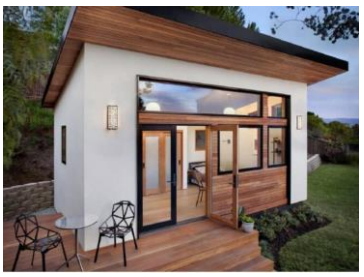

Advanced Design Project

Concurrent Engineering Study for a closed-loop Tiny House

Background:
Let's build a sustainable tiny house as it would be a satellite!
Join the unite! Concurrent Design Engineering Hub (uCoDE Hub) design study at the Institute of Flight Systems and Automatic Control (FSR) and participate in the creation of a closed-loop tiny house in our new Concurrent Engineering Lab (CEL). CE is a process coming from the space industry to build satellites and we use now the same process to build a tiny house with space-grade efficiency!
The goal of the project is to create an off-the-grid, closed-loop tiny house that has an autonomous system optimized for it's low environmental impact while working with an international group of students. This project will involve students from other European universities (PoliTO and Wroclaw Tech) remotely, so the project will be multi-disciplinary and multi-national. Like any CE project, it will require a lot of teamwork and communication skills.

Statement of Work:
Your focus will be on the **systems engineering** or **power engineering** part of the CE study. You will need to ensure effective integration and coordination of various subsystems and components. The main goal is to facilitate collaboration and communication between the different teams involved in the design and development process.

The project takes place over four weeks:
- **1. Week** part-time (09:00 - 13:00): preparation. 01. - 05. July 2024
- **2.-3. Week** are full weeks (09:00 - 16:00) of design study. 08. - 19. July 2024
- **Week 4** part-time (09:00 - 13:00): report writing. 22. - 26. July 2024

We can only host 4 students (2 for Systems Engineering, 2 for Power Engineering), so the seats might be taken quickly!

Application:
- Course of Studies: Mechanical/Aerospace Engineering, Mechatronics, WiMB
- Deadline: Monday 2024-06-10 06:00 (CEST)
- short cover letter to state your interest
- CV
- Contact: Jan-Peter Ceglarek ceglarek@fsr.tu-darmstadt.de