Dept. of Architecture

Architecture is both a science and an art. Good architecture is the one that is firmly and functionally built, and must give deep aesthetic experience to those who use it at the same time. The education of architecture, therefore, has dual objectives; the learning of technology to make healthy architecture, and a balanced experience of aesthetic appreciation to provide the students intellectual sensibility. In addition, the significance of architecture as a social art emphasized.

The students in Graduate program study and develop the thesis with greater view towards the society and their own field of research. The program also provides the students the opportunity to experience practical projects.

❑ Architecture Major

Architecture is a deep process of developing one's design abilities. Students master architectural design, planning, theory. This course studies various principles and concepts of architecture for a fundamental understanding of it.

❑ Architectural System Major

Students master concept of building structures concerning a load which act on building and its mechanical movement, and studies force of vector, truss, section, shear moment diagram, stress, strain and application of material.

☐ Courses

❑ Core Courses

- **Theory of Architectural Style (3)**

  The course studies architectural style from European ancient times to modern age.

- **Theory of Spatial Composition (3)**

  The course studies composition principle of space. The course analyzes relation of architecture and space through actuality work.

· **Theory of Urban Planning (3)**

The course analyzes urban development according to connection field. Also, the course studies a whole city that led to social development problem from problem of human essence.

· **Research Methodology (3)**

This course studies various principles and concepts of architecture for a fundamental understanding of it. The domain and definition of architecture will be comprehended. The basic knowledge of architecture the process of planning, the basic knowledge of structure, the meaning of architecture and its social role will also be learned.

· **Modern Architectural Theory (3)**

This course studies architecture from the era of Rationalism to the Modern Movement by the various concepts, styles of expression and changes of architectural type and construction. Centering around works and architect, it is learned the arts and crafts movement, the art nouveau, the avant garde, etc. And, studies of history of Korean modern architecture after the nineteenth century are also reviewed.

· **Theory of Contemporary Architecture (3)**

This course studies architecture from the mid 1960s up until now. Various architectural theories including postmodernism and Deconstruction architecture are understood in relation to other arts, literature, philosophy and other cultural factors.

· **Seminar on Korean Architects (3)**

This course studies Korean architect concerned with concept, style, architectural background. In addition, the purpose of this course is to examine the essence of Korean architectural culture.

· **Architecture and Society (3)**

This course studies the interaction between architecture and the physical and social environment based on the interdisciplinary social sciences including sociology, psychology, anthropology, etc. It masters that the way of architectural application

for the concepts of a user's need, decision making, social organization and architecture, scientific movement and architectural theory.

· **Research in Architectural Planning (3)**

This course studies design methods and theories of architectural process, analysis and background based on complicacy meaning of architecture and urban.

· **Research in Architectural Planning Seminar (3)**

This course studies various principles and concepts of architecture for a fundamental understanding of it. The domain and definition of architecture will be comprehended. The basic knowledge of architecture the process of planning, the basic knowledge of structure, the meaning of architecture and its social role will also be learned.

· **Theory of Aesthetics (3)**

This course studies logics of architectural theme from ancient to modern aesthetics. Also students practice the architectural critique which uses the concept.

· **History of Oriental Architecture (3)**

History of Oriental Architecture course studies an oriental architecture and regional special formality in a style. Specially, it focuses to make a comparative study how to differentiate Chinese, Japanese and Korean style.

· **Theory of Mechanical Systems for Building (3)**

This course covers principles of construction technology, cost analysis, construction management, and the application to the knowledge to field experience. This study requires full understanding of construction technology and learns how to make a progress schedule. This course also practices the basic of integration and itemized unit cost of progress schedule.

· **Theory of Urban Environment (3)**

This course is the lecture about the urban environment design to confront with an urban problem. Its factors are searched at both a cultural view and a physical view.

· **Theory of Interior Design (3)**

This course is the overall discussion of environment design to understand interior design as total design. It is constituted with the design methodology and the presentation for background logic. It also provides how to manage a project from a view of interior architecture.

· **Research in Contemporary Architects (3)**

The purpose of this course is analyzing the international tendency and under-standing each logics through focusing on the architects working since modernism.

· **Critique of Contemporary Architecture (3)**

This course is constituted by study on the tendency of contemporary architecture and theorizing current thoughts on each of them from the general view. The main discussible subjects are focused on the circumstances that progress from modern architecture to post modern architecture. It is based on the analysis of ideas of architects and their works.

❑ **Architecture Major Courses**

· **Advanced Architectural Design Ⅰ (3)**

Advanced Architecture Design I course study theory of background, method of development and analysis that is stood architectural solution on a complex characteristic of architecture and urban fabric.

· **Advanced Architectural DesignⅡ (3)**

Advanced Architectural Design II course study analysis, development and ultimate principle after institute a cooperation theme, as a architectural design process about social contribution of architecture.

· **Theory of Structural Systems (3)**

Theory of Structural Systems course studies mechanical movement and building system of Core, Shear Wall, Wall Brancing, Tube System, etc. for solution of a horizontal force in buildings.

· **Research and Special Thesis of Architectural Design (3)**

Research and Special Thesis of Architectural Design course study necessity of subject, process of development, collecting and analysis of data, materialization of logic and essay type techniques that is stand established each subject before write a thesis for a degree.

· **Research in Architectural Design (3)**

Research in Architectural Design course studies logical practice and method of analysis that is used by existing architects for an ultimate solution as a process through a study of architectural design.

· **Research in Architectural Design Seminar (3)**

Research in Architecture Design Seminar course study to make a report about a architectural model that include social valuation, economic valuation, and environmental valuation in order to analyze architectural theme and those results with positive.

· **Research in Architectural Form (3)**

Research in Architectural Form course studies an architectural aesthetics theory.

· **Research in Architectural Environment (3)**

Research in Architecture Environment course studies culture, society, psychology, physical the surrounding[social] environment as all things considered background that is formed architecture and research a methodology to be adjusted such a subject.

· **Research in History of Western Architecture (3)**

This course covers the substance of western architecture focusing on concept of history. Student will understand sociality, technique and regional differences as an important decision factor of the style.

· **Research in History of Korean Architecture (3)**

This course explores the history of korean architectural design, theory and practice. In collusion with the Far East Architecture, this course studies korean classic

building´s place in style of architecture. After lessons, detail of each style are explained.

· **Independent Study (3)**

Each student conducts intensive and independent research on a topic chosen in consultation with his or her advisor.

❑ **Architectural System Major Courses**

· **Research in Architectural System Ⅰ (3)**

The focus of this course is the understanding for the organic relations of architectural system that is made by architectural structure, construction/materials, architectural environment/equipment and urban planning.

· **Research in Architectural System Ⅱ (3)**

This lecture provides the recent trend of architectural structure, construction/materials, architectural environment/equipment and urban planning. This course also reviews the developmental direction of architectural system through the consideration of future building or a recent trend of architectural technology.

· **Research in Architectural Structures (3)**

The course introduces various method of structural analysis. Topics includes slope deflection method, the moment distribution, principle of hypothesis work, energy method and influence line method as solving truss, arch and frame.

· **Theory of Steel Structure (3)**

The methodology and consideration of the structure of steel are discussed. Studies of specification and junction planning are reviewed.

· **Theory of Advanced Structure (3)**

This course examines structural analysis on mechanics plan of frame, stress basic principle for frame's motion and the principles and thinking process by which the analysis reaches decisions intended to resolve modification.

· **Theory of Architectural Environment (3)**

This course focuses on the background of thermal transfer processes in buildings through studies of heat transfer, air flow, thermal comfort, and load calculation algorithms. This lecture also provides the basic knowledge and skills required by architectural engineering students who lack sufficient knowledge of fluid mechanics and CFD.

· **Theory of Indoor Air Quality (3)**

This class explores estimation methods of indoor air quality by investigation of national and international standards. Different types of ventilation systems are examined to study the methodologies used in resolving IAQ problems. CFD analysis and the capability to create new data from the results of CFD are both important. This class is aimed at acquisition of fundamental knowledge and skills through CFD exercises.

· **Simulation for Building Performance (3)**

The focus of this course is the application of simulation techniques in building design. The course uses computers and various other simulation tools for design performance prediction and/or evaluation. These simulation tools are used to promote an understanding of the fundamental principles involved in assessing the built environment and creating new applications for simulation techniques.

· **Dynamics (3)**

This course studies particle using classical mechanics by Sir Isaac newton, geostatics, kinetic mechanics, energy and momentum. And the course introduces the oscillation theory and the equation of motion.

· **Independent Study (3)**

Each student conducts intensive and independent research on a topic chosen in consultation with his or her advisor.

☐ Faculty Members

Choi, Wang Don
Seoul National Univ., B.E.
Seoul National Univ., M.S.
Univ. of Manchester, Ph.D.
Architectural Design
wchoi@kookmin.ac.kr

Jang, Yoon Gyoo
Seoul National Univ., B.E.
Seoul National Univ., M.S.
Architectural Design
ygjang@kookmin.ac.kr

Bong, Il Burm
Seoul National Univ., B.E.
Seoul National Univ., M.S.
Harvard Graduate School of Design, M.Arch.
Architectural Design
ibong@kookmin.ac.kr

Park, Mi Ye
Seoul National Univ., B.F.A.
Seoul National Univ., M.F.A.
Harvard Graduate School of Design M.Arch.
Seoul National Univ., Ph.D.
Architectural Design
seojh@kookmin.ac.kr

Mo, Seongbeom
Kookmin Univ., B.Arch.
Univ. of Pennsylvania, M.Arch.
Architectural Design
seongbeommo@kookmin.ac.kr

Lee, Kyung Hoon
Kookmin Univ., B.E.
Pratt Institute, M.Arch.
Architectural Design
khlee@kookmin.ac.kr

Rha, Chang Soon
Seoul National Univ., B.E.
Seoul National Univ., M.S.
Univ. of California, Los Angeles, Ph.D.
Structure
csrha@kookmin.ac.kr

Seo, Jang Hoo
Kookmin Univ., B.E.
The Univ. of Tokyo, Japan, M.S.
The Univ. of Tokyo, Japan, Ph.D.
Architectural Environment
seojh@kookmin.ac.kr

Choi, Helen Hejung
Rensselaer Polytechnic Institute, USA, B.S.
Columbia Univ., M.Arch.
Architectural Design
choih@kookmin.ac.kr

Ko, Taewoo
Seoul National Univ., B.E.
Seoul National Univ., M.S.
Texas A&M University., Ph.D
Construction Management
taewoo.ko@kookmin.ac.kr