

# Architectural Design Technology Minor

## Goal

### Goal Description:

The Architectural Design Technology Minor provides knowledge and proficiency for students to succeed in an architectural profession through conventional and applied academic learning environments.

**Providing Department:** Architectural Design Technology Minor

### RELATED ITEMS/ELEMENTS

#### RELATED ITEM LEVEL 1

### Learning Objective

#### Learning Objective Description:

- Prepare individuals for careers in commercial and/or residential architectural fields.
- Determine a method of presentation to graphically represent building plans and coordinate architectural, structural, electrical, and mechanical designs.

#### RELATED ITEM LEVEL 2

### Professional careers preparation

#### Indicator Description:

Student learning outcomes as well as career pathways-related topics are discussed annually as part of our Industry Advisory Board meeting. All board members are informed about the updates and involved in the process, including industry representatives, recent alumni, and faculty.

#### Criterion Description:

Prepares learners with the necessary skills for architectural design career options in residential and commercial design in the construction industry.

#### Findings Description:

Student learning outcomes as well as career pathways-related topics are discussed annually as part of our Industry Advisory Board (IAB) meeting. All board members are informed about the updates and involved in the process, including industry representatives, recent alumni, and faculty.

Assessment of the student learning in architectural design, engineering drafting, and BIM classes has produced three key findings.

- **Experiential Learning:** Architectural design classes emphasize experiential learning, where students engage in hands-on design projects and learn by doing. This approach allows students to develop practical skills, problem-solving abilities, and a deeper understanding of design principles through direct application.
- **Design Process:** Students in architectural design and BIM classes learn to follow a structured design process, which involves conducting research, analyzing site conditions, generating ideas, developing concepts, creating design iterations, and refining their solutions. This iterative process helps students cultivate their creativity, critical thinking, and decision-making skills.
- **Integration of Theory and Practice:** We often integrate theoretical concepts with practical design exercises. Students learn to apply architectural theories, principles, and historical precedents to inform their design decisions. This integration helps students develop a deeper understanding of the contextual and theoretical aspects of architecture.

#### RELATED ITEM LEVEL 3

### Professional careers preparation

#### Action Description:

The feedback from the IAB members and internal discussion among the Construction Management (CM) faculty resulted in the following actions:

- Our students in the Architectural Design Technology minor shall develop strong visual and verbal communication skills. The class projects and assignments shall be revised to effectively present the design ideas through drawings, sketches, models, and oral presentations. These skills enable students to communicate their design intentions clearly and persuasively to clients, peers, and other stakeholders.

- Also, it is recommended to encourage collaboration and teamwork among students. Group projects and design critiques provide opportunities for students to work together, share ideas, receive feedback, and learn from one another. Collaborative experiences help students develop interpersonal skills, negotiation abilities, and an appreciation for diverse perspectives.

#### RELATED ITEM LEVEL 1

### Performance Objective

#### Performance Objective Description:

Architectural Design is a required course for all Interior Design minors. During the Fall and Spring semesters, the Interior and Architecture Design Minor committee records grades that communicate mastery or non-mastery skilled currently accepted in the Architecture, Engineering & Construction (A/E/C) industry.

#### RELATED ITEM LEVEL 2

### KPI

#### KPI Description:

The indicator is reported as the percentage of Architectural Design Technology Minor students who met Satisfactory Academic Performance in Architectural Design class. Performance equivalent to a grade of C or better is recorded as Satisfactory. Please note that there were only two students with minor in the Architectural Design Technology who registered for Architectural Design course in 2021-2022. Both students registered for the Spring class and received A.

#### Target Description:

Students will receive a grade of C or better in courses required for the minor.

#### Results Description:

All students with minor in Architectural Design Technology enrolled in ETCM2363 have received C or better.

#### RELATED ITEM LEVEL 3

### KPI

#### Action Description:

- Two more components will include in the course curriculum:
- Contextual and Sustainable Design: Students in architectural design classes are increasingly encouraged to consider the broader social, cultural, and environmental contexts in which their designs will be realized. Sustainable design principles, such as energy efficiency, material selection, and ecological sensitivity, are integrated into the curriculum to promote environmentally responsible design practices.
  - Reflection and Self-Critique: Architectural design classes often encourage students to reflect on their design process and outcomes. Through self-critique and peer review sessions, students learn to evaluate their work objectively, identify strengths and weaknesses, and make iterative improvements. This reflective practice fosters self-awareness, continuous learning, and growth as designers.

## Update to Previous Cycle's Plan for Continuous Improvement Item

### Previous Cycle's Plan For Continuous Improvement (Do Not Modify):

#### Closing Summary

The Architecture Design Technology Minor (formerly the Interior Design Minor) Committee in the Department of Engineering Technology realized the above mentioned need and decided to propose a new concentration to fill this gap through an emphasis on a professionally-oriented program that combines technical CM coursework with design courses and practical training.

#### Update of Progress to the Previous Cycle's PCI:

In order to seek continuous improvement, the interior design minor is expected to maintain an assessment plan and present an annual assessment report to the Industrial Advisory Board (IAB) of the program. The assessment plan was developed for the past academic year and reflected specific program goals, the enrollment data and students' grades in Architectural Design class. The IAB is comprised of architectural and

construction professionals, regularly reviews the minor's objectives and curriculum, and keeps the program apprised of concerns within the wider professional community, thus helping the program to ensure a high degree of relevance.

## **New Plan for Continuous Improvement Item**

### **Closing Summary:**

The Architecture Design Technology Minor (formerly the Interior Design Minor) Committee in the Department of Engineering Technology realized the above mentioned need and decided to propose a new concentration to fill this gap through an emphasis on a professionally-oriented program that combines technical CM coursework with design courses and practical training.