

# Module specification

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### Refer to the module guidance notes for completion of each section of the specification.

| Module code   | BUS7B41                                   |
|---------------|---|
| Module title  | Business Analytics for Project Management |
| Level         | 7   |
| Credit value  | 15  |
| Faculty       | FSLS                                      |
| Module Leader | Dr Ben Binsardi                           |
| HECoS Code    | 100812                                    |
| Cost Code     | GABP                                      |

# Programmes in which module to be offered

| Programme title        | Is the module core or option for this |  |
|------------------------|---------------------------------------|--|
|                        | programme                             |  |
| MBA Project Management | Core                                  |  |

## **Pre-requisites**

A first degree and appropriate work experience.

## **Breakdown of module hours**

| Learning and teaching hours  | 15 hrs        |
|--|---------------|
| Placement tutor support  | 0 hrs         |
| Supervised learning e.g. practical classes, workshops                | 0 hrs         |
| Project supervision (level 6 projects and dissertation modules only) | 0 hrs         |
| Total active learning and teaching hours                             | <b>15</b> hrs |
| Placement / work based learning                                      | 0 hrs         |
| Guided independent study   | 135hrs        |
| Module duration (total hours)  | 150 hrs       |



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|-----------------------|------------|
| Initial approval date | 08/09/2021 |
| With effect from date | 08/09/2021 |
| Date and details of   |            |
| revision              |            |
| Version number        | 1          |

### Module aims

This module aims to develop students' understanding of various numerical methods for forecasting, in particular time-series methods that have wide applications in project management. It also explores the aspects of risk and uncertainty in project management, which are central to forecasting and prediction. This module employs the SPSS software package for implementing forecasting methods (free software downloads available to students).

## **Module Learning Outcomes -** at the end of this module, students will be able to:

| 1 | Provide a critical insight into various numerical methods for forecasting that have wide applications in project management.               |  |  |
|---|--|--|--|
| 2 | Explores the aspects of risk and uncertainty in project management, which are central to forecasting and prediction In project management. |  |  |
| 3 | Identify appropriate techniques to implement forecasting methods employing the SPSS software package.                                      |  |  |
| 4 | Critically evaluate several measures of prediction accuracy of a forecasting method in project management.                                 |  |  |

#### **Assessment**

Indicative Assessment Tasks:

This section outlines the type of assessment task the student will be expected to complete as part of the module. More details will be made available in the relevant academic year module handbook.

**Assignment 1 Report** – Students will evaluate the use of the following numerical forecasting methods in a project management context: Moving average, exponential smoothing, trend forecasting. Students must apply findings in a practical context using a project of your choice and address how the data can be utilised to predict future trends. (1000 words)

**Assignment 2: Essay:** With specific reference to a project of students choice, critically evaluate the forecasting risks and uncertainties facing project managers and apply it to your chosen example. (2000 words)



| Assessment number | Learning<br>Outcomes to<br>be met | Type of assessment | Weighting (%) |
|-------------------|-----------------------------------|--------------------|---------------|
| 1                 | 1, 3                              | Written Assignment | 30            |
| 2                 | 2, 4                              | Written Assignment | 70            |

## **Derogations**

None

## **Learning and Teaching Strategies**

The learning and teaching strategy will consist of formal lectures to present theory, principles and practices which will form the foundation of the learning outcomes. Students will be encouraged to interact and contribute as a means of developing critical skills. Tutorials will be activity based using real world case studies and live examples to apply the theory into practice and develop their decision making and evaluating skills. In addition, students will be encouraged to undertake self-directed study and further research on selected topics to acquire additional perspectives which will provide them with a deeper understanding of the topics covered.

## **Indicative Syllabus Outline**

- Forecasting using the SPSS software package
- Basic forecasting methods
- Time-trend forecasting methods 1
- Time-trend forecasting methods 2
- Econometric forecasting methods 1
- Econometric forecasting methods 2
- Measuring forecasting performance

# **Indicative Bibliography:**

Please note the essential reads and other indicative reading are subject to annual review and update.

### **Essential Reads**

Gujarati, D. (2016). Econometrics by Example, New York, USA, Publisher: Palgrave.

#### Other indicative reading



Makridakis, S. G., Wheelwright, S. C. and Hyndman, R. J. (1988). *Forecasting: Methods and Applications*, Hoboken, USA, Publisher: John Wiley & Sons.

#### Websites:

https://www.macmillanihe.com/companion/Gujarati-Econometrics-By-Example/https://onlinelibrary.wiley.com/doi/book/10.1002/9780470996430

# Employability skills - the Glyndŵr Graduate

Each module and programme is designed to cover core Glyndŵr Graduate Attributes with the aim that each Graduate will leave Glyndŵr having achieved key employability skills as part of their study. The following attributes will be covered within this module either through the content or as part of the assessment. The programme is designed to cover all attributes and each module may cover different areas. Click here to read more about the Glyndwr Graduate attributes

### **Core Attributes**

Engaged
Enterprising
Creative
Ethical

### **Key Attitudes**

Commitment Curiosity Resilience Confidence Adaptability

#### **Practical Skillsets**

Digital Fluency Organisation Critical Thinking Communication