BACHELOR OF EDUCATION IN SENIOR PHASE AND FURTHER EDUCATION AND TRAINING TEACHING

(Specialisation in Technology)

BEd (Senior Phase and Further Education and Training Teaching) - NQF Level 7 (498 credits)

Qualification type: Professional Bachelor's Degree

Qualification code: BPSG20

SAQA ID: 109454, CHE NUMBER: H/H16/E132CAN

Campus where offered: Soshanguve North, eMalahleni, Mbombela and Polokwane campuses

Please note that this programme is currently only offered on Soshanguve North Campus.

REMARKS

a. Admission requirement(s) and selection criteria:

- **FOR APPLICANTS WHO OBTAINED A SENIOR CERTIFICATE BEFORE 2008:**

Admission requirement(s):
A Senior Certificate with a matriculation endorsement or an equivalent qualification, with a C symbol at Higher Grade or a B symbol at Standard Grade in English and at least a D symbol at Higher Grade or a C symbol at Standard Grade for Mathematics or Technical (Civil) or Technical (Electrical) or Technical (Electronics) or Technical (Mechanical) or Technical Drawing and/or Physical Science.

The following subject specific-prerequisite in the FET/Senior Certificate is compulsory for applicants who intend to enrol for this qualification. Specialisation modules are offered in different groups and applicants must meet the requirements accordingly:

Specialisation modules offered in the programme	Specific prerequisite(s) on NQF Level 4
FET: Civil Technology I	Technical (Civil) with an D symbol at Higher Grade or a C symbol at Standard Grade
FET: Electrical Technology I	Technical (Electrical) or Technical (Electronics) or Physical Science with an D symbol at Higher Grade or a C symbol at Standard Grade
FET: Engineering Graphics and Design I	Technical Drawing with an D symbol at Higher Grade or a C symbol at Standard Grade
FET: Technical Mathematics	Mathematics with an D symbol at Higher Grade or a C symbol at Standard Grade
FET: Mechanical Technology I	Technical (Mechanical) or Physical Science with an D symbol at Higher Grade or a C symbol at Standard Grade

Selection criteria:
Applicants are assessed according to the following formula:

SYMBOL	HG	SG
A	5	4
B	4	3
C	3	2
D	2	1
E	1	

To be considered for this qualification, applicants must have a score of **12**.

- **FOR APPLICANTS WHO OBTAINED A NATIONAL SENIOR CERTIFICATE IN OR AFTER 2008:**

Admission requirement(s):
A National Senior Certificate with a bachelor's degree endorsement, or an equivalent qualification with an achievement level of at least 4 for English (home language or first additional language) and/or Mathematics or Technical Mathematics and/or Civil Technology (Civil Service/Construction/Woodworking) and/or Electrical Technology (Digital Systems/Electronics/Power Systems) and/or Mechanical Technology (Automotive/Fitting and Machining/Welding and Metal Work) and/or Engineering Graphics and Design and/or Physical Sciences or Technical Sciences.

The following subject specific-prerequisite in the FET/Senior Certificate is compulsory for applicants who intend to enrol for this qualification. Specialisation modules are offered in different groups and applicants must meet the requirements accordingly:

Specialisation modules offered in the programme	Specific prerequisite(s) on NQF Level 4
FET: Civil Technology I	Civil Technology (Civil Service/Construction/ Woodworking) or Physical Sciences or Technical Sciences with a minimum score of 4
FET: Electrical Technology I	Electrical Technology (Digital Systems/ Electronics/ Power Systems) or Physical Sciences or Technical Sciences with a minimum score of 4
FET: Engineering Graphics and Design I	Engineering Graphics and Design with a minimum score of 4
FET: Technical Mathematics	Mathematics or Technical Mathematics with a minimum score of 4
FET: Mechanical Technology I	Mechanical Technology (Automotive/Fitting and Machining/ Welding and Metal Work) or Physical Sciences or Technical Sciences with a minimum score of 4

Selection criteria:
To be considered for this qualification, applicants must have an Admission Point Score (APS) of at least **24** (excluding Life Orientation).

- **FOR APPLICANTS WITH A NATIONAL CERTIFICATE (VOCATIONAL) AT NQF LEVEL 4:**

Admission requirement(s):
A National Certificate (Vocational) at NQF Level 4, with a bachelor's degree endorsement, issued by the Council for Quality Assurance in General and Further Education and Training (Umalusi) with at least a 50% (APS of 4) for English (home language or first additional language), Mathematics and Life Orientation (excluded for APS calculation) and at least 60% (APS of 5) in one of the following Civil/Electrical/Mechanical Engineering and three other vocational subjects.

Selection criteria:
To be considered for this qualification, applicants must have an Admission Point Score (APS) of at least **28** (excluding Life Orientation).

b. *Assessment procedure(s):*
No further assessment will be done. Applicants who achieve the minimum APS will be considered until the programme complement is full. Acceptance is subject to available capacity according to the Student Enrolment Plan (SEP). Once a programme is full, a waiting list will be in place to provide an opportunity for applicants to fill places of those who did not register on time. Applicants will be informed of their status per official letter from the Office of the Registrar, alternatively, they can check their application status on the TUT website, www.tut.ac.za.

c. *Recognition of Prior Learning (RPL), equivalence and status:*
See Chapter 30 of Students' Rules and Regulations.

d. *Intake for the qualification:*
January only.

e. *Presentation:*
Day classes.

f. *Minimum duration:*
Four years.

g. *Exclusion and readmission:*
See Chapter 2 of Students' Rules and Regulations.

h. *Abbreviation(s):*
In this programme, the abbreviation LoLT means Language of Learning and Teaching and the abbreviation LoCC means Language of Conversational Competence. LoCC modules are offered as determined by the Head of the Department.

CURRICULUM

FIRST YEAR

CODE	MODULE	NQF-L	CREDIT	PREREQUISITE MODULE(S)
ALY105P	Academic Literacy and Life Skills	(5)	(10)	
CLM116P	Classroom Management I (first-semester module)	(6)	(5)	
ITE105P	ICT in Education I	(5)	(8)	
LLE105P	LoLT: English I	(5)	(8)	
PSF106P	Professional Studies (FET) I	(6)	(10)	
PSP106P	Professional Studies (SP) I	(6)	(10)	
SFS105P	School Based Learning I (6 weeks)	(5)	(12)	
STH106P	SP: Technology I	(6)	(14)	
TEC106P	Theory of Education (Curriculum Studies) I	(6)	(22)	

plus two of the following electives. Students must ensure that they register in any one of the following combinations:

- FET: Civil Technology I, FET: Technical Mathematics I; **or**
- FET: Electrical Technology I, FET: Technical Mathematics I; **or**
- FET: Mechanical Technology I, FET: Technical Mathematics I; **or**
- FET: Civil Technology I, FET: Engineering Graphics and Design I; **or**
- FET: Mechanical Technology I, FET: Engineering Graphics and Design I.

FCI106P	FET: Civil Technology I	(6)	(16)
FET106P	FET: Electrical Technology I	(6)	(16)
FGD106P	FET: Engineering Graphics and Design I	(6)	(16)
FMS106P	FET: Mathematics I (not offered in 2023)	(6)	(16)
FMT106P	FET: Mechanical Technology I	(6)	(16)
FTH106P	FET: Technical Mathematics I	(6)	(16)

TOTAL CREDITS FOR THE FIRST YEAR: **131**

SECOND YEAR

CODE	MODULE	NQF-L	CREDIT	PREREQUISITE MODULE(S)
CLM216P	Classroom Management II (first-semester module)	(6)	(5)	Classroom Management I
ITE205P	ICT in Education II	(5)	(7)	ICT in Education I
LLE205P	LoLT: English II	(5)	(6)	LoLT: English I
PSF206P	Professional Studies (FET) II	(6)	(13)	Professional Studies (FET) I
PSP206P	Professional Studies (SP) II	(6)	(10)	Professional Studies (SP) I
SFS206P	School Based Learning II (6 weeks)	(6)	(12)	School Based Learning I (6 weeks)
STH206P	SP: Technology II	(6)	(16)	SP: Technology I
TEP207P	Theory of Education (Psychology and Sociology) II	(7)	(24)	Theory of Education (Curriculum Studies) I

plus two of the following electives. Students must ensure that they register in any one of the following combinations:

- FET: Civil Technology II, FET: Technical Mathematics II; **or**
- FET: Electrical Technology II, FET: Technical Mathematics II; **or**
- FET: Mechanical Technology II, FET: Technical Mathematics II; **or**
- FET: Civil Technology II, FET: Engineering Graphics and Design II; **or**
- FET: Mechanical Technology II, FET: Engineering Graphics and Design II.

FCI206P	FET: Civil Technology II	(6)	(16)	FET: Civil Technology I
FET206P	FET: Electrical Technology II	(6)	(16)	FET: Electrical Technology I
FGD206P	FET: Engineering Graphics and Design II	(6)	(16)	FET: Engineering Graphics and Design I
FMS206P	FET: Mathematics II (repeaters only)	(6)	(16)	FET: Mathematics I
FMT206P	FET: Mechanical Technology II	(6)	(16)	FET: Mechanical Technology I
FTH206P	FET: Technical Mathematics II	(6)	(16)	FET: Technical Mathematics I

TOTAL CREDITS FOR THE SECOND YEAR: **125**

THIRD YEAR

CODE	MODULE	NQF-L	CREDIT	PREREQUISITE MODULE(S)
CLM316P	Classroom Management III (first-semester module)	(6)	(7)	Classroom Management II
PSF307P	Professional Studies (FET) III	(7)	(15)	Professional Studies (FET) II
PSP306P	Professional Studies (SP) III	(6)	(12)	Professional Studies (SP) II
SFS307P	School Based Learning III (6 weeks)	(7)	(12)	School Based Learning II (6 weeks)
STH307P	SP: Technology III	(7)	(16)	SP: Technology II
TEH307P	Theory of Education (History and Comparative Studies) III	(7)	(24)	Theory of Education (Psychology and Sociology) II

plus two of the following electives. Students must ensure that they register in any one of the following combinations:

- FET: Civil Technology III, FET: Technical Mathematics III; **or**
- FET: Electrical Technology III, FET: Technical Mathematics III; **or**
- FET: Mechanical Technology III, FET: Technical Mathematics III; **or**
- FET: Civil Technology III, FET: Engineering Graphics and Design III; **or**
- FET: Mechanical Technology III, FET: Engineering Graphics and Design III.

FCI307P	FET: Civil Technology III	(7)	(18)	FET: Civil Technology II
FET307P	FET: Electrical Technology III	(7)	(18)	FET: Electrical Technology II
FGD307P	FET: Engineering Graphics and Design III	(7)	(18)	FET: Engineering Graphics and Design II
FMS307P	FET: Mathematics III (repeaters only)	(7)	(18)	FET: Mathematics II
FMT307P	FET: Mechanical Technology III	(7)	(18)	FET: Mechanical Technology II
FTH307P	FET: Technical Mathematics III	(7)	(18)	FET: Technical Mathematics II

TOTAL CREDITS FOR THE THIRD YEAR: **122**

FOURTH YEAR

CODE	MODULE	NQF-L	CREDIT	PREREQUISITE MODULE(S)
IED417P	Inclusive Education (first-semester module)	(7)	(7)	Academic Literacy and Life Skills
IRS416P	Introduction to Research (first-semester module)	(6)	(6)	Classroom Management III
PSF407P	Professional Studies (FET) IV	(7)	(20)	Professional Studies (FET) III
PSP407P	Professional Studies (SP) IV	(7)	(20)	Professional Studies (SP) III
SFS407P	School Based Learning IV (12 weeks)	(7)	(30)	School Based Learning III (6 weeks)
TEY407P	Theory of Education (Philosophy) IV	(7)	(30)	Theory of Education (History and Comparative Studies) III
	plus one of the following electives:			
LTA405P	LoCC: Setswana	(5)	(7)	
LTG405P	LoCC: Xitsonga	(5)	(7)	
LVN405P	LoCC: Tshivenda	(5)	(7)	
LZL405P	LoCC: IsiZulu	(5)	(7)	

TOTAL CREDITS FOR THE FOURTH YEAR: **120**

TOTAL CREDITS FOR THE QUALIFICATION: **498**

MODULE 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 module. At time of publication, the syllabus content was defined as follows:

A

ACADEMIC LITERACY AND LIFE SKILLS (ALY105P) **CONTINUOUS ASSESSMENT**

(Module custodian: Department of Technology and Vocational Education)

The purpose of the module is to provide students with an introduction to the competencies required to be an effective student at university. This module aims to empower students with the skills, knowledge, abilities and attitudes required to address academic challenges in a proactive and meaningful way. (Total notional time: 100 hours)

C

CLASSROOM MANAGEMENT I (CLM116P) **1 X 2-HOUR PAPER**

(Module custodian: Department of Educational Foundation)

The purpose of the module is to equip students with skills and knowledge that would enable them to effectively manage their classrooms. Students will be exposed to basic knowledge and skills of classroom management principles and functions. (Total notional time: 50 hours)

CLASSROOM MANAGEMENT II (CLM216P) **1 X 2-HOUR PAPER**

(Module custodian: Department of Educational Foundation)

The purpose of the module is to provide students with detailed knowledge and skills to enable them to appropriately execute administrative classroom activities, to effectively manage diverse classroom areas and techniques to facilitate learner motivation within their classrooms. (Total notional time: 50 hours)

CLASSROOM MANAGEMENT III (CLM316P) **1 X 2-HOUR PAPER**

(Module custodian: Department of Educational Foundation)

The purpose of the module is to provide the student with the necessary detailed knowledge and insight into the environment of the law of education with special reference to the sources of education law, the legal status of the learner as well as the role and legal duties of the educator to act as a caring supervisor. Furthermore, the module enriches the student's knowledge base about the current legal practices pertaining to education. This module will enable the student to enter the labour market confidently and apply the appropriate legal principles situationally and professionally in and outside the classroom. (Total notional time: 70 hours)

F

FET: CIVIL TECHNOLOGY I (FCI106P) **1 X 3-HOUR PAPER**

(Module custodian: Department of Technology and Vocational Education)

The emphasis is on basic technical knowledge and skills in the civil field of specialisation. Theory and practical skills are integrated by way of Woodwork Theory and practical work. Civil Technology also focuses on organisation, communication and services, planning and communication, design procedures, installation of cold and hot water supply, heat, drainage and electricity, instruments, materials and construction as well as applied mechanics. Projects in which the technological process is applied are undertaken to solve technological problems. Specific Subject Didactics - Lesson plan and Presentations (Grade 10), Learner Teacher support material, Application of CAPS: Civil Technology Grade 10. (Total notional time: 160 hours)

FET: CIVIL TECHNOLOGY II (FCI206P) **1 X 3-HOUR PAPER**

(Module custodian: Department of Technology and Vocational Education)

The emphasis is on basic technical knowledge and skills in the civil field of specialisation. Theory and practical skills are integrated by way of woodwork theory (safety measures, machine tools and attachments, design, making, evaluating and finishing), and practical work (preparation of material, design, manufacturing projects using machines). Civil Technology also focuses on organisation, communication and services, design procedures (CAD, bridges, dams and buildings), installation of solar heating systems, drainage), instruments (dumpy level, test apparatus, slump test, concrete compression test, tensile test for steel), materials and construction (reinforced concrete, glass, cement, aggregates), as well as applied mechanics. Specific Subject Didactics - Teaching methods, strategies and assessment relevant to Civil Technology, Lesson plan and Presentation, Application of CAPS: Civil Technology Grade 11. (Total notional time: 160 hours)

FET: CIVIL TECHNOLOGY III (FCI307P) **1 X 3-HOUR PAPER**

(Module custodian: Department of Technology and Vocational Education)

The emphasis is on basic technical knowledge and skills in the civil field of specialisation, with specific reference to the built environment. Theory and practical skills are integrated by means of hands-on practical application of theoretical work (pouring of concrete, bridge building, surveying, conducting practical tests on concrete samples, etc.), organisation, communication and services, design procedures, materials and construction, as well as applied mechanics. Specific Subject Didactics - Application of teaching methods, strategies, assessment and programme guidelines relevant to Civil Technology, Lesson plan and presentation. Application of CAPS: Civil Technology Grade 12. (Total notional time: 180 hours)

FET: ELECTRICAL TECHNOLOGY I (FET106P) **1 X 3-HOUR PAPER**

(Module custodian: Department of Technology and Vocational Education)

Basic electrical principle; electric systems; simple electrical circuits; magnetism; electromagnetic induction; capacitor and capacitance; measuring instruments; semi-conductor materials; alternating voltage and current; digital system (introduction); logic circuits. Specific Subject Didactics - Lesson plan and Presentations (Grade 10), Learner Teacher support material, Application of CAPS: Electrical Technology Grade 10. (Total notional time: 160 hours)

FET: ELECTRICAL TECHNOLOGY II (FET206P) **1 X 3-HOUR PAPER**

(Module custodian: Department of Technology and Vocational Education)

Single phase series circuits; single phase parallel circuits; power in AC circuits; transistor theory and application; power supplies; single phase transformer; DC machines; logic circuits. Specific Subject Didactics - Teaching methods, strategies and assessment relevant to Electrical Technology, Lesson plan and Presentation, Application of CAPS: Electrical Technology Grade 11. (Total notional time: 160 hours)

FET: ELECTRICAL TECHNOLOGY III (FET307P) **1 X 3-HOUR PAPER**

(Module custodian: Department of Technology and Vocational Education)

AC circuit analysis: complex notation; integrated circuits and op-amps; three-phase circuits; three-phase transformers; AC machines; induction motors; switching and control circuits; programmable logic controllers. Specific Subject Didactics - Application of teaching methods, strategies, assessment and programme guidelines relevant to Electrical Technology, Lesson plan and Presentation. Application of CAPS: Electrical Technology Grade 12. (Total notional time: 180 hours)

FET: ENGINEERING GRAPHICS AND DESIGN I (FGD106P) **1 X 3-HOUR PAPER**

(Module custodian: Department of Technology and Vocational Education)

General drawing principles; Free-hand drawing; Geometrical construction and scale drawing; First-and third-angle orthographic projections; Civil Drawing; Mechanical drawing; Descriptive and solid geometry; Perspective drawing; Isometric drawings. Specific Subject Didactics - Lesson plan and Presentations (Grade 10), Learner Teacher support material, Application of CAPS: Engineering Graphics and Design Grade 10. (Total notional time: 160 hours)

FET: ENGINEERING GRAPHICS AND DESIGN II (FGD206P) **1 X 3-HOUR PAPER**

(Module custodian: Department of Technology and Vocational Education)

Advance drawing principles; application of free-hand drawing; Civil drawing; Mechanical drawing; Advance solid geometry; Interpenetration; Developments; Perspective drawing; Isometric drawing; Loci; The Design Process. Specific Subject Didactics - Teaching methods, strategies and assessment relevant to Engineering Graphics and Design, Lesson plan and Presentation, Application of CAPS: Engineering Graphics and Design Grade 11. (Total notional time: 160 hours)

FET: ENGINEERING GRAPHICS AND DESIGN III (FGD307P) **1 X 3-HOUR PAPER**

(Module custodian: Department of Technology and Vocational Education)

Application of advance drawing principles; Advance Civil drawing; Advance Mechanical drawing; Complex solids; Advance Interpenetration and Developments; Advance Perspective drawing; Advance isometric drawing; Complex Loci; The Advance Design Process; Computer Aided Drawings. Specific Subject Didactics - Application of teaching methods, strategies, assessment and programme guidelines relevant to Engineering Graphics and Design, Lesson plan and Presentation. Application of CAPS: Engineering Graphics and Design Grade 12. (Total notional time: 180 hours)

FET: MATHEMATICS I (FMS106P) **1 X 3-HOUR PAPER**

(Module custodian: Department of Mathematics Science and Business Education)

The purpose of this module is to equip students with mathematical skills and knowledge at the pre-calculus level and calculus level. Students will be exposed to basic mathematical knowledge and skills applicable to the Further Education and Training Phase. Complex numbers Binomial Theorem, Theory of polynomials, Functions, Differentiation, Exponential and logarithmic functions, Trigonometry, Coordinate geometry, Circle. Matrices, Systems of linear equations, Linear programming, Partial fractions, Permutation and Combination, Binomial theorem, Limits and continuity, Euclidean Geometry and measurement, Analytical Geometry. Specific Subject Didactics - Lesson plan and Presentation (Grade 10), Learner Teacher support material, Application of CAPS: Mathematics Grade 10. (Total notional time: 160 hours)

FET: MATHEMATICS II (FMS206P) **1 X 3-HOUR PAPER**

(Module custodian: Department of Mathematics Science and Business Education)

This module exposes students to the mathematical methods, procedures and techniques for solving problems related to Calculus, Statistics and Vectors. Students will be exposed to detailed mathematical knowledge and skills applicable to the FET phase. Plane curve, parametric equations and Polar coordinates, Lines and planes in 3-D space Differentiation, Integration. Series and progressions, Infinite series, Vectors. Conic Section, Data handling; Probability, Euclidean Geometry and measurement, Analytical Geometry. Specific Subject Didactics - Teaching methods, strategies and assessment relevant to Mathematics, Lesson plan and Presentation, Application of CAPS: Mathematics Grade 11. (Total notional time: 160 hours)

FET: MATHEMATICS III (FMS307P) **1 X 3-HOUR PAPER**

(Module custodian: Department of Mathematics Science and Business Education)

The purpose of this module is to enrich students' knowledge base with the mathematical methods, procedures and techniques to apply in solving problems related to Linear Algebra, Differential equations and Advanced Calculus. Students will be exposed to advanced mathematical knowledge and skills applicable to the FET Phase. Vector Spaces, Linear Transformations, Multiple Integration, Laplace Transforms and Fourier series, First-order differential equations. Second-order differential equations, Euclidean Geometry and measurement, Analytical Geometry. Specific Subject Didactics - Application of teaching methods, strategies, assessment and programme guidelines relevant to Mathematics, Lesson plan and Presentation. Application of CAPS: Mathematics Grade 12. (Total notional time: 180 hours)

FET: MECHANICAL TECHNOLOGY I (FMT106P) **1 X 3-HOUR PAPER**

(Module custodian: Department of Technology and Vocational Education)

Safety precautions in workshop; basic workshop practice; machine tool and process; processing of materials; process of materials (finishing and polishing); linear expansion; fluids: hydraulics/pneumatics; statics and mechanics. Specific Subject Didactics - Lesson plan and Presentation (Grade 10), Learner Teacher support material, Application of CAPS: Mechanical Technology, Grade 10. (Total notional time: 160 hours)

FET: MECHANICAL TECHNOLOGY II (FMT206P) **1 X 3-HOUR PAPER**

(Module custodian: Department of Technology and Vocational Education)

Centre of gravity; friction; dynamics (motion-liner and angular); dynamics (work and power); dynamics (centrifugal forces- slopes and tracks); simply supported beams; fluids and hydraulics. Specific Subject Didactics - Teaching methods, strategies and assessment relevant to Mechanical Technology, Lesson plan and presentation, Application of CAPS: Mechanical Technology Grade 11. (Total notional time: 160 hours)

FET: MECHANICAL TECHNOLOGY III (FMT307P) **1 X 3-HOUR PAPER**

(Module custodian: Department of Technology and Vocational Education)

Mechanical testing on metals (stress/strain); pin-jointed frame structure (sectioning); temperature stress; thin cylinder subjected to internal pressure; simply supported beams (shearing/bending/per flexure; centrifugal stress in thin rotating cylinders; Dynamics inertia (second moment of area); heat engine. Specific Subject Didactics - Application of teaching methods, strategies, assessment and programme guidelines relevant to Mechanical Technology, Lesson plan and Presentation. Application of CAPS: Mechanical Technology Grade 12. (Total notional time: 180 hours)

FET: TECHNICAL MATHEMATICS I (FTH106P) **1 X 3-HOUR PAPER**

(Module custodian: Department of Mathematics Science and Business Education)

The purpose of this module is to provide students with basic knowledge and skills to apply mathematical principles and develop fluency in computation skills with the usage of calculators. Students will develop mental processes that enhance logical and critical thinking, accuracy and problem solving that will contribute in decision-making. Number system, factorising, integration, square and cubic units and representing geometric figures in a Cartesian coordinate system are some of the aspects covered. (Total notional time: 160 hours)

FET: TECHNICAL MATHEMATICS II (FTH206P) **1 X 3-HOUR PAPER**

(Module custodian: Department of Mathematics Science and Business Education)

The purpose of this module is to provide students with knowledge and skills to enable them to apply Technical Mathematics Principles and Technical Problems in order to understand realistic and contextual problems relating to health, social, economic, cultural, scientific, political and environmental issues whenever possible. Students will develop the ability to be methodical, generalise and skillful users of the Science of Mathematics. (Total notional time: 160 hours)

FET: TECHNICAL MATHEMATICS III (FTH307P) **1 X 3-HOUR PAPER**

(Module custodian: Department of Mathematics Science and Business Education)

The purpose of this module is to provide students with detailed knowledge and skills to enable them to understand and develop the correct use of the language of Mathematics; use mathematical process skills to identify and solve problems; use spatial skills and properties of shapes and objects to identify, pose and solve problems creatively and critically; participate as responsible citizens in the technical environment locally, as well as national and global communities; and communicate appropriately by using descriptions in words, graphs, symbols, tables and diagrams. Students will be exposed to advanced Technical Mathematical knowledge and skills applicable to the FET Phase. (Total notional time: 180 hours)

I

ICT IN EDUCATION I (ITE105P) **CONTINUOUS ASSESSMENT**

(Module custodian: Department of Technology and Vocational Education)

The purpose of the module is to provide students with detailed ICT knowledge and skills to enable them to appropriately execute the use of Microsoft office suite which, amongst others, will include basic Word Processing (Microsoft Word), basic Spreadsheet (Microsoft Excel), basic Presentation (Microsoft PowerPoint) and basic desktop publishing software (Microsoft Publisher). The student will also be exposed to theoretical knowledge and skills of mastering the concepts and terminology of relevant computer basics, managing computer contents, searching for contents and using help, customising Windows, using Internet and security and maintenance of computers and computer laboratories. (Total notional time: 80 hours)

ICT IN EDUCATION II (ITE205P) **CONTINUOUS ASSESSMENT**

(Module custodian: Department of Technology and Vocational Education)

The purpose of the module is to provide students with detailed ICT knowledge and skills to enable them to appropriately execute the use of Microsoft office suite which, amongst others, will include intermediate Word Processing (Microsoft Word), intermediate Spreadsheet (Microsoft Excel), intermediate Presentation (Microsoft PowerPoint) and advanced desktop publishing software (Microsoft Publisher). (Total notional time: 70 hours)

INCLUSIVE EDUCATION (IED417P) **1 X 3-HOUR PAPER**

(Module custodian: Department of Educational Foundation)

Students who completed the module successfully, will be able to demonstrate knowledge of the practical implications of the implementation of inclusive education and of strategies for the accommodation of learners with specific barriers to learning in different classroom contexts; implement the SIAS-process; to collaborate with parents and other support professionals in the support process. (Total notional time: 70 hours)

INTRODUCTION TO RESEARCH (IRS416P) **1 X 2-HOUR PAPER**

(Module custodian: Department of Primary Education)

Introduction to the designing and conducting of research by selecting an area and topic for research, understanding of appropriate research methodologies. Understand research processes: topic, action plan, literature review, research questions, hypothesis, methodology, interpreting of data, analysis, findings. Access of data. Producing and presenting a research proposal. (Total notional time: 60 hours)

L

LOCC: ISIZULU (LZL405P) **CONTINUOUS ASSESSMENT**

(Module custodian: Department of Applied Languages)

The purpose of this module is to equip students with basic conversation skills, so that they can communicate with other people in IsiZulu in a social context. Further, this module is aimed at providing the students with basic knowledge and skills on how to communicate successfully with other people in IsiZulu besides their home languages, in various contexts. This will enhance multilingualism; promote knowledge and the development of indigenous African Languages. (Total notional time: 70 hours)

LOCC: SETSWANA (LTA405P) **CONTINUOUS ASSESSMENT**

(Module custodian: Department of Applied Languages)

The purpose of this module is to equip students with basic conversation skills, so that they can communicate with other people in Setswana in a social context. Further, this module is aimed at providing the students with basic knowledge and skills on how to communicate successfully with other people in Setswana besides their home languages, in various contexts. This will enhance multilingualism; promote knowledge and the development of indigenous African Languages. (Total notional time: 70 hours)

LOCC: TSHIVENDA (LVN405P) **CONTINUOUS ASSESSMENT**

(Module custodian: Department of Applied Languages)

The purpose of this module is to equip students with basic conversation skills, so that they can communicate with other people in Tshivenda in a social context. Further, this module is aimed at providing the students with basic knowledge and skills on how to communicate successfully with other people in Tshivenda besides their home languages, in various contexts. This will enhance multilingualism; promote knowledge and the development of indigenous African Languages. (Total notional time: 70 hours)

LOCC: XITSONGA (LTG405P) **CONTINUOUS ASSESSMENT**

(Module custodian: Department of Applied Languages)

The purpose of this module is to equip students with basic conversation skills, so that they can communicate with other people in Xitsonga in a social context. Further, this module is aimed at providing the students with basic knowledge and skills on how to communicate successfully with other people in Xitsonga besides their home languages, in various contexts. This will enhance multilingualism; promote knowledge and the development of indigenous African Languages. (Total notional time: 70 hours)

LOLT: ENGLISH I (LLE105P) **1 X 3-HOUR PAPER**

(Module custodian: Department of Technology and Vocational Education)

The purpose of this module is to develop students English language competence and subject knowledge in order to support and improve the language of learning and teaching in the classroom. (Total notional time: 80 hours)

LOLT: ENGLISH II (LLE205P) **1 X 3-HOUR PAPER**

(Module custodian: Department of Technology and Vocational Education)

Stages, Types and Importance of Listening; Effective Communication Strategies: Register and Tone; Reading and Interpretation of texts; Critical Analysis of Texts; Writing for Critical Analysis; Writing Strategies for Different Purposes. (Total notional time: 60 hours)

P

PROFESSIONAL STUDIES (FET) I (PSF106P) **CONTINUOUS ASSESSMENT**

(Module custodian: Department of Educational Foundation)

Introduction to general methodology, lesson planning and design (Grades 10-12), differentiated teaching and learning methods and strategies, formative and summative assessment methods and the school curriculum. Engage in Microteaching and mini lessons presentation. (Total notional time: 100 hours)

PROFESSIONAL STUDIES (FET) II (PSF206P) **CONTINUOUS ASSESSMENT**

(Module custodian: Department of Educational Foundation)

Curriculum design and implementation of curriculum policy (Grades: 10-12) and implementation of special needs: scaffolding learning. Teaching and learning methods and strategies and the application of formative assessment. Develop and apply media and technology. Engage in microteaching and min lesson presentations. (Total notional time: 130 hours)

PROFESSIONAL STUDIES (FET) III (PSF307P) **CONTINUOUS ASSESSMENT**

(Module custodian: Department of Educational Foundation)

Development of Curriculum theories within specialisation field; curriculum development models within specialisation; designing and application of assessment methods and techniques for the FET Phase; development and analysing of various digital technology and media; reflective teaching; and engage in Micro teaching. (Total notional time: 150 hours)

PROFESSIONAL STUDIES (FET) IV (PSF407P) **CONTINUOUS ASSESSMENT**
(Module custodian: Department of Educational Foundation)
Application and analyses of curriculum theories within specialised subjects. Reflective teaching; application and analyses of assessment strategies, integration of digital technology media. Micro teaching. Teaching portfolio for FET subjects, Grade 10-12. Mini-research projects. (Total notional time: 200 hours)

PROFESSIONAL STUDIES (SP) I (PSP106P) **CONTINUOUS ASSESSMENT**
(Module custodian: Department of Educational Foundation)
Creation and organisation of a positive learning environment. Introduction to lesson planning and design (Grades 7-9) and special needs education. Monitoring and assessing learner progress. Core-curricular and extra-curricular activities and microteaching. (Total notional time: 100 hours)

PROFESSIONAL STUDIES (SP) II (PSP206P) **CONTINUOUS ASSESSMENT**
(Module custodian: Department of Educational Foundation)
Introduction to curriculum policy (Grades: 6-9); theory, special needs, diagnosing learning barriers. Teaching and learning methods and strategies and assessment for senior phase: protocol on assessment. Apply technology and media and teaching and learning methods. Micro teaching lesson presentations in SP subject specialisation. (Total notional time: 100 hours)

PROFESSIONAL STUDIES (SP) III (PSP306P) **CONTINUOUS ASSESSMENT**
(Module custodian: Department of Educational Foundation)
Development of Curriculum theories within specialised field; application of teaching, learning and assessment methods and strategies (Grades 7-9). Introduction to various representations of knowledge; apply digital technology and media in the classroom and participate in micro teaching lessons. (Total notional time: 120 hours)

PROFESSIONAL STUDIES (SP) IV (PSP407P) **CONTINUOUS ASSESSMENT**
(Module custodian: Department of Educational Foundation)
Application of content knowledge, assessment strategies and Senior Phase curriculum models in lessons. Reflective teaching; application and analyses of assessment strategies, integration of digital technology media. Micro teaching. Teaching portfolio for SP subjects, Grades 7-9. Mini-research projects. (Total notional time: 200 hours)

S

SCHOOL BASED LEARNING I (6 WEEKS) (SFS105P) **WORK-INTEGRATED LEARNING**
(Module custodian: Department of Educational Foundation)
The purpose of this module is to ensure that the students is well-equipped and demonstrate communicative, reflective, ethical, numerical and technological competence and literacy in ways that facilitate their own academic learning, and enable them to enhance teaching, learning and the observation and evaluation of their learners in their classrooms. (Total notional time: 120 hours)

SCHOOL BASED LEARNING II (6 WEEKS) (SFS206P) **WORK-INTEGRATED LEARNING**
(Module custodian: Department of Educational Foundation)
Students who completed the module successfully, will be able to demonstrate knowledge, skills and applied competencies in areas such as, but not limited to: demonstrate the facilitation and scaffolding learning in the classroom, apply various teaching and learning strategies on relevant subject's specialisation, develop and practical application of the media within the lessons execute and perform classroom tasks and successfully complete of the subject portfolio's and logbook. (Total notional time: 120 hours)

SCHOOL BASED LEARNING III (6 WEEKS) (SFS307P) **WORK-INTEGRATED LEARNING**
(Module custodian: Department of Educational Foundation)
Students who completed the module successfully, will be able to demonstrate knowledge, skills and applied competencies in areas such as to plan organised and execute all teaching activities at an accredited school, research how gifted and talented learners are identified and supported at school, observe and reflecting on various tasks expected from the educator at school, write a report on work-based learning and reflect on their teaching practice. (Total notional time: 120 hours)

SCHOOL BASED LEARNING IV (12 WEEKS) (SFS407P) **WORK-INTEGRATED LEARNING**
(Module custodian: Department of Educational Foundation)
Students who completed the module successfully, will be able to demonstrate knowledge, skills and applied competencies in areas such as, but not limited to: plan, organise and execute all teaching activities at an accredited school; complete a set of educator files for each subject, participate as register teacher, in creating a positive learning environment; share knowledge of the curriculum and learning programmes, in lesson planning and presentation in assessing learner achievements, in professional development in the field of work, participate in extra-curricular and co-curricular activities and reflect on own teaching practice. (Total notional time: 300 hours)

SP: TECHNOLOGY I (STH106P) **1 X 3-HOUR PAPER**
(Module custodian: Department of Technology and Vocational Education
Understanding theories, Technological process and skills, Structures, Materials processing, Electrical systems, Mechanical systems, Graphical communication; Specific Subject Didactics - CAPS Senior Phase: Technology Grade 7 theories of Lesson plan and Presentations, Learner Teacher support material. (Total notional time: 140 hours)

SP: TECHNOLOGY II (STH206P) **1 X 3-HOUR PAPER**
(Module custodian: Department of Technology and Vocational Education)
Using IDMEC process to design technology prototype in structures, mechanical system, electrical systems, Understanding technological problem scenarios and solve problem by designing artefact in form of 3D drawings. Specific Didactics: CAPS SP: Technology Grade 8; teaching methods and strategies; theories of Pedagogic Content Knowledge (PCK) and TPACK introduced; theories of learning; Assessment; Lesson plans and Presentation of Grade 8. (Total notional time: 160 hours)

SP: TECHNOLOGY III (STH307P) **1 X 3-HOUR PAPER**
(Module custodian: Department of Technology and Vocational Education)
Designing and building technological projects within electrical systems, mechanical systems, structures, hydraulics and pneumatics, Present technological solutions using graphic communications. Specific subject didactics: CAPS Technology Grade 9; application of PCK, TPACK in teaching. Applying learning in teaching context; using constructivist theory and other relevant theories to advance learning in the class. (Total notional time: 160 hours)

T

THEORY OF EDUCATION (CURRICULUM STUDIES) I (TEC106P) **1 X 3-HOUR PAPER**
(Module custodian: Department of Educational Foundation)
This module provides theoretical knowledge and insights into issues related to curriculum theory as subdiscipline of Foundations of Education. Students develop skills on how to create a learning environment, select teaching, learning and assessment methods applicable for micro curriculum development with reference to lesson design. (Total notional time: 220 hours)

THEORY OF EDUCATION (PSYCHOLOGY AND SOCIOLOGY) II (TEP207P) **1 X 3-HOUR PAPER**
(Module custodian: Department of Educational Foundation)
Psychological and Sociological perspective based on learning and development theories and the effects on cognitive development. Socio-pedagogics as sub-discipline of Foundations of Education addresses, youth leadership, education and economy, diversity of cultures and gender, unemployment. (Total notional time: 240 hours)

THEORY OF EDUCATION (HISTORY AND COMPARATIVE STUDIES) III (TEH307P) **1 X 3-HOUR PAPER**
(Module custodian: Department of Educational Foundation)
This module includes the development of education through various periods in the history of mankind; the influence of the age of enlightenment on western and South African education; and the roles of policies and adult education. (Total notional time: 240 hours)

THEORY OF EDUCATION (PHILOSOPHY) IV (TEY407P) **1 X 3-HOUR PAPER**

(Module custodian: Department of Educational Foundation)

This module comprise of: the philosophy of education as sub-discipline of the foundations of education, the philosophy of education as a science, education and the South African Constitution, multi-cultural education and ethical issues in education. (Total notional time: 300 hours)