

# BACCALAUREUS TECHNOLOGIAE: FIRE TECHNOLOGY

## Qualification code: BTFY01 - NQF Level 7

Campus where offered: Arcadia Campus

### Important notification to new applicants:

Students who intend to enrol for this qualification should take note that no new applications will be accepted as from 2020. Potential students are advised to consult the University's website for possible new qualifications which are aligned with the newly-implemented Higher Education Qualification Sub-Framework.

### REMARKS

- a. *Admission requirement(s):*  
A National Diploma: Fire Technology, a National Diploma: Fire Services or an equivalent qualification.  
  
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:*  
Selection is based on an assessment by a departmental selection panel.
- c. *Minimum duration:*  
One year.
- d. *Presentation:*  
Block-mode classes offered over a period of 18 months.
- 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. *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 May 2009.)

### CURRICULUM

**SUBJECTS PRINTED IN BOLD ARE NOT FOR REGISTRATION PURPOSES.**

#### ATTENDANCE

CODE	SUBJECT	CREDIT
<b>FIRST SEMESTER (2019)</b>		
FBT411T	Fire Technology IV	(0,150)
FIN411T	Fire Technology: Investigations IV	(0,150)
LES201T	Legislation: Emergency Services II	(0,092)



SHS101T Safety and Health: Emergency Services I\* (0,092)

TOTAL CREDITS FOR THE SEMESTER: 0,484

### SECOND SEMESTER (2019)

EMR401T Emergency Management IV (0,150)

PYE201T Psychology: Emergency Services II (0,092)

**RMD110E Research Methodology**

RMD11XE Research Methodology: Fire Technology (0,045)

TOTAL CREDITS FOR THE SEMESTER: 0,287

### FIRST SEMESTER (2020)

FMN211T Financial Management II (0,092)

MIS201T Management Information Systems II (0,092)

**RMD110E Research Methodology**

RMD11YE Research Methodology: Statistics (0,045)

TOTAL CREDITS FOR THE SEMESTER: 0,229

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 01 August 2018, the syllabus content was defined as follows:

### E

#### **EMERGENCY MANAGEMENT IV (EMR401T)**

**1 X 3-HOUR PAPER**

*(Subject custodian: Department of Physics)*

Evolution of management. Management practices. Styles of management. Management by objectives. Top management and team work. External relations. Protocol. Case studies. (Total tuition time: ± 45 hours)

### F

#### **FINANCIAL MANAGEMENT II (FMN211T)**

**1 X 3-HOUR PAPER**

*(Subject custodian: Department of Managerial Accounting and Finance)*

Budgets, income and expenditure, budget systems. Tenders and contracts. Loans. Financial control and accountability. Stocking. Case studies. The time value of money. (Total tuition time: ± 45 hours)

#### **FIRE TECHNOLOGY IV (FBT411T)**

**1 X 3-HOUR PAPER**

*(Subject custodian: Department of Physics)*

Background: today's arson problem. Chemistry of fire. Fire scene investigation. Types of fire. Explosives. Interviews. Court appearances. (Total tuition time: ± 45 hours)

#### **FIRE TECHNOLOGY: INVESTIGATIONS IV (FIN411T)**

**CONTINUOUS ASSESSMENT**

*(Subject custodian: Department of Physics)*

Students must undertake an investigation of a practical/applied research nature of at least 120 hours. A written report/dissertation must be submitted for evaluation, examination and moderation. (Total tuition time: ± 45 hours)



**L****LEGISLATION: EMERGENCY SERVICES II (LES201T)****1 X 3-HOUR PAPER****(Subject custodian: Department of Physics)**

Ordinances of local government. Laws and their interpretation. Criminal law. Interpretation of Acts. Fire Brigades Services Act, 1987 (Act No. 99 of 1987). Labour matters. Departmental investigations. Ethics. Case studies. Civil Defence Act, 1966 (Act No. 39 of 1966). Criminal Procedure Act, 1977 (Act No. 51 of 1977). Machinery and Occupational Safety Act, 1983 (Act No 6 of 1983). Trace licences. Law of Delicts. Riots Assemblies Act. (Total tuition time: ± 45 hours)

**M****MANAGEMENT INFORMATION SYSTEMS II (MIS201T)****1 X 3-HOUR PAPER****(Subject custodian: Department of Informatics)**

Importance of MIS. Evaluation of information systems. Efficiency of information systems. Basic principles of work study. Management functions. External relations. Case studies. (Total tuition time: ± 45 hours)

**P****PSYCHOLOGY: EMERGENCY SERVICES II (PYE201T)****1 X 3-HOUR PAPER****(Subject custodian: Department of Biomedical Sciences)**

Introduction to psychology. Personality and temperament. Developmental psychology. Intellectual processes. Defence mechanisms. Physical, environmental and psychological stressors. Stress symptoms and reduction. Critical incident stress. Well-being programmes. (Total tuition time: ± 45 hours)

**R****RESEARCH METHODOLOGY: FIRE TECHNOLOGY (RMD11XE)****CONTINUOUS ASSESSMENT****(Subject custodian: Department of Physics)**

A general introduction to research methodology, including the planning and execution of the research process, as well as the different types of research strategies. Basic principles of measurement and methods of data collection. (Total tuition time: ± 45 hours)

**RESEARCH METHODOLOGY: STATISTICS (RMD11YE)****CONTINUOUS ASSESSMENT****(Subject custodian: Department of Mathematics and Statistics)**

Statistical methods for the preparation and processing of data, which include descriptive statistical methods. (Total tuition time: ± 45 hours)

**S****SAFETY AND HEALTH: EMERGENCY SERVICES I (SHS101T)****1 X 3-HOUR PAPER****(Subject custodian: Department of Physics)**

Overview of the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993). Introduction to basic health and safety risks; urban terrorism; risk evaluation; control procedures of emergency services; emergency situations involving disasters (fire, EMS and nuclear radiation); and practical safe handling of radioactive materials (WIL training at Necsa). (Total tuition time: ± 45 hours)

