SATURDAY, MARCH 14, 2020 8:30AM – 4:30PM
ROVER WORKSHOP
(Robotics, Coding, and 3D Printing)

Mechatronics is a specialty field of engineering and technology that integrates mechanical, electrical, and human factors design functions in programming and controlling the operation of a product used in an industrial system or consumer product. It is an evolutionary stage in the progression of engineering design to produce the products and systems used in modern societies. Examples of these systems include the operation and control of today's "smart" automobiles, appliances and entertainment products. additionally, we see automated braking systems that sense cars and objects in their driving path and self-driving cars.

The Rover Workshop will provide hands-on experiences in assembling and programming a mobile robot to encourage interest and awareness in STEM-related studies for the 9th -12th grade teachers that are participating in the 2020 NASA Aerospace Academy Workshop. The objective of the Rover Workshop is to participate in activities that can provide student awareness, interest, and motivation in STEM-related courses and careers. The teachers will experience activities in constructing, assembling, and programming a 3D printed remotely controlled Rover Robot with vision guidance capabilities.

The participants will test, evaluate, and compete in a culminating Rover activity using their remotely guided video camera-equipped Rovers to locate and identify a hidden object. Additionally, science-related activities will be demonstrated using the Robot Rover that includes digital measurement of temperature and humidity, light, speed and velocity, and ultrasonic distance measurement that may be used to augment classroom activities.

*If possible, please bring or borrow an Android cell phone. The workshop facilitators will provide an app for Android which will be used for controlling the rover.

**Lunch will be provided.

Application Deadline: March 10, 2020

Only the selected participants will be informed in a separate e-mail.

ELIZABETH CITY STATE UNIVERSITY

For high school STEM teachers

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$500 participation stipend

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https://bit.ly/2wB223r
Click the link above to apply online

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