

# DESIGN OF LIVING BUILDINGS (GRADUATE CERTIFICATE)

#### Contacts

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Program Website (https://www.jefferson.edu/academics/colleges-schools-institutes/architecture-and-the-built-environment/programs/sustainable-design-ms/degree-options/graduate-certificates/design-of-living-buildings.html)

## **Program Description**

• STEM designated program

The Living Building Challenge is a green building certification program and sustainable design framework that visualizes the ideal for the built environment. This graduate certificate focuses on the design and certification of living buildings with a focus on the regenerative design of spaces and places that feature a strong connection to "light, air, food, nature and community." As a student in this program, you will begin with an overall understanding of the sustainable design movement while also studying the "basics" of the Living Building Challenge. You will move on to study the various technical aspects of meeting the Challenge, with an emphasis on simulation, calculation, and validation. The Living Building Design Studio features interaction with industry professionals who have had direct experience in designing and certifying Living Building Challenge projects and ends with the design of a living building.

## **Learning Goals/Outcomes**

- Gain understanding of the sustainable design movement while also studying the "basics" of the Living Building Challenge
- Study the various technical aspects of meeting the Challenge, with an emphasis on simulation, calculation, and validation
- Integrate and apply methodology in the design of a living building.
- Apply critical skills including the LEED® rating system, Passive House design, energy and daylight modeling and life cycle assessment.
- Credits earned through certificate courses are transferable into the MS in Sustainable Design program.

#### **Curriculum: 12 Credits**

Code	Title	Credits
Core Curriculum		
SDN 601	Princ & Methods of Sust Design	3
SDN 602	Adaptive & Resilient Dsgn Sdio	3
SDN 622	MS: Living Buildings	4
SDN 624	SC: Sust Syst for Living Bldgs	2
Total Credits		12