

TERMS OF REFERENCE



**APPOINTMENT OF A SERVICE PROVIDER(S) TO PROVIDE A DIGITAL PRODUCT
AND SERVICES TO THREE TVET COLLEGES IN SOUTH AFRICA**

**SOFT SKILLS DEVELOPMENT – DIGITAL PRODUCT FOR TRAINING AND
DEVELOPMENT IN SCIENCE, TECHNOLOGY, ENGINEERING AND
MATHEMATICS**



APPOINTMENT OF A SERVICE PROVIDER(S) TO PROVIDE A DIGITAL PRODUCT AND SERVICES TO THREE TVET COLLEGES IN SOUTH AFRICA: SOFT SKILLS DEVELOPMENT – DIGITAL PRODUCT FOR TRAINING AND DEVELOPMENT IN SCIENCE, TECHNOLOGY, ENGINEERING AND MATHEMATICS

1. PURPOSE

- 1.1 To appoint a service provider(s) to:
 - 1.1.1 Provide a digital product for training and development in science, technology, engineering and mathematics to three selected public TVET Colleges,
 - 1.1.2 Install and commission (inclusive of training of relevant lecturers) the digital product supplied; and
 - 1.1.3 Train selected lecturers (6 lecturers x 4 campuses of TVET colleges) in the use, care and maintenance of the digital product supplied.

2. BACKGROUND

- 2.1 The public TVET Colleges are governed by the Continuing Education and Training Act, Act 16 of 2006 and fall within the jurisdiction of the Department of Higher Education and Training (DHET). According to the Act, the task of a public TVET College is to -
 - (a) Register students for all learning and training programmes leading to qualifications at levels 2 to 4 of the National Qualifications Framework or such further education and training levels determined by SAQA and 50 contemplated in the South African Qualifications Authority Act, 1995 (Act No. 58 of 1995), which levels are above general education but below higher education; and
 - (b) take responsibility for the registration of students, the provision and delivery of the curriculum and the assessment of students.
- 2.2 The UNDP, in association with DHET identified three public TVET Colleges to be supported to improve their offerings to students in engineering studies with a focus on the automotive manufacturing sector.
- 2.3 The three beneficiary colleges are –

<i>Swinton Road Campus of Coastal KZN College, Belville and Wingfield Campuses of Northlink College and Centurion Campus of Tshwane South College.</i>
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3. PROBLEM STATEMENT

Research and feedback from employers indicate that graduates are not sufficiently prepared for the world of work. The reasons are plentiful but at the core are their inability to work with modern, 4IR equipment and a lack of soft skills. Combined these are the two main reasons for graduates not being able to find employment.

- 3.1 Colleges do not have modern digital equipment that are aligned to factory needs in a new 4IR environment.
- 3.2 Colleges do not sufficiently train students in soft skills such as innovative/creative thinking, teamwork, work ethics, leadership and problem solving). At the same time college lecturers are not trained in the delivery of soft skills.
- 3.3 COVID-19 has elevated the need for blended on-line and remote learning. The pandemic has also illustrated that lecturers are not well prepared to work in a digital learning environment.

4 SCOPE OF SERVICES

The successful bidder(s) is expected to provide the following:

- 4.1 A digital product that meets the specifications as set out below.
- 4.2 Brand the digital product supplied with branded stickers or materials provided by the UNDP (where possible).
- 4.3 Deliver, install and commission (where necessary) the digital product supplied.
- 4.4 Provide training to relevant college lecturers in the use, care and maintenance of the digital product supplied.
- 4.5 Undertake the maintenance for a one-year period including transfer of skills.
- 4.6 General information on the scope of services
Delivery campuses will be clearly indicated in the product list.
- 4.7 All delivery costs, installation, commissioning and training should be included in the price offering.
- 4.8 The bidder can suggest where the training should take place. It can be on-site or if appropriate, virtual.
- 4.9 The digital product supplied should have at least a three-year warranty.
- 4.10 After sales services for one year after installation and a 24-hour turn-around time for support service and defects.

5. DELIVERABLES

- a) Bidders should bid for complete the complete list below. No partial bids will be considered.
- b) The successful bidder(s) must provide a project schedule that corresponds to the supply, delivery, installation, configuration, training and warranty related to the following:

SOFT SKILLS DEVELOPMENT: Improving Science, Technology, Engineering and Mathematics (STEM) through the use of interactive simulators. This batch is a single product what will assist NATED and NC(V) learners in STEM development through a wide range of simulations in the Engineering field covering various STEM subjects. The product should also contribute to learners' ability to work in a digital environment and strengthen problem solving skills. The proposed solution should target TVET College students.

In preparing Colleges to implement the solution, bidders should make proposals on how training will take place – on-site or on-line and will it be done per College or can all lecturers be trained together. The proposed solution should be described and reflected in the price.

The list below describes in more detail what is required from bidders.

It is the intention to procure three digital products for training and development of TVET college engineering students in science, technology, engineering and mathematics. These will be delivered, installed, commissioned and the necessary training will be provided at the Swinton Road Campus of Coastal KZN College, Belville and Wingfield Campuses of Northlink College and Centurion Campus of Tshwane South College.

6. TIME FRAME

The specified requirements are expected to be delivered immediately post award and contract signature and service providers must align their timeframes service requirements as stipulated in section 4 above in line with UNDP procurement processes.

7. BID PRICES

Bidders must express prices for their services in South African currency (Rand). All prices must be inclusive of Value Added Tax and costs to be incurred that are necessary for the execution and completion of the contract in accordance with the bid document. Prices will remain firm for the duration of the contract.

8. BID EVALUATION SYSTEM

The evaluation system will be as per UNDP supply chain management processes.

9. AWARDING OF BID

The awarding of bid will be as per UNDP supply chain management processes.

IMPROVING SCIENCE, TECHNOLOGY, ENGINEERING AND MATHEMATICS (STEM) THROUGH THE USE OF INTERACTIVE SIMULATORS

Sites: Coastal KZN College, Swinton Road Campus, Mobeni, eThekweni
 Northlink College, Belville Campus, Cape Town
 Northlink College, Wingfield Campus, Cape Town
 Tshwane South College, Centurion Campus, Tshwane

Item	Description	Description of Make and Model offered	Qty	Nett unit price excl Vat	Nett Total Price excl Vat
IMPROVING STEM					
1	<ul style="list-style-type: none"> A digital product for training and development of TVET College engineering students in Science, Technology, Engineering and Mathematics Should be able to support NATED and NC(V) programmes Should be suitable for blended learning Must be thought-provoking, challenging, versatile. Must be able to assess student understanding of every topic in a supportive way that clearly identifies the correct answer to each question once it has been attempted. Should address a broad range of related engineering topics such as <ul style="list-style-type: none"> Engineering Science, Engineering Mathematics, Electrical Engineering, Electronics, Mechatronics, Mechanical Engineering, Engineering Science, Engineering Materials Technology, Manufacturing Techniques, Automotive, Green Technologies The package should be able to simulate real-world applications. such as gearing, electricity, structures and machine programming Medium of instruction: English. If a license based product, it should include a license for unlimited users and the license should be perpetual. Should be usable in classroom sizes of 30 students. Inclusive of delivery, installation and training of lecturers. Will be used at four different sites, though 3 different Colleges Include explanatory brochures/descriptions. 		3		
	Total excluding VAT				
	VAT (15%)				
	Total including VAT				