

# ARCHITECTURE: ENVIRONMENTAL BUILDING DESIGN, MSD

The Master of Science in Design with a concentration in Environmental Building Design (MSD-EBD) is an advanced, three-semester, post-professional degree that adds an additional, research-oriented semester to the professionally oriented MEBD degree. It is designed for architects seeking to develop new approaches to environmental design. A wider range of skills, which are tested through experiment and validation, are required to achieve real innovation in this rapidly changing field. The challenge for architects is to operate between the synthetic activities of design and the analytic procedures of research. The EBD Research studio develops and tests physical prototypes of buildings and components as part of an iterative design process.

For more information: <https://www.design.upenn.edu/architecture/graduate/master-environmental-building-design-mebd>

## Curriculum

A total of 15 course units are required.

First Year		
Fall		Course Units
ARCH 7510	Ecology, Technology, and Design	1
ARCH 7520	EBD Research Seminar	1
ARCH 7530	Building Performance Simulation	1
Select 2 Designated Electives		2
	<b>Course Units</b>	<b>5.00</b>
Spring		
ARCH 7080	Bioclimatic Design Studio	2
ARCH 7180	History and Theory of Architecture and Climate	1
Select 2 Designated Electives		2
	<b>Course Units</b>	<b>5.00</b>
Second Year		
Fall		
ARCH 7090	Environment Building Design Research Studio	2
ARCH 7540	Performance Design Workshop	1
ARCH 7550	Environment Innovation and Prototyping	1

Designated Elective	Course Units	1
	<b>Total Course Units</b>	<b>15.00</b>

The degree and major requirements displayed are intended as a guide for students entering in the Fall of 2023 and later. Students should consult with their academic program regarding final certifications and requirements for graduation.