

# AMERICAN UNIVERSITY OF SHARJAH

## ARCHITECTURE DEPARTMENT SCHOOL OF ARCHITECTURE AND DESIGN Dr. AHMED MOKHTAR

### Teaching Area

- ARC 333 Rough Construction Process.
- ARC 434 Finish Construction Process.
- ARC 354 Environmental Energies and Buildings Form / Building Science.
- ARC 455 Environmental Control Systems.
- ARC 436 Construction Drawings.
- ARC 366 Applied Computer-Aided Design.
- ARC 364 Computer-Aided Drawings.

### Education

Ph.D. in Engineering (Architectural), Concordia University, 1998  
Master of Engineering (Architectural), Concordia University, 1991  
Bachelor of Architecture (Degree is called "Architectural Engineering"), Cairo University, 1988

### Teaching Experience

Associate Professor, Architecture, American University of Sharjah, 3 years  
Assistant Professor, Architecture, American University of Sharjah, 4 years  
Assistant Professor, Architectural Engineering, Illinois Institute of Technology, 2 years

### Administrative Experience

Director of the Architecture Engineering Program, Illinois Institute of Technology, 2 years.

### Professional Experience

Architect and Design Coordinator, Arab Consulting Engineers, 13 Months  
Architect, Architectural Bureau for Consultation, 8 months  
Architect and Contractor, Nabil Mokhtar. Arch., 4 months

### Memberships

Founding member of the Architectural Engineering Institute (in the USA).  
Member of the American Society of Civil Engineers.  
Member of the Engineers and Architects Syndicate of Egypt.  
Member of the Society of Engineers in the United Arab Emirates.

### Publications

#### Books Authored:

- Mokhtar, A., (2006), "*Design Guidelines for Ablution Spaces in Mosques and Islamic Praying Facilities*," American University of Sharjah, United Arab Emirates, (In Arabic and English), ISBN 9948-427-02-5.

#### Articles in peer-reviewed Journals Authored:

- Mokhtar, A., (2006), "*Educational Architecture-Oriented Software Linking Conceptual Design and Solar Intensity*," Journal of Architectural Engineering, ASCE, Vol.12, No.2, June, pp.100-105.
- Mokhtar, A., (2003), "*Challenges of Designing Ablution Spaces in Mosques*," Journal of Architectural Engineering, ASCE, Vol.9, No.2, June, pp.55-61.
- Mokhtar, A., (2002), "*Coordinating and Customizing Design Information through the Internet*", Journal of Engineering, Construction and Architectural Management, Blackwell-Science Ltd., Volume 9, Issue 3, June, pp. 222-231.
- Mokhtar, A., (2000), "*Architectural Engineering Curriculum at Illinois Institute of Technology*", Journal of Architectural Engineering, ASCE, Vol.6, No.3, pp.91-94.
- Mokhtar, A., Bédard, C., Fazio, P., (2000), "*Collaborative Planning and Scheduling of Interrelated Design Changes*" Journal of Architectural Engineering, ASCE, Vol.6, No.2, pp.66-75.
- Mokhtar, A., Bédard, C., Fazio, P., (1998), "*Information Model for Managing Design Changes in a Collaborative Environment*," Journal of Computing in Civil Engineering, ASCE, Vol.12, No.2, pp.82-92.

### Research

#### Conference papers (last five years only)

- Mokhtar, A., (2007), "*BIM as Learning Media for Building Construction*," CAADRIA 2007 - The Twelfth Conference of the Association for Computer Aided Architectural Design in Asia, April 18-22, Nanjing, China

- Mokhtar, A., (2005), “*Standardizing Ablution Spaces in Public Facilities in the UAE*,” The Eighth Sharjah Urban Planning Symposium, April 3-5, Sharjah, UAE
- Mokhtar, A., (2005), “*Building Information Modeling As A Structure Learning Tool For Architecture Students*,” Conference on Future Directions in Science, Mathematics, and Technical Education, May 23-26, Universiti Brunei Darussalam, Brunei.
- Mokhtar, A., (2005), “*Using Building Information Modeling Software as an Educational Tool*,” Poster Presentation - UIA 2005 ISTANBUL World Congress of Architecture, July 3 – 10, Istanbul, Turkey.
- Mokhtar, A., (2004), “*Appreciating Sustainability through Building Science Education*,” Proceedings of the First Conference on Sustainable Architecture and Urban Development, Cairo, Egypt, February 24-26, Published by the Department of Architecture, Cairo University, Egypt.
- Mokhtar, A., Khan, M., (2004), “*Education – Oriented Visualization Model for Buildings Cross Ventilation*,” ACM SIGGRAPH Graphite 2004 Conference – International Conference on Computer Graphics and Interactive Techniques in Australasia and Southeast Asia, Singapore, June 15-18
  - Mokhtar, A., (2003), “*Computer-Assisted Learning of Energy Implication of Architectural Design*,” Proceedings of Building Integration Solutions, Architectural Engineering 2003 Conference, ASCE, Austin, Texas, 17-20 September.
  - Mokhtar, A., (2003) “*Defense Objective of Energy Codes*,” 8<sup>th</sup> Environmental and Sustainable Engineering Specialty Conference of the Canadian Society of Civil Engineers, Moncton, New-Brunswick, Canada, June 4 -7.
  - Mokhtar, A., (2003), “*The Use of IT in Learning the Relationship Between Buildings’ Form and Energy Consumption*,” Architectural Education for the New Millennium – Issues, Innovations and Traditions, UIA Architectural Education Commission 1<sup>st</sup> International Conference, Bibliotheca Alexandria, Egypt, Mar. 8-10, Abstract pp. 28. (Poster Format).

#### Articles in Magazines Authored: (selected)

- Mokhtar, A., (2004), “*Forced learning, the missing obligation*,” Emirates Real Estate, (in Arabic).
- Mokhtar, A., (2003), “*Towards Rationalizing Water Consumption*,” Sada Al Mabani, Year 1, No. 9, November, pp.68-69 (in Arabic)
- Mokhtar, A., (2003), “*Security Engineering in Buildings*,” Emirates Real Estate, Year 4, No. 38, October, pp.80. (in Arabic)
- Mokhtar, A., (2002), “*Readings in the Dubai Municipality Code of Thermal Insulation*,” Emirates Real Estate, Year 2, No.23, July, pp.34,36 (in Arabic).
- Mokhtar, A., (2002), “*Air Conditioning Using the Home Garden Land*,” Emirates Real Estate, Year 2, No.22, June, pp.48-49. (in Arabic).
- Mokhtar, A., (2002), “*The Strategic Incentive to regulate energy consumption in buildings in the GCC*,” Emirates Real Estate, Year 2, No.19, March, pp.52-54. (in Arabic).
- Mokhtar, A., (2001), “*The Need of The Emiraty Building Industry to A New Engineering Discipline*,” Emirates Real Estate, Year 2, No.9, May, pp.80.

#### **Creative Work**

##### Software Development

- Mokhtar, A., (2002) “*SIBS - Solar Intensity on Buildings Surfaces*”.
- Developed from scratch to help architecture students in selecting appropriate building forms that achieve energy conservation.

##### Video Production

- “*Design of Ablution Spaces - The Guide*” 20 minutes technical documentary video to guide architects in the design of ablution spaces. Director, script writer, and principal video editor.

#### **Service (most important only)**

- President of the Faculty Senate (2005-2006).
- Vice-President of the Faculty Senate (2004-2005).
- Secretary of the Faculty Senate (2003-2004).
- Chair of the Steering Committee for Middle States Accreditation Self Study. (2006 – 2009)
- Co-Chair of the 2006 conference of the Arab Society for Computer Aided Architecture Design.
- Chair and member of the department and school faculty personnel committee for both faculty rolling contract and promotion. (2005 – 2007)
- Assigned by the Vice Chancellor for Academic Affairs to update the Faculty Handbook.