

FACULTY OF ENGINEERING AND THE BUILT ENVIRONMENT

*Department of Architecture
Design and build a Rolling Hut
Competition Day 4 August 2017*

1. Assignment

Architecture is not only a technical field, but also a design (artistic) field. To be a good architect, one must be able to design spaces for specific use; by doing so, you need to expose yourself to good design.

This project will encourage students to rethink a typical object that has been used throughout history, and the usage has not changed much to date.

Your assignment will be to design and build a working scale model of a rolling hut to be situated in the Kruger National Park. The primary use of the rolling hut is a hotel room / chalet / cabin / lodge / cottage / bungalow, which forms part of a greater game reserve accommodation. These are bed and breakfast suites and not self-catering suites.

The accommodation for the guest suite will have:

1. Sleeping area (double bed or 2 single beds)
2. Bathroom (toilet, shower and basin)
3. Lounge (Seating area for 3-4 people, TV is optional)
4. Patio / Balcony / Deck

These spaces may be combined (open plan) or separated for privacy.

The choice of the design layout is for the student to decide.

Being that the rolling hut is mobile (on wheels), the student needs to show how fresh water and grey water can be stored and discharged.

***Please note:** Do not design a caravan (the rolling hut will not be moved from the site).

The idea is for the judges to see if the student has thought about the assembly (It can be basic). Students must submit a plan – scale 1:50 illustrating the activity that will happen in and around the rolling hut.

2. Materials

There are no restrictions to materials that can be used. Therefore, teams are allowed to make use of any material, e.g. cardboards, cereal boxes, tapes, glues. Be creative!



3. Rules, specifications and outcomes

- The project must be completed before bringing it to TUT on the day.
- Teams must consist of a maximum of four learners.
- Each team will present their project and explain their ideas.
- The final project must contain a **scale 1:20 model**.
- Submit scale 1:50 plans and an A4 document showing the research done and design development.
- The rolling hut size must be 30m².
- The dimensions will not exceed 10 meters length x 3 meters width x 6 meters height in real life.
- Teams will also be encouraged to evaluate other teams' work; so a clear verbal presentation about the project and ideas must be given.

4. Learning objectives

This project will introduce the learner to the fundamentals used in the architectural design field. The teams will learn that an ordinary design can be done completely different, keeping the same functions. Learners will also be introduced to scale and measurements through the design process.

5. Procedure

Teams will be allocated a place to display their model and A1 size design presentation board.

6. Time

Presentation of project may not be longer than ten minutes.

7. Teams

A team will consist of a maximum of four learners.
Points will be given if the team displays a theme.

8. Evaluation

- Judges will look at innovation and whether the design will function.
- Neatness of model, drawings/sketches and research document will be considered.
- The team with the highest percentage wins.
- The judges' decision is final.

9. Contact details

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(Teachers are welcome to send me an email where I can respond with a link to possible design solutions).

Rolling Hut Example:

<http://www.archdaily.com/24959/rolling-huts-oska-architects>



Architects	: Olson Kundig
Location	: Mazama, WA 98833, United States
Design Principal	: Tom Kundig, FAIA
Project Manager	: Jerry Garcia
Area	: 200.0 ft ²
Project Year	: 2008
Photographs	: Tim Bies / Olson Kundig, Chad Kirkpatrick / Olson Kundig, Derek Pirozzi / Olson Kundig
Manufacturers	: Milgard, Rais, Stonco