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| **Title** | **Financial Modelling with Excel** |
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| **Lecturer** | **Ashwin Arulselvan** | Tutor | **Ashwin Arulselvan** |
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|  | Code | MS988 | Semester | 2 | Weeks | 6 – 11 | Credits | 10 |  |
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|  | **Assessment** |  | Examination |  |  | Coursework | 70% |  | Test | 30% |  |
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|  | Finance | Option |  | Int. Banking & Fin. | Option |  | Investment & Fin. | Option |  | Int. Accounting & Fin. | Option |  |  |
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## CLASS AIMS

To develop the ability to capitalise on the potential use of Excel for financial analysis and financial modelling.

## LEARNING OUTCOMES

**i) Knowledge Based Outcomes:**

 On completing this course students will be able to:

* To develop a good understanding of the various Excel functions that are available.
* To develop the ability to make use of programming in Excel (VBA).
* To make use of Excel to develop students' appreciation for the scope of numerical analysis in finance.
* To develop the ability to make use of Excel in financial modelling.
* To develop a good understanding of the various Excel functions that are available.
* To develop the ability to make use of programming in Excel (VBA).

**ii) Skills Outcomes:**

 On completion of this class students should be able to demonstrate that they can:

* The class will develop the ability of students to structure (non financial) business problems and make use of quantitative analysis in the resolution of such problems. It is also expected to develop the students' general understanding of the potential use of programming techniques in developing business models and plans.

**TEACHING AND LEARNING**

There are 15 contact hours and the teaching will be on the basis of lectures and workshops. The workshops will discuss the various topics covered in the lectures and offer opportunities for students to test and develop their understanding of quantitative problems. Students are expected to attempt workshop questions prior to the workshop. Attendance at workshops is compulsory.

**ASSESSMENT**

A computer based class test will account for 30 percent and a group assignment for 70 percent of the assessment. The class test will involve a number of quantitative and conceptual questions to be completed in 1 hour. The group assignment will comprise of a project testing both the financial and spreadsheet modelling components of the class. Students can resit the individual components of the assessments separately.

**READING**

Financial Modelling, MIT Press, 4th edition 2014

Principles of Finance with Excel, Oxford University Press, 2nd edition, 2010

Benninga, S. and Czaczkes, B., 2000. Financial Modelling. MIT press. (pages 195-272, Portfolio Models, Calculating Variance and Covariance Matrix and Efficient Portfolios).

## LECTURE PROGRAMME

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| **Session** | **Lecture Title/Subject/Content** |
| **1** | Excel functions - revision and extension of their use. |
| **2** | Macro functions, recording macros. |
| **3** | Introduction to VBA- Analysis of returns and risk- Development of efficient portfolios- Regression models- Estimation of betas- Financial statement analysis and valuation- Monte Carlo |
| **4** |
| **5** |