UNISA

college of science, engineering and technology

To: ALL MEDIA

ATTENTION: NEWS EDITORS/PR WIRE SERVICES DATE: 07 October 2019

Media statement: Unisa to launch the state-of-the-art **Real-Time Digital Simulation Platform for Power Systems and Protection Automation Equipment**.

Unisa's College of Science, Engineering and Technology (CSET) is proud to announce the launch of a state-of-the-art Real-Time Digital Simulation Platform for Power Hardware in the Loop, and Protection and Automation Equipment.

Lately, some faculties of engineering have embraced the use of simulation packages as a substitute for experiments in laboratories. Simulation experiments provide opportunities to investigate a wide range of scenarios. However, the main challenge with simulation exposure is that students are removed from the realities of the work environment. Engineering education requires students to be grounded in theoretical principles, practical experiments, hands-on experience, and skills to solve problems in the real world. In view of this, there is a need for a platform that combines best practices in simulation and reallife experimentation to train students and conduct research.

A real-time digital simulation platform for power system hardware in the loop combines the best of both simulations and real-life experiments. It provides a relatively safe, flexible, and cost-effective environment to study the interaction between various power system components and active controllers without posing any risk to power utilities.

The platform will substantially improve our teaching and research in power systems operation, protection, substation automation, smart grid and renewable energy sources integration. The composition and configuration of our platform enable a limited number of students and researchers to conduct remote experiments in our laboratories through a virtual private network.

Venue: Unisa Science Campus in Florida (corner of Christiaan de Wet Road & Pioneer Avenue, Florida, 1709), (the Link Area, next to Thamsanqa Nkambule)

Date: Tuesday, 22 October 2019

Time: 14:00

Members of the media are invited to attend and cover the event.

About Unisa's College of Science, Engineering and Technology:

The College prides itself on being a leader in open distance e-learning in the country for Science and Engineering certificate, diploma and degree programmes through the use of advanced technologies for interactive teaching and learning. This College is the largest provider of Science and Engineering undergraduates in South Africa and also has students from the African continent. Owing to state-of-the-art laboratories and high-tech instrumentation, the College conducts cutting-edge research in collaboration with world-class universities across the globe.

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For RSVP and interview requests, please contact Tommy Huma (Unisa: Senior Media Liaison Officer) on 072 218 6197 / 012 429 6390 / <u>humatm@unisa.ac.za</u> OR Thembeka Ntuli-Mpapama on 079 285 3307.