

Fall 2021 Course Highlights

ARCH 1000 Introduction to Architecture

This course will explore theoretical and practical frameworks that inform architecture. Relevant theoretical and practical issues will be presented and discussed, allowing students to understand how fundamental parameters in design, including formal, spatial, and phenomenal factors, influence decision-making and inform critical thinking. Students shall be introduced to social and ethical stewardship that center on sustainability and socially-engaging designs.

ARCH 1001 Architecture Studio I

This course is the first design studio. Through exercises and projects, it introduces a variety of skills and fundamental principles in design for the beginning student in architecture including but not limited to the following: graphic observations, analysis, and representations, design process, architectural drawing and drafting, model building, and verbal communication.

ARCH 1011 Accelerated Studio I

This course introduces skills and fundamental principles in architectural design, including: graphic observations, analysis, and representations; two-dimensional and three-dimensional designs, including ordering space and forms; design process; precedent analysis; architectural drawing and drafting; model building, and verbal communication. The framework of the studio is observation, documentation, and analyses through specific filters and conventions. The second component is the notion of thinking through making, in which the engagement with tools, media, materials and techniques would inform design intents and design iterations. The studio will build up the scale and complexity of the projects, culminating in a simple, small-scale structure.

ARCH 1241 Design Communication

This course offers lecture and practicum providing fundamentals of design communication through principles of drawing conventions and related techniques including orthographic projections, paraline drawings, and perspective construction systems to represent design ideas and built forms. This involves use of manual media, 2D image manipulation and 3D modeling using digital media. The intention of the course is to develop visual literacy through visual thinking and to develop skills to represent objects and simple buildings in both two and three-dimensions.

ARCH 2003 Architecture Studio III

This course builds on the design thinking skills developed during first year studios. This course initiates the application of research from site, context and case studies in the design process and emphasizes design concept development. Projects initiate the design of interior and exterior conditions, site design and the architectural design of structural systems.

ARCH 3011 Architecture Studio V

This studio emphasizes the importance of conceptual architectural thinking, materiality, and natural daylighting and introduces integration of building technologies within the architectural design process. The majority of the semester focuses on a medium sized, mixed-use project located on a suburban/exurban site.

ARCH 3112 ArchCultureIIrenaissance-1850

This course examines the rise of renaissance architecture and architectural theory and traces the spread of their influence across Europe into the enlightenment. The architectural impact of colonial expansion is studied as European architecture interacts with or displaces the local traditions of colonized areas in Asia, Africa, and the Americas.

ARCH 3211 Arch Structures II Steel& Wood

This course builds on ARCH 2211 with a focus on design and analyses of statically determinate wood and steel structure systems, mainly frames. Upon completion students would be able to apply design techniques in defining a frame system and selecting or sizing wood or steel members, particularly beams and columns, trusses, diaphragms, and connections. Knowledge and skills are applied in a final team project that highlights a structural form employing wood and steel.

ARCH 3313 EnvTechII:HumanCom&Bldg Syst

This course offers lecture instruction that is focused on the fundamental connection between human comfort and active / passive design mechanisms. Topics include building context / orientation and form, envelope characteristics and materials, and human comfort within interior environments. Additionally, energy conservation and major mechanical systems are examined in relation to building typology and sustainability.??

ARCH 4013 Arch StudioVII:IntegratDesign

This course focuses on building structural systems and systems integration in relation to an architectural concept. Students will work on a program allowing them to study the impact of site and programmatic forces in relation to integrative principles as described by NAAB. The course builds upon and emphasizes synthesizing knowledge and skills acquired in concurrent and prior coursework.

ARCH 4114 CulturesIV:DevArch21stCentury

This course continues the investigation of architecture culture by examining the development of the diverse regional and conceptual approaches to modern Architecture from the international style to the present, including the development of contemporary theoretical positions in architecture.

ARCH 4116 Urban Design & Planning Theory

This course examines historic and current trends of urban design, development and growth. Diverse socio-economic-political and spatial issues that shape and continuously transform the physical fabric of cities, metropolitan centers, and regions are the focus of this course. The course requires critical and applied assignments, through which the students explore and understand theoretical and applied underpinnings of wide-ranging and diverse urban forms and practices.

ARCH 5015 Focus Studio

The Fifth-Year Focus Studios are intended to introduce the student to design research and its application, while adhering to creativity, critical thinking, processes of making, and constructability. The annual Focus Studio is an intrinsic part of the professional core of the Architecture Program and is designed to foster a strong relationship between the program, our students, and the profession as a whole. All qualified fifth year students have the option to select a studio critic who will broaden their area of interest in a subject-based studio.

CM 1000 Orientation to Construction

An introduction to construction industry careers; an overview of construction industry sectors and the industry's impact on the economy; and discussion of the basics of the construction process. Also includes a preview of the construction degree curriculum and an overview of Southern Polytechnic policies, procedures, and resources.

CM 2000 Construction Graphics

A study of the fundamentals of graphic language used by construction professionals, with an emphasis on developing skills in expressing concepts in visual form and in reading architectural and engineering construction documents.

CM 2210 Introduction to Structures

The study of basic structural design and analysis. Primary aim of this course is to develop and present structural concepts, introduce structural theory, provide a sound understanding of statics and strength of materials to establish a basis for understanding structural principles as it relates to building components.

CM 3000 Computer App in Construction

An introduction to microcomputers and commercial software. Students learn DOS and Windows manipulations, spreadsheets, word processing, visualization, and presentation software by actively using tutorials and help screens in a structured laboratory setting. Scheduling and estimating software are introduced.

CM 3040 Bldg Info Modeling App

A course on study of building information modeling for pre-construction applications. The course will enable the students to develop and modify building information models. It includes integration of estimates and schedules with building information models. It also prepares the students to identify conflicts caused by architectural, structural, mechanical, plumbing, and electrical systems during pre-construction stages.

CM 3110 Residential&LightCnstMethods

A study of materials, techniques, and methods used in residential and light construction. Foundations, wood frame and masonry structural systems, interior and exterior finishes, residential electrical, plumbing, and mechanical systems are included. Also included are residential building code requirements.

CM 3180 Mech & Elec Building Systems

A study of mechanical and electrical system types, how they are built, and how they affect the construction project. Topics will include air conditioning, heating, plumbing, fire protection, electrical power, electrical lighting, and building control materials and systems. The analysis of current construction drawings will be integrated into each topic.

CM 3260 Temporary Structures

A study of structural design and analysis concepts of temporary structures used in the construction process. Topics include formwork design, scaffolding, and material handling equipment and staging.

CM 3270 Strategic Facilities Mgmt

Students in this course will learn about the history, practice and profession of Facility Management (FM). Core competencies of the FM profession as detailed by key FM organizations such as IFMA, BIFM, and FMAA will be introduced and analyzed for similarities and differences. Students will also learn about the organizational, ethical, and leadership strategies for the delivery of facility management services.

CM 3310 Real Estate Develop Practices

The course provides an overview of the land development process and provides a foundation for the advanced land development courses. The course focuses on the steps in planning and carrying out the land development project and on the legal issues encountered in the land development profession. The course includes lectures, readings from the texts and closed library reserves, class discussion, problems, exercises and student presentations.

CM 3400 Risk & Quality Management

This course focuses on Exposure analysis, risk management, risk transfer and the costs associated with each. The costs of safety and the lack of it is examined. Workers' compensation insurance cost is integrated into the issues of safety along with the development of a comprehensive risk management plan.

CM 3410 Const Quantity Surveying

A study of techniques in the process of construction estimating, with an emphasis on development of the quantity survey. The completion of a specification takeoff and a quantity survey of commercial construction are required.

CM 3420 ConstEstimating&BidPrep

The continued study of the estimating process emphasizing pricing the general contractor's work including: estimating procedures, development of direct and indirect unit costs, evaluation of subcontractor's bids, bidding strategy, and bid opening. The completion of an estimate, bid submission, and development of a schedule of values are required. Also included is an introduction to conceptual estimating.

CM 3500 Building Codes

This course will provide an overview of building codes from the perspective of construction managers and superintendent. Various issues related to building codes, which must be considered by the PM/CM/superintendent, will be discussed and follow the scheduled reading assignments.

CM 3710 Market & Site Analysis

An integrated theory and applications course that provides an exposition of theoretical principles associated with the site planning process, and then involves the students in hands-on application. The inter-relationship between site planning decisions and their potential consequences will be demonstrated through practical exercises.

CM 3800 Construction Finance

Students in this course will study the fundamentals of real estate development process. The roles and responsibilities of the private and the public sector professionals and other partners involved in the process will be investigated along with the development constraints such as land use controls, physical, environmental and off-site constraints. Students will also learn the fundamentals of property, asset, and portfolio management.

CM 4510 Construction Scheduling

A study of the management techniques used in controlling the progress of construction projects, including development of a commercial project schedule, as well as simulation of updating and monitoring progress using critical path methodology. Commonly used commercial software packages are introduced.

CM 4512 Emerging Trends in Residential

This course emphasizes emerging trends in the residential building industry. Students will explore labor issues, residential construction concerns, and innovative strategies that are present in today's residential homebuilding.

CM 4560 Cons Project Management

A study of traditional, design-build and construction management delivery methods, the management of field operations and administration of the construction contracts. Contract documents, project organization, supervision, working with owners and design professionals, procurement, management of subcontractors.

CM 4620 Develop Process & Finance

Students in this course will study financial feasibility and economic desirability of income producing properties. They will learn various financial feasibility analysis techniques and prepare financial pro-forma models for various stages of the development process. The concepts that will be covered are net operating income, time value of money, different forms of financing, and business entities for development process. Acquisition, development, and construction (ADC) loans will be studied and student will prepare their loan amortization schedule.

CM 4660 Adv Scheduling&Project Mgmt

Course focuses on Communication, Industry Software, Target Value Design and other best Practices as they pertain to Project Management. Erosion Control Supervisor, and Work Zone Traffic Control Certification requirements are examined. Skills generally required for sound project management in a variety of management settings are studied in addition to specific management issues typically associated with construction companies.

CM 4710 Construction Safety

A study of construction safety and loss control principles and practices. Topics include project security control, construction accident prevention, safety information sources, weather precautions, emergency planning, and OSHA procedures and regulations.

CM 4760 Const & Property Law

A study of Construction Contract Documents and Claims. Topics include: analyses of AIA B141, A101, A201, and contractual graphic and technical documents. Other supporting construction contract documents such as bid bonds, payment and performance bonds and construction modifications are studied. The traditional tri-union construction contract formation process is examined in relation to the owner, contractor, material men, and subcontractors. Discussions regarding damages for differing and unforeseen conditions, defective workmanship, and construction delay claims are surveyed in conjunction with AAA construction arbitration rules regarding emerging construction manager contracting processes.

CM 4900 Capstone Project

Simulations and case studies of events that affect the construction organization and project. Topics and event simulations will include problems typically encountered in the construction industry such as changed conditions, strikes, inconsistencies in documents, and surety assumption of the contract. Presentations by prominent industry representatives pertinent to the event being simulated are included.

CM 6610 Sustainable Construction

A study of mechanical and electrical system types, how they are built, and how they affect the construction project. Topics will include air conditioning, heating, plumbing, fire protection, electrical power, electrical lighting, and building control materials and systems. The analysis of current construction drawings will be integrated into each topic.

CM 6720 Facility Management Strategies

Students in this course will learn about the history, practice and profession of Facility Management (FM). Core competencies of the FM profession as detailed by key FM organizations such as IFMA, BIFM, and FMAA will be introduced and analyzed for similarities and differences. Students will also learn about the organizational, ethical, and leadership strategies for the delivery of facility management services.

CSE 4983 CSE Computer Internship

Interested? Contact Internship Coordinator Dawn Tatum (470-578-3797 or dawn.tatum@kennesaw.edu)

MATH 1111 College Algebra

This course provides an in-depth study of the properties of algebraic, exponential and logarithmic functions as needed for calculus. Emphasis is on using algebraic and graphical techniques for solving problems involving linear, quadratic, piece-wise defined, rational, polynomial, exponential, and logarithmic functions.

Note: Students completing this course may not also receive credit for MATH 1113.

NURS 9400 Dissertation

Course work supports and guides doctoral candidates in the implementation of their applied research and the development and defense of the dissertation. This format and structure provides individual time with the Doctoral Committee and collegial and academic support from their peers. Course may be repeated as necessary.

PR 3429 Persuasion Methods & Strategies

This course provides a study of the theories, methods, applications and implications of persuasion from the days of Aristotle to today's political and commercial arenas. The course explores the practice of changing attitudes and opinions via non-coercive means.