## Mathematics refresher course 2019

All bona fide first year students enrolled for programs which contain the module MTHS111, MTHS114, MATH111 or WSKT122 must attend the refresher course. This implies that all engineering and BMI students, BSc and BA students enrolled for the modules MTHS111 or MTHS114 and BEd students (Snr/FET) with Education Mathematics as mayor subject or Technology Education, have to attend. See the enclosed list of programs that contain the modules MTHS111, MTHS114, MATH111 or WSKT122. Students who are repeating the modules MTHS111, MTHS114, MATH111 or WSKT122, BCom students enrolled for MTHS112/123, and BSc students enrolled for MTHS113, are exempted from the refresher course. Students repeating the module MTHS111, MTHS114 or MATH111 are strongly recommended to attend the refresher course.

## Refresher course time table

<b>Day</b> Monday	<b>Date</b> 14 Jan 2019	<b>Time</b> 16:00-17:45	Content Compulsory for all Test
Tuesday	15 Jan 2019	8:00-11:00	Registration and distribution of workbooks Optional if 80% or more for Algebra section in pre-test Algebra
Wednesday	16 Jan 2019	14:00-17:00	Optional if 80% or more Logarithm section in pre-test The number e, Logarithms
Thursday	17 Jan 2019	14:00-17:00	Compulsory for all How contagious diseases affect me
Friday	18 Jan 2019	14:00-17:00	Optional if 80% or more for Function section in pre-test Function concept
Saturday	19 Jan 2019 9	9:00-12:00	Compulsory for al Radian measure
Tuesday	22 Jan 2019 1	4:00-17:00	Compulsory for alal Trigonometry
Wednesday	23 Jan 2019 9	9:30-12:30	Compulsory for al Trigonometry, Waves at sea
Woensdag	23 Jan 2019 1	4:00-17:30	Compulsory for al Absolute value and limits
Thursday	24 Jan 2019 1	4:00-17:30	Compulsory for all Survive in an economic driven world
Friday	25 Jan 2019 9	9:00-12:00	Compulsory for al Absolute value and limits
Friday	25 Jan 2019 1	3:00-16:00	Compulsory for al Optimisation
Saturday	26 Jan 2019 1	4:00-16:00	Compulsory for al Test

**14 January:** Before the commencement of the refresher course, during the "R&O" period, a Mathematics test will be written by all students enrolled for programmes in the attached list. The test will be written during the first session on Monday 14 January 2018 at 8:00-10:00 in the lecture halls of E8 (J Chris Coetzee building), Potchefstroom campus, NWU. All students have to report in the lecture halls of E8 (J Chris Coetzee building) as indicated in the list below. Bring a HB pencil and eraser (no calculators). In the test certain basic mathematical ideas/concepts, which were taught at school and which are important for Mathematics at university level, are tested. No specific preparation for the test is necessary.

**Venue:** G34 (The course are presented in English in this venue only)

All information is available at https://goo.gl/FQhbQ6

Students admitted to the following programs have to attend the refresher course:

- Faculty of Engineering (ASA Ingenium) (E8 G42, English E8 G34)
  - Chemistry (7CG K01 I421P)
  - Chemistry en Mineral Processing (7CG K02 I422P)
  - Electrical en Electronics (7CN K01 I423P)
  - o Computer en Electronics (7CH K01 I424P)
  - Electromechanical (7CL K01 I425P)
  - Mechanical (7CJ K01 I426P)
  - Industrial (7CK K01 I427P)
- Faculty of Natural Sciences
  - ASA Scientae E8 G01, English E8 G34)
    - Chemistry and Physics (2FF H05 N301P)
    - Chemistry, Mathematics and Applied Mathematics (2FF H22 N301P)
    - Physics and Mathematics (2FF H23 N301P)
    - Physics and Applied Mathematics (2FF H24 N301P)
    - Physics and Computer Science (2FF H25 N301P)
    - Computer Science and Statistics (2FF H26 N301P)
    - Computer Science and Mathematics (2FF H09 N301P)
    - Computer Science and Economics (2FF H28 N301P)
    - Mathematics and Economics (2FF H29 N301P)
    - Geography and Applied Mathematics (2FF H30 N301P)
    - Statistics and Mathematics (2FG H02 N301P)
    - Mathematics (2FG H01 N301P)
    - Quantitative Risk Management (2FT H01 N301P)
    - Financial Mathematics (2FS H01 N301P)
    - o Business Analytics (2FR H01 N301P)
    - Actuarial Science (2FQ H01 N301P)
    - o Information Technology and Computer Science (2DX H01 N302P) if MTHS111 is elected
  - ASA Ad Vivendum (E8 K41, English E8 G34)
    - Biochemistry and Chemistry (2FF H06 N301P)
    - Microbiology and Biochemistry (2DK H11 N301P)
    - Botany and Biochemistry (2DK H02 N302P)
    - Zoology and Biochemistry (2DK H07 N302P)
    - Chemistry and Physiology (2DK H06 N302P)
    - Microbiology and Chemistry (2DJ H10 N301P)
    - Botany and Chemistry (2DJ H03 N302P)
    - Zoology and Chemistry (2DJ H04 N302P)
    - Geology and Chemistry (2DJ H07 N302P)
    - Geography and Computer Science (2DJ H14 N301P)
  - ASA PSA (E8 K40, English E8 G34)
    - Urban and Regional Planning (2FE K01 N401P)
- Faculty of Health Sciences (ASA Viviente) (E8 K40, English E8 G34)
  - o Physiology and Biochemistry (8DJ H01 G301P)
- Faculty of Arts (ASA Cuvinte) (E8 G01, English E8 G34)
  - o Any BA with Mathematics as elective
- Faculty of Education Sciences (ASA Educo) (E8 G41, English E8 G34)
  - o BEd Snr/FET with Mathematics as a specialisation subject (4BN J01/03/04/07/08/13/14)
  - BEd Snr/FET Mechanical, Electrical and Civil Technology education (4BN J17/18/19)
- Students appointed by the Admission office or Faculty Manager to attend the course for possible admission (E8 K40, English E8 G34)