

Student Learning Outcomes

College: Arts + Architecture

Department: School of Architecture

Degree Program: Master of Urban Design/Master of Architecture (Dual Degree)

1) Student will demonstrate proficiency in Urban Design Fundamentals. Proficiency will be assessed for:

Part 1: Basic Urban Design Composition Skills

Ability to organize the physical elements of urban design, urban infrastructure and public space design in the creation of master plans.

Part 2: Basic Urban Design Graphic Skills

Ability to use appropriate representational media, including freehand drawing and computer technology, to convey essential spatial and formal elements at each stage of the urban design process.

2) Student will demonstrate proficiency in Urban Design Intermediate Skills. Proficiency will be assessed for:

Part 1: Sustainable Site Design Skills

Ability to analyze and synthesize context and site design criteria relevant to issues of environmental sustainability. (MUDD 6102)

Part 2: Ability to Collaborate in Multi-Disciplinary Design Teams Ability to work effectively in charette teams with members from related disciplines. The product is a design project that tangibly integrates the work of all disciplines. (MUDD 6102)

3) Student will demonstrate proficiency in Mixed-use, High Density Urban Design Skills. Proficiency will be assessed for:

Advanced Mixed-use, High Density Urban Design Skills Ability to create and communicate complex urban design proposals for large buildings and associated public space and transportation infrastructure.

- 4) MArch students will demonstrate proficiency in Design Fundamentals. Proficiency will be assessed for:
 - Part 1: Visual Communication Skills: Ability to use appropriate representational media, such as traditional graphic and digital technology skills, to convey essential formal elements at each stage of the programming and design (NAAB Architecture Accreditation Criterion A.3).
- 5) Student will demonstrate proficiency in Comprehensive Project Building Technology Development and Integration. Proficiency will be assessed for:
 - Part 1: Structural Order: The ability to design a fundamental structural systems, its hierarchy, and element spacing for the Comprehensive Architectural Project.
 - Part 2: Material / Construction System Design: The ability to design an exterior wall system for the Comprehensive Architectural Project, including its materials, layering, and connections, from the building's foundation to the roof.
 - Part 3: Structural / Material / Construction Systems Integration: The ability to advance the design of the Comprehensive Architectural Project in response to the influence of the structural, material, and construction technology design decisions.
- 6) Student will demonstrate proficiency in Architecture Technology Fundamentals: Structural Systems.
- 7) Student will demonstrate proficiency in facets of Thesis Research. Proficiency will be assessed for:
 - Part 1: Case Study Analysis: Ability to examine and comprehend the fundamental principles present in relevant precedents and to make choices regarding the incorporation of such principles into architecture and urban design projects (NAAB Architecture Accreditation Criterion A.7).
 - Part 2: Bibliographic Research: Ability to gather, assess, record, apply, and comparatively evaluate relevant information within architectural coursework and design processes (NAAB Architecture Accreditation Criterion A.5
- 8) Student will demonstrate proficiency in Architecture Technology Fundamentals: Environmental Systems. Proficiency will be assessed for:
 - Environmental Systems: Understanding the principles of environmental systems' design related to Architectural Heating, Architectural Cooling and Architectural Lighting.