### Deadline: Friday, March 9th Checks Payable to: Ness Co. 4-H Council **ENCLOSE:** Registration form Payment П Kansas 4H Participation Form Name: \_\_\_\_ Address: Phone: email: Youth Parent Adult T-shirt Size Youth Adult Sm Med Large XL Other Session 1: 10:00am - noon (pick one) Rocket Building/Finishing Techniques WeDo Robotics Session 2: 12:45pm - 1:45pm (pick one) \_\_\_ Engineering 101 \_\_\_ NXT-EV3 What's it all A"BOT" Drone Discovery Scratch Programming Session 3: 2:00pm - 3:00pm (pick one) \_\_\_ Engineering 101 NXT-EV3 What's it all A"BOT" Drone Discovery

Scratch Programming

#### **Sponsored by:**

Walnut Creek District 4H 503 S. Pens City, KS 67560 785-798-3921 rdeines@ksu.edu

> Ellis County 4H 601 Main, Suite A Hays, KS 67601 785-628-9430 sschlich@ksu.edu



# Thanks To: Dane G. Hansen Foundation, Financial Support

# NW 4-H Space Tech Day

9:30am to 3;30pm Ness City High School 200 N 5<sup>th</sup> Street Ness City, KS

### Kansas State University Agricultural Experiment Station and Cooperative Extension Service

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Who: Youth, Parents and 4-H Project leaders that want to learn more about the 4-H Space Tech project.

What: Hands-on learning experiences with Rocketry, Robotics, Unmanned Aerial Systems (Drones, UAS), Engineering and **Scratch Programming** 

When: Saturday, March 24, 2018 Registration and get acquainted will start at 9:30am First Session will start at 10:00am We will wrap up the day by 3:30pm

Where: Ness City High School, 200 N 5<sup>th</sup> Street, Ness City, KS

**Cost:** Registration cost is \$20.00 per participant which includes snack, lunch, t-shirt, handouts and one choice of curriculum.

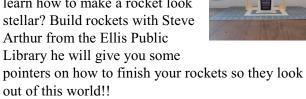
Lunch/Snack: Lunch will be provided for paid registrants, and \$5.00 for additional family members. Please note on Registration.

## **Registration Deadline:** Friday, March 9th

Mail to: Walnut Creek Extension District 503 S. Penn, Ness City, Kansas 67560

Each participant will receive a t-shirt the day of event, and one project book or leaders guide delivered after the event.

**Rocket Building/Finishing** Techniques -- Would you like to learn how to make a rocket look stellar? Build rockets with Steve Arthur from the Ellis Public Library he will give you some





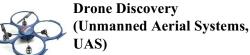
WeDo Robotics -- Build and program simple robots during this Lego robotics workshop. This class is geared for the beginner robotics participant. We'll work in teams to

build and program basic Lego WeDo bots. This class is taught by Susan Schlichting, Cottonwood District Extension Agent, 4-H Youth Development; Gracie Jessup, Phillips Co. 4-H'er and Ellis Co. 4-H teens. Min. 5 Max. 10.

Engineering 101- Try your hand at some fun Space Tinker Crates, creating Planetariums, Paper Rockets, Air Cannons and Catapults. Knowing the basics of engineering helps to build skills later through your space tech program. Taught by Robyn Deines Walnut Creek District 4H Agent and WCD Teens. Max 12

#### NXT - EV3 - What's it all A"Bot"? -

Lego Mindstorms are a fun way to learn about engineering design and programming. During this session you will learn more about the different platforms (NXT & EV3) and the different ways to program them using laptops, iPads, and directly on the robot's brain. See how the sensors work to help the robots solve challenges. This class is taught by Gracie Jessup, Phillips Co. 4-H'er; Susan Schlichting, Cottonwood District Extension Agent, 4-H Youth Development and Ellis Co. 4-H teens. Min. 5 Max. 10



Drones are revolutionizing the way we work and play, whether you are a filmmaker looking for the perfect aerial shot, a rescue worker mapping damage from natural disaster or a farmer determining how to increase crop yield. Come join us as we explore drones. Tyler Rider WCD 4H Volunteer and Brett Ellis Co Teen

**Scratch Programming** – learn the visual programming language and online community targeted for youth. You will learn to the basics to create games and animations. First time Scratch class. Taught by Heather, Traci and Preston Ross, Walnut Creek District Volunteers.

#### **Hands-on Activities**

Take time to explore the array of quick and simple Space Tech hands-on activities. These activities are fun to learn about and also fun to share at day camps, After School programs and 4-H club meetings.

Please invite your friends! Participants may be 4-H members, non-4-H Members, Scouts or home school youth. Spread the word and help us to fill the classes.