

Educational Visit: Nkolbisson Tunnel Construction Site

Fifth-year Civil Engineering students visited this site on 7 June 2026 within the framework of the “Underground Structures” module.

This activity was designed to complement theoretical teaching with hands-on experience at a real underground structure currently under construction, with the following educational objectives:

- Observe, on site, the excavation and support techniques used in a rock tunnel;
- Identify the geological and geotechnical formations encountered on site;
- Understand the constraints relating to safety, logistics and the organisation of an underground construction site;
- Link the theoretical concepts covered in the course to real-world conditions on site;
- Develop the ability to observe and compile field survey reports;
- Observe the different areas of the site: the working face, the support system, water management, and record data on individual observation forms.

Under the supervision of Dr MABE FOGANG Piérade, Dr ZIGLA and Dr TAYPONDO, lecturers at the NASPW, the future engineers received explanations on:

- The geological nature of the massif (granitic to gneissic rock) requires appropriate tunnelling methods, reinforcing the lessons taught in class on rock classification and mechanised or explosive tunnelling methods;
- The support systems observed (bolting, shotcrete, steel arches) provide a practical illustration of the principles of stabilising underground structures;
- The water management and ventilation systems on site enabled the students to explore technical aspects that are often difficult to grasp without visual aids;
- Strict adherence to safety measures on site was highlighted as a key aspect of professional practice.

The students were able to complete their individual observation sheets, which will be analysed during tutorials.



Photograph 1: Students on the site



Photograph 2: Students on the site



Dr MABE FOGANG Piérde giving explanations



Group photograph