

## TSHWANE UNIVERSITY OF TECHNOLOGY ERASMUS FUNDED PROJECTS

Tshwane University of Technology (TUT) is actively promoting internationalisation and capacity development through its involvement in Erasmus+ funded projects, including MASSTER, SAMTIC, and ProCyD, which aim to strengthen higher education systems, support digital transformation, and foster research collaboration. These initiatives boost academic innovation, skills development, and cross-border partnerships, positioning TUT as a vital contributor to sustainable development and global knowledge exchange.

### SAMTIC Project

The South African Music Technology and Innovation Capacity-building (SAMTIC) project, funded by the European Union (ERASMUS + Capacity Building), involves 4 South African universities and 2 European



Union universities. The project addresses urgent educational, economic, and technological gaps in South Africa's higher education system—particularly in digital music training—through internationalisation, curriculum renewal, infrastructure development, and professional upskilling.

South African higher education institutions continue to struggle with the migration to digital education in music due largely to funding challenges. Reduced national funding to universities has led to deteriorating infrastructure, staff shortages, outdated curricula, and reduced programme offerings particularly in the area of music technology. Digital music education has been significantly affected: with laboratories and recording studios often outdated, obsolete, or severely understaffed. As a result, graduates lack key digital production, recording, and technology skills, leaving them at a disadvantage in the global music industry and contributing to persistent skills drain.

The SAMTIC directly responds to these challenges through capacity-building between EU and SA universities. Benefits include broadening EU partnerships in Africa, while supporting South African HEIs to transition towards digital transformation. The project aligns with Erasmus+ priorities for internationalisation, digital transformation, widening access to education, and improving employability. It also supports the EU's Digital Education Action Plan (2021–2027) and Africa-focused goals of digital innovation, sustainable growth, and human development.



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## **Project Objectives**

The project includes five key objectives:

### **1. Training of SA educators and postgraduate**

through in-person workshops, lectures, and practical sessions hosted by Hochschule für Musik Nürnberg (HMN) and University of Sofia St Kliments Ohridski (US). Staff are expected to improve digital competency training in the use of current music technology hardware and software and also explore current trends in digital music and artificial intelligence.

### **2. Upgrading of facilities**

including studios and laboratories with 2025-level software, new computers, MIDI controllers, microphones, converters, and professional audio interfaces. This represents a 25–100% improvement in current capacity; TUT will establish South Africa's first fully functional HEI-based professional recording studio for teaching and production.

### **3. Collaborative research and artistic work**

including a digital music education symposium in South Africa, joint performances, and international dissemination of collaborative recordings.

### **4. Curriculum revision**

across participating SA HEIs to incorporate contemporary digital music production, audio recording, AI and multimedia practices. Revised curricula will affect at least three modules per institution and include 10–25% new course content based on EU standards.

### **5. Real-world training and production**

including participation in professional recording projects (CD recordings) to be distributed internationally. Staff will apply new skills in recording, production, and AI-supported platforms.

## **Project Partners:**

Tshwane University of Technology (TUT), South Africa (Coordinator)

Hochschule für Musik Nürnberg (Germany)

University of Sofia St Kliment Ohridski (Bulgaria)

University of Pretoria (South Africa)

University of Witwatersrand (South Africa)

University of South Africa (South Africa)



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## ProCyD Project

Tshwane University of Technology is committed to driving innovation, digital transformation, and practice-oriented education that responds to both national and continental development needs. Within this ProCyD, TUT contributes its expertise in applied research, cybersecurity capacity development, and international collaboration to strengthen data protection and cybersecurity education in South Africa and Mozambique.



The ProcyD project focuses on a Modular Higher Education System in Data Protection and Cybersecurity for Supporting the Digital Transformation in Mozambique and South Africa. The envisioned goal of the project is the introduction or strengthening of data protection and cybersecurity into higher education in order to support the digital transformation in Mozambique and South Africa. The digital transformation is a challenge that all countries around the world must face. Digitalisation needs IT security and people who, based on knowledge in both data security and data protection, can realistically assess the benefits and risks that accompany this transformation. The project intends to make a significant contribution here. The plan is to design and implement courses at different levels: A course for general basic qualification that aims to raise awareness for the relevance of data protection and cybersecurity and to provide basic knowledge in these fields as well as study programmes at bachelor's and master's level.

To address the challenge that the partner institutions from Mozambique lack qualified teaching staff in the targeted subject areas, we plan a pilot master's programme with semesters abroad at Masaryk University in Czech Republic within the project runtime. The partner institutions can send selected participants for this masters' programme. This will create an initial pool of specialists as well as lecturers, which will ensure the sustainability of the project results.

More details can be found at the project website: [www.procyd.eu](http://www.procyd.eu)

### Project Partners:

- University of Technology Dresden (Germany) (Coordinator)
- Masaryk University (Czech Republic)
- Università Degli Studi Guglielmo Marconi-Telematica / Unimarconi (Italy)



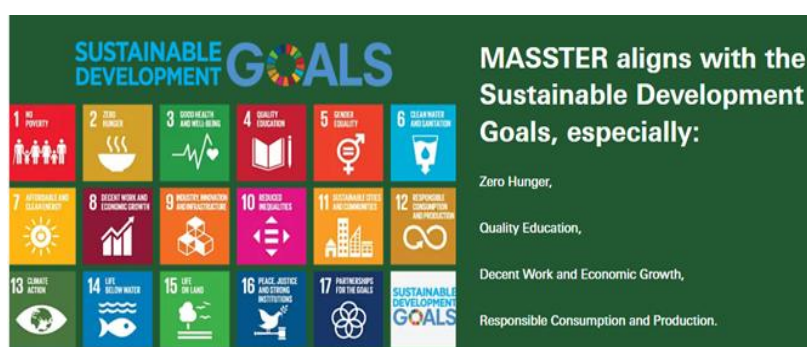
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- Universidade Eduardo Mondlane (Mozambique)
- Universidade Pedagógica (Mozambique)
- Universidade Rovuma (Mozambique)
- Universidade Licungo (Mozambique)
- Instituto Nacional de Governo Electronico (INAGE) (Mozambique)
- Instituto Nacional de Tecnologias de Informação e Comunicação (INTIC) (Mozambique)
- Rhodes University (South Africa)
- Tshwane University of Technology (South Africa)

## MASSTER Project

The MASSTER (Managing (South) Africa and Senegal Sustainability Targets through Economic Diversification of Rural Areas) project is a 36-month Erasmus+ Capacity Building in Higher Education initiative funded by the European Union. The



project focuses on strengthening the link between agriculture, rural development, and migration management in Sub-Saharan Africa, particularly in South Africa and Senegal. It recognises that agriculture remains a key livelihood source, yet rural–urban migration and limited income opportunities reduce the sector’s development potential.

MASSTER supports higher education institutions (HEIs), extension services, and rural communities to develop innovative training programmes that enhance income-generating opportunities for farmers and students. The project promotes skills development in agriculture, entrepreneurship, and rural enterprise to improve livelihoods and reduce migration pressures from rural areas.

Ultimately, MASSTER contributes to achieving key Sustainable Development Goals (SDGs), including Zero Hunger, Quality Education, Decent Work, Economic Growth, and Responsible Consumption and Production, by strengthening institutional capacity and promoting sustainable rural economic diversification.

### The MASSTER project aims to achieve the following core objectives:

1. Strengthen the capacity of Higher Education Institutions (HEIs) and extension services.



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2. To design and deliver innovative, practical training programmes that enhance agricultural skills, entrepreneurship, and rural development knowledge among students, farmers, and rural stakeholders.
3. Promote sustainable rural livelihoods and economic diversification.
4. To support income-generating activities and alternative rural enterprises that improve household incomes, strengthen resilience, and reduce economic drivers of migration.
5. Enhance migration management through evidence-based approaches.
6. To analyse migration risk factors and develop tools and strategies that help communities and local institutions better manage migration challenges.
7. Foster collaboration and knowledge exchange among stakeholders.
8. To strengthen partnerships between universities, extension services, policymakers, and communities in order to support inclusive and sustainable rural development.

### **Project Partners**

The MASSTER project consortium consists of 13 partners from Germany, Senegal, South Africa, Italy, France, and Serbia.

- Hochschule Weihenstephan-Triesdorf (Germany), Project Coordinator
- Université du Sine Saloum El-Hadj Ibrahima Niass (Senegal)
- Université Gaston Berger de Saint-Louis (Senegal)
- Université Assane Seck de Ziguinchor (Senegal)
- Centre Interprofessionnel pour la Formation aux Métiers de l'Agriculture (Senegal)
- University of the Free State (South Africa)
- Tshwane University of Technology (South Africa)
- Stellenbosch University (South Africa)
- South African Society for Agricultural Extension (South Africa)
- Università degli Studi di Napoli Federico II (Italy)
- Université d'Aix-Marseille (France)
- Academy of Professional Studies South Serbia (Serbia)
- Western Balkans Institute (Serbia)



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