

INDEPENDENT CONTRACTORS (EXTERNAL MARKERS) DEPARTMENT OF MATHEMATICAL SCIENCES SCHOOL OF SCIENCE COLLEGE OF SCIENCE ENGINEERING AND TECHNOLOGY (CSET) UNIVERSITY OF SOUTH AFRICA (REF: CSET/MATHS/12-2023)

Assessment is an integral part of curriculum development as outlined in the Curriculum Policy. During curriculum development, an assessment strategy is developed that is aligned to the ODeL Policy and strategy of UNISA. Assessment can have different focuses, namely to:

- improve the quality of students' learning experiences by focusing on significant knowledge, skills, attitudes and values, and providing motivation to work through the material through tasks and feedback, known as assessment for learning.
- b) focus on the ability to transfer knowledge to new contexts and to apply knowledge in specific contexts in line with the NQF level descriptors and other taxonomies of learning.
- c) focus on programmatic and graduate attributes and critical cross-field outcomes in assessment of learning.
- d) make academic judgements related to diagnostics, placements competence, progression and/or qualification completion; and as a feedback mechanism to improve curricula, known as assessment of learning; and to
- e) create opportunities for students to engage with the content, with their context, with the lecturer and with fellow students (Unisa Assessment Policy, 2011).

The Department of Mathematical Sciences is inviting suitable applicants for providing assessment services to be appointed as independent contractors (markers) on a yearly basis. The purpose of this positions is to appoint competent and suitable candidates to complete and execute assessment task professionally and ethically align to the Assessment Policy and Guidelines.

Requirements:

- Applicable and relevant equivalent to NQF level 9 (Master's Degree) OR NQF level 10 (Doctoral Degree) Specialization in Mathematics, Applied Mathematics or related fields.
- At least 5-years teaching experience (primary or secondary) or relevant experience in the education field (TVET College /University)
- Experience as a Tutor or e-Tutor in Mathematics will be an added advantage
- Postgraduate Mathematics students (M & D) in good standing may be considered in lieu of the completed academic requirements above

Duties:

- Complete and execute assessment task professionally
- · Comply and adhere to all Unisa tuition, assessment and examination and plagiarism policies and guidelines
- Act in the ethical and professional manner dealing with all assessment tasks
- Execute duties as stipulated in contract and task agreement
- Marking of assessment tasks fairly and consistently
- Meet deadlines of allocated assessment task
- Attend markers meeting and submit marking reports timeously

· Maintain confidentiality of all assessment tasks

Knowledge, skills and abilities

- Basic knowledge of the discipline applying for
- Basic knowledge of assessment and assessment practices
- Basic knowledge of marking and procedures
- Basic knowledge of constructive feedback on assessment tasks
- Basic knowledge of academic dishonesty and plagiarism
- Knowledge of teamwork/leadership skills
- · Good interpersonal and communication skills (listening, speaking, reading and writing)
- · Must be honest / ethical and show empathy when required to mark assessment tasks
- · Must have good problem-solving and decision-making skills
- Must be service orientated (Actively looking for ways to help and support lecturer or students)
- Must have good time management skills
- · Ability to resolve conflict and maintain confidentiality of all assessment tasks
- · Ability to work under pressure with adherence to deadlines

Recommendations:

- Computer and Internet skills
- · Have own desktop computer or laptop and internet connectivity (no computers or data bundles will be provided)
- · Advanced communication skills and proficiency in English
- Digital literacy skills competent in ICT and online learning environments
- Experience in online marking tools or software or LMS (Moodle will be an advantage)
- · Commitment to marking and meeting deadlines for all assessments
- Friendly, patient, and sensitive to a diversity of students

To apply please fill the online application form from the attached link <u>https://forms.office.com/r/2Heumb2QkQ</u> and send the following documents to <u>csetmarkesr@unisa.ac.za</u>

- 1) An application letter indicating willingness to mark assignments and/or exam scripts for any of the modules listed below.
- 2) Comprehensive UPDATED and signed curriculum vitae (most recent)
- 3) Only a certified copy of the **HIGHEST** qualification as per requirement
- 4) Certified copy of ID/Passport and valid visa

Please note:

*Required documents should be submitted as a single file (one PDF) to the email provided

*Use email address as provided its typed correctly csetmarkesr@unisa.ac.za

Assumption of duty: The candidates will have to undergo an interview (either face-to-face or Microsoft Teams) and online Moodle training sessions. Completion of the prescribed training on various aspects of Marking on the Moodle platform is compulsory.

Closing date: 15 December 2023

Independent Contractor (MARKER) positions are available in the modules listed in the Department of Mathematical Sciences

MODULE	MODULE NAME	PURPOSE OF MODULE	NAME OF DEPARTMENT	NUMBER OF STATITICS
MAT1503	Linear Algebra	Purpose : The purpose of this module is to enable students to understand and apply the following basic concepts in linear algebra: non-homogeneous and homogeneous systems of linear equations, Gaussian and Jordan-Gauss elimination, matrices and matrix operations, elementary determinants by cofactor expansion, inverse of matrix using the adjoint, Cramer's rule, evaluating determinants using row/column reduction, properties of the determinant function, vectors in 2-, 3- and n- space, dot product, projections, cross product, areas of parallelograms and volumes of parallelepipeds determined by vectors, lines and planes in 3-space and complex numbers.	Mathematical Sciences	3
MAT1510	Precalculus Mathematics A	Purpose: The purpose of this module is to enable learners to acquire the knowledge and skills that will enable students to draw and interpret graphs of linear, absolute value, quadratic, exponential, logarithmic and trigonometric functions, and to solve related equations and inequalities, as well as simple real-life problems.	Mathematical Sciences	3
MAT1501	Fundamental Mathematics	Purpose: The purpose of the module is to enable students credited with this module to have the basic skills which can be applied in the natural sciences and engineering sciences. They will have the understanding of basic ideas of algebra and very basic calculus, which are crucial in problem solving. This module will be useful to students who have studied Mathematics at matriculation level but who do not satisfy the minimum requirements for direct admission to undergraduate study, as stated in the calendar. 90104 - Bachelor of Education in Senior Phase and Further Education and Training Teaching (CEDU) 90130 - Diploma in Chemical Engineering 90132 - Diploma in Mechanical Engineering 90136 - Diploma in Industrial Engineering 90137 - Diploma in Civil Engineering 90138 - Diploma in Civil Engineering 90141 - Diploma in Nining Engineering 90141 - Diploma in Pulp and Paper Technology he purpose of this module is to enable students credited with this module have the basic skills which can be applied in the natural sciences and engineering sciences. They will have the understanding of basic ideas of algebra and very basic calculus, which are crucial in problem solving. This module will be useful to students who have studied Mathematics at matriculation level but who do not satisfy the minimum requirements for direct admission to undergraduate study, as stated in the calendar.	Mathematical Sciences	4
MAT1581	Mathematics I (Engineering)	Purpose: The purpose of this module is to give learners knowledge on Algebra; trigonometry; calculus; complex numbers; co-ordinate geometry; analytic geometry; matrices; determinants.	Mathematical Sciences	2
MAT3700	Mathematics III (Engineering)	Purpose: The purpose of this module is to give knowledge to students to be able to solve first- order ordinary differential equations and second order ordinary differential equations using the method of undetermined coefficients, solve any order differential equations using d-operators and Laplace transforms, to find the eigenvalues and eigenvectors of a matrix and write the Fourier series of a function. This module will assist students to develop their mathematical knowledge and analytical skills to support and advance their studies in the field of engineering.	Mathematical Sciences	1

MAT2691	Mathematics II (Engineering)	Purpose: The purpose of this module is to give learners understanding on Differentiation: partial differentiation, series; integration solutions of first-order differential equations; numerical methods; statistics.	Mathematical Sciences	1
MAT1613	Calculus B	Purpose: The purpose of this module is to enable students to obtain basic skills in differentiation and integration and build on the knowledge provided by module MAT1512. More advanced techniques and further basic applications are covered. Together, the modules MAT1512 and MAT1613 constitute a first course in Calculus which is essential for students taking Mathematics as a major subject.	Mathematical Sciences	1

Correspondence will be limited to short-listed candidates only. If you have not been contacted within two months after the closing date of this advertisement, please accept that your application was not successful.