**Overview**

The Integrative Learning Center (ILC) is located at the heart of the UMASS Amherst campus; adjacent to the Lincoln Campus Center and the Student Union. As a highly utilized destination for students, these buildings are the center of an immense amount of daily traffic. This creates the potential for the ILC building to be the most visible example of LEED and Sustainable Building Practices on campus.

In targeting LEED Gold, the building has the potential to bear the LEED banner on campus and to educate and inform students, faculty, and staff about LEED and about Sustainable Building practices. Its proximity to the campus center, campus hotel, and campus parking garage also make it a valuable LEED emblem for visitors to the campus.

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**Sustainable Sites**

Integrative Learning Center sustainable site features positively impact the UMass campus' built environment in many ways, including:

- Site hardscape has a high solar reflectance index (SRI) to reduce heat island effect.
- The project provides adjacent vegetated open space equal in area to two times the building footprint.
- Surface run-off will be captured and re-infilt rated on-site into rain gardens and storm quality structures. This returns water to the natural hydrology of the area, and provides natural filtration.
- Strong community connectivity via ready access to services and to PVTA bus stops.
- Bicycle racks are located close to building entrances, and shower facilities are conveniently located inside.
- About 15,000 sf. of the building’s roof is planted with hardy native plants.

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**Water Efficiency, Materials & Resources**

Consideration for efficient material and resource use was made in the design and construction of this facility:

- Water use for irrigation will be minimized by planting drought tolerant, native species, utilizing efficient drip irrigation systems, and reusing water from the 15,000 gallon roof runoff cistern and effluent from the Town's waste water treatment plant.
- Water consumption within the building will be reduced by 35% with the use of dual flush toilets and low-flow urinals.
- 75% of nonhazardous construction debris was recycled, rather than sent to a landfill.
- Reusable water bottle use will be encouraged by providing bottle fillers.
- Building materials and furnishings were selected to be low-e, have recycled content, and be formaldehyde free. All wood is responsibly harvested.
UMass Amherst strives to reduce energy use on campus through sustainable design. The team employed many strategies, including:

- The ILC will be 38.7% more energy efficient than the baseline building case.
- The innovative mechanical system uses a dedicated ventilation system with a heat recovery wheel and a cooling coil to semi-condition the ventilation air.
- The “Machine-Room-Less” Elevator is 75% more energy efficient than typical model.
- Radiant floors here heat individuals, rather than the air, and are up to 30% more energy efficient than forced air heating.
- A detailed analysis enabled design of exterior shading elements to reduce peak cooling, yet allow winter solar heat gain.
- High efficiency lighting fixtures reduce the lighting power density.
- Operable windows and local lighting and temperature controls enable occupants to make adjustments for optimal comfort.