

MANAGING FACILITIES FOR EFFICIENCY AND HEALTH UNDERGRADUATE ACADEMIC CERTIFICATE

- Use energy modeling software to calculate the return on investment of energy efficiency upgrades.

This certificate is intended for those who wish to manage commercial and industrial buildings. Students will learn how to identify and measure specific metrics on building performance and understand the factors that affect indoor environmental performance such as indoor pollution, thermal performance, and sound transmission. The certificate also includes a course on project and personnel management so students will learn how to coordinate technical projects and set up workflows that will help them communicate when overseeing building infrastructure retrofits. The goal is to equip facility managers with the skills needed to operate increasingly complex buildings in a way that maximizes the health of the occupants and minimizes energy costs.

All required coursework must be completed with a grade of C or better (O-10-a (<https://catalog.uidaho.edu/general-requirements-academic-procedures/o-miscellaneous/>)).

Code	Title	Hours
ARCH 4640	Environmental Building Performance	4
Select 3 credits related to Management:		3
MGT 3110	Introduction to Management	
MGT 3150	Corporate Social Responsibility and Sustainability	
IAD 4430	Universal Design	
EM 5100	Engineering and Technology Management Fundamentals	
EM 5130	Leading Technical Organizations	
Select 3 credits related to Indoor Environmental Quality:		3
IAD 3680	Materials for Health and Sustainability	
IAD 4000	Seminar (Design for Well-Being)	
FIRE/GEOL 4410	Air Quality, Pollution, and Smoke	
Select 3-4 credits related to Energy Efficiency:		3-4
ARCH 4630	Principles of Environmental Building Design	
ME 4140	HVAC Systems	
or ME 5140	HVAC Systems	
ARCH 4170	Designing Net-Zero Spaces	
ARCH 5740/ ME 5710	Building Performance Simulation for Integrated Design	
Total Hours		13-14

Courses to total 13-14 credits for this certificate

- Understand building performance metrics.
- Know how to measure building performance.
- Objectively compare a building's energy usage to its expected performance.
- Can plan and manage a technical project with a diverse team of personnel.
- Detail the factors that provide exceptional indoor environmental quality.