BACCALAUREUS TECHNOLOGIAE: POLYMER TECHNOLOGY
Qualification code: BTPY03 - NQF Level 7

Campus where offered: Pretoria 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. This qualification will be replaced by the Bachelor of Engineering Technology in Materials Engineering in Polymer Technology.

REMARKS

a. *Admission requirement(s):*
A National Diploma: Polymer Technology **or** a National Diploma: Engineering: Chemical Engineering **or** a National Diploma: Engineering: Mechanical, **or** a National Diploma: Engineering: Metallurgy **or** a National Diploma: Analytical Chemistry **or** an NQF Level 6 Bachelor's Degree in Chemical/Mechanical Engineering (or a closely related field) obtained from a South Africa university.

Preference will be given to candidates with an average of 60% or more. Candidates who do not meet the 60% requirement will be evaluated by the Department and may be requested to provide a portfolio of relevant work experience (excluding P1 and P2) in order to be considered for selection.

National Diploma students at TUT who are busy with their final semester (P2) and do not have more than one theoretical subject outstanding may also apply for admission and may be considered based on the average of their completed theoretical subjects, but admission will be subject to the successful completion of the National Diploma and the Faculty's Student Enrolment Plan (SEP).

Students other than those with a National Diploma: Polymer Technology will also have to complete Polymer Technology I as part of their 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:*
Please note that meeting the minimum requirements does not guarantee admission. Due to capacity constraints, qualifying students will be selected based on academic performance and/or work experience. Selection will be done after the closing date for applications.

c. *Minimum duration:*
One year.

d. *Presentation:*
Block-mode classes presented over a period of two consecutive semesters. Classes take place approximately once a month for three consecutive days. Schedules will be send to students before the start of each semester.

e. *Intake for the qualification:*
January and July.

f. *Re-registration:*
A student may re-register for the subject Polymer Science: Practical IV only with the permission of the Head of the Department. The purpose of the re-registration is to provide students with an opportunity to complete the project only and to prevent them from failing and having to re-do it.

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

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

i. Subject credits:
Subject credits are shown in brackets after each subject.

CURRICULUM

FIRST SEMESTER

CODE	SUBJECT	CREDIT
POP411T	Polymer Technology: Practical IV	(0,250)
PYT401T	Polymer Technology IV	(0,250)
TOTAL CREDITS FOR THE FIRST SEMESTER:		**0,500**

SECOND SEMESTER

CODE	SUBJECT	CREDIT
PWP410T	Polymer Science: Practical IV (year subject)	(0,250)
PWP411R	Polymer Science: Practical IV (re-registration)	(0,000)
PYW401T	Polymer Science IV	(0,250)
TOTAL CREDITS FOR THE SECOND SEMESTER:		**0,500**
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 8 August 2018, the syllabus content was defined as follows:

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POLYMER SCIENCE IV (PYW401T) **CONTINUOUS ASSESSMENT**
(Subject custodian: Department of Chemical, Metallurgical and Materials Engineering)
There are two components, namely Polymer Chemistry and Polymer Physics. Polymer Chemistry examines the bond between the chain structure, morphology, microstructure and the solvability and molecular mass. Speciality polymer, cross-bonding reactions and the mechanism of degradation and protection against degradation are also examined. (Total tuition time: ± 80 hours)

POLYMER SCIENCE: PRACTICAL IV (PWP410T, PWP411R) **CONTINUOUS ASSESSMENT**
(Subject custodian: Department of Chemical, Metallurgical and Materials Engineering)
Practicals relating to Polymer Science IV. (Total tuition time: ± 80 hours)

POLYMER TECHNOLOGY IV (PYT401T) **CONTINUOUS ASSESSMENT**
(Subject custodian: Department of Chemical, Metallurgical and Materials Engineering)
This subject comprises compulsory, as well as free-choice, subject matter. Compulsory subject matter includes the selection of polymers and mix design, chemical technology of fluid systems, cellular polymers, polymer films, textiles, polymer morphology, polymer structural analysis. (Total tuition time: ± 80 hours)

POLYMER TECHNOLOGY: PRACTICAL IV (POP411T) **CONTINUOUS ASSESSMENT**
(Subject custodian: Department of Chemical, Metallurgical and Materials Engineering)
Practicals relating to Polymer Technology IV. (Total tuition time: ± 80 hours)