

GREEN INITIATIVE Discover how our newest facilities use principles of Science, Technology, Engineering and Mathematics to achieve best practices in green building.



BUILDING A SUSTAINABLE FUTURE

Through collaboration with Centerbook Architect and BSI Constructors, this expansion has been designed and constructed using strategies aimed at improving the building's performance across key metrics, including:

- Operational cost savings
- Minimized carbon footprint

stem.micds.org/green-initiative 1/5



AWARDS AND RECOGNITION

LEED v 3.0 Platinum Certification for Design and Construction

Platinum is the highest level of certification possible from LEED, or Leadership in Energy & Environmental Design, a voluntary green building rating system of the U.S. Green Building Council (USGBC), which recognizes sustainable building strategies and practices in green building.

BEST PROJECT OF THE YEAR AWARD

By the Engineering News-Record (K-12 Education Category)

KEYSTONE AWARD

By the Associated General Contractors of St. Louis

CONSTRUCTION INDUSTRY BEST PRACTICE AWARD

By the St. Louis Council of Construction Consumers (SLCCC)

U.S. GROWIING GREEN AWARD

MICDS won the 2014 Growing Green Award by the USGBC-Missouri Gateway Chapter for its STEM curriculum and for building the most advanced STEM teaching facility in the region.

MATERIALS AND RESOURCES

stem.micds.org/green-initiative 2/5



- 35% of the building materials used have recycled content, including synthetic slate roof shingles made from recycled tires, aluminum window frames and Terrazzo Flooring.
- 90% of construction and demolition materials were recycled or reused.
- MICDS donated existing desks, furniture, doors and windows to Habitat for Humanity and local schools.



ENERGY & ATMOSPHERE

Saving energy means more than a lowered energy bill. It's using the STEM principles we teach to make a difference in the world we live in. Even the direction the building faces was a conscious decision to take full advantage of natural sunlight, illuminating interiors and converting sunlight into energy using our rooftop solar panels.

Throughout the building, energy-saving light fixtures, HVAC system and low velocity ceiling fans reduce energy consumption. Room sensors detect if a space is occupied, turning on or off lights and adjusting the temperature for maximum efficiency.

 Using Ameren Pure Power – at least 20% of the MICDS power purchase will come from alternative sources, such as, wind, photovoltaic and hydroelectric power.

stem.micds.org/green-initiative 3/5





construction process. One of the most impressive green features of the new building is a 10,000 gallon rainwater harvest tank buried underground in the courtyard, where rainwater is collected and provides water for the facilities, outdoor gardens and the greenhouse.

- Water consumption will be reduced by 64% through rainwater conservation and management.
- Sensor-activated water stations activate
 when a refillable bottle is under the spout,
 pouring the perfect amount every time and
 reducing the need for wasteful plastic
 bottles.



LANDSCAPE DESIGN

We took careful steps to preserve the landscape surrounding our building. Over 50% of the project boundary disturbed by the construction of McDonnell Hall and Brauer Hall has been restored as open, green space. After construction was complete, we used indigenous trees and shrubs for landscaping, which reduce irrigation by 50%. The outdoor bio-swale creek and bio-retention gardens captures and purifies water, reducing run-off.

stem.micds.org/green-initiative 4/5





building from direct sunlight, minimizing the amount of air conditioning needed. As the weather cools, Wisteria flowers fade, allowing the sunlight to naturally warm the school and reduce the amount of heat needed.

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LOCATION

101 North Warson Rd Saint Louis, MO 63124

Get Directions

MICDS.org

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