

# BSc (Hons) Business Statistics with Finance – SH306

## 1. Context and Objectives

This programme is designed to produce a class of business professionals conversant with rigorous statistical and quantitative techniques and able to apply their power in the business environment. Students will be trained in the analysis of data to evaluate risks and extract business intelligence that can give businesses a competitive edge in an increasingly tight playing field. This programme will pay special attention to the financial function of businesses.

## 2. Learning Outcomes

On completion of the programme, students should be able to:

- Design experimental or survey based studies for collection of primary data, taking into consideration fundamental statistical principles
- Choose from a set of appropriate statistical techniques, ranging from simple descriptive statistics to complex statistical models to answer research questions (including the use of statistical packages)
- Identify common sources of secondary data and suggest ways of using them in the face of constrained resources
- Conduct statistical analyses for both primary and secondary data, including performing data cleaning steps and creating visuals as part of the Exploratory Data Analysis step
- Recommend rational and scientifically sound alternatives in the face of uncertainty in a business setting
- Appraise financial markets and provide advice to investors
- Apply best practices in financial management for profit and not- for-profit organizations
- Assess the economic environment of a geographical area/organization and make predictions thereof

## 3. Teaching and Learning Methods

As far as possible, a blended approach will be used. These might include among others: face to face lectures, e-learning (moodle), problem based learning, case studies, document analysis, practical lab sessions (where applicable), assignments, seminars, tutorials, open learning materials, textbooks and independent study as well as collaborative learning.

## 4. Entry Requirements

### *General*

In accordance with the University General Entry Requirements for admission to undergraduate degree Programmes.

### *Specific Programme Requirements*

Credit in English at SC/GCE ‘O’ Level and Passes in two “A” level subjects including Mathematics - preference will be given to candidates having at least a “B” in Mathematics

## 5. Programme Duration

	<b>Normal</b>	<b>Maximum</b>
Degree	3 Years	5 Years

## 6. Minimum LCCS Credits required

### *-Credits per year*

As per University Regulations.

### *-For Degree Award*

200, with the following breakdown:

<b>Core Taught Modules</b>	<b>Electives</b>	<b>Project/ Dissertation</b>
168	12	20

<b>Modules</b>	<b>LCCS Credits</b>
<b>Core</b>	
STAT	108
ECON	24
DFA	36
Dissertation	20
<b>Electives</b>	12
<b>Total</b>	200

<b>Year</b>	<b>LCCS Credits</b>
<b>1</b>	60
<b>2</b>	66
<b>3</b>	74
<b>Total</b>	200

## 7. Assessment and deadlines

Each module will be assessed over 100 marks with details as follows (unless otherwise specified):

Assessment will be based on a written examination of 2 to 3 hours. Written examinations for all modules, except for some semester modules, whether taught in semester 1 or in semester 2 or both, will be carried out at the end of the academic year (unless stated otherwise).

The continuous assessments will count for 40 – 50% of the overall percentage mark of the modules and written examinations will count for 50 – 60% of the overall percentage mark of the modules, except for the following:

<b>Module</b>	<b>Continuous Assessment</b>	<b>Written Examination</b>
STAT 2003Y(3)-Statistical Computing and Data Graphics	60%	40%

Continuous assessment may be based on seminars and/or assignments and should include at least two (2) assignments/tests per module. There will be a compulsory class test for all modules taught in semester 1 at the end of semester 1 of the given academic year unless stated otherwise in the Programme Structure.

An overall total of 40% for combined continuous assessment and written examination components would be required to pass the module, without minimum thresholds within the individual continuous assessment and written examination. The same criterion will apply for modules being assessed jointly. Note that an overall mark for the two modules will be considered and not the individual marks for each of the two modules.

All students should keep a portfolio of all coursework for their respective programme of studies and same should be made available upon request, to the Faculty/Centre Examination Office. In case students fail to submit the Portfolio to the External Examiners through the Faculty/Centre Examination Office, a penalty of 10% on all Continuous Assessment marks obtained shall apply.

***Deadline for submission of final copy of Dissertation:*** Last week day of March of the Academic Year by 4.00 p.m. at latest.

Three copies of the dissertation (two spiral-bound copies and one soft copy in a single PDF text file on electronic storage media) should be submitted to the Faculty/Centre Registry and in addition, a soft copy of the dissertation in a single PDF text file should be uploaded on the “Turnitin’ Platform” in the final assignment submission link indicated by the Programme / Project Coordinator.

## 8. List of Modules – BSc (Hons) Business Statistics with Finance

Code	Module Name	Hrs/Wk L+P	LCCS Credits
<b>CORE</b>			
STAT 1131(1)	Mathematics for Statistics	3+0	6
STAT 1008Y(1)	Uncertainty and Inference	3+0	12
STAT 1009Y(1)	Statistical Reasoning and Practical Data Handling	3+0	12
STAT 1122(1)	Operational Research I	3+0	6
ECON 1215(1)	Economics	3+0	6
DFA 1002Y(1)	Financial Theory and Practice	3+0	12
DFA 1020Y(1)	Accounting and Financial Analysis	3+0	12
STAT 2003Y(3)	Statistical Computing and Data Graphics	3+0	12
STAT 2004Y(3)	Statistical Inference and Decision Making	3+0	12
STAT 2005Y(3)	Survey Methods and Sampling Techniques	3+0	12
ECON 2004Y(3)	Money, Banking and Finance	3+0	12
DFA 2035Y(3)	Business Finance Decision Making and Applications	3+0	12
STAT 3014Y(5)	Multivariate Analysis & Business Intelligence	3+0	12
STAT 3015Y(5)	Time Series Analysis and Business Forecasting	3+0	12
STAT 3017Y(5)	Generalised Linear Models and Survival Analysis	3+0	12
ECON 3022(5)	Global Finance	3+0	6
STAT 3000Y(5)	Dissertation	-	20
<b>ELECTIVES</b>			
STAT 3221(5)	Design and Analysis of Experiments	3+0	6
ECON 3021(5)	Econometric Analysis	3+0	6
STAT 3016Y(5)	Stochastic Processes and Stochastic Finance	3+0	12

## 9. Programme Plan – BSc (Hons) Business Statistics with Finance

### LEVEL I

Code CORE	Module Name	Hrs/Wk L+P	LCCS Credits
STAT 1131(1)	Mathematics for Statistics <sup>1</sup>	3+0	6
STAT 1008Y(1)	Uncertainty and Inference	3+0	12
STAT 1009Y(1)	Statistical Reasoning and Practical Data Handling	3+0	12
DFA 1002Y(1)	Financial Theory and Practice	3+0	12
DFA 1020Y(1)	Accounting and Financial Analysis	3+0	12
ECON 1215(1)	Economics <sup>1</sup>	3+0	6
		<b>Subtotal</b>	<b>60</b>

### LEVEL II

Code CORE	Module Name	Hrs/Wk L+P	LCCS Credits
STAT 2003Y(3)	Statistical Computing and Data Graphics	3+0	12
STAT 2004Y(3)	Statistical Inference and Decision Making	3+0	12
STAT 2005Y(3)	Survey Methods and Sampling Techniques	3+0	12
STAT 1122(3)	Operational Research 1 <sup>1</sup>	3+0	6
DFA 2035Y(3)	Business Finance Decision Making and Applications	3+0	12
ECON 2004Y(3)	Money, Banking and Finance	3+0	12
		<b>Subtotal</b>	<b>66</b>

### LEVEL III

Code CORE	Module Name	Hrs/Wk L+P	LCCS Credits
ECON 3022(5)	Global Finance <sup>1</sup>	3+0	6
STAT 3014Y(5)	Multivariate Analysis and Business Intelligence	3+0	12
STAT 3017Y(5)	Generalised Linear Models and Survival Analysis	3+0	12
STAT 3015Y(5)	Time Series Analysis and Business Forecasting	3+0	12
STAT 3000Y(5)	Dissertation	-	20
<b>ELECTIVES</b>	<b>Choose 12 LCCS CREDITS from</b>		
STAT 3016Y(5)	Stochastic Processes and Stochastic Finance	3+0	12
STAT 3221(5)	Design & Analysis of Experiments <sup>2</sup>	3+0	6
ECON 3021(5)	Econometric Analysis <sup>2</sup>	3+0	6
		<b>Subtotal</b>	<b>74</b>
<b>TOTAL</b>			<b>200</b>

**Note:** <sup>1</sup>- Modules taught and examined in Semester 1

<sup>2</sup>- Modules taught and examined in Semester 2