# Solent University Module Descriptor

## **Module Code: COM517 Module title: Analytics and Business Intelligence**

### **Why is this module important?**

As there is more and more data created, organisations now use this data as an asset to help them plan forecast and support business strategies. This is very important and hugely helpful for businesses competitive advantage.

**What you will learn on the module**

Nowadays, organisations adopt analytics to forecast, measure and analyse business operations. Furthermore, it assists in fraud detection, risk management, performance management, and customer and/or marketing analysis. This module incorporates some advanced analytical and modelling techniques important in today’s business environment. You will learn a range of techniques and develop an understanding of where they can be applied.

Emphasis is placed on understanding and analysis of today’s business problems and the use of data for decision-making. Furthermore, you will be developing suitable models, using popular and high rated industry system/software where appropriate. This promotes the improvement of your problem-solving skill through analysis and solutions provision to facilitate business planning, control and decision-making.

### **How you will learn**

You will have IT-room sessions to present techniques and business models and show the business applications and implications. These hands-on sessions will give you more experience in applying the taught concepts and techniques, which cover a range of applications at increasing levels of difficulty. You will be expected to work with data using spreadsheets and statistical packages to further aid model developments.

You will keep a learning record, which is expected to build-up throughout the semester and will contain evidence of your evolving engagement with taught concepts, theories and techniques covered in the module. Also, the developed learning record will be assessed by your tutor and allows for formative feedback on given tasks at interval.

### **How much time the module requires**

### You are expected to study for 200 hours (which equates to 10 hours per credit.  This total learning time is made up of contact time, directed learning tasks, independent learning and assessment activity. Your tutor will offer you guidance on how you should best manage your study time on this module

### **How you will be assessed**

#### **Tasks which help you to learn and prepares you for summative tasks (Formative):**

You will incrementally submit given tasks, which are based on the assessment brief during the course of the semester for feedback and improvement on your final work.

#### **Tasks which count towards your degree (Summative):**

The summative assessment is a portfolio-based report demonstrating an understanding of principles, concepts and sophistication in thought of provided solutions to given tasks. The portfolio report will be written in a commentary form to evidence understanding of the module learning outcomes through reflections of own performance and assessment of tasks relevance in real-world business environments and decision-making processes.

The submitted portfolio should be an improved version of the given tasks based on the feedback from incremental formative assessments.

This summative assessment report supported by the tasks will require you to produce a report that explores scenarios derived from realistic working situations and case studies.

This involves the analysis of data from a variety of online sources, using appropriate computer analytics system/software. You will be required to describe in detail, the analytical and modelling techniques employed and present the results in an appropriate form.

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#### **When assessment does not go to plan** If you are referred in first summative assessment, AE1, you do have the opportunity to revise and resubmit your learning record by completing missing tasks and addressing deficiencies in areas identified and highlighted in tutor’s feedback.

### **What you will be able to do after the module**

Upon completion of the module, you are expected to:

1. Explain various analytic approaches suitable to aid decision-making process in conventional and electronic business.
2. Evaluate the techniques, models and computer software most appropriate in analysing information across a range of business environments.
3. Analyse and build models using appropriate computer packages and modelling techniques.
4. Present analysis reports and results clearly and accurately.
5. Apply relevant statistical models for data manipulation and visualisation

### **How this relates to the dimensions of Solent’s Real-world curriculum framework**

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| **Dimensions** | **How students learn** | How students are assessed |
| Students are challenged to think in critical, creative and applied ways | You will get regular real-world problems that require critical thinking by which creative solutions are provided. Although concepts, theories and application will be taught, the application of appropriate techniques to solve given problems is expected | Problem solving artefacts are included in the portfolio |
| **Students are inspired to do research through inquiry, curiosity and problem-solving;** | Intensive research is expected to profound solutions to given tasks. Such research-based tasks are important to improve your curiosity about the underlining business problems, challenges and the importance or benefits of applying analytical tools and techniques in providing solutions. | The results of the research are reflected in the portfolio. |
| **Students experience an intellectually stimulating curriculum which inspires them to learn for life:** | Theories, techniques, concepts and tools taught throughout the module are transferable, which can be applied in various aspects of life. Your understanding will be assessed through numerous real-world problems. | The utilisation of statistical packages and analytical systems is also expected to enhance your learning experience, particularly, the process of deriving meaningful knowledge from data to solve human problems. |
| **Students face outward to the community, industry and the global environment:** | In the course of this module, consultancy type tasks provide opportunities to demonstrate an understanding of industry/real-life problems. | Soft skills including reports and presentations through individual work and group activities are required with which interval feedback are provided on your approach and understanding of stakeholder roles. |
| **Students learn from authentic, engaging and programmatic assessment:** | Provided tasks are real-world problems | Both formative and summative assessments are incrementally based problems. Your understanding of the connections between concepts and their application to real-world problems will be demonstrated through formative and summative assessments. |

### **Summative assessment details**

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| AE1 | Weighting: | 100% |
|  | Assessment type: | Portfolio/Report |
|  | Aggregation: | N/A |
|  | Length/duration: | Portfolio (10 weeks) 3000 words |
|  | Online submission: | Yes |
|  | Grade marking: | Yes |
|  | Anonymous marking: | No |

### Module Author: Dr Olufemi Isiaq

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| Module Title: Analytics and Business Intelligence | | | |
| Credit Points: | 20 | Module Code: | COM517 |
| FHEQ Level: | 5 | School/Service | Media Arts and Technology |
| Module Delivery Model: | CD | Max/Min student numbers | Not applicable |
| Module Leader: | Dr Olufemi Isiaq | | |
| HECOS code | 100360 | | |

### Module change history:

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| --- | --- | --- | --- |
| Module Approved/Year Implemented/Code | July 2019 | 2020/21 | COM517 |
| Module modified/Year Implemented/Code |  |  |  |
| Add extra rows as required |  |  |  |