

BEYOND

SMART CITIES

SUSTAINABLE SITES - GREEN BUILDING TECHNOLOGY

TRAINING PROGRAM

FOR GREEN BUILDING AND SUSTAINABILITY SPECIALISTS

KRISHNAJI PAWAR, LEED AP BD+C, GSAS CGP, ISO 14001:2015, GCP

GREEN BUILDING SPECIALIST CURRICULUM

GREEN BUILDING SPECIALIST

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INTRODUCTION AND COURSE OUTLINE

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ONLINE TRAINING PROGRAM

SUSTAINABLE SITES

GREEN BUILDING TECHNOLOGY

GREEN BUILDING SPECIALIST

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LEARNING OBJECTIVES



Know the benefits of looking at the project site as a whole

Include local and regional ecosystems in the project.

Recognize how different credits work together.

Know how credit requirements lead to better buildings and a change in the market.

Explore the LEED v4 Sustainable Sites credits, which are related to the environment surrounding the building.



WHO SHOULD ATTEND

Individuals seeking a greater understanding of Sustainable Sites category credits and implementation criteria

Sustainable Sites Implementing prerequisites and credit for Green Buildings seeking LEED Certification

Explore the LEED v4 Sustainable Sites credits, which are related to the environment surrounding the building and emphasize the importance of local ecosystems and holistically integrating the site with its surroundings.

The program will address each prerequisite and credit on a credit-by-credit basis, including technical prerequisites and effective tactics for attaining them.



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**GET READY TO LEARN
SUSTAINABLE SITES - GREEN BUILDING
TECHNOLOGY AND ENROL NOW!**





SUSTAINABLE SITES



The Sustainable Sites (SS) category rewards decisions about the environment surrounding the building, with credits that emphasize the vital relationships among buildings, ecosystems, and ecosystem services. It focuses on restoring project site elements, integrating the site with local and regional ecosystems, & preserving the biodiversity that natural systems rely on.



CRITERIA IN THIS CATEGORY

SS PR.CONSTRUCTION ACTIVITY POLLUTION PREVENTION

SS CR.SITE ASSESSMENT

SS CR.SITE DEVELOPMENT - PROTECT OR RESTORE HABITAT

SS CR.OPEN SPACE

SS CR. RAINWATER MANAGEMENT

SS CR.HEAT ISLAND REDUCTION

SS CR.LIGHT POLLUTION REDUCTION



MAXIMUM POSSIBLE CREDITS : 1 P / 10 C

WHAT MAKES A SITE SUSTAINABLE?

A sustainable site design considers the building's effect on the neighbourhood as well as the building's intended tenants.

Either the team starts with a site and analyses the greatest functions and uses for that specific location, or the team starts with a function and chooses the best location for that land use. These two approaches are ideal starting points for sustainable design projects.

To ensure a project's sustainability, the site of the building must be selected and managed during development. A building's influence on ecosystems and waterways is reduced by environmentally sound site selection, which also fosters regionally suitable planting, rewards sensible transportation decisions, and manages stormwater runoff.

Additionally, proper site management can lessen pollution from building, the heat island effect, light pollution, and erosion. Buildings can be erected in a variety of sites; project teams should select the environmentally preferable choice and then maintain the site responsibly.



WHAT FACTORS ARE AT PLAY WHEN CHOOSING A SITE

When selecting a site, the team must consider many attributes of the overall system:

✓What is the project's environment in the region?

✓Has the site been previously developed?

✓Is it linked to the local transportation system and infrastructure?

✓What species in the area might use the site as habitat and be affected?

✓What is the nature of the street life in the area, and how can the project contribute to community?

✓Where do people in the area live and work, and how do they get back and forth?



WHY IS THIS IMPORTANT FOR BUILDINGS?

A building's location is just as crucial as its design. How a project may support a sustainable environment will be determined by its relationship and linkage to the nearby bioregion, watershed, and community.

A sustainable project accomplishes goals beyond the building's primary purpose. It must also cater for the requirements of the neighbourhood, encourage healthy lifestyles, support active street life, sustain ecological services, and establish a feeling of place.

In order to reduce greenhouse gas emissions and aid projects in adapting to the effects of climate change, site selection and design are crucial. The project reduces the carbon emissions related to commuting if people can take public transportation, bicycles, or walk to the building.

By encouraging people to walk or bike instead of driving, a project that is connected to the neighbourhood by bicycle lanes and pedestrian routes not only reduces air pollution but also encourages physical exercise.



STRATEGIES TO A SUSTAINABLE SITE

As development keeps getting better, the question is whether we will build better, the same, or worse than before. It's not as hard as you might think to build on better sites that work with the landscape instead of against it and that take advantage of the property's natural assets.

Sustainable site planning and design helps people get back in touch with nature and can combine the science of ecology with the art of design in any kind of development. This can be done by putting these in landscape designs:

1. Be aware of what you have. Before you can build a site that makes sense, you need to know what is on the site (water, plants, habitat, etc.).
2. Choose the right style of building. Find a place that fits the needs of your building program. Don't try to build a certain size or style of building on a site that can't handle it. This will help lessen the effects of grading and erosion problems and make it easier to keep the site's natural resources in good shape.



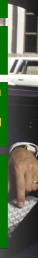
STRATEGIES TO A SUSTAINABLE SITE +

3. Take care of water. Water problems, like lack of water, bad water quality, and poor drainage, can all be fixed by designing to treat rainwater and catch and store it so it can be used again.

4. Help save energy by using the landscape. By putting plants in the right places around a building or home, energy can be saved for both heating and cooling.

5. Choose the correct plants. Think about native plants and plants you can eat. Even better, think about native plants you can eat. You can also use new places to plant species that are going extinct in the wild because they are losing their homes.

With sustainable site planning and design, the social, environmental, and economic needs of the developer, the community, and the individual can all be met. In fact, many companies like New Belgium Brewing, Sierra Nevada, and Davenport Park, to name a few, see this kind of growth as a way to stay ahead of the competition in the market.



SUMMARY

The Sustainable Site category looks at how the design of the proposed development will affect both the site of the proposed development and any sites next to it.

Sustainable landscaping and site design practices can make the site and landscape better and have less of an effect on climate change, fossil fuel depletion, water depletion and pollution, air pollution, land use and contamination, and people's comfort and health.

The U.S. Forest Service says that between 1982 and 2001, about 34 million acres of open space were lost to development in the U.S. alone. That's about four acres per minute, or 6,000 acres a day. It's about the same size as the state of Illinois. With this fast growth, more hardscapes were built, which increased the amount of polluted rainwater that ran off into natural water bodies. This, in turn, hurt aquatic species and ecosystems more.

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