APPLY KNOWLEDGE OF STATISTICS AND PROBABILITY TO CRITICALLY INTERROGATE AND EFFECTIVELY COMMUNICATE FINDINGS ON LIFE RELATED PROBLEMS

Unit Standard: 9015

Course Information

Qualification Title	National Certificate: Environmental Management
Course Title	Apply Knowledge of Statistics and Probability to Critically Interrogate and Effectively Communicate Findings on Life Related Problems
Course Level	4
Course Credits	6
Course Duration	Three days
Cost of Course	R 2 800,00 per delegate (excluding 15% VAT)

Course Overview

The essential purposes of the mathematical literacy requirement are that, as the learner progresses with confidence through the levels, the learner will develop:

- A confident, 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 provides 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.

Apply Knowledge of Statistics and Probability to Critically Interrogate and Effectively Communicate Findings on Life Related Problems

Who Should Attend?	• Anyone seeking knowledge and understanding related to the construction sector, physical planning and civil engineering, construction, information technology, and computer sciences fields. • Anyone in the above-mentioned fields seeking to further develop their skills.
Course Objectives	Delegates are able to: • Critique and use techniques for collecting, organising, and representing data. • Use theoretical and experimental probability to develop models, make predictions, and study problems. • Critically interrogate and use probability and statistical models in problem solving and decision making in real-world situations.
Benefits	Benefits of this course include the ability to: • Solve a variety of problems based on data, statistics, and probability. • Gather, organise, evaluate, and critically interpret data and statistics to make sense of situations. • Use everyday language and mathematical language to represent data, statistics, and probability and effectively communicate or critique conclusions. • Use mathematics to critically analyse, describe, and represent situations and to solve problems related to the life or work situations of the adult with increasing responsibilities.

Course Content

Course Modules	Course modules consist of: 1. Techniques for collecting, organising, and representing data. 2. Identifying situations or issues that can be dealt with through statistical methods. 3. Appropriate methods for collecting, recording and organising (data are used so as to maximise efficiency and ensure the resolution of a problem or issue 4. Use theoretical and experimental probability to develop models.

	5. Experiments and simulations are chosen and/or designed appropriately in terms of the situation to be modelled. 6. The results of experiments and simulations are interpreted correctly in terms of the real context. 7. Critically interrogate and use probability and statistical models. 8. Statistics generated from the data are interpreted meaningfully and interpretations are justified or critiqued. 9. Tables, diagrams, charts and graphs are used or critiqued appropriately in the analysis and representation of data, statistics and probability values 10. Evaluations of the statistics identify potential sources of bias, errors in measurement, potential uses and misuses and their effects
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.