

Architectural Engineering And Urban Planning Division

Course Syllabus

AEA622 BUILDING ENVIRONMENT - 3 Credits

Efficient environmental control in urban planning and building environment (architecture and urban design) in response to Libyan climate.

Energy conservation techniques (active and passive solar gains), indoor thermal comfort.

AEA623 BUILDING TECHNOLOGY AND STRUCTURAL SYSTEMS: 3

Credit

Study and step-by-step exploration of building technology development according to market demand, its relation to structural development along the development era.

Study of building structure development processes and its contemporary utilization, the sequence of operations and manufacture of main structure, cladding, acoustics, .. etc. The development of building materials and performance requirements of the building components, construction methods and development of working drawings

AEU 637 HOUSING DEVELOPMENT AND SUSTAINABLE DESIGN:3

Credit

Revision of the housing history based on human life development demands and social requirements, will also explore the meaning of housing economy according to categories, location and urban fabrics, and its interrelation to environmental quality and sustainability with a most higher social welfare.

AEU 638 LANDSCAPE ARCHITECTURE: 3 credits

Studying landscape rules and application in urban design structure as space and environment quality improving tools using different techniques assuring a better environment, living quality and good health for better human life. The course will be entailed with case studies and a project undertaken by students in a less developed precincts of the city.

ARCHITECTURE AND URBAN PLANNING COURSE DISCRPTIONS

GAE 620 MECHANICAL, ACOUSTICS AND LIGHTING IN ARCHITECTURE : 3 Credits.

The design of mechanical systems such as heating, ventilation and air conditioning unites, develop in acoustical control through planning, design and specialized acoustical standard. Study of light through visual observation and application of theories, methods of determining lighting conditions according to standards

GAE 621 SITE ENGINEERING AND MANAGEMENT: 3 Credit

Developing a good understanding and practice enabling architects to be in control of site and construction activities through a good capability for site organization to accommodate the construction operation utilities and tools; their arrangement according to the assigned construction method. site cleaning and stripping process, excavation methods and related tools. formwork type and erection, quantity surveying and construction control programs par chart diagram, prEEPdence diagram and program evaluation

and review techniques.

GAE 631 URBAN PLANNING: 3 Credit

Urban land use planning strategies and various land use control techniques which can be employed to carry out development policies; social implications of land use policy and practice

GAE 632 URBAN PLANNING: 3 Credit

An examination of the relationship between architecture and urban planning through contemporary interpretations of future urban form and the determinants of the location, spatial structure, growth, and land scale an attempt to bridge the hiatus between large-scale architectural design and incremental adjustments to urban dynamics.