### SUMMARY

This unit, Business Maths, are mathematics used by commercial enterprises to record and manage business operations. Commercial organizations use mathematics, in accounting, inventory management, marketing, sales forecasting, and financial analysis. Mathematics typically used in commerce includes elementary arithmetic, elementary algebra, statistics and probability. Business management can be made more effective in some cases by use of more advanced mathematics such as calculus, matrix algebra and linear programming. This unit will sharpen the mathematical skills of learners preparing to enter business employment. This Unit Activities will include:

- Conduct break even analysis using both graphical and algebraic approaches
- Collect, summaries and present data, orally and in written English, including summary statistics and solve probability problems
- Carry out statistical analysis of data and describe the process used in English
- Formulate and test a hypothesis and describe the outcomes.

### COURSE CONVENOR

TBA

### ASSOCIATED HIGHER EDUCATION AWARD

- Diploma of Business
- Bachelor of Business

### STUDENT WORKLOAD

<table>
<thead>
<tr>
<th>S. No</th>
<th>Description</th>
<th>Hours per week</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>No. timetabled hours per week</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>No. personal study hours per week</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>Total workload hours per week</td>
<td>10</td>
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Additional English language support: _ hours per week

### PRE-REQUISITE

Nil

### SUBJECT WEIGHTING

- Subject credit points - 6 credit point
- Total course credit points - 144 credit point

### MODES OF DELIVERY

- E-learning (online)
- Face-to-face on site
- Distance/Independent learning (untimetabled)
- Full-Time
- Part-Time

### LEARNING OUTCOMES FOR SUBJECT

1. Demonstrate an understanding of the concepts and methods used in the analysis of business data.
2. Demonstrate an understanding of the role of mathematics in business and the ability to use basic mathematics functions to solve business problems.
3. Evaluate a range of sample statistics.
4. Demonstrate an understanding of the basic rules of probability to solve probability problems.
5. Demonstrate the ability to use appropriate computer software applications (such as MS Excel) in the analysis of statistical data.
6. Identify and assess the most appropriate statistical and analytical tools for use in given business situations.

### ASSESSMENT TASK

<table>
<thead>
<tr>
<th>Type</th>
<th>When Assessed</th>
<th>Weighting</th>
<th>Linked Learning Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tutorial quizzes</td>
<td>Four quizzes commencing in week three and continuing every three weeks.</td>
<td>20% (5% for each quiz)</td>
<td>1 - 6</td>
</tr>
<tr>
<td>Practical exercise – Data analysis</td>
<td>The practical exercise is required by the end of week 10</td>
<td>30%</td>
<td>2, 3, 4, 5 and 6</td>
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</tbody>
</table>
specific aspects of mathematical and/or statistical analysis. Topics may include interest and depreciation calculations, descriptive techniques, probability concepts, sampling distributions, and inference. Students must show detailed workings including correct calculations, graphs, and diagrams, as well as the appropriate use of MS Excel.

<table>
<thead>
<tr>
<th>Final examination</th>
<th>The examination is conducted in week following the final week of lectures.</th>
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<tbody>
<tr>
<td></td>
<td>50%</td>
</tr>
<tr>
<td></td>
<td>1 - 6</td>
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</tbody>
</table>

**PRESCRIBED FOR THE COURSE**

**SELECTED REFERENCES**

**PRINTED MATERIALS**

Extensive lectures notes, case study material and other information will be provided on-line as part of this course.

Prescribed text

**WEB SITES**

No single Web site presents all the necessary knowledge that students need to learn and apply. However, opposite are some useful sites to visit.

Online useful sources of references are: