



# NASA STEM EPDC DIGITAL BADGING SYSTEM

*Leading the way to an enhanced STEM learning journey for Educators and Students*

A “badge” is a micro-credential or certification in a specific topic area. In support of professional development for educators and STEM engagement for students, the badging system offers a personalized, relevant, and engaging experience.

*The robust, quality system designed for STEM educators and students tracks learning, provides access to online courses, and maintains a certification database. Evidence of progress in skill attainment is monitored while the completion of related activities, assessments, and projects are documented.*

Learn more at [txstate-epdc.net](https://txstate-epdc.net)

## THE FACTS



FREE RESOURCES  
PROVIDED BY NASA



40+ EDUCATOR AND  
STUDENT BADGES



NEW BADGES DEVELOPED AND  
PUBLISHED ON A REGULAR BASIS



INTEGRATED ASSESSMENT  
MODULES WITHIN EACH BADGE

## HOW DO I GET STARTED?

- » Explore the badges at [txstate-epdc.net/digital-badging/](https://txstate-epdc.net/digital-badging/) and hover over title for a badge description
- » Click on any badge to create a free account by selecting the **Register Now** button
- » Keep track of your badges using an integrated dashboard and reporting platform
- » Share your badge certificate(s) showing earned continuing education credits with administrators or others.

## HOW CAN AN EDUCATOR USE BADGING WITH THEIR STUDENTS?

- » Teachers can introduce NASA content to their students after first completing the educator companion badge and a brief 1-hour badge titled “Using Badging with Students.”
- » You will be contacted by NASA STEM EPDC with information to help you create your student badging community.
- » Students will receive an email invitation to join the group and the teacher will be the student work reviewer.
- » When the teacher has determined that the student has successfully completed all steps in the badge, the student will earn the badge and a certificate of completion.

# EPDC BADGES

NASA RELATED  
MICRO-CREDENTIALS IN STEM

## PHYSICAL SCIENCE



NASA Rockets:  
Forces & Motion



Energy & Power for  
Living on the Moon



Rocketry In/Out  
of the Classroom



NASA  
Does Matter

## ENGINEERING & TECHNOLOGY



Engineering  
Design Process



NASA  
Spinoff



On the Moon:  
Engineering 6-12



Space Operations  
Learning Center (K-6)



Balancing Act-Spacecraft  
Mass Properties



NASA's BEST:  
Lunar Buggy Activity



NASA BEST: Engineering  
for K-8 Students



NASA's BEST:  
Green Propellant Activity



Additive Manufacturing  
in Space: Building in 3D



Moon  
to Mars

## LIFE SCIENCE



Radiation &  
Human Health



Moon  
Munchies



Looking  
for Life



Red Planet/  
Green Thumb

## NASA STRATEGIC THEMES



Journey to Mars:  
NASA LaRC 100 Educator



Aeronautics:  
NASA LaRC 100



Earth Right Now  
Langley 100th



Small Steps  
Giant Leaps



Moon  
to Mars



Development of Commercial  
Crew Program

## EARTH & SPACE



Blue Marble Matches:  
Earth Processes



Curved Space-Time  
in the Classroom



GLOBE: Elementary  
Water Studies -  
Storybooks & STEM



Earth's Orbit &  
Distance from the Sun



Mission  
Geography



Models &  
Microgravity



Earth's Water  
Resources



Ames Aeronautics  
Exploration Encounter

## MATHEMATICS



Year of the Solar  
System Math (6-12)



Bringing Global Climate  
Change (GCC) into  
Mathematics Classrooms



Cognitively Guided Instruction  
(CGI) using NASA Math



Solar System Scroll



Scale of Discovery



Orbital Systems

## STEM INSTRUCTIONAL PRACTICES



Preparing to Be  
Culturally Responsive



Practicing Equity  
in STEM Education



Taking the STEM Challenge  
in Your Classroom



Real World Problem Solving  
with NASA eCLIPS



Variables: Independent,  
Dependent, & Controlled



Ways of Knowing  
& Student Inquiry

## STUDENT BADGES



Small Steps  
Giant Leaps



Moon  
to Mars



Orbital Systems



Red Planet/  
Green Thumb



Development of Commercial  
Crew Program