ARCHITECTURAL SCIENCES (AS)

AS 151   Architectural Graphics   3 Hours
An introduction to the basic skills of drawing and modeling techniques. Sketching and drafting with emphasis on line weights, lettering, equipment, geometric construction and pictorial drawings. Conventional modeling and an introduction to software applications with emphasis on 3D form, context and material delineation.
Recent Term(s) Offered: spring 2022; fall 2022; spring 2023; fall 2023; spring 2024; fall 2024

AS 163   Architectural Drafting   3 Hours
An introductory course using sketching and CADD software to teach orthographic projection, isometric projection, sections, dimensioning, and 3D modeling. This course designed for majors in the Architectural Sciences Concentration, Interior Design, Civil Engineering, Geography and Textiles.
Recent Term(s) Offered: spring 2022; fall 2022; spring 2023; fall 2023; spring 2024; fall 2024

AS 180   Introduction to Architecture   3 Hours
It covers the basic concepts of building design and architectural theory of various architectural styles. The primary vehicle of investigation will be the architectural artifacts of the built environment and the philosophical rationale behind the motivation for the creation. **Colonnade/Statewide General Education Code E-AH | AH**
Recent Term(s) Offered: winter 2022; summer 2022; fall 2022; summer 2023; fall 2023; winter 2024; summer 2024; fall 2024

AS 251   3D Modeling and Imaging   3 Hours
Introduction to 3D modeling, animation, and visualization techniques. Topics include 3D solids, perspective projection, lighting, cameras, texturing, walk-through and fly-by animations using current industry software.
Prerequisite(s): AS 151 and AS 163
Recent Term(s) Offered: spring 2022; fall 2022; spring 2023; fall 2023; spring 2024; fall 2024

AS 263   Architecture Documentation I   3 Hours
Planning and producing residential construction drawings. Residential construction standards and codes; building materials research and specification.
Prerequisite(s): AS 163 with a minimum grade of C and CM 261 (may be taken concurrently)
Recent Term(s) Offered: fall 2022; fall 2023; fall 2024

AS 273   Architectural Detailing   3 Hours
Architectural detailing in terms of function, contractibility, and aesthetics. A transition from architectural ideas to build reality. Detailing as a means of controlling: water, air heat flow, sound, aging, and load transfer. Detailing with respect to economics, ease of assembly, efficiency, and problem solving. Lecture and Laboratory.
Prerequisite(s): AS 263 with a minimum grade of C
Recent Term(s) Offered: spring 2022; spring 2023; spring 2024

AS 305   Building Codes   3 Hours
Introduction to format and content of current building codes, including interpretation and code research for application to residential and commercial projects, with emphasis on building design.
Prerequisite(s): CM 261
Recent Term(s) Offered: summer 2022; fall 2022; summer 2023; fall 2023; summer 2024; fall 2024

AS 351   Building Information Modeling   3 Hours
Advanced course in architectural modeling, focusing on the concepts and processes of creating object-oriented databases by embedding relevant building information into parametric modeling systems, and extracting building data using standard industry software applications.
Prerequisite(s): AS 251 with a minimum grade of C and AS 263 with a minimum grade of C
Recent Term(s) Offered: spring 2022; summer 2022; spring 2023; spring 2024

AS 369   Architectural Design Studio I   4 Hours
Design processes using architectural projects as case studies, design experience includes schematic design, program development, design methodologies, graphic and verbal communication skills, and environmental influences on building design: geographic location, daylighting, natural ventilation, size and shape. Lecture and laboratory.
Prerequisite(s): AS 263
Recent Term(s) Offered: spring 2022; spring 2023; spring 2024; summer 2024

AS 373   Architecture Documentation II   3 Hours
Planning and producing commercial construction drawings. Commercial construction standards and codes; building materials research and specification.
Prerequisite(s): AS 273 with a minimum grade of C and AS 305 and SEAS 325 and AS 351
Recent Term(s) Offered: fall 2022; fall 2023; fall 2024

AS 375   Special Architectural Problems   3 Hours (repeatable max of 6 hrs)
A research project that includes a written report or an innovative design of a non-standard structure is required.
Recent Term(s) Offered: winter 2022; summer 2022; fall 2022; winter 2023

AS 378   Architectural / Professional Presentation   3 Hours
Techniques to present an idea, concept, architectural design, and individual talents. Techniques include architectural modeling, both physical and virtual; presentation graphics; virtual walk-through and fly-by; portfolio design; and web page development. Lecture and Laboratory.
Prerequisite(s): AMS 369
Restriction(s): Students with a semester level of Freshman or Sophomore may **not** enroll.
Recent Term(s) Offered: None

AS 380   Independent Study in Architectural Sciences   3 Hours (repeatable max of 6 hrs)
This course is designed for the undergraduate student who would like to study different aspects of the profession, that is not included in existing formal courses of instruction.
Recent Term(s) Offered: spring 2022; winter 2023; summer 2023; fall 2023

AS 463   Architecture Documentation III   3 Hours
Advanced planning and producing commercial construction drawings relating to additions, renovations, and demolition. Commercial construction standards and codes; building materials research and specification; systems coordination.
Recent Term(s) Offered: None

AS 469   Architectural Design Studio II   4 Hours
Advanced analysis, synthesis, and appraisal techniques responding to contemporary architectural issues. Theory and practice of architecture as art and science. In-depth studio experience in: schematic design and design development; selection and conceptual design of structural systems; mechanical and electrical systems, materials and connective systems, specifications and building costs with focus on sustainable design. Lecture and Laboratory. Note: Course pass required.
Prerequisite(s): AS 273 and CM 282 and AS 369
Recent Term(s) Offered: summer 2022; fall 2022; summer 2023; fall 2023; summer 2024; fall 2024

AS 470   Land Development   4 Hours
Land development in terms of promoting: a community, human well-being, environmental sustainability, green space and economic growth. Site analysis, climatic and regional analysis, cultural and contextual analysis, and human pattern language will be investigated and applied. Lecture and Laboratory. Note: Course pass required.
Prerequisite(s): AMS 273
Recent Term(s) Offered: None

AS 488   Comprehensive Design   3 Hours
Identification and collaboration with a real world client, architectural proposals, project programmatic requirements, project research, site analysis, building codes and regulations, professional portfolio. Note: Consent of instructor may be required.
Prerequisite(s): AS 373 (may be taken concurrently) and AS 369
Recent Term(s) Offered: fall 2022; fall 2023; fall 2024

AS 490   Senior Research for Architectural Sciences   3 Hours
Students work on capstone research projects utilizing skills and knowledge from prior courses in the Architectural Sciences program. Projects in this course will simulate real life projects encountered in industry.
Prerequisite(s): AS 373 with a minimum grade of C and AS 488 with a minimum grade of C
Recent Term(s) Offered: spring 2022; spring 2023; spring 2024