

# AAD - ARCHITECTURE AND DESIGN

## **AAD 100 - Introduction to Architectural Design** **Units: 3**

This is a survey course of the profession of design. Covered in this course is a discussion of the fields of Architecture, Landscape Architecture and Planning. Other design fields may be discussed as they relate to these professions. Topics may include types of firms and their specialties, what it takes to become a licensed practitioner for whom a design professional might work, salaries that might be achieved and the professional associations to which a design professional might belong.

*Term Offered: Spring and Fall*

## **AAD 101 - Design with Nature** **Units: 3**

Introduces the concepts of natural systems and their influence on human activity and the living environment. Reviews the historical context and cultural adaptations and introduces the basic management and use of the natural systems. Reviews natural, biological, cultural and design management philosophies.

*Term Offered: Fall*

## **AAD 125 - Construction Drawings and Detailing** **Units: 3**

This class will include the analysis of assembling and detailing for construction in the field of architecture and understanding of the reading and interpretation of representative construction prints. Techniques for the production of construction details will be discussed, demonstrated, and applied.

*Term Offered: Spring and Fall*

## **AAD 180 - Design Foundation I** **Units: 3**

Investigation of the elements, principles and theories of design in three dimensions. Emphasis placed upon principles of organization, principles of visual and geometric logic, design methodology and color theory. Completion of this course satisfies 25 hours of instruction toward completing the embedded human relations curriculum requirements, in accordance with Embedded Curriculum Guidelines Option A.

*Enrollment Requirements: Corequisite: AAD 181.*

*Term Offered: Spring and Fall*

## **AAD 181 - Design Foundation I Discussion** **Units: 3**

Discussion of the elements, principles and theories of design in three dimensions. Emphasis placed upon principles of organization, principles of visual and geometric logic, design methodology and color theory. Completion of this course satisfies 20 hours of instruction toward completing the embedded human relations curriculum requirements, in accordance with Embedded Curriculum Guidelines Option A..

*Enrollment Requirements: Corequisite: AAD 180.*

*Term Offered: Spring and Fall*

## **AAD 198 - Special Topics in AAD** **Units: 0.5-6**

This course will explore the study of special relevant topics in the profession of design. This course includes discussion of the fields of Architecture, Landscape Architecture, or Sustainable Planning and other related design professions. Topics may include, type of education and skills necessary, the specialties of each profession, what it takes to become a licensed practitioner, and might be seen as the future of these professions.

*Transferability: May not transfer towards an NSHE bachelor's degree*

*Enrollment Requirements: Prerequisite: AAD 100.*

*Term Offered: AS NEEDED*

## **AAD 201 - History of the Built Environment** **Units: 3**

This course will review the built form of architecture and urban design from various cultures and civilizations throughout history. Specific periods of study include the Ancient World, the Medieval Period, the Renaissance and Modern Times. Historical events along with developments in architecture of non-western civilizations that have shaped philosophies, cultures and civilizations will also be discussed. Satisfies TMCC Diversity requirement.

*Enrollment Requirements: Prerequisite: Equivalent placement score.*

*Term Offered: Spring and Fall*

## **AAD 202 - Analysis of the Built Environment** **Units: 3**

This course will discuss the history of architecture and city design in western and non-western civilization. The time periods to be covered will be from classical Greek, Hellenistic and Roman, through the Romanesque period, including the events and architecture of non-western civilizations happening within the same time frame. The influences that the architecture and design philosophies have had on the shaping of civilization will also be discussed. What civilization reflects through its architecture during these periods will be examined.

*Term Offered: Spring*

## **AAD 223 - Graphic Software for Arch, Const, Dsgnr, Planners** **Units: 3**

Students will identify various digital drafting platforms and graphic software packages for presentation techniques. Emphasis will be placed upon the preparation of materials for a portfolio.

*Enrollment Requirements: Prerequisite: AAD 180 and AAD 181. Corequisite: AAE 280.*

*Term Offered: Fall*

## **AAD 230 - Design with Climate** **Units: 3**

This course will prepare the student with the basic knowledge in the following areas of solar design history, solar procession, climatological data for Reno and northern Nevada, energy reflection, transmission and absorption, heat transfer, heat storage, types of collector systems and their sizing as it relates to architecture.

*Term Offered: Spring*

## **AAD 256 - Introduction to Land Use Planning** **Units: 3**

This course introduces students to the evolution and application of contemporary land use planning in the United States, emphasizing the four primary tools of development regulation: comprehensive planning, zoning, subdivision regulation, and capital improvement programming.

*Term Offered: Fall*

## **AAD 261 - Introduction to Topo Form and Design Technology** **Units: 3**

This course introduces students to the understanding and applying of technical, graphical and computational exercises in site design and topographical shaping. Introduction to sustainable site design and best management practices.

## **AAD 265 - Computer Applications in Architecture I** **Units: 3**

Advanced work in computer-aided drafting and design. Includes development of speed, three dimensional visualization, and the understanding of contemporary digital software used in the professional office environment.

*Enrollment Requirements: Prerequisite: Instructor permission required*

*Term Offered: Spring*

**AAD 280 - Fundamentals of Architecture Design I**

**Units: 3**

This course explores the elements, principles, and theories of design as applied to projects in various media. It emphasizes integration of design principles with the properties of wood, concrete, steel, glass, masonry and other construction materials. Consideration of environmental and climatic conditions and determinants is also discussed.

*Enrollment Requirements: Prerequisite: AAD 180 and AAD 181. Corequisite: AAD 223.*

*Term Offered: Fall*

**AAD 282 - Fundamentals of Architecture Design II**

**Units: 3**

Discussion of the elements, principles and theories of design. Emphasis is placed upon integration of design principles to urban landscapes, buildings, interiors, furnishings and environmental graphic applications.

*Enrollment Requirements: Prerequisite: Instructor permission required.*

*Term Offered: Spring*

**AAD 299 - Architectural Design Transition Camp**

**Units: 12**

This class is an intensive introduction to various design processes from concept to schematic design development. Beginning level graphic and architectural design standards for persons entering third year Architecture Program, including construction drawing and details, material and methods, literacy, design thinking strategies and aesthetic awareness. Introduction to digital programs, development of basic design, modeling and communication skills.

*Transferability: May not transfer towards an NSHE bachelor's degree*

**AAD 350 - Design Studio I**

**Units: 6**

This class furthers the development of architectural design processes and projects that cultivate an understanding of structures, properties of materials, and building tectonics. Emphasis is placed upon precedent analysis, basic code and site related issues and creating/storing design solutions on a variety of digital drafting platforms. Field trips required at students expense outside of scheduled hours; some critique sessions may meet outside scheduled hours.

*Enrollment Requirements: Prerequisite: AAD 265 and AAD 261 or equivalent.*

*Application required.*

**AAD 351 - Design Studio II**

**Units: 6**

This class furthers the continued development of Architectural design processes and projects that cultivate an understanding of structures, properties of materials and building tectonics. Emphasis is placed upon precedent analysis, basic code and site related issues. Strong emphasis upon digital drafting methods which focus on digital platforms. Field trips required at students' expense outside of scheduled hours; some class critique sessions may meet outside of scheduled hours.

*Enrollment Requirements: Prerequisite: AAD 350.*

**AAD 410 - Professional Practice for B. Arch. I**

**Units: 3**

This class will introduce the architectural practice's professional standards, duties, and responsibilities and the architect's different functions within the architectural practice. Emphasis on professional ethics, the architect's tasks, regulations that apply to trade, business management, staff management, contract specifications, building planning, and other aspects of professional architectural practice.

*Enrollment Requirements: The student must be admitted to 3rd year and be pursuing the Bachelor of Architecture 5-year degree at TMCC.*

**AAD 413 - Professional Practice For B. Arch. II**

**Units: 3**

Architectural management deals with the project management context within which architecture is practiced. Development of professional expertise to the methods used to generate work and charge fees.

Emphasis on project briefing and contract administration phases of an architectural project, including development and contract law, project management frameworks, development of a design brief, a project consultancy agreement, and the administration of a building contract.

*Enrollment Requirements: Prerequisite: AAD 410 Professional Practice for B. Arch. I*

**AAD 416 - Professional Practice for B. Arch. III**

**Units: 3**

This class furthers the exploration of innovative practices and design thinking models. Additionally, the understanding of working relations with allied consultants and sub-consultants such as Civil, MEP, and structural engineering, utilizing tools such as BIM, construction documents, scheduling, and contracts, is strengthened.

*Enrollment Requirements: Prerequisite: AAD 413 Professional Practice for B. Arch. II*

**AAD 452 - Integrated Design Studio I**

**Units: 6**

Focus on sustainable design strategies to address architectural issues on multiple scales. Moreover, students evaluate their design intent from a regional perspective and urban fabric scale; and advance to a more specific scale with a building detail. Field trips are required at students' expense outside of scheduled hours; some class critique sessions may meet outside of scheduled hours.

*Enrollment Requirements: Prerequisite: AAD 351 Design Studio II*

**AAD 453 - Integrated Design Studio II**

**Units: 6**

This class will explore the relationship between human societies and regional seismic events in the Great Basin Desert, urban wildland interface, and carbon-neutral design. The student will utilize projects and in-class assignments to develop integrated design skills. Field trips may be required at students' expense outside of scheduled hours; some class critique sessions may meet outside of scheduled hours.

*Enrollment Requirements: AAD 452 INTEGRATED DESIGN STUDIO I*

**AAD 455 - Integrated Design Studio III**

**Units: 6**

The student will be introduced to the "All-Inclusive" design theory and strategies for creating buildings and spaces accommodating people of all types. Additionally, the student will design a series of projects and in-class assignments to assist the student in developing integrated design skills. Three-hour studio classes a week and assigned work. Field trips are required at students' expense outside of scheduled hours; some class critique sessions may meet outside of scheduled hours.

*Enrollment Requirements: Prerequisite: AAD 453 Integrated Design Studio II*

**AAD 461 - Urban Theory and Design I**

**Units: 3**

This class reviews the fundamentals of urban design theory and invites students to apply these theories to neighborhood design. Additionally, the course surveys major historical and contemporary trends in urban design theory and practice and introduces contemporary theories on the future drivers of change affecting the development and functioning of urban regions.

*Enrollment Requirements: The student must be admitted to 3rd year and be pursuing the Bachelor of Architecture 5-year degree at TMCC.*

**AAD 462 - Urban Theory and Design II****Units: 3**

This class explores various urban design theories and their interrelation with architectural practice, urban planning, and urban design. Additionally, it reinforces the knowledge of contemporary and future urban design themes and their interrelations with sustainability, technology, mobility, and the human at multiple scales. The course also is designed to provide a collaborative, interactive, applied, and community-based environment for the development of spatial thinking and basic urban design literacy.

*Enrollment Requirements: AAD 461 Urban Theory II*

**AAD 475 - Portfolio Design****Units: 6**

This course will review the skills needed to create a professional architectural portfolio of quantitative and qualitative research designs, procedures, instruments, and techniques for presentation purposes in architectural research, programming, and design.

*Enrollment Requirements: The student must be admitted to 3rd year and be pursuing the Bachelor of Architecture 5-year degree at TMCC.*

**AAD 480 - Thesis (Research)****Units: 3**

Develop quantitative and qualitative research designs, procedures, instruments, and techniques for architectural research, programming, and design. Philosophy of research in architecture, research design, data gathering and interpretation, and thesis preparation. This body of work will seamlessly transfer into ARCH 485 THESIS (DESIGN) and be an instrumental component of the culmination of the final degree studio project.

*Enrollment Requirements: Current enrollment in AAD 455 INTEGRATED DESIGN STUDIO III*

**AAD 485 - Thesis Design Studio****Units: 9**

Thesis studio is the culminating design studio for all 5th-year seniors completing the Bachelor of Architecture. Under the supervision of faculty members, students will investigate an architectural thesis generated in Thesis Research. This final body of work will provide students with an opportunity to focus and produce a personal architectural response. Completing this course and submitting a final degree project will be required to graduate.

*Enrollment Requirements: AAD 455 INTEGRATED DESIGN STUDIO III & AAD 480 THESIS (RESEARCH)*