**ARCH 601 Seminar (3+0) 0**

* Discussions on papers, articles, or books on diverse topics
* Application studies on preparation of a (thesis) report
* Discussions on rendering presentations of a certain subject given to each individual student

**ARCH 602 Applications on Design Methods (3+0) 3**

* Concept of and development of design research
* Design theories and methods; intuitive, artistic approach to design, systems approach, behavioral approach, cognitive approach and environmental approach to design
* Application of theories to real life examples – case studies.

**ARCH 603 Advanced Studies on Sustainable Architecture (3+0) 3**

* Global Policies on sustainability, its impacts on building sector
* Low and high technology approaches on sustainable architecture
* Green Buildings, green assessment systems: LEED and BREEAM
* Studies on energy efficiency and low carbon emissions
* Regulations on environmental issues

**ARCH 604 Advanced Environmental Control (3+0) 3**

* Conceptual assessment
* Ecology and sustainability; human comfort and system requirements
* Active and passive systems in environmental control, ecologically conscious buildings
* Intelligent Buildings
* Analyzing existing buildings

**ARCH 605 Social Survey Techniques (3+0) 3**

* Man–environment interactions and behavioral theories
* Survey methods; problem formulation, model development, sampling, data collection techniques (interview, field survey, questionnaire, observation etc.), data analysis, choosing proper statistical techniques, interpretation and presentation of results
* Case studies

**ARCH 606 Typology Studies (3+0) 3**

* Typology concept on design
* Design archetypes and patterns
* Morphological study and research on building types
* Analytical approach to typification; functional, conceptual, social, physical, symbolic, aesthetic, contextual etc.
* Discussions over cases
* Progressive typology studies

**ARCH 607 Architectural Theories(3+0) 3**

* Architecture as a profession
* Evolution and development of concept of arcitecture through ages
* Changing role of the architect
* Architecture as an artefact
* Discussions on the meaning in architecture
* The effects of change in means on architecture

**ARCH 608 Ecological Design Principles of Housing Settlements (3+0) 3**

* Ecological design principles in different scales -  from settlement to house -
* Ecological design as a cooperative action of multi-disciplinary team.
* Ecological concepts in contemporary housing settlement designs; Vernacular solutions, New Urbanism, Post Modern City, Eco-Village, Eco-Utopias etc.
* Various solutions to ecological life in settlements
* Concept of re-cycling and re-gain; waste disposals, re-cycling material usage, water reservoirs, usage of bio-gases, using and creating micro-climates, alternative energy types
* Critical discussions on various cases.

**ARCH 609 Art and Ecology (3+0) 3**

* Creative interpretation of 'Nature and Ecology' in art forms
* Philosophy behind nature - reflective / responsive art in sculpture, in painting, in music, in performing arts, in virtual art, in industrial design, and in architecture

**ARCH 610 Building Economics and Sustainable Design (3+0) 3**

* Impact of building design on real estate in cities
* Economical sustainability of buildings
* Social sustainability of settlements
* Ecological sustainability and economics
* Contradictions on design decisions
* Critical discussions on examples

**ARCH 611 Gender and the Built Environment (3+0) 3**

The relationship between gender and the built environment has predominantly been discussed in Western architectural and literary accounts through a 'Eurocentric' perspective. In this graduate seminar, we will read a selection of recently-published texts on different cities, places, historical figures and women’s movements which have been geographically apart, yet interconnected in many other ways. Our intention will not be to replace the 'West' with the 'East' or its 'Other' as has been imagined by the former. We will not merely focus on the present or the past three decades either, as the term global usually connotes today. We will set a journey instead, through '*The times and spaces of modernity*' of the 19th and 20th centuries and tell concomitant 'her-stories' of women, architecture, the city and the built environment by comparatively visiting Western and Eastern Europe, The Middle East and what has been considered 'the bridge' between the two - The Late Ottoman Empire and Turkey. Through these textual spaces, different representations of these contexts, their similarities and interdependencies will be explored.

**ARCH 612 Spatial Systems in Architecture and Urban Space (3+0) 3**

This course aims to introduce techniques of formal and spatial analysis. Within this framework, the notion of 'shape grammars', its generative principles and theoretical framework; the notion of 'space syntax', its background, research methods, and primary techniques will be introduced. These theoretical approaches will be supplemented by spatial analysis both at the building and urban scale. Using these techniques, students will be asked to describe built space and the patterns of their occupancy and use; to identify regularities; and to analyze movement patterns.

**ARCH 613 Performance Measurement and Management in Construction (3+0) 3**

In the construction industry, the systematic ways of performance measurement have influenced many construction firms, government sectors, public and private clients and other project stakeholders. This course aims to introduce existing human, project, firm and industry level performance measurement models, systems and approaches with related themes, concepts and theories.