Subject Area:** | Computer Science and Informatics |
| **Summary of Assessment Method:** | 60% Coursework, 40% Examination |
| **External Examiner appointed for module:** | Peter Duncan |

# 2. SHORT DESCRIPTION

This module will introduce you to the concept of the Enterprise Architecture – the high-level internally compatible representations of an organisations business models, data, applications, and information technology infrastructure. Being able to understand and develop the enterprise architecture is a key skill set for ensuring that the IT capabilities are fully aligned with the general organisational goals.
This introduction focuses on the component architectures of the IT Infrastructure, including networking technology, data centres, and so on and will introduce you to the IT management and control frameworks COBIT, ITIL and TOGAF.

# 3. AIMS OF THE MODULE

This module aims to develop a clear understanding of the key components of the IT infrastructure and the standard approaches to modelling and representing them for the purpose of aligning them with business goals. To this end the module aims to ensure you are familiar with the ITIL, TOGAF and COBIT frameworks for managing and monitoring IT infrastructure operations and development.

# 4. LEARNING OUTCOMES

## 4.1 Knowledge and Understanding
- Explain the high-level components of the IT infrastructure
- Compare and contrast frameworks for enterprise architecture

## 4.2 Intellectual Skills
- Apply frameworks (eg ITIL and COBIT) to specific problems to ensure IT infrastructure alignment with business goals

## 4.3 Practical Skills
- Construct and interpret IT infrastructure models

## 4.4 Transferable Skills
- Abstract problem solving

# 5. ASSESSMENT OF THE MODULE

The module is assessed by a coursework assignment worth 60% and an examination worth 40%.
For the assignment you will create a model repository using Visual Paradigm. The repository should contain BPMN (Business Process Modelling Notation) and UML diagrams representing all the processes,

functions and main artefacts recommended by ITIL and TOGAF. There will be two assessment points one in week 7 and one in week 13.

NOTE: - you will need to submit your models on a USB memory stick. You will need two copies of your work so that you can continue working while your first submission is being accessed.

The examination will contain 3 sections. You must answer all questions from section which accounts for 50% of the available marks and one question from section B and one question from section C which will be worth 25% of the marks each. Section A will cover general aspects of enterprise architecture and modelling, section B will contain ITIL related questions and section C TOGAF related questions.

# 6.   FEEDBACK

Your tutors will give feedback on your work each week. Your first submission will be marked and return by week 10.

# 7.   INTRODUCTION TO STUDYING THE MODULE

### 7.1   Overview of the Main Content

This module covers the management frameworks ITIL and TOGAF and provides experience in developing architectural model repository using an industry standard modelling tool.

### 7.2   Overview of Types of Classes

Each week you will be introduced to a key aspect of a framework the lecture. Most of your time in the laboratory sessions will be taken up with modelling the processes and artefact introduced in the lecture. Lecture are on Monday afternoons and tutorial are on Monday morning so that the work in the tutorial will follow the lecture from the previous week allowing plenty of time to complete required reading, and practice the modelling.

### 7.3   Importance of Student Self-Managed Learning Time

In order to get the most from the module it is important that you read the appropriate online material relevant to that week and that you attempt to model the processes and artefact before the laboratory sessions so that you can benefit from the help and guidance of your tutor.

### 7.4   Employability

Designing and managing enterprise architectures is consider a core competence that any IS/IT graduate should have by all the leading IS/IT professional bodies including ACM, IEEE, and BCS

# 8.   THE PROGRAMME OF TEACHING, LEARNING AND ASSESSMENT

| Week | Seminar | Lecture | Comments | Week Begining |
|------|---------|---------|----------|---------------|
| 1 | Preliminaries | Introduction | | 28th Sept 2015 |
| 2 | The ICT Department  Visual Paradigm | BPMN  ITIL Strategy | | 5Th Oct 2015 |
| 3 | Modelling processes with BPMN | ITIL Design | | 12th Oct 2015 |
| 4 | Assignment pt 1 | ITIL Transition | | 19th Oct 2015 |
| 5 | Assignment pt 1 | ITIL Operations | | 26th Oct 2015 |
| 6 | Assignment pt 1 | ITIL Continuous Service Improvements | | 2rd Nov 2015 |
| 7 | Assignment pt 1 | TOGAF ADM Preliminary phase | Assignment part 1 submission | 9th Nov 2015 |

| 8 | Assignment pt 2 | A & B | | 16th Nov 2015 |
|---|---|---|---|---|
| 9 | Assignment pt 2 | C | | 23th Nov 2015 |
| 10 | Assignment pt 2 | D & E | | 30th Nov 2015 |
| 11 | Assignment pt 2 | F, G & H | | 7th Dec 2015 |
| 12 | Assignment pt 2 | Overflow | | 14th Dec 2015 |
| 13 | | Examination Prep | Assignment part 2 submission | 11th Jan 2016 |

# 9.  STUDENT EVALUATION

This is the first time this module has run so there are no student evaluations available.

# 10.  LEARNING RESOURCES

## 10.1  Core Materials

https://www.axelos.com/best-practice-solutions/itil
http://pubs.opengroup.org/architecture/togaf9-doc/arch/
http://www.bpmn.org/

Desfray, P. Raymond, G. (2014) Modelling Enterprise Architecture with Togaf: a practical guide using UML and BPMN, Morgan Kaufmann (Available via the VLE)

## 10.2  Optional Materials

Bernard, S. (2012) *An Introduction to Enterprise Architecture* (Third Edition) Authorhouse.

The Open Group (2011). *TOGAF® Version 9.1*. Van Haren
Publishing.

The Open Group (2011). *TOGAF® Version 9.1: A Pocket Guide*.
Van Haren Publishing.

Itil (2012) *Key Element Guide Suite - Aligned to the Itil 2011* Editions (2012). Cabinet Office

Van Haren Publishing (Author) (2007) *ITIL V3: A Pocket Guide* (1st edition) Van Haren Publishing;

**NOTES**