

EbD™–NASA: Integrated Units for a Standards-Based Model Program

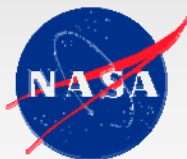


Engineering byDesign™ (EbD™) is a standards-based National Model Program that was developed in collaboration and consultation with the ITEA Consortium of States, Technology Education Advisory Council, ITEA Institutional Members, and the Mathematics, Science, and Engineering Community. The intent of the program is related to the development of technological literacy for students in Grades K-12, and delivered in the context of Technology, Innovation, Design and Engineering (TIDE). Members of the EbD™ Network are pioneers who collaborate through synchronous and asynchronous professional learning communities to implement the program on a national level.

The EbD™–NASA units have three themes that integrate with the EbD™ Courses:

- Energy and Power
- Transportation
- Lunar Plant Growth Chambers

*Funding provided by the
National Aeronautics and
Space Administration*



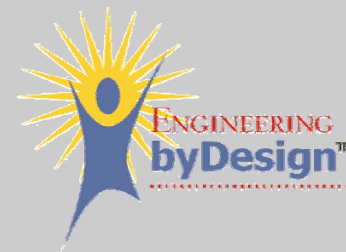
The International Technology Education Association's (ITEA) Center to Advance the Teaching of Technology & Science (Center) proudly offers professional development opportunities with the

Engineering byDesign™ (EbD™) Curriculum Specialists.

These specialists have been trained to deliver consistent professional development on EbD™, including the courses, assessments, professional development and sharing opportunities and other aspects that comprise the Program. Specialists will provide a broad overview of the Program, then focus in on a specific course or instructional offering, such as the EbD™ NASA units.



To find out more about the EbD™–NASA offerings or to schedule a Curriculum Specialist, contact Shelli Meade at 540-382-4804 or via email at smeade@iteaconnect.org.



EbD™–NASA Partners for Technological Literacy



**Center to Advance the Teaching
of Technology and Science**



Elementary School
Middle School
High School



EbD™-NASA

People, Education, and Technology

Elementary School

All EbD™-NASA Curricular Units:

- Are based upon the technological literacy standards.
- Coordinate with science and mathematics standards.
- Utilize a standards-based development approach.
- Focus on space exploration.
- Stand alone and coordinate with ITEA **Engineering byDesign™** curricular offerings.
- Reflect a unique partnership between NASA scientists and engineers and education professionals.
- Incorporate leading edge insight and practical experiences for students on how NASA works and plans.

“Excellent concept for promoting interest and application of the engineering design process.”

-Michael Doddo
Hereford High School
Parkton, Maryland

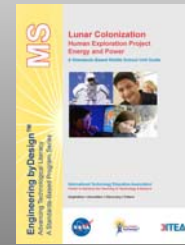
Middle School



Elementary School
Energy and Power Unit



Elementary School
Lunar Plant Growth Chamber Unit



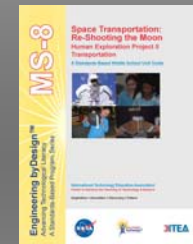
Middle School
Energy and Power Unit



Middle School
Lunar Plant Growth Chamber Unit



Middle School
Transportation Units



High School



High School
Energy and Power Unit



High School
Lunar Plant Growth Chamber Unit



High School
Transportation Units



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