



Universal American School









Week without walls with ETB

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About Us

Engineers To Be is a team of actual engineers from different fields that offer engineering, coding and robotic programs. ETB has been running with the top premier schools in Dubai, Abu Dhabi and Sharjah offering different programs; after school activities, enrichment programs, STEM academies, developing Coding and STEM curriculums, and holiday camps.

Our Qualifications

Bachelor's & masters degree in engineering First aid & child safety training Public liability insurance covering all UAE Abu Dhabi Educational Council (ADEC) approval



Week Without Walls – Engineering

As a part of the unique learning experience; WWW organized by Universal American School, we are delig hted to offer our Week With Engineers.

During this unique "EDU_TAINMENT" experience, our students will be experiencing a full hands-on engin eering environment. The program will introduce the students to the engineering world, they will learn abou t different engineering fields and experience a real life resemblance of an engineering project.

For this program students will tackling a real life problem, and trying to come up with their own creative so lutions and designs.

Who can attend this program

This program will be offered to middle and high school. The outline is the same for both, however the com plexity and level of the project will be different.)The two groups will be running separately not together)

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Projects

Our students will be experiencing a full hands-on engineering environment. The journey will include every milestone of an actual engineering project. From coming up with a design, maintaining a budget, using different tools, prepare materials, building the projects, to testing their work.

It will be a great experience for our future engineers to experience how it is like to work on a real life engineering pro ject along side our actual team of engineers. It will enhance their understanding of different engineering fields, probl em solving skills, design aspects, understanding of coding logistics, and how to use different tools in a safely profes sional manner.

Automated cranes; this is such an amazing project that will introduce the future generations of engineers to one o f the current technology trends. Cranes are a main part of many industries, whether its in construction sites, factori es or warehouses, they are using "mechanical advantages" to make the work easier. Students will learn all about t he mechanics of the cranes, how gears and pulleys can help create mechanical advantages to help with lifting hea vy objects. Our experience wont end here; using modern sensors and different coding and programing skills our fut ure engineers will have to modify the design of traditional cranes to lower the risks of human errors involved in usin g cranes. After studying some of the accidents that might happen while operating a crane, our engineers will use; c oding, motion sensors, proximity sensors, and other modern techs, the students need to make sure the cranes saf er, more efficient and easier to use.

* Please note that the main focus will be on the mechanics and designs of the cranes, not the coding.

Learning outcome

This course will help the students improve and develop many of their skills such as; problem solving, critical thinking, team work, and communication skills. They will also learn many esse ntial concepts such as:

- 1- How to design and plan for an engineering project
- 2- Learn about the different fields of engineering
- 3- Get familiar with using different tools safely
- 4- Learn about mechanics, gears and pulleys and how they can be used.
- 5- Learn more about electric circuits and how they are connected in different ways.

Fees and Dates

 $\begin{array}{l} \mbox{Middle school: Feb, 9^{th}-13^{th}} \\ \mbox{High school: Feb, } 23^{rd}-27^{th} \end{array}$

Fees are: 945AED for the week (price includes VAT

For registrations or more details please contact us on: <u>info@etb-club.com</u> +971509451937

