

# STEM WORKSHOPS IN GERMAN

MONDAY  
13 MAY 2019  
10.45 AM – 2.30 PM



Dear Students,

**What is a zero energy home?  
Is artificial intelligence set  
to become next the great  
art movement? How can  
we fight superbugs?**

**Step into the shoes  
of STEM professionals  
and find out.**

**LEARN GERMAN  
+ STUDY SCIENCE**

## PROGRAM

**10.45 am**

Welcome

**11.00 am – 12.15 pm**

Workshops

**12.15 am – 1.00 pm**

Lunch

**1.00 pm – 2.15 pm**

Workshops

**2.15 pm – 2.30 pm**

German science vocabulary quiz

*Working in small groups you will explore the work of three scientists.*

### **GlitterBugs: How clean are your hands?**

**Dr Katharina Richter (The University of Adelaide)**

Many bacteria live a secret life on our skin and within our bodies, invisible to the naked eye. Some bacteria are beneficial to us whilst others can cause harm. The 'GlitterBug' experiment makes the bugs that reside on our hands visible and highlights the importance of hand hygiene. Bacteria, especially antibiotic resistant superbugs are also the focus of Katharina Richter's research. With expertise in microbiology, pharmaceutical sciences and medical sciences she aims to bring new antibacterial treatments from the laboratory to clinical applications.

### **Design a Zero Energy Home**

**Dr David Kroll (University of South Australia)**

Zero energy homes produce as much renewable energy as they consume. They are a cornerstone of a sustainable future – one that is not reliant on fossil fuels. In this workshop you will learn what it takes to build such a house by designing your own model.

### **Artificial Intelligence and the Arts**

**Aneta Neumann (The University of Adelaide)**

Artificial intelligence is substantially changing the nature of creative processes. In this workshop, you will explore the interface between art and artificial intelligence. Evolutionary image transition can be utilised as inspiration for creating original digital art and videos. Is artificial intelligence set to become the next great art movement?

[www.goethe.de/sciencegerman](http://www.goethe.de/sciencegerman)