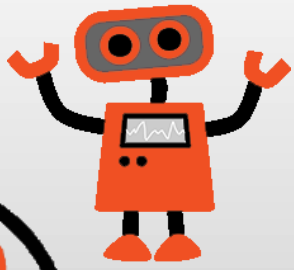
UNIVERSITY TRANSPORTATION CENTER FOR RAILWAY SAFETY

The University of Texas Rio Grande Valley

2019 STEM Teacher National Workshop

In our sessions, you will learn ways to implement STEM concepts with emphasis on transportation-related engineering and technology applications in the classroom. The workshop provides you with ideas that will allow your students to make the connection between STEM concepts and interactive hands-on experiences.



Session 1: Exploring with MagLevs

Curriculum incorporates magnetic levitation kits that involve STEM concepts such as magnetism and railway transportation. The curriculum allows for interactive hands-on explanations of Newtonian Physics at an elementary level.

Session 2: Exploring with Lego Robotics

Lego Mindstorm EV3 Robot is the third generation robotics kit in Lego's Mindstorm line. The EV3 set consists of EV3 programmable brick, 2 large motors, 1 medium motor, 1 touch sensor, 1 color sensor, 1 infrared sensor, 1 remote control, cables, USB cable, and 585 TECHNIC elements. The kit will allow students to utilize high-level thinking to code robots for various operations providing a hands-on STEM learning adventure.

Session 3: Exploring with MakeBlock Robotics

Scratch, hosted by MIT, is a free visual programming language and online community used by millions of students around the world. With Scratch, you can create interactive stories, and share and discuss creations with other people, as well as program Arduino-based robots such as the MakeBlock Robots.

University of Texas Rio Grande Valley (UTRGV)
1201 W. University Dr., Edinburg, Texas 78539
EENGR 1.300 (Engineering Auditorium)

To register: https://goo.gl/forms/RTtLTaK5xHTKcOQ13

Saturday June 1, 2019
8:00AM to 5:00PM
LUNCH 12:00PM to 1:00PM

University Transportation Center for Railway Safety (UTCRS)
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