

# BACCALAUREUS TECHNOLOGIAE: BUSINESS INFORMATION SYSTEMS

Qualification code: BTBI03 - NQF Level 7

Campus where offered: Soshanguve South Campus

Please note that a moratorium was placed on new intakes as from 2016 until further notice.

## REMARKS

- a. *Admission requirement(s):*  
A National Diploma: Information Systems or a National Diploma: Information Technology or a relevant qualification from a South African university.
- Holders of any other equivalent South African or international qualification may also be considered, see Chapter 1 of Students' Rules and Regulations.
- b. *Selection criteria:*  
Admission to this programme is subject to the approval of the Head of Department.
- c. *Minimum duration:*  
One year.
- d. *Presentation:*  
Day classes offered on Saturdays, offered over a period of one and a half years (please see Rule 8.4.1 of Students' Rules and Regulations for information on duration). If fewer than 15 students are enrolled for a specific subject, the Department may decide not to offer the subject.
- e. *Intake for the qualification:*  
January and July.
- f. *Exclusion and readmission:*  
See Chapter 2 of Students' Rules and Regulations.
- g. *Recognition of Prior Learning (RPL), equivalence and status:*  
See Chapter 30 of Students' Rules and Regulations.
- h. *Re-registration:*  
A student may re-register for the subject Project IV only with the permission of the Head of Department. The purpose of the re-registration is to provide students with an opportunity to complete the project only, and not to redo it, should they fail the subject.
- i. *Subject credits:*  
Subject credits are shown in brackets after each subject.

Key to asterisks:

- \* Information does not correspond to information in Report 151.  
(Deviations approved by the Senate in November 2008 and May 2011.)

## CURRICULUM

### FIRST OR SECOND SEMESTER

CODE	SUBJECT	CREDIT	PREREQUISITE SUBJECT(S)
BIF401T	Business Information Systems IV	(0,100)	
INH401T	Information Systems Technologies IV	(0,100)	
NDS401T	Networks and Distributed Systems IV	(0,100)	



PAJ411B	Principles of Research IV*	(0,100)	
PJT411C	Project IV*	(0,200)	Principles of Research IV
PJT410R	Project IV* (re-registration)	(0,000)	
SYD401T	Systems Development IV	(0,100)	

**plus three of the following subjects. All subjects are offered as determined by the Head of the Department:**

ADQ401T	Advanced Knowledge Management IV*	(0,100)	Knowledge Management IV
BUA401T	Business Analysis IV	(0,100)	
ITA401T	Information and Technology Management IV	(0,100)	
KNM401T	Knowledge Management IV	(0,100)	
KTG401T	Knowledge Technologies IV	(0,100)	
MTI401T	Multimedia and Internet IV	(0,100)	
PRZ401T	Professional Systems Engineering IV	(0,100)	

TOTAL CREDITS FOR THE QUALIFICATION: **1,000**

## SUBJECT INFORMATION (OVERVIEW OF SYLLABUS)

The syllabus content is subject to change to accommodate industry changes. Please note that a more detailed syllabus is available at the Department or in the study guide that is applicable to a particular subject. On 02 August 2018, the syllabus content was defined as follows:

### A

#### **ADVANCED KNOWLEDGE MANAGEMENT IV (ADQ401T)**

**1 X 3-HOUR PAPER**

*(Subject custodian: Department of Informatics)*

Students have to be able to construct the relevant documents, reports and other sources and to search that content for meaningful relationships synthesise the concepts and techniques such as data mining, information management, groupware and BI software. The content entails: Knowledge Management Life Cycle and Models, Competitive Intelligence and Business Intelligence. (Tuition time: ± 54 hours)

### B

#### **BUSINESS ANALYSIS IV (BUA401T)**

**1 X 3-HOUR PAPER**

*(Subject custodian: Department of Informatics)*

Business analysis is critical in identifying the business needs of end users and other stakeholders to determine the appropriate solution to a business problem. Focus is primarily on business analysis, and discusses how to obtain success in business analysis. Six business analysis knowledge areas are discussed in detail. On successful completion of this subject, the student will be able to: specify and model requirements for an IT business solution, investigate business problem or opportunity within an organisation, analyse and document solution requirements for an IT organisation and support project manager throughout solution development, implementation and testing to ensure that requirements are met. (Tuition time: ± 54 hours)

#### **BUSINESS INFORMATION SYSTEMS IV (BIF401T)**

**1 X 3-HOUR PAPER**

*(Subject custodian: Department of Informatics)*

This subject introduces the student to the operation of different business information systems, exploring the broader context within which information systems operate as well as investigating their implications. After studying this subject, students will be able to identify and apply the relevant business information system based on industry-related technology for the organisational needs and recommend the relevant choice, selection and implementation of the business information system. (Total tuition time: ± 54 hours)



**I****INFORMATION AND TECHNOLOGY MANAGEMENT IV (ITA401T)****1 X 3-HOUR PAPER****(Subject custodian: Department of Informatics)**

This subject provides concepts and frameworks for understanding the potential impact of Information Technology (IT) on business strategy and performance. The subject focuses on the implications of increased digitisation for defining business strategies and operating models, and explores the roles of both general managers and IT executives in using IT to achieve operational excellence and business agility. On successful completion of this subject, the student will be able to develop an IT Strategy for a digital enterprise; evaluate how IT will shape future businesses and the contribution of enterprise architecture; evaluate the risk and benefits of digitised processes and compare strategically whether to perform those processes internally or externally; assess the impact of globalisation; motivate why some firms are better able to convert their IT investments into business value; and implement steps to ensure effective IT decision making. (Total tuition time: ± 54 hours)

**INFORMATION SYSTEMS TECHNOLOGIES IV (INH401T)****1 X 3-HOUR PAPER****(Subject custodian: Department of Informatics)**

This subject is aimed at extending the skills of the students by helping them to understand the fundamentals of IT soft skills for both the IT industry and other working environments, upon which a successful career can be built. On completion of the subject, students will be able to apply the latest technology in the organisational structure, examine the fundamentals of computers and computer terminology, and appraise the use of personal computer hardware, software and the web. (Total tuition time: ± 54 hours)

**K****KNOWLEDGE MANAGEMENT IV (KNM401T)****1 X 3-HOUR PAPER****(Subject custodian: Department of Informatics)**

This subject is aimed at extending the skills of the students by introducing students to the various Knowledge Management concepts, design, implementation and management of KNM systems, as well as an overview of challenges that organisations face during the implementation of KNM initiatives. As the economy increasingly moves towards a knowledge-based economy, the ability to manage knowledge becomes a matter of competitive survival for organisations. Principles and practice of knowledge management in organisations, therefore, become the focal point of this subject. On completion of the subject, students will be able to identify and apply the theoretical and practical knowledge management principles to address management pitfalls, manage these knowledge management challenges; and implement the relevant knowledge management steps to ensure success within the context of the organisation. (Total tuition time: ± 54 hours)

**KNOWLEDGE TECHNOLOGIES IV (KTG401T)****1 X 3-HOUR PAPER****(Subject custodian: Department of Informatics)**

This subject deals with Knowledge engineering and technologies underpinning knowledge systems, such as decision support systems, group support systems, expert systems, data warehousing, data mining, document management and information searches. It also looks at the concepts, tools and technologies used to support decision making, with emphasis on DSS, BI, data mining, data warehousing, use of Web technologies, and knowledge management implementation, potential and challenges. On completion of this subject, students will be able to examine the decision making process; propose the various technologies that can be implemented; and assess the potential and challenges of DSS, BI and knowledge technologies within an organisation. (Total tuition time: ± 54 hours)

**M****MULTIMEDIA AND INTERNET IV (MTI401T)****CONTINUOUS ASSESSMENT****(Subject custodian: Department of Computer Science)**

Basics of multimedia technologies and their applications in the context of the Internet. (Total tuition time: not available)

**N****NETWORKS AND DISTRIBUTED SYSTEMS IV (NDS401T)****1 X 3-HOUR PAPER****(Subject custodian: Department of Information Technology)**

Technologies and methodologies underpinning the design and development of networked and distributed information systems. (Total tuition time: ± 36 hours)



**P****PRINCIPLES OF RESEARCH IV (PAJ411B)****CONTINUOUS ASSESSMENT***(Subject custodian: Department of Informatics)*

This subject prepares students to obtain the necessary skills in doing proper research to deliver a proper researched report. The subject also looks at the basics of paradigms, methodologies, and techniques of research in the behavioural sciences, and their application in information technology. On completion of the subject, students will be able to apply the basic paradigms, methodologies and techniques; apply different methodologies in different scenarios; recommend which data collection technique is necessary; apply correct research methods in the ICT environment, and apply the appropriate tools for collecting data in the ICT environment. Project topics and research questions in line with the Department niche area. (Total tuition time: ± 54 hours)

**PROFESSIONAL SYSTEMS ENGINEERING IV (PRZ401T)****1 X 3-HOUR PAPER***(Subject custodian: Department of Computer Science)*

Managing the development of information systems. Specification and design of networks. (Total tuition time: ± 40 hours)

**PROJECT IV (PJT411C, PJT410R)****CONTINUOUS ASSESSMENT***(Subject custodian: Department of Informatics)*

This subject is an IT project that includes IT research and writing a research report. On completion of the subject, students will be able to apply the research and presentation skills obtained in Principles of Research, apply the correct Harvard reference method, demonstrate writing skills, and demonstrate research skills according to the project topics and research questions in line with the Department niche area. (Total tuition time: ± 26 hours)

**S****SYSTEMS DEVELOPMENT IV (SYD401T)****1 X 3-HOUR PAPER***(Subject custodian: Department of Informatics)*

Students are introduced to all processes and models of the SDLC cycle. This subject deals with the Methodology and techniques of design and development of information systems. On completion of the subject, students will be able to evaluate the impact of IT and the future of IT within the organisation, determine the Role of System Analysis and Design within the project, summarise the Business Process and Models, discuss the role of enterprise resource planning (ERP) within the organisation, discuss the role of knowledge management systems within the organisation, determine the Information System Users and their needs, and examine the System Development Tools and Techniques used within a project. (Total tuition time: ± 54 hours)

