

## *Renewable Energy – The Future is Here*

### *Exploring and Learning Today – A Summer STEM Camp*

June 1 – 6, 2025 -- Hosted on the NWOSU campus in Alva, OK



**FREE Summer STEM Camp for Oklahoma students entering grades 9-12 in fall 2025**

Funded by the Oklahoma State Regents for Higher-Education and hosted by Northwestern Oklahoma State University, High Plains Technology Center,



OG&E, and Next Era Energy, *Renewable Energy – The Future is Here – Exploring & Learning Today:* A summer STEM camp will engage



students in hands-on learning with experts in higher-education as well as professionals in the field of renewable energy. Students entering grades



9-12 in the fall of 2025 are eligible to apply. Students will get an inside view of a wind turbine nacelle, experience with simulators and a climbing tower, and see an operational Renewable Energy Site. Students will learn about the generation and use of electricity as well as an introduction to electronics and robotics. Students will have hands-on experiences with the Renewable Energy Trainer, a portable



Microgrid training device that includes power generation, micro-inverter, and storage using renewable energy technology. Students will also build and assemble a wind turbine, and learn about solar power as well as hydroelectric power.

**Apply online at <https://www.nwosu.edu/stem-summer-camp>**

**(applications accepted March 1 – April 1, 2025)**

Questions or for more information contact Dr. Tim Maharry @ [tjmaharry@nwosu.edu](mailto:tjmaharry@nwosu.edu) or 580-327-8583



Renewable Energy – The Future is Here – Exploring & Learning Today: tentative 2025 camp schedule

**Sunday, June 1:**

6:30-7:30pm: Camp check-in, welcome, & orientation at Fryer Hall, NWOSU Alva campus  
7:30-8:30pm: Introductions and Ice-breaker activities

**Monday, June 2:**

8am: Breakfast  
9:00am: Welcome – introduction to power & electricity activities  
9:30am: Introduction to Renewable Energy Careers  
10:00am: Introduction to Wind Energy  
Noon: Lunch  
1:00-2:15pm: Continued Wind Energy activities/labs  
2:15pm: Break  
2:30-4:00pm: Continued Wind Energy activities/labs  
4:00-5:30pm: Break/Free time  
5:30pm: Supper @ Coronado Cafe  
6:45pm: Movie at Rialto Theatre

**Tuesday, June 3:**

8am: Breakfast  
9am: Solar Energy Presentation & Activities  
Noon: Lunch  
1-2:15pm: Solar Energy Labs & Activities with the Renewable Energy Trainer  
2:15pm: Break  
2:30-4:00pm: Continued Solar Energy Labs & Activities  
4:00pm: Break/Free time at dorms  
5:30pm: Super at Coronado Cafeteria  
6:30pm: Visit Bradt's Menagerie  
7:30pm: Evening activities at dorm (movies, games, swimming at Wellness Center pool, etc)

**Wednesday, June 4:**

8:00am: Breakfast  
8:45am: Leave for wind site tour  
10:00am: Presentation & Tour at Sooner Wind site near Mooreland, OK  
12:00pm: Lunch in Woodward  
1:00pm: Travel to Alabaster Caverns State Park  
2:00pm: Tour at Alabaster Caverns State Park  
3:00pm: Return to Alva  
5:30pm: Supper at Coronado Café  
7:30pm: Evening activities at dorm

**Thursday, June 5:**

8:00am: Breakfast  
9:00am: Travel to High Plains Technology Center in Woodward  
10:30am: Activities/training at High Plains (safety training, simulator, wind turbine operation)  
12:00pm: Lunch in Woodward  
1:00pm: Activities/training at High Plains (SCADA, climbing tower, renewable energy careers)  
3:30pm: Activity in Woodward (mini-golf)  
5:00pm: Supper in Woodward  
6:00pm: Return to Alva  
7:30pm: Evening activities at dorm

**Friday, June 6:**

8:00am: Breakfast  
9:00am: Activities in the Robotics lab  
10:30am: Presentation on educational opportunities leading to STEM fields by NWOSU (college readiness, educational programs, financial assistance options for post-secondary education, etc)  
11:00am: camp evaluations/surveys, check out at dorms  
Noon: camp ends