## MATHEMATICS

| DESCRIPTION | UNIT STANDARD | UNIT STANDARD TITLE | LEARNING OUTCOMES | DURATION <br> (DAYS) | NQF LEVEL | CREDIT |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 9015 | Apply knowledge of statistics and probability to critically interrogate and effectively communicate findings on life related problems | Critique and use techniques for collecting, organising and representing data. | 2 | 4 | 6 |
|  |  |  | 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. |  |  |  |
|  | 9016 | Represent analyze and calculate shape and motion in 2 and 3 -dimensional space in different contexts | Measure, estimate, and calculate physical quantities in practical situations relevant to the adult with increasing responsibilities in life or the workplace. | 2 | 4 | 4 |
|  |  |  | Explore, analyze and critique, describe and represent, interpret and justify geometrical relationships and conjectures to solve problems in two and three dimensional geometrical situations |  |  |  |
|  | 7468 | Use mathematics to investigate and monitor the financial aspects of personal, business, national and international issues | Define a budget. |  | 4 | 6 |
|  |  |  | What are the steps to be followed for company budgetary control? |  |  |  |
|  |  |  | Why is it advisable to start with a sales-, then a production- and then a capital expenditure forecast in the budgeting process? |  |  |  |
|  |  |  | What is the difference between assurance and insurance? |  |  |  |
|  |  |  | What is an annuity? |  |  |  |
|  |  |  | What is a bond? |  |  |  |
|  |  |  | What is inflation? |  |  |  |
|  | 9010 | Demonstrate an understanding of the use of different number bases and measurement units and an awareness of error in the context of relevant calculations | Convert numbers between the decimal number system and the binary number system. | 1 | 3 | 2 |
|  |  |  | Work with numbers in different ways to express size and magnitude. |  |  |  |
|  |  |  | Demonstrate the effect of error in calculations. |  |  |  |
|  | 9013 | Describe, apply, analyse and calculate shape and motion in 2-and 3-dimensional space in different contexts | Measure, estimate, and calculate physical quantities in practical situations. | 1 | 3 | 4 |
|  |  |  | Explore, describe and represent, interpret and justify geometrical relationships and conjectures. |  |  |  |
|  | 9012 | Investigate life and work related problems using data and probabilities | Pose questions, collect and organise data. | 1 | 3 | 5 |
|  |  |  | Represent, analyse and interpret data using various techniques. |  |  |  |
|  |  |  | Use random events to explore and apply, probability concepts in simple life. |  |  |  |
|  | 7456 | Use mathematics to investigate and monitor the financial aspects of personal, business and national issues | Use mathematics to plan and control personal, regional and/or national budgets and income and expend | 1 | 5 | 5 |
|  |  |  | Use simple and compound interest to make sense of and define a variety of situations. |  |  |  |
| MATHEMATICS |  |  | Use mathematics to debate aspects of the national economy. |  |  |  |

