



DEMONSTRATE AN UNDERSTANDING OF THE HANDLING OF ERROR IN A COMPUTER PROGRAMMING ENVIRONMENT

Unit Standard: 115359



Course Information



Accelerating quality skills towards an information savvy society

Programme Approval no: PA/00/2018/07/0026
Media, Information and Communication Technologies
Sector Education and Training Authority

Qualification Title

National Certificate: Information Technology
(Systems Development)

Course Title

Demonstrate an Understanding of The
Handling of Error in A Computer
Programming Environment

Course Level

4

Course Credits

2

Course Duration

Three days

Cost of Course

R 2 800,00 per delegate (excluding 15% VAT)

Course Overview

This Unit Standard is designed to provide credits towards the mathematical literacy requirements of the NQF at level 4. The essential purposes of the mathematical literacy requirements are that, as the learner progresses with confidence through the levels, the learner will grow in:

- An insightful use of mathematics in the management of the needs of everyday living to become a self-managing person.
- An understanding of mathematical applications that provide insight into the learner's present and future occupational experiences and so develop into a contributing worker.
- The ability to voice a critical sensitivity to the role of mathematics in a democratic society and so become a participating citizen.

Systems Development

Who Should Attend?	This course is for anyone interested in the field of system development and computer architecture concepts.
Course Objectives	- Explain different errors found in the computer programming environment. - Demonstrate how calculation errors are induced in the computer. - Demonstrate how mistakes and computer errors can be minimised.
Benefits	Benefits of this course include learning to: - Identify, solve problems, and make decisions. - Collect, analyse, organise, and critically evaluate information. - Communicate effectively. - Use science and technology effectively and critically. - Contribute to his/her full personal development and the social and economic development of the society at large.

Course Content

Course Modules	Course modules consist of: - The difference between an error and a mistake. - The explanation covers the errors found in data entry via computer input devices. - The explanation identifies sources of induced errors in calculations. - The demonstration explains overflow errors found in computers. - The demonstration explains underflow errors found in computers. - The demonstration explains conversion errors found in computers. - The demonstration explains errors found in computers because of advancement in processor word-sizes. - The demonstration explains how mistakes can be minimised. - The demonstration explains how errors can be minimised.
Certification and Assessments	All delegates who complete the summative assessment will be assessed, moderated, and receive a SOR (Statement of Results). Thereafter a Certificate of Competence from WWiSE (or SETA for qualifications) will be issued.

About WWiSE

Who are we?

World Wide Industrial & Systems Engineers (WWiSE) is an ISO consultancy, training, business solutions, and systems implementation firm based in Southern Africa that provides clients with effective business processes management solutions in preparation for ISO compliance. The solutions we provide and implement allow our clients to compete favourably in modern competitive business environments, both locally and internationally. We also strive to be the leading training providers in SHERQ, ISO, Engineering, Finance, Business, and Project Management.

What do we do?

Our services are aimed at the improvement of quality, efficiency, knowledge, and competitiveness of client companies. This service range includes:

- ISO and SHERQ Systems implementation services, whereby we assist clients in meeting the requirements of (but not limited to) ISO 9001, 14001, 22000, 31000, 27001, 20000-1, 50001, and ISO 45001 Standards.
- Integrated Management Systems development whereby we integrate several business systems and management solutions into a single management system to comply with standards.
- Training of all employees (Shop Floor to Executive Management) in the fields of SHERQ, Engineering, Finance, Business, and Project Management to meet job responsibilities and expertise requirements of International Standards.
- ISO and Legal Auditing which includes Gap Analysis Audits, Product, Process, Procedural, and Systems auditing by our registered SAATCA Auditors.
- Customised web-based solutions integrating current systems to be in line with ISO requirements.

We are a Level 1 BBBEE Contributor that specialises in systems development, consultancy, training, and auditing.