



Scholars
Program



AIMS

African Institute for
Mathematical Sciences
NEXT EINSTEIN INITIATIVE



Mastercard Foundation Scholars Program @ AIMS

About AIMS

The African Institute for Mathematical Sciences (AIMS) is a pan-African network of Centres of Excellence for post-graduate training, research and public engagement in mathematics with a mission to lead the transformation of Africa through innovative scientific training, technological advances, breakthrough discoveries, strategic foresight and innovative policy design.

Founded in 2003 in South Africa and later replicated in Centres of Excellence in Senegal, Ghana, Cameroon, Tanzania and Rwanda under the framework of the Next Einstein Initiative, AIMS is feeding the STEM pipeline by training African students for a Masters in Mathematical Sciences, including a co-operative option with a direct link to industry. The network also offers research programs, with 90 researchers currently conducting studies under the tutelage of prestigious Research Chairs across the network. In addition to a gender-responsive Teacher Training Program currently implemented in Cameroon and Rwanda, AIMS equally created two critical initiatives: Quantum Leap Africa to prepare the continent for the coming quantum revolution and the Next Einstein Forum to propel Africa on to the global scientific stage.

*February 2017
Hackathon at
AIMS Senegal:
Mastercard
Foundation
Scholars in a
brainstorming
session.*





We are leading Africa's socio-economic transformation through



Innovative scientific training

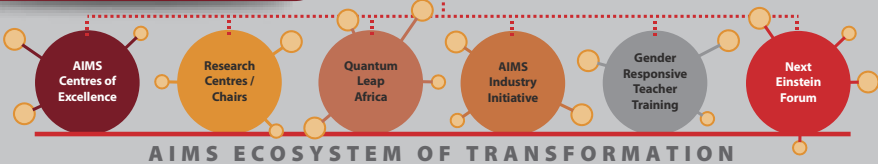


Technical advances & discoveries



Strategic foresight & policy design

How are we doing this?



AIMS Centres of Excellence



Our students come from 43 countries

2018

6 centres of excellence



Commitment to Scientific Excellence & Gender Equality

The Mastercard Foundation Scholars Program @ AIMS

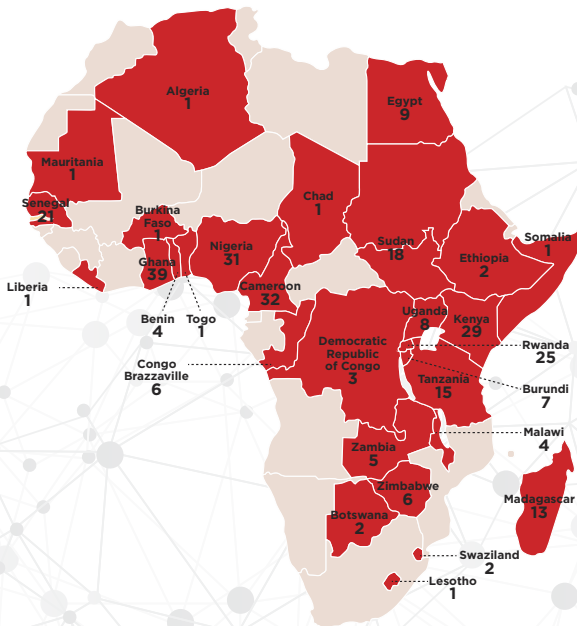
In November 2014, AIMS partnered with the Mastercard Foundation to support 30% of all admitted students (predominantly women) at AIMS from 2014 to 2019.

Mastercard Foundation Scholars at AIMS are selected based on academic excellence, leadership potential and their commitment to:

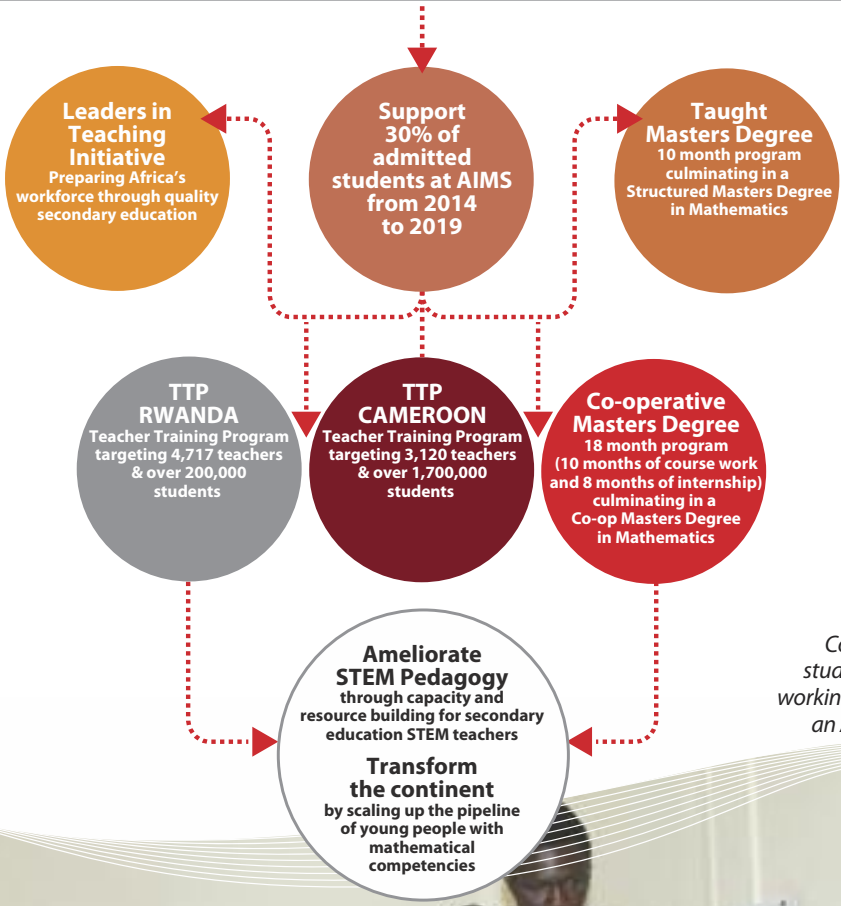
- 1 Give-back to their communities;
- 2 Fully participate in training and outreach opportunities, fashioned to reinforce their leadership skills, strengthen their sense of responsibility to give back to the African continent and lead the positive transformation of their communities.

As at July 31 2018, AIMS-NEI had graduated **264** Mastercard Foundation Scholars (**66% Female**), with **25** Co-op scholars (**48% Female**) currently undertaking the program.

Combined, these scholars are nationals from **29** African countries:



Ghana	39	Benin	4
Cameroon	32	Malawi	4
Nigeria	31	Democratic Republic of Congo	3
Kenya	29	Botswana	2
Rwanda	25	Ethiopia	2
Senegal	21	Swaziland	2
Sudan	18	Algeria	1
Tanzania	15	Burkina Faso	1
Madagascar	13	Chad	1
Egypt	9	Lesotho	1
Uganda	8	Liberia	1
Burundi	7	Mauritania	1
Congo	3	Somalia	1
Congo Brazzaville	6	Togo	1
Zimbabwe	6		
Zambia	5		



Co-op students working on an App.



Our Programs

A Co-operative Master's degree built on a model of work-integrated learning combining formal instruction (10 months) with scheduled, alternative segments of practical work experience in appropriate industry (6-8 months). Currently offered at our Senegal, Cameroon and Rwanda centres, Co-op students graduate with a Master's in Mathematics, with specialization in either Big Data, Computer Security or Financial Mathematics.

A Taught Master's degree in Mathematics comprising 10 months of formal instruction and research. AIMS students are selected through a rigorous application process after which successful candidates are granted full bursaries for both programs. Candidates must have studied mathematics in the broad sense at an African university for 4 years prior to their application.

A Teacher Training Program implemented in Rwanda and Cameroon designed to equip secondary school teachers with professional development courses, promote best practices and distribute high-quality classroom resources to in-service and pre-service teachers. The goal is to raise the quality of mathematics and science education at the secondary education level in order to improve STEM teaching and increase the transition of students to tertiary STEM education.

*Co-op students
at work*



Alumni Spotlight

Here are 5 things you need to know about Ndeye Mbeuguet Niang, from Senegal.

1. Prior to joining AIMS Senegal, she studied Mathematics and Computer Science at the Gaston Berger University of Saint-Louis, Senegal.
2. She conducted her Co-op internship at the Centre of Networks and Information of the Ministry of Higher Education, where using web semantic technologies with Java and Hadoop, she prepared a sharing framework to accommodate the data, after converting and modelling it to facilitate its accessibility to users.
3. Her work was so compelling that during her defence in February 2017, ATOS, an AIMS industry partner in the business of Big Data Analytics offered her a position as Data Scientist.
4. Now working for SONATEL-Orange, another AIMS industry partner, she currently holds the position of Data Scientist Manager for Orange Sierra Leone.
5. She nurses a dream of creating a software system more performant than Google.



*Ndeye Mbeuguet
Niang, from
Senegal.*



Thirty-Two Mastercard Foundation Scholars support the Next Einstein Forum Global Gathering 2018 as Volunteers

So we did it again! This year, 32 Mastercard Foundation Scholars from Benin, Egypt, Ethiopia, Ghana, Kenya, Madagascar, Mauritius, Nigeria, Rwanda, South Africa, Uganda and Zambia converged in Kigali at the behest of AIMS, to volunteer as rapporteurs at the Next Einstein Forum Global Gathering 2018. These scholars are currently enrolled in 17 Mastercard Foundation Scholars Program partner institutions across the globe. Launched in 2015 just in time for the first edition of the NEF Global Gathering 2016 held in Dakar, the NEF Volunteers Program is a unique networking opportunity for highly motivated, Mastercard Foundation Scholars, dedicated to promoting STEM in Africa. Successful applicants get to attend the prestigious, invitation-only NEF Global Gatherings alongside Nobel Prize winners, Heads of States and representatives from leading global corporations. Volunteers benefit from a flight ticket, accommodation, as well as a stipend from AIMS. NEF Global Gatherings are exciting events where the world of science and technology meet on African soil to unveil breakthroughs in science, through unique panels and discovery sessions, exclusive investor lunches and uniquely relevant pre-conferences and side-events.

AIMS Global Secretariat

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Apply via the website of the centre of your choice by selecting "Study at AIMS..." under the "Apply" menu. Successful applicants are invited to compete for a spot on the Mastercard Foundation Scholars Program. Applications open from December 1st to March 31st annually.