



## SYSTEMS DESIGN AND IMPLEMENTATION TECHNIQUES

Systems Design and Implementation Techniques is one of an integrated set of courses leading to the widely respected British Computer Society Information Systems Examination Board (ISEB) Diploma in Systems Development.

Systems Design and Implementation Techniques is a PRACTITIONER specialist module of the ISEB Diploma in Solution Development.

## SYSTEMS DESIGN AND IMPLEMENTATION TECHNIQUES

This course focuses on the techniques and approaches needed to structure and build a robust, flexible system, and to deploy that system for live running. It is concerned with designing all aspects of the user interface (input forms, input screens, output screens, reports and documents, dialogues) as well as underlying principles of data and process design. It explores the options for implementation and the various risks and benefits of these.

### Course Objectives

*This course will enable delegates to:*

- Explain the role and objectives of systems design and implementation in the systems development life cycle
- Construct a usable user interface (HCI)
- Normalise a set of inputs and outputs
- Create detailed process specifications
- Apply the principles of security, confidentiality, privacy and physical design
- Describe the role of testing in systems design
- Describe and evaluate different methods of implementation
- Analyse and select an appropriate training method
- Describe a range of post-implementation issues
- Prepare for the ISEB Certificate in Systems Design and Implementation Techniques

### Who Should Attend

*Those who are likely to become involved in systems development at any level, including:*

- Business Analysts and Systems Analysts
- Developers
- Project Managers and Team Leaders
- Quality Assurance and Quality Control Managers
- Release Managers and Test Managers

**Course Duration:** 3 days

**Course Code:** SDIT

### Detailed Course Content

#### Introduction

Design and implementation in the lifecycle  
Interpreting the models of analysis  
Design approach, objectives, constraints and architecture

#### Design

Input / Output Design  
Interface Design and Data Design (normalisation)  
Process design and specification  
Physical design

#### Controls and Security

Physical and logical security  
Risk assessment  
Backup and recovery procedures  
Audit trails  
Contingency planning  
Legislative controls  
Ethical issues

#### Testing within the Chosen Life Cycle

Test cases from design models  
Design and code inspection  
Unit testing and component integration testing  
System and system integration testing  
User acceptance testing  
Requirements traceability

*(continued overleaf)*

### Pre-requisites, evening study and examinations

There are no pre-requisites for the course. Delegates can take an optional one-hour written examination at the end of the course. Successful candidates are awarded the ISEB Certificate in Systems Design and Implementation Techniques.



### Detailed Course Content (continued)

#### Methods of implementation

Implementation planning and preparation  
Changeover methods  
Handover procedures  
Training

#### Post Implementation

Post implementation and post project reviews  
Benefits realisation  
Types of maintenance

Change control  
Build and release strategy  
Regression testing

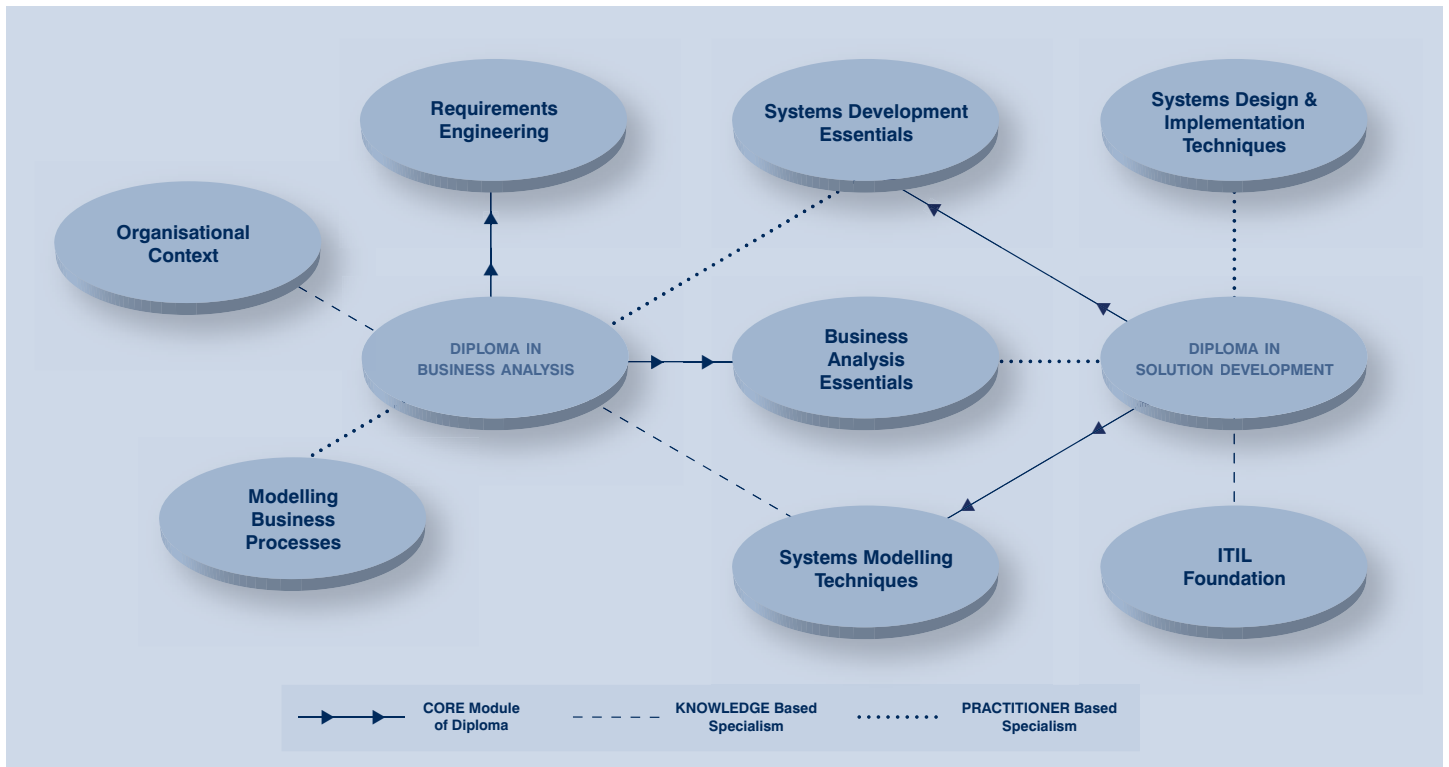
#### More Information

If you would like to discuss anything further, please email us at [contact@tcc-net.com](mailto:contact@tcc-net.com)

For upcoming dates on our public schedule and prices, please visit our website at [www.tcc-net.com](http://www.tcc-net.com)

If you have four or more people to train and would like this course run in-house, please **call us** for further details.

### Related TCC Training Courses



SDIT201