



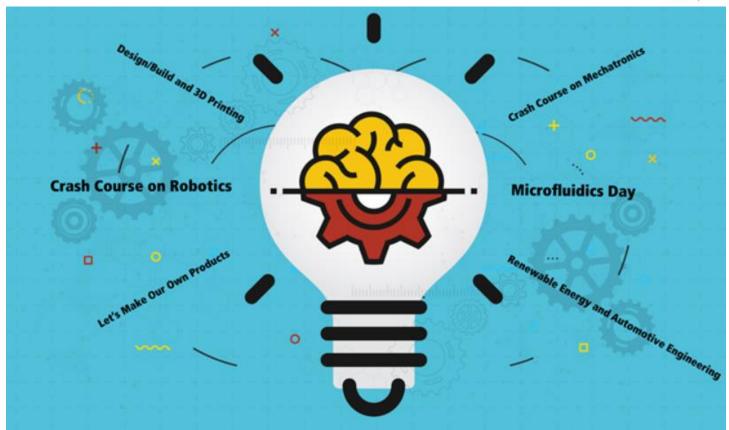
# **Explore, Design and Build:**

# A Mechanical Engineering Boot Camp

Boot Camp is Open to High School Students in year 10-12

[ Limited Seats ]





Mechanical engineers are problem solvers and innovators. As the world changes, we are facing problems that only engineers can solve.

At the AUS Mechanical Engineering Boot Camp, our hands-on activities will show you how studying mechanical engineering can lead to a career where you can design solutions to problems people face each day.

- · Enjoy hands-on activities and build your critical thinking skills
- Improve your communication and collaboration skills
- · Make new friends with similar interests
- Enjoy an unforgettable campus experience at AUS





Using Autodesk Inventor and a 3Dprinter, you will design and create a quadcopter body. You will also see how you can improve its shape.



### Wednesday Dec. 14, 2022: Let's Make Our Own Products

Go from making things in the cyber world to making things in the real world. You will use hand tools to form metals and make products that you can take and use at home.



## Thursday Dec. 15, 2022: Crash Course on Robotics

Develop your computational thinking skills by creating graphical algorithms, and then build and program functional robots using the LEGO EV3 robotics kit.



### Monday Dec. 19, 2022: Renewable Energy, Automotive Engineering, and Microfluidics Day

Have you seen scientists in Hollywood movies using sophisticated equipment to analyze the DNA in a blood sample in the lab to identify a murder suspect? Wouldn't it be faster if they could do this using pocket devices at the crime scene? Learn how microfluidics has made this happen and get hands-on experience by designing and fabricating your own microfluidic chip using a laser cutter.



Developing renewable energy is an important topic in today's world. Learn about solar and wind power by assembling a solar panel system and using a wind turbine. You will also learn about the design and operation of the automotive engine.



#### Tuesday Dec. 20, 2022: Crash Course on Mechatronics

Have you heard about mechatronics? Find out all about this exciting field, which combines robotics, electronics, computer, telecommunications, systems, control, and product engineering. You will use the Arduino Inventor Kit to build and program a mechatronic system.



- The camp will be offered ONSITE
- **Cost**: Free of charge, but students will be selected according to their statement of interest and according to our available capacity
- Registration deadline: Nov 20, 2022
- For registration and more information: <a href="https://aus-mcebootcamp.com">https://aus-mcebootcamp.com</a>

or contact us: mce-bootcamp@aus.edu

Only fully vaccinated students (with green pass or recent PCR negative result) will be allowed to participate in the boot camp, as instructed by the Ministry of Education guidelines.