Traditional scholarship programs in the Global North, which target gifted candidates from less developed economies in Africa, often contribute to brain drain.

At the same time, while the academic training received by STEM students at many African universities is sometimes world class, graduates often lack smooth paths to industry.

This is particularly true for larger, public universities. These graduates often face huge hurdles to enter the industrial workforce, and are often even unaware that opportunities to leverage their skills may exist outside of academia.

**ABOUT ESMT BERLIN**

ESMT Berlin (European School of Management and Technology) is a stand-alone business school in Germany. Founded by 25 leading global companies, ESMT offers master’s, MBA, and PhD programs, as well as executive education on its campus in Berlin, in locations around the world, online, and in online blended format.

Focusing on leadership, innovation, and analytics, its diverse faculty publishes outstanding research in top academic journals. Additionally, the international business school provides an interdisciplinary platform for discourse between politics, business, and academia. ESMT is a non-profit private institution of higher education, accredited by AACSB, AMBA, EQUIS, and FIBAA, and is committed to diversity, equity, and inclusion across all its activities and communities. ESMT has prioritized three areas: leadership, innovation, and analytics. These pillars underpin the academic and organizational development of the school and guide its programming and research. The school was ranked 9th in the Financial Times European Business School ranking in 2020.
Not all Master’s level graduates are suitable or desire a further academic path to PhD level. There is considerable wastage as participants who do not follow PhD level academic training finish without sufficient training to enter into the workforce able to use their world class quantitative training in business.

Many graduates suffer from chronic underemployment. The ESMT AIMS Industry Immersion Program (IIP) aims to help bridge this gap, firstly by working directly with students, and later by transferring the knowledge to African universities so that they can adapt and deliver such a program independently.

Specifically, the IIP has the following aims:

1. To enable scientifically trained African graduates to contribute to the economic transformation of Africa by immersing them in a practical, skills-based employability program after their STEM studies

2. To develop basic managerial and organizational skills in the cohort

3. To facilitate potential entrepreneurs to succeed with their ideas by imparting an understanding of business and entrepreneurial principles

4. To foster behavioral competences in participants that are demanded by employers through a complementary work-readiness program delivered by local partners

5. To transfer teaching and training competences from one of Europe’s leading business schools to ambitious partners in Africa

6. To develop business linkages between African graduates and German business operating in Africa through internship and post-graduate employment
The IIP consists of a six-week academic module, followed by a three to six-month internship placement in both local and German companies across Africa.

ESMT Berlin faculty designed the academic content to focus specifically on areas in which mathematicians and other STEM graduates can apply their skills in a business context, such as data analytics, business intelligence and sales, while at the same time aiming to give participants an overview of how business works.

The program is delivered in blended format to cohorts in Ghana, Kenya, Rwanda and South Africa, in partnership with AIMS (African Institute for Mathematical Sciences) and Strathmore University’s School of Engineering and Computer Science, and Academics without Borders.

Since the COVID pandemic, the program has developed a hybrid internship model, whereby students undertake remote, project-based internships in teams located in innovation hubs from the AfriLabs networks, and with a digital skills support program delivered in conjunction with Microsoft, and additional internships provided by Riipen, a Canadian learning experience platform bringing real projects from organizations to project teams in Africa.

So far, 174 students have graduated from the program, with aim of reaching 1000 by 2025, adding one new partner university per year.
PROGRAM IMPACT AND SUCCESS

The impact and success of the program can be judged by the career trajectories of our graduates. How successful have we been in bringing in underrepresented groups, i.e. those who have been educated in technical disciplines in public universities who lack initial professional experience, into jobs in industry?

Statistics on graduates employed one year after our program are encouraging, with an average of 80% of graduates employed in industry one year after completing their program. This figure is consistent over the years 2017-2019 (n=79).

A control group of AIMS alumni who applied to the program but were not accepted shows an industry employability rate of 20%.

Since the beginning, we have focused on gender equality, with 51% of total graduates being female.

Outcomes for the 2020 cohort are currently being evaluated, but we faced significant challenges with the COVID pandemic. The majority of our contact companies across Africa stopped hiring, both for internship and full-time positions. It is too early to say what impact this will have on the longer term career trajectories of these graduates. It is also too early to assess whether the pivot to the Hybrid Internship Hub concept will allow us to maintain our employment success.

The fifth year allowed us to refine the concept and engage other African academic partners who can take the program as open source and benefit from the learnings we have made throughout the program. Academics without Borders (Canada) enabled us to onboard Strathmore University. We aim to add one new partner each year, and to empower each partner to deliver the program with ESMT online content but delivered autonomously by the host university. Our academic aims have been achieved.
We have managed to develop a program which successfully prepares graduates from technical disciplines to enter the African workplace in meaningful roles in industry. Our graduates have achieved considerable success into managerial roles, and the internship concept has proved a very valuable transition vehicle into employment.

Our transition to a blended concept will allow us to scale. We have proven we can attract new partners. With a cost per student of roughly EUR 1,000, we believe that we have built a concept which can transform lives and economies.

However, all is not rosy. The pandemic made it difficult to find internships and corporate partners to employ our graduates.

Companies do not yet queue at our doors to hire our students. We have mastered the academic and behavioral training parts, but have not finished our mission to expand the internship concept in Africa.

Furthermore, it seems that our program is not yet at sufficient scale to attract sustainable funding, despite our success with the pilot program.

Therefore, we have pivoted the positioning of the program to a higher education capacity building program and moved to a train-the-trainer approach.

We have repositioned the program as an opportunity for African industry to compete for top quantitative talent educated to add value in industry rather than one which solves an underemployment problem.
SDG IMPACT

**GOAL 5: Gender Equality**
Achieve gender equality and empower all women and girls

**GOAL 9: Industry, Innovation and Infrastructure**
Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

**GOAL 8: Decent Work and Economic Growth**
Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

**GOAL 4: Quality Education**
Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

LOOKING FORWARD

In 2021, we appointed a local managing director to take over all aspects of partnership and program management. ESMT’s Circle of Friends have agreed to underwrite the expenses for 2022.

Longer term, we are confident that funding will come from the corporates that benefit from hiring our graduates. At the same time, we will continue to reduce the cost per student of delivering the program.

LOOKING FORWARD

ESMT faculty and staff will continue to provide their services pro-bono (along with faculty from the University of Toronto, University of Victoria in Canada and adjunct faculty from INSEAD).

We will add one new partner university per year until 2026. We aim to bring the program next to Nigeria, Cote d’Ivoire and Ethiopia, and are working with Academics without Borders to identify suitable new host universities.

We aim to graduate 250 students per year by 2025. We will hand over fully to our local partners when they are comfortable and confident in their ability to deliver the program to the highest standards.

Finally, we will expand our hybrid internship hub concept based on our initial success, opening opportunities for our graduates to intern remotely with global organizations regardless of their location.