

Peace Engineering

Designing the cities of tomorrow

Bios and Headshots

Chair: María Laura Polo González, SPEED

Co-Chair: Faith Mzandu, WomEng

Description of Theme and Research Question

Research Question: **With the tools we have today, can we design the ideal city?**

In the past, cities used to grow seemingly spontaneously. Once a suitable location was found, perhaps near resources or somewhere with certain geographical features, it was almost magic how a town would come together; people who worked in the area needed places to stay, food to eat, medical care and individuals would travel or rise up to meet these needs. Slowly, the development of necessary infrastructure would build the foundations for a bustling city. For most of human history, this method has cycled from generation to generation. However, with the creation of various technologies, we saw the development of cities as intentional rather than incidental.

As global leaders and citizens, we are presented with the opportunity to redefine what our cities will look like for the next generation. To counteract the effects of rising urbanisation and expanding populations, it is paramount that we reinvent our global communities as sustainable, resilient, carbon-neutral, and sustainable all around. We can look at The United Nations Sustainable Development Goals (SDGs) as a guideline to address the challenges that our urban centers face. Reinventing our future cities as resilient and equitable for all citizens requires different and innovative ways of thinking. Such an approach will require input from all areas of our global community.

In our cities of tomorrow, we aim to empower everyone through addressing the inequities that exist in society. When designing our cities of tomorrow, we must keep in mind that all SDGs work hand in hand to improve our world, rather than in isolation. The designs should include, but not be limited to the following SDGs:

- 1. No poverty
- 2. Zero hunger
- 3. Good health and well-being
- 4. Quality education
- 10. Reduced inequalities
- 11. Sustainable cities and communities

Description of Activity

Students will be grouped into multidisciplinary teams of 4 (or 5 max). They will design the ideal city of tomorrow based on the fulfillment of the above mentioned SDGs. The teams will develop a short document and presentation describing the key elements composing their city design and how they would achieve them through current engineering knowledge. They will be provided with a manual in which requirements are detailed, as well as examples of good practices in cities today. Participants will also have live assistance and coaching sessions from SPEED's team of Educational Developers. This activity will be carried out on the Discord online platform.

Impact Plan

TBD

Timeslots

TBD