Systems and Principles Unit Syllabus

Level 3 Investigating and Defining Customer Requirements for ICT Systems

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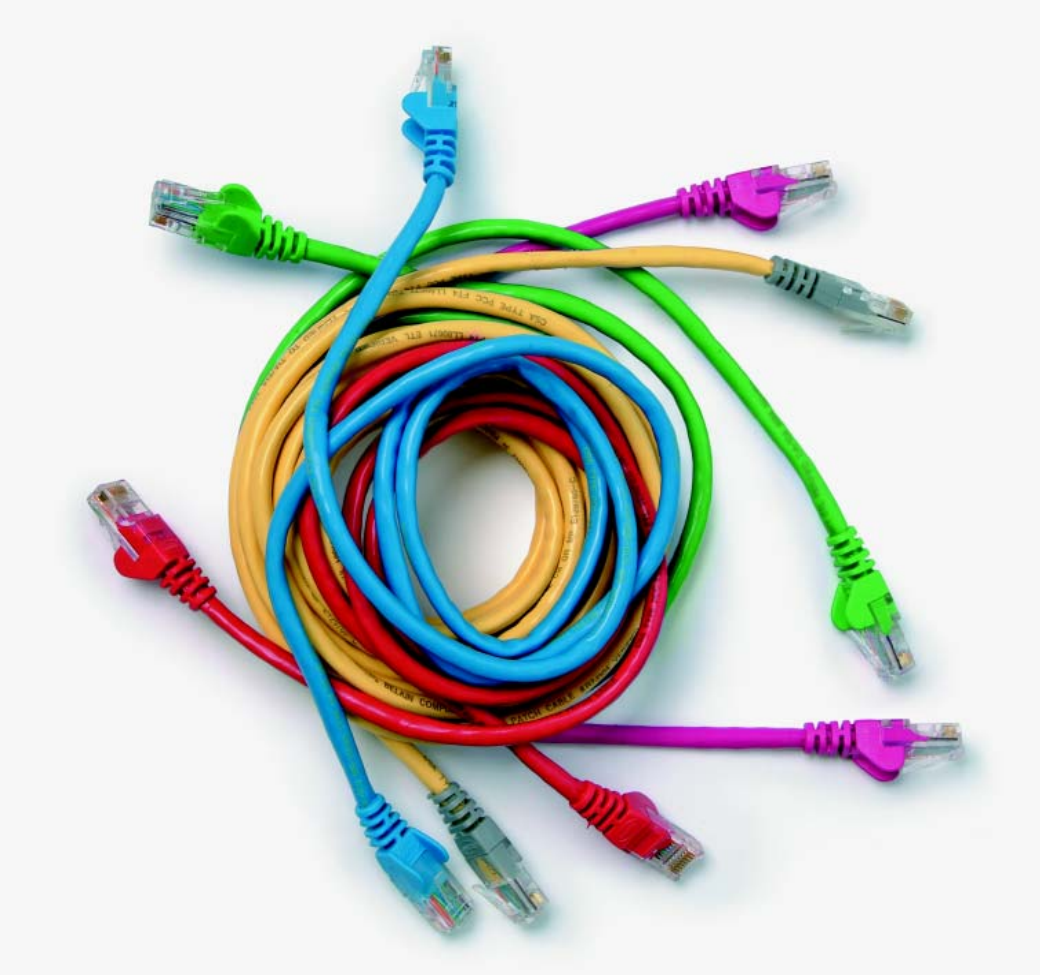

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Unit 053 Investigating and Defining Customer Requirements for ICT Systems

Syllabus Overview

Unit accreditation number R/601/3249

Credit value 12

Rationale

This unit covers the principles of investigating existing systems and processes and the application of the techniques used for analysis of information to identify the customer requirements.

Learning outcomes

There are **two** outcomes to this unit. The candidate will be able to:

1 Investigate existing systems and processes

2 Analyse information to identify needs and constraints

Guided learning hours

It is recommended that **75** guided learning hours should be allocated for this unit. This may be on a full time or part time basis.

Connections with other qualifications

This unit contributes towards the learning outcomes and assessment criteria required for the level 3 Diploma in ICT Professional Competence.

Assessment and grading

Assessment will be by means of a **set assignment** covering practical activities and underpinning knowledge.

Unit 053 Investigating and Defining Customer Requirements for ICT Systems

Outcome 1 Investigate existing systems and processes

Practical activities

The learner will be able to

1 Use three of the following investigative methods:
- observations
- examination of existing documents, records or software
- questionnaires
- site surveys

2 Record the results of investigations using standard documentation

3 Explain the importance of preserving the confidentiality of customer information

Underpinning knowledge

The learner will be able to
- explain the reason for using observation as an analytical tool
- describe the purpose of examining existing documents, records and software
- describe the generally accepted rules of good practice for drawing up questionnaires
- explain the reason for using a site survey as an analytical tool
- explain that security measures must be defined to protect customer information stored in a computer eg backup, passwords
- describe how customer information can be protected in a manual system eg physical locks
- explain the purpose and use of a decision table.

Unit 053 Investigating and Defining Customer Requirements for ICT Systems

Outcome 2 Analyse information to identify needs and constraints

Practical activities

The learner will be able to

1 Describe the type of defect, including inaccuracy, duplication and omission, which can arise in information
2 Describe the types of customer needs and constraints which can affect the design of an ICT system
3 Analyse information to identify customer needs for:
   - data to be stored and processed
   - functionality in terms of inputs, processes and outputs
   - capacity including numbers of users, throughput, and data storage
4 Analyse information to identify customer constraints
5 Record the results of analyses using standard documentation

Underpinning knowledge

The learner will be able to

- describe the types of constraint that may be imposed on a system: compatibility with existing systems; physical; timescale; regulatory; financial; reliability; performance
- explain that a data dictionary defines for each individual data element
    - unique name
    - data type (numeric, character, date, logical)
    - format (currency, day/month/year)
    - description
    - range/domain
    - size
- explain that a data dictionary defines for each data group its composition eg Aircraft Position = Latitude + Longitude + Height
- state that the diagrammatical representations used may be dependant on the type of system to be developed eg real-time
- describe the use of the following:
    - Data Flow Diagram (DFD)
    - Entity Relationship Diagram (ERD)
    - State Transition Diagram (STD)
    - Object modelling diagram
- explain the importance of presentations/walkthroughs and approval/sign off at each stage of the SDLC to ensure that proposals meet customer requirements

Unit record sheet

Use this form to track your progress through this unit.

Tick the boxes when you have covered each outcome. When they are all ticked, you are ready to be assessed.

Outcome		✓	Date
1	**Investigate existing systems and processes**	☐	
2	**Analyse information to identify needs and constraints**	☐	

Candidate Signature ..... **Date** .....

City & Guilds Registration Number .....

Quality nominee (if sampled) ..... **Date** .....

Assessor Signature ..... **Date** .....

External Verifier Signature (if sampled) ..... **Date** .....

Centre Name ..... **Centre Number** .....

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