

Engineering Programme

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<https://www.unesco.org/en/basic-sciences-engineering/engineering>



unesco

United Nations
Educational, Scientific
and Cultural Organization

A top-down view of various engineering and construction tools laid out on a dark wooden surface. On the left, there is a bright yellow hard hat, a pair of yellow leather work gloves, and a pair of clear safety goggles. Below the gloves is a yellow and black ear protection device. In the center, a rolled-up white blueprint with technical drawings is visible. To the right of the blueprint is a black and white headlamp. At the bottom, several metal folding rulers of different lengths are scattered. On the far right, the toe of a brown leather safety boot is partially visible. A semi-transparent white banner with black text is overlaid on the right side of the image.

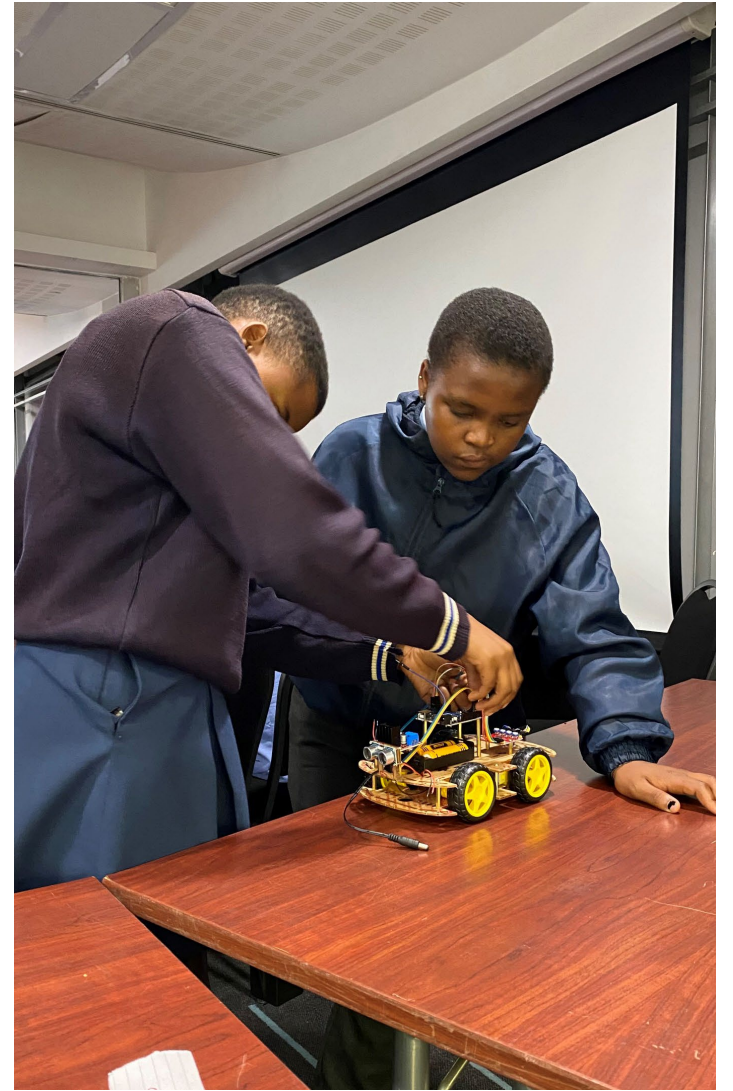
UNESCO Engineering | Peep into the future

- Capacity-Building
- Awareness-raising

Africa Engineering Week (AEW23)

- Opening Ceremony
- Women's Parallel Event
- Youth Parallel Session
- Youth STEM Bootcamp
- Technical Paper Session
- Poster Paper Session
- B2B Parallel Event
- Exhibition Area





YOUTH STEM BOOTCAMP

Africa Engineering Week (AEW24)


- 10th AEW
- Main event in Angola (9-13 September 2024)
- In the planning stage
- Continent-wide celebration to raise awareness and build capacities of school and engineering students, early-career engineers
- Entrepreneurship Bootcamp (Early-career Engineers)
 - Participants from at least 10 Member States
 - Mentors & Resource persons from the region through our networks
- Other activities to be confirmed



Space Education

- Space Education Curriculum
- Training of Teachers
- Pilot online training for teachers in Rwanda - ongoing

Table of Contents



Space Education
by SpacePrizeFoundation

3. Introduction to Space Science

4. History of Space Exploration

5. The New Space Economy

6. Space and Sustainability


7. Space Governance and Ethics

8. Future Implications

6.1 The Environment and Global Warming

FlexBooks 2.0 > Space Education > The Environment and Global Warming

Last Modified: Feb 25, 2024



[Figure 1]

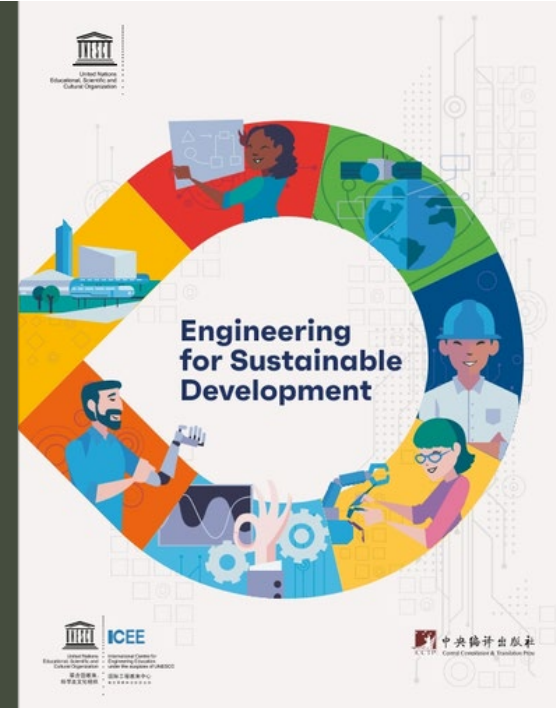
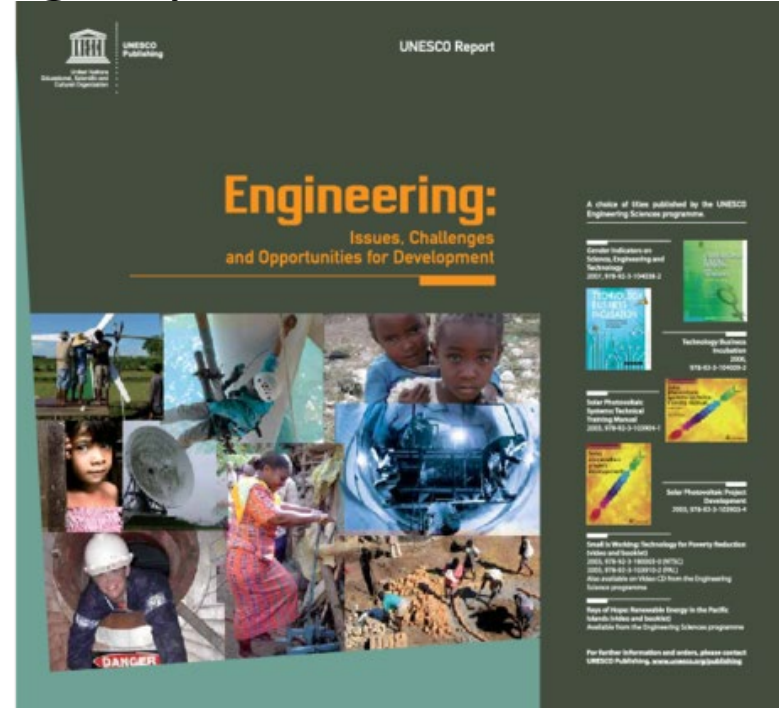
Our cosmic address is unique: Planet Earth, The Solar System, Orion Arm, The Milky Way, Local Group, Virgo Cluster, Virgo Supercluster, Laniakea Supercluster, the Universe.^{1,2} Throughout this expanse, Earth is the only planet we know of whose climate, oceans, atmosphere and complex life exist in a fragile environmental balance of carbon and water cycles. Sustainability and the responsibility to use clean energy, provide access to clean water and ensure food security are essential to all inhabitants of Earth. Over the last 150 years since the Industrial Revolution, greenhouse gasses have warmed the Earth and changed the climate resulting in more wildfires, flooding and severe weather systems. NASA, as well as other space agencies and organizations have played an important role in collecting data related to climate change, deforestation and severe weather alerts. The United Nations (UN) recognized that accessing information, particularly through the internet, is a basic human right. This access includes the right to be informed about severe weather conditions and the right to know about clean water and energy.³ Space technology will continue to provide access for the internet, communications, tracking climate change and providing data on the environment.

Environmental Sustainability

The Earth is filled with immense resources, yet they will not last forever. Humans are the stewards of this planet and must account for

Engineering Report

1. [Engineering: issues, challenges and opportunities for development; UNESCO report](#)
2. [Engineering for sustainable development: delivering on the Sustainable Development Goals](#)
3. Upcoming: Flagship Engineering Report
 - Access to data and statistics
 - Peer-reviewing
 - Additional resources
 - Dissemination & Outreach

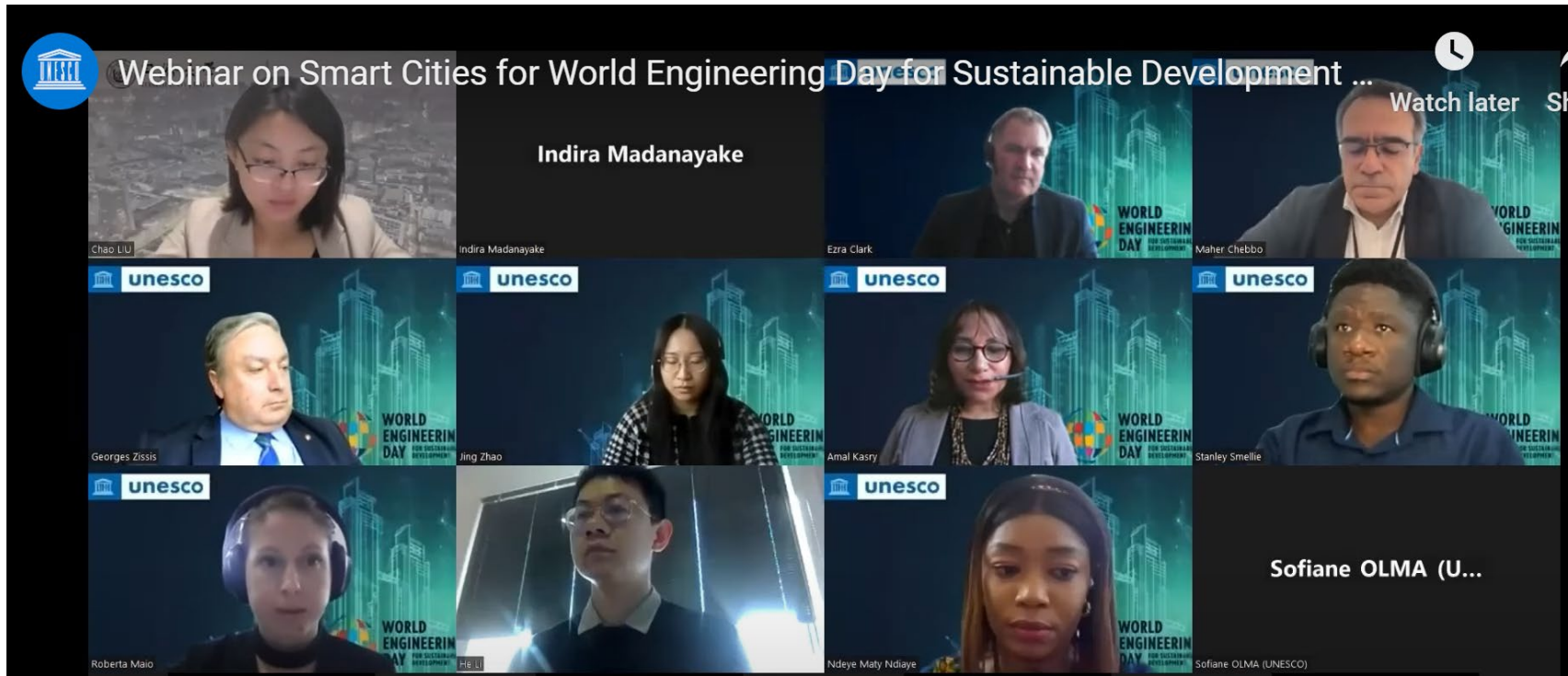


World Metrology Day (WMD24)

- 42nd GC proclaimed 20 May of every as WMD
- First celebration in 2024 with the support of Bureau International des Poids et Mesures (BIPM)
 - [Launch Event](#) (14 May 2024)
 - A poster exhibition



World Engineering Day for Sustainable Development



- ✓ Webinar
- ✓ In collaboration with WFEO - 24-hour stream
- ✓ Hackathon
- ✓ Global events



Winning team of the WED Hackathon

Sponge

Philippines

Ateneo Naga University



Thank you