



Girls4Tech, the science, technology, engineering and mathematics (STEM) programme launched by Mastercard in 2014, reached its initial goal of educating one million girls in mid-October. The programme now aims to reach five million girls by 2025.

The Girls4Tech programme offers activities and curriculum built on global standards in science and mathematics. It incorporates Mastercard's expertise in technology and innovation, enabling students to discover a range of STEM careers, such as fraud detective, data scientist and software engineer.

Originally a hands-on, in-person session run by employee volunteers, the programme has expanded into new topics

such as artificial intelligence and cybersecurity, and has also enhanced access to its STEM curriculum through a digital learning experience, called Girls4Tech Connect. This provides interactive worksheets that can be downloaded and printed for home use, as well as teacher guides for online lessons.

To access these, visit Girls4Tech Connect at: <https://www.girls4tech.com/>

4IR progress

In October, Minister Stella Ndabeni-Abrahams reported on progress made by the Department of Communications and Digital Technologies with regard to the Fourth Industrial Revolution, known as 4IR. The Department was delegated a coordination role, which included overseeing the Presidential Commission tasked with developing a programme of action around 4IR.

The Commission's completed 4IR Report, which has been approved by Cabinet, consists of the following eight recommendations:

- Investment in human capital
- The establishment of an artificial intelligence (AI) institute
- The establishment of a platform for advanced manufacturing
- To secure and avail data to enable innovation
- Incentivise future industries, platforms and applications of 4IR technologies
- Build 4IR infrastructure

- The review and amendment (or creation) of appropriate policies and legislation
- The establishment of a 4IR Strategic Implementation Coordination Council.

Speaking about the need to provide the public with the tools required to take advantage of the outcomes, the Minister said that the Department had designed a framework for implementing the Digital Skills Strategy. The strategy focuses on developing skills in data science, software development, cybersecurity, 3D printing, drone piloting and the production of digital content.

In parallel, a pilot programme had been started by NEMISA, one of the entities under the Department's custodianship. NEMISA appointed Coursera to undertake training and development of over 700 learners on the skills and competencies required to take advantage of the 4IR outcomes. An additional 50 000 young people will be trained specifically on data science and related competencies.

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A. Academy of Science of South Africa (ASSAf) Publications

D. Quest: Science for South Africa

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