

## **Eco House**

GUtech's Eco House is a pioneering energy-neutral home. It is designed, built and operated by students, professors, consultants, companies and contractors.

The Sultanate of Oman is currently experiencing a rapid increase in population, a steep increase in energy consumption per capita, and a steady decrease in fossil energy resources. These three phenomena make the design of an ECO HAUS relevant and timely. Therefore The Research Council of Oman initiated a competition among national universities to design, build and operate a zero-energy house on their campuses. The teams are collaborations of students, staff, consultants, and companies.

Located on the new campus of the German University of Technology in Oman (GUtech) in Halban, the ECO HAUS is a two-storey residential building of 200 sqm net indoor area that will serve as a guesthouse for visiting professors and as a showroom for aspects of energy-efficient building. The project has received Project Grant Funding from The Research Council of the Sultanate of Oman.

The concept for the ECO HAUS is based on ten strategies for energy-efficiency. It results in a building that can be operated at net zero-energy and achieves full comfort for its users. These ten strategies can be wholly or partly translated from the ECO HAUS project into future designs for residential and other purposes.

### **Mission:**

To design, build, and operate the first modern energy-efficient residential building in Oman. To combine teaching, research, and making in a project for the benefit of our students - the next generation of architects in Oman. To promote the ideas of and solutions for energy-efficient buildings to the wider public of Oman.