WORLD WIDE INDUSTRIAL & SYSTEMS ENGINEERS



APPLY THE PRINCIPLES OF CREATING BATCH AND INTERACTIVE COMPUTER PROGRAMS USING A PROCEDURAL PROGRAMMING LANGUAGE

Unit Standard: 115386



Course Information

Programme Approval no:LPA/00/2018/07/0026
mictseta
Media, Information and Communication Technologies Sector Education and Training Authority
Accelerating quality skills towards an information savvy society

Qualification Title	National Certificate: Information Technology (Systems Development)
Course Title	Apply the Principles of Creating Batch and Interactive Computer Programs Using a Procedural Programming Language
Course Level	5
Course Credits	10
Course Duration	Three days
Cost of Course	R 2 800,00 per delegate (excluding 15% VAT)

Course Overview

People credited with this Unit Standard will be able to explain batch and interactive computer program concepts. Create batch computer programs to perform commercial tasks using a procedural programming language and create interactive computer programs to perform commercial tasks using a procedural programming language.

In addition, they will be able to test computer programs that demonstrate procedural programming language skills and document computer programs that demonstrate procedural programming language skills.

Systems Development

Who Should Attend?	• This course is for anyone interested in the field of system development and computer architecture concepts.
Course Objectives	• Explain batch and interactive computer program concepts. • Create batch programs for commercial tasks using a procedural language in a text-based environment. • Create interactive programs for commercial tasks with procedural language in a text-based environment. • Test computer programs that demonstrate procedural programming language skills. • Document computer programs that demonstrate procedural programming language skills.
Benefits	Benefits of this course include learning to: • Identify, solve problems and make decisions concerning the current environments. • Organise and manage oneself and one's activities responsibly and effectively. • Collect, analyse, organise, and critically evaluate information. • Communicate effectively using visual, mathematical and/or language skills in the modes of oral and/or written persuasion when engaging with the subject. • Demonstrate an understanding of the world as a set of related systems by recognising that problem-solving contexts do not exist in isolation. • Contribute to one's full personal development and the social and economic development of the society at large by being aware of the importance of reflecting on and exploring a variety of strategies to learn more effectively, exploring education and career opportunities and developing entrepreneurial opportunities.

Course Content

Course Modules	Course modules consist of: 1. Distinguish batch and interactive programs. 2. Justify decisions on when to use a batch program and when to use an interactive program for given situations.

	3. Identify the characteristics of file access methods for batch and interactive programs and outlines their limitations. 4. Create batch computer programs to perform commercial tasks using a procedural programming language in a text-based environment. 5. Programs fulfil the specified requirements. 6. Programs use algorithms that make efficient use of computer resources without complicating the program logic. 7. Create interactive computer programs to perform commercial tasks using a procedural programming language in a text-based environment. 8. User error messages are polite and meaningful. 9. Testing checks all program logic paths. 10. Program code is corrected to eliminate errors identified through testing. 11. Testing verifies that the program functions according to the design requirements. 12. A real-time source-level debugging tool is used to diagnose program errors. 13. The layout of the program code provides a visual guide to the logical structure of the program. 14. Comments embedded in the program code enhance the understanding of the program code for all readers. 15. Programmer-supplied names contribute to the self-documenting attributes of the program code. 16. The documentation complements the self-documenting attributes of the program code.
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.