**Raven Hill Discovery Center**

**STEM and STEAM PROGRAMMING**

**1992 to Present**

STEM and STEAM has been a focus of Raven Hill programming since it opened in 1992. Examples include, but are not limited to the following:

**STEM and STEAM for Students**

* Girls (Guys or Groups) And Physical Science (GAPS)
* Work SMART (Science Math And Related Technologies)
* Girls and the environment -- AAUW
* STEM Plus
* Full STEAM Ahead
* Halfway to Anywhere
* STEM Academy for Girls (SAG)
* History Heritage and STEAM
* Yearly Non-Traditional Science & Mathematics Career Expo 1993 to 2024
* Transportation, Explorations and Challenges (TEC) Days for schools
* Classroom Science Investigations (CSI)
* GEAR (Great Engineering Adventures in Robotics) UP (for Unlimited Potential)
* Patents and Prototypes
* SMART (Science Math And Related Technology) Start
* STEM (Science Technology Engineering Math) To Go
* GUT-SEE (Giving Useful Thinking Skill Experiences & Explorations) to Girls (Also available to Guys or Groups)
* Real SMART (Science Math And Related Technologies) for Girls
* Made Possible by the Sun - Exploring Solar Energy
* Recycle 2 - How Nature and Man Recycle
* Spin Off - Products Invented for the Space Program

**STEM and STEAM for Professionals (Educators and others such as Scout Leaders)**

* Free NASA STEM Workshops for teachers presented by NASA Glenn Research Center at Raven Hill Discovery Center
* Potato Gun Workshop
* Central Michigan University Three Credit Courses at Raven Hill Discovery Center
	+ Ancient Techniques and Technology (ATT)
	+ Science And Integrated Learning (SAIL)
	+ Art Across the Ages (AAA)
* Central Michigan University One Credit Courses at Raven Hill Discovery Center
	+ STEM Days
	+ Connecting the Science, History and Art of Glass
	+ Exploring the Brain
	+ Integrating Science Process Skills

**STEM and STEAM for Families and the community**

* Ham Radio Events
* Build Your Own 3D Printer
* Astronomy Events
* Engineer Day
* Transportation, Explorations and Challenges (TEC) Days for families and community
* NASA Moon Rocks at Raven Hill Discovery Center
* Scout Night at the Museum (Raven Hill Discovery Center)
* Discovery Camps
* Smithsonian ***Water/Ways*** Exhibit at Raven Hill Discovery Center (one of six in Michigan)
* Smithsonian Museum On Main Street ***Labor Days History of Work*** (one of ten in the nation in 2019)
* NASA in Your Neighborhood (at Raven Hill Discovery Center—only one in the Midwest)
* Model Train Exhibit

**Current displays/exhibits to enhance STEM!**

**Exhibits**

**Indoor**

* 3D Periodic Table
* Patent office with our display units—outside & inside of building with stacks of boxes, file drawers, plus drawings and models of patents
* Already there to highlight—computer technology history
* Solar SMART (2022)
* History Heritage and STEM—traveling exhibit on career pathways
* Smithsonian Museum On Main Street ***Labor Days History of Work*** *(2019)*
* Connection Boxes – the science and history of different art mediums
* Evolving Technology of Communication
* Evolving Technology of Daily Life, Toys & Games, and Tools
* To the Moon and Beyond
* Can mover machine
* Generator bike
* Noble Scientific Collection—compass, astrolabe, etc.
* Weeden Steam Toys—steam powered toys (1884)

**Outside**

* Connections Trail
* Taxi (Tree Taxonomy) Trail
* Evolving Technology Addition
* Ancient World
	+ Moai
	+ Obelisk
	+ Stonehenge
	+ Working factory site
	+ Blurred Boundaries
* Whisper dishes
* Watershed Model

**Facilities**

* Main Museum
* Alternative Energy House
* ET (Evolving Technology) Building
* Schoolhouse
* Workshops

**Events and Programs**

* Field trip groups
* Speakers
* Local patent holders