Financial Information Systems
(offered by the Department of Computing)

1 Syllabus

FIRST LEVEL

FSY1M1X Financial Information Systems I: Module 1: Theory (Examination: 1 x 3 hour paper)
Syllabus: This module serves as an introduction to computers and introduces the student to some of the most important topics, although none of them will be studied in detail. Topics covered include:
- Application software and the World Wide Web
- Internet
- Components in the system unit
- Input, output and storage
- Operating systems and utility programs
- Communications and networks
- Information system development
- Multimedia
- Security, privacy and ethics
Similar study unit/modules: INY1M1S

SECOND LEVEL

FIL2M1F Financial Information Systems II: Module 1: Structured Systems Analysis and Design (Examination: 1 x 3 hour paper)
(offered for the last time in 2008)
Prerequisite: Old: FIL1M1F, FIL1M2F, FIL1M3F, Revised: FSY1M1X, FSY1M2Y
Syllabus: This module emphasises the SDLC (Systems Development Life Cycle), project management, information gathering and management reporting. Specific topics include:
- The world of the modern systems analyst
- The analyst as a project manager
- Approaches to system development
- Investigating systems requirements
- Modelling system requirements: structured approach
- The traditional/structured approach to requirements
- Structured systems design
- Designing relational databases
- Designing inputs, outputs and controls using structured models
- Making the system operational
Access to a Personal Computer with a CD-ROM, Windows 2000/XP operating system minimum, Internet and e-mail facilities are compulsory.
Similar study unit/modules: INY2M1S, FSY2M14

FIL2M2F Financial Information Systems II: Module 2: Object-Oriented Systems Analysis and Design (Examination: 1 x 3 hour paper)
(offered for the last time in 2008)
Prerequisite: Old: FIL1M1F, FIL1M2F, FIL1M3F, Revised: FSY1M1X, FSY1M2Y
Syllabus: This module mainly emphasises the object-oriented approach with regard to systems analysis and design as opposed to the structured systems analysis and design done in module 1. Knowledge with regard to the SDLC (Systems Development Life Cycle) pertaining to both the structured and object-oriented approach as covered in module 1, will not be repeated in module 2. It will however be accepted that the student is familiar with this knowledge. Specific topics include:
- Environments, alternatives and decisions
- Modelling system requirements: object-oriented approach
- The object-oriented approach to requirements
- Object-oriented systems design
- Designing object-oriented databases
- Designing inputs, outputs and controls using object-oriented models
- Human computer interaction
- Rapid application development
- Access to a Personal Computer with a CD-ROM, Windows 2000/XP operating system minimum, Internet and e-mail facilities are compulsory.
Similar study unit/modules: INY2M1S, FSY2M2S

FSY2M14 Financial Information Systems II: Module 1: Structured Systems Analysis and Design (Examination: 1 x 3 hour paper)
(offered for the last time in 2008)
Prerequisite: Old: FIL1M1F, FIL1M2F, FIL1M3F, Revised: FSY1M1X, FSY1M2Y
Syllabus: This module emphasises the SDLC (Systems Development Life Cycle), project management, information gathering and management reporting. Specific topics include:
- The world of the modern systems analyst
The analyst as a project manager
- Approaches to system development
- Investigating systems requirements
- Modelling system requirements: structured approach
- The traditional/structured approach to requirements
- Structured systems design
- Designing relational databases
- Designing inputs, outputs and controls using structured models
- Making the system operational

Access to a Personal Computer with a CD-ROM, Windows 2000/XP operating system minimum, Internet and e-mail facilities are compulsory.

**Similar study unit/modules:** INY2M1S, FIL2M1F

**FSY2M25**  
**Financial Information Systems II: Module 2: Business Analysis (Examination: 1 x 3 hour paper) (offered for the last time in 2008)**

*Prerequisite:* Old: FIL1M1F, FIL1M2F, FIL1M3F, Revised: FSY1M1X, FSY1M2Y

*Syllabus:* This module introduces students to the basic drivers of productivity in any business and how to create sustainable economic value. It equips them firstly to read and use financial statements. Secondly they reach a level of understanding that enables them to identify performance improvement opportunities. Thirdly they will have a tool to measure and quantify the value they can add through any information system changes they recommend. Access to a Personal Computer with a CD-ROM, Windows 2000/XP operating system minimum, Internet and e-mail facilities are compulsory.

**Similar study unit/modules:** BU2A21I

**THIRD LEVEL**

**FIL3M1F**  
**Financial Information Systems III: Module 1: Advanced Databases (Examination: 1 x 3 hour paper) (offered for the last time in 2009)**

*Prerequisite:* Old: FIL2M1F, FIL2M2F, Revised: FSY2M14, FSY2M25 and DEV201I

*Syllabus:* The following topics are covered in detail:
- File systems and databases
- The relational database model
- Introduction to SQL
- Entity relationship modelling
- Normalisation of database tables
- Database design, the database life cycle (DBLC)
- A case study on conceptual design and implementation
- The data warehouse
- The following concepts are also introduced:
  - Network Databases
  - Hierarchical Databases
  - Transaction management
  - Concurrency control
  - Distributed database systems
  - Object oriented databases
  - Client/server systems
  - Data administration

Access to a Personal Computer with a CD-ROM, Windows 2000/XP operating system minimum, Internet and e-mail facilities are compulsory.

*Similar study unit/modules:* INY3M1I

**FIL3M2F**  
**Financial Information Systems III: Module 2: Project Management (Examination: 1 x 3 hour paper) (offered for the last time in 2009)**

*Prerequisite:* Old: FIL2M1F, FIL2M2F, Revised: FSY2M14, FSY2M25

*Syllabus:* General principles of project management are covered. These include project management context and processes; project integration, scope, time, cost, quality, human resource, communications, risk, and procurement management; initiating, planning executing, and controlling projects. Students enrolling for this course must have access to a CD-ROM. Access to the Internet will be an advantage. Access to a Personal Computer with a CD-ROM, Windows 2000/XP operating system minimum, Internet and e-mail facilities are compulsory.

*Similar study unit/modules:* INY3M2I, SSS3M2I, WEB3M2I