Curriculum Vitae

PROF. DR. OSSAMA A. ABDOU

Consulting Architectural Engineer Professor of Architecture Head, Dept. of Architecture, Higher Institute of Engineering 15th of May City,

Cairo, Egypt

Nationality: Egyptian / US Permanent Resident

Marital Status: Married, with 5 Children

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SUMMARY OF CAPABILITIES & EXPERIENCES

Dr. Ossama Abdou has over forty years of academic and professional architectural/engineering experience. Currently, he is holding the position of Professor and Head of Architecture at the Higher Institute of Engineering at 15th of May City, Egypt. He was Professor of Architecture/Architectural Engineering at Drexel University; the University of Michigan as well as the University of Detroit in the US. Moreover, he taught at El-Shorouk Academy, Misr International University (MIU) in Egypt, and King Saud University in Riyadh, Saudi Arabia and was also adjunct faculty member in the Construction Engineering Program at the American University in Cairo (AUC).

Over more than three decades, Dr. Abdou has been engaged in various teaching and research activities in the fields of industrialized building systems, appropriate building technology, building construction, computer applications to building and simulation studies, green/sustainable architecture, environmental technology and energy conservation, building climatic design and healthy buildings (indoor air quality, etc.).



He has acquired a great appreciation for issues regarding building systems integration coupled with solid knowledge of the various building engineering systems as they relate to each other and to the architectural and structural designs while considering issues pertaining to building economics and life-cycle costing. The research projects were done either individually or were performed in collaboration with other researchers of related professional disciplines.

Dr. Abdou has contributed to 9 books and over 80 articles and technical peer- reviewed papers and reports. His research interests and experience cross the boundaries of disciplines and involve theories and methodologies of design studio teaching in architecture and urbanism; sustainable design processes, learning/teaching environments and workplaces, as well as user participation in the design and construction processes.

In addition to his academic experience, he has been a Partner and General Manager in the architectural engineering firm of Ahmed Abdou & Partners in Cairo.

Recently, Dr. O. Abdou has established a private Architectural Engineering Consulting Firm – IBTEKAR, International - in Cairo. His professional experience as an architect covers a broad range of large-scale and complex design projects including housing projects, institutional, commercial and office buildings as well as health care facilities and industrial plants. The firm provides full-service multidiscipline architectural engineering and consulting services, including preliminary site investigations, feasibility studies, architectural programming, permitting, and all stages of design in addition to construction supervision. Services are furnished to private industry and government agency clients to meet all necessary environmental requirements. His professional experience includes also practice in Germany, the United States and Saudi Arabia. This diversified exposure has allowed him not only to gain full understanding of the local construction issues, but has also given him insight into international design and construction practices.

A few years ago, Dr. Abdou has established the Center for Building Environmental Studies and Testing (C-BEST) in Cairo to pursue a role in the promotion of environmentally sustainable development and provide independent consultancy in building environmental studies and energy analysis and design. This has qualified him to serve as an invited expert through local and international organizations, giving talks and providing constructive feedback for current challenges

EDUCATION

The University of Michigan, College of Architecture & Urban Planning, Ann Arbor, Michigan, USA.

Doctor of Architecture, 1987.

<u>Doctoral Dissertation:</u> "The Impact of Passive Solar Energy Utilization on Multi-story Apartment Houses in Hot, Dry Climates."

The University of Oklahoma, School of Architecture Norman, Oklahoma, USA.

Master of Architecture, 1981.

Master Thesis: "The Housing Problem in Egypt and the Applicability of Industrialized Building Systems to Egypt."

Cairo University, Faculty of Engineering, Department of Architectural Engineering, Cairo, Egypt.

B.Sc. in Architectural Engineering, 1978.

LANGUAGES

English, German, Arabic, knowledge of French, Russian & Italian Read and Write Hieroglyphics

PROFESSIONAL EXPERIENCE

Consultant, AD Engineering,

Riyadh, KSA Aug 2009 – Aug 2010.

Consultant, Riyadh Techno Valley (RTV), King Saud University.

 A Guide for High-Performance Design for Proposed Buildings in RTV Project (Review).

Riyadh, Jan-Jun 2009.

Consultant to Project Management, Saudi Food and Drug Authority (SFDA) Headquarters and Reference Laboratories.

Riyadh, Mar 2008 – May 2009.

Consultant, King Abdullah Institute for Research and Consultative Studies (KAI-RCS)-King Saud University,

- King Khaled University @ Abha Project Reviews
- Al-Jouf University Design Reference Report

Riyadh, Nov 2006 - Aug 2008.

Consultant to the Architectural/Engineering Firm AWTAD

- Housing Projects,
- Educational Facilities. Riyadh,

Sept. 2006 - Aug 2007.

Consultant to RAE Training & Environmental Consultants Architectural/Environmental Consultation on Wadi Hanifa Project.

Riyadh, March – July 2006

Consultant to Hagler Bailly Services, Inc.

<u>USAID/EEPP</u> Project [Red Sea Sustainable Tourism Initiative (RSSTI)]:

Ecolodge and Deep Range Development

Contracted through the Egyptian Tourism Development Authority (TDA)

Cairo, April 2000 – June 2002

Vice President, LATITUDE, Inc., Architectural Engineering Consulting Services,

Baltimore, MD, USA, 1998-2005

- Residential Developments
- Building Remodeling and Interior Design
- Building Damage Assessment and Repair
- Alternative Energy Utilization

PROFESSIONAL EXPERIENCE (cont'd)

Co-founder and Principal, ENVIROPLAN, Architectural, Environmental and Planning Consultants,

Cairo, Egypt, 1998-2006.

Major Projects:

- Educational Facilities for 3 High Schools in Cairo and Alexandria.
- Civic and commercial center in Alexandria Metropolitan Area comprising a shopping mall, exhibition halls, office building and 3-star hotel, landscape design
- Housing Projects in Suez City, Egypt

Architectural Engineering Consultant

SAMIRAM Co., Giza – Egypt

Evaluation of Architectural Design and Planning Scheme and Proposal for a new Environmentally-friendly Residential and Touristic Development in Hurghada, Egypt. 1999-2000.

Co-founder and President, Center for Building Environmental Studies and Testing (C-BEST),

Cairo, Egypt, 1997 – present.

C-BEST was founded to pursue a role in the promotion of environmentally-sustainable development by promoting environmentally-sound initiatives and defining clear objectives for environmental policy.

Other activities and expertise include:

- Building Indoor Environmental Studies
- Pollution Prevention/Abatement Projects

- Environmental Impact Assessments & Policy Formation
- Solar and Other Renewable Energy Studies
 - Green Architecture
 - Energy Conservation
- Building Thermal Modeling & Design
- Environmental Testing & Publications

C-BEST is an official resource center of the <u>United States</u> <u>Department of Energy (US DOE)</u> promoting public domain computer simulation programs (DOE-2; BLAST), and offering independent consultancy in building energy simulation studies and design.

PROFESSIONAL EXPERIENCE (cont'd)

Partner and President, Ibtekar International,

Architectural, Engineering & Environmental Consultancy,

Cairo, Egypt, 1987 - present.

Major Projects:

- Housing Projects
- Industrial Plants
- Health Care Facilities
- Educational Facilities

Partner, Ahmed Abdou & Partners

Architectural, Engineering & Planning Consultants,

Cairo, Egypt, 1981 - 1987.

Major Projects:

- Housing Projects
- Shopping and Commercial Centers
- Office Buildings
- Industrial Plants (Pharmaceutical, Food Industry, Glass & Crystal Co.'s)
- Educational/Vocational Buildings
- Residential Buildings
- Multi-Use Projects
- Restoration & Adaptive Reuse of Historic Buildings

Architectural Engineering Consultant,

Philadelphia, Pennsylvania, USA, 1990 - 1996.

Major Clients:

- Tekh Steel Enterprises, Glen Burnie, MD
- Crescentville Church, Philadelphia, PA
- Radnor Mid-Atlantic Corporation, PA
- Islamic Society of Baltimore, MD

Architectural / Landscape Design, Terrafirma, Inc.

Ypsilanti, Michigan, USA, 1987.

Passive Solar Homes & Landscape Design

Building & Energy Design Consultant,

Ann Arbor, Michigan, USA, 1984-1986.

Projects:

Institutional & Residential Buildings

PROFESSIONAL EXPERIENCE

(cont'd)

Architectural Designer, John Robison Architects,

Oklahoma City, Oklahoma, USA, 1981. Projects:

- Residential Buildings
- Restaurants

Architectural Designer, International Petroleum Eng. Corporation,

Norman, Oklahoma, USA, 1980.

Projects:

- Company's Headquarters
- Manufacturing Facilities

Architectural Designer, Ahmed Abdou Architectural Engineering

Design Firm, Cairo, Egypt, 1975-1979. Major

Projects:

- Multistory Apartment Buildings
- Industrial & Commercial Facilities
- Office Complexes & Health Care Facilities
- Telecommunication Facilities

Architekturburo Kiessling,

Munich, Germany, 1977

Major Projects:

- Institutional Buildings
- Elderly Care Facilities

Poliet Engineering

Paris, France, 1976.

Projects:

- Prefabrication Plants,
- Prefabricated Multistory Residential Buildings

Cairo General Contracting Company

Cairo, Egypt, 1975.

Site/Field Construction Supervision:

Office Buildings & Industrial Facilities

ACADEMIC EXPERIENCE

- Visiting/Adjunct Prof. of Architecture, Faculty of Engineering, Misr International University (MIU) Cairo, Egypt, 2017 – present.
- Professor and Head of Architecture at the Higher Institute of Engineering, 15th of May City, Egypt
 September 2013-2018
- Professor and Head of Architecture at the Higher Institute of Engineering El-Shorouk Academy, Egypt August 2012- August 2013
- Professor of Architecture, College of Architecture & Planning, Dept. of Architecture & Building Sciences, King Saud University
 Riyadh, Saudi Arabia, 2006 2012.
- Professor of Architecture, Faculty of Engineering, Misr International University (MIU), Cairo, Egypt, 2003 – 2006.
- Adjunct Professor, Dept. of Architectural Engineering & Environmental Design, College of Engineering & Technology, Arab Academy for Science, Technology and Maritime Transport, Cairo, Egypt, 2004 2006.
- Adjunct Professor, Department of Engineering, Construction Engineering Unit, The American University in Cairo (AUC), Cairo, Egypt, 1998 – 2006.
- Associate Professor of Architecture, Faculty of Engineering, Misr International University (MIU), Cairo, Egypt, 1997 2002.
- Visiting Associate Professor, Modern Academy in Maadi (MAM), in collaboration with the University of the District of Columbia, Washington, DC in Cairo, Egypt, 1997-1998.
- Associate Professor of Architectural Engineering, College of Engineering, Misr Univ. for Science and Technology (MUST), 6th of October City Giza, Egypt. 1996 1997.
- Faculty Member, American Institute for Professional Training and Development, Timonium, MD, USA, 1996.

ACADEMIC XPERIENCE

(cont'd)

Assistant Professor, Architectural Engineering Program,
Department of Civil & Architectural Engineering,
Drexel University, Philadelphia, PA, USA, 1990-1996.

Asst./Assoc. Professor, Dept. of Architecture, Faculty of Engineering., Zagazig Univ. (Banha Branch), Cairo, Egypt. 1987-1996.

Lecturer, College of Architecture & Urban Planning, The Univ. of Michigan, Ann Arbor, Michigan, USA. 1984-1986.

Lecturer, School of Art, The University of Michigan, Ann Arbor, Michigan, USA. 1985.

Teaching & Research Assistant, College of Architecture & Urban Planning, The University of Michigan, Ann Arbor, Michigan, USA. 1982-1984.

Teaching Assistant, School of Art, The University of Michigan, Ann Arbor, Michigan, USA. 1983-1984.

Graduate Teaching Assistant, School of Architecture, University of Oklahoma, Norman, OK, USA, 1980-1981.

Instructor, Department of Architecture, Faculty of Engineering, Zagazig University, Cairo, Egypt, 1978-1979.

Adjunct Instructor, Department of Architecture, Faculty of Engineering, Cairo University, Cairo Egypt, 1978-1979.

Visiting Instructor, Department of Architecture, Faculty of Fine Arts, Helwan University, Cairo, Egypt, 1978.

PUBLICATIONS/ RESEARCH EXPERIENCE

Elhady, I. (2019). The Effect of Colors on the Mental Performance of Children with Mental Disability. Current unpublished research.

Abdou, O. (2010). "Daylighting: A Means For Sustainable Buildings." Paper submitted for presentation and publication in the 1st Interational Conference on Technology & Sustainability in the Built Environment. Riyadh: King Saud University. January.

- Aldakheel, R. and **Abdou**, **O.** (2008). Methods for Reducing the Cost of Interior Finishings in Small Housing Units in the City of Riyadh. Research sponsored by the Research Center of the College of Architecture and Planning, King Saud University.
- **Abdou, O.**, Elkholy, G. and Abdou, A. (2006). Correlation between Indoor Environmental Quality and Productivity in Buildings. Paper accepted for publication and presented at IAPS 19th Conference, 11-16 September, Alexandria, Egypt.
- **Abdou, O.** and Elhinnawy, T. (2005). Investigation into the Thermal Impact of Window-to-Wall Ratio, Building Orientation and Glazing Material in Office Spaces. *Al-Azhar University Journal*, October Issue.
- Elhinnawy, T. and **Abdou, O**. (2004). "Shading Device Calculator: A Tool for Sustaianable, Energy-Saving, Climatic Building Design." Paper submitted for presentation and publication at the 1st Cairo University Conference on Sustainable Architectural and Urban development, 26-28 February.
- **Abdou, O**. (2003). "Health Effects Related to Building Materials, Building Systems and Furnishings." Paper submitted for presentation and publication at *Al-Azhar 7th International Engineering Conference*, March.
- **Abdou, O.** and Elsawy, M. S. (2001). "Preliminary Study on the Effect of Building Materials' Emissions on Indoor Environments and Human Health." Proceedings, *Faculty of Fine Arts 3rd Scientific Conference*, April 17-19, Cairo.

- **Abdou, O.** and Abdellatif, O. (2001). "The Impact of Industrialized Building Technologies on Architecture." *Proceedings of the 3rd Engineering Conference, Monoufiya University,* Sept. 9-12, Cairo.
- **Abdou, O.** (2000). "Exploring Building Envelope Design Alternatives in the Architectural Design Studio." Paper submitted for presentation and publication at *the 1st Joint International Conference (UOH, MIU, UOP) on Architectural Education 2000, Sept. 20-23, Amman, Jordan.*
- Salama, A. M. and **Abdou**, **O**. (2000). "Sustainability: An Issue in Architectural Education?" Paper submitted for presentation and publication at *the 1st Joint International Conference (UOH, MIU,*

- *UOP) on Architectural Education 2000*, Sept. 20-23, Amman, Jordan.
- Abdou, O. (2000). "Green Architecture." Medina. March, pp.33-41.
- **Abdou, O.** and Salama, A. M. (1999). "Towards Sustainable Ecofriendly Human Settlements in Hot Climatic Conditions." Paper accepted for publication at the 2nd International Conference on Sustainability in Desert Regions, SDR'99, Nov. 20-22, United Arab Emirates University, Al-Ain, UAE.
- Salama, A. M. and **Abdou**, **O**. (1999). "Designing for Sustainable Future: Reflections on Architectural Education in Africa and the Middle East." Paper accepted for publication at *the 2nd International Conference on Sustainability in Desert Regions*, SDR'99, Nov. 20-22, United Arab Emirates University, Al-Ain, UAE.
- **Abdou, O.** and Elhinnawy, T. (1998). "Solar Envelope: A Design Concept for Preserving Solar Access to Buildings." *Proceedings of the Conference on Engineering and Environment*, May 9-10, Ain Shams University, Cairo, Egypt.
- Ide, N., Larson, D.C. and **Abdou, O.** (1998). "Insulation of Steel Studs in the Rehab of Masonry Structures." ASHRAE Transactions, Vol.104, Pt. 1A, pp. 430-439.

PUBLICATIONS/ RESEARCH EXPERIENCE

(cont'd)

- Elhinnawy, T. and **Abdou, O.** (1998). "Solar Energy Evaluation Using Sky Elements: Applicability to Building Design."
 - Paper accepted for publication at Cairo International Conference on Energy and Environment, Cairo, Egypt, May 11-14.
- **Abdou, O.** (1997). "Architectural Engineering: An Alternative to Architecture? *Proceedings of the UIA/MIU Conference on Cultural Heritage and Architectural Education*, Cairo, Egypt. Dec. 27-29, Paper No. 11.
- Elhinnawy, T. and **Abdou, O.** (1997). "Solar Radiation for Evaluating its Distribution for Application to Building Design." *Proceedings of Al-Azhar 5th International Engrg Conference, Dec. 19-22*, pp. 368 380.

- **Abdou, O.** (1997). "Effects of the Luminous Environment on Worker Productivity in Building Spaces." *ASCE Journal of Architectural Engineering*. September, pp. 124-132.
- **Abdou, O.** (1997). "The Thermal Performance of an Interlocking Fiber-reinforced Plastic Building Envelope System." *ASCE Journal of Architectural Engineering*.
- **Abdou, O.**, Murali, K. and Morsi, A. (1996). "Thermal Performance Evaluation of a Prefabricated Fiber-reinforced Plastic Building Envelope System." *Energy and Buildings*. Vol. 24, pp. 77-83.
- **Abdou, O.** (1996). "Managing Construction Risks." *ASCE Journal of Architectural Engineering*, Vol. 2, No. 1, pp. 3-10, March.
- **Abdou, O.** and Lorsch, H. (1995). "Improving Worker Productivity through a Better Indoor Environment." *Proceedings of the 2nd International Conference on Indoor Air Quality, Ventilation and Energy Conservation in Buildings*, Montreal, Canada, May 9-12, pp. 881-904

- **Abdou, O.** and Peyton, T. (1995). "Industrial Cleanrooms: Architectural Engineering Considerations." *ASCE Journal of Architectural Engineering*, Vol. 1, No. 1, pp. 37-52, March.
- Peyton, T. and **Abdou**, **O**. (1995). "Environmental Control Concepts for Industrial Cleanroom Facilities." *ASCE Journal of Architectural Engineering*, Vol. 1, No. 1, pp. 53-63, March.
- Sando, F. and **Abdou. O**. (1995). "Environmental / Psychrometric Test Cells in Industrial Facilities." *ASCE Journal of Architectural Engineering*, Vol. 1, No., pp. 108-114, September.
- **Abdou, O.** and Murali, K. (1995). "Investigation into the Thermal Bridging Effect of an Innovative Cavity Wall System Tie." *Building Research Journal*, Vol. 4, No. 1, pp. 19-37.
- **Abdou. O.** and Murali, K. (1994). "The Effect of Air Cells and Mortar Joints on the Thermal Resistance of Concrete Masonry Walls." *Energy and Buildings*, 21, pp. 111-119.

- Lorsch, H. and **Abdou, O.** (1994). "The Effect of Indoor Environment on Occupant Productivity -- Part 1: Recent Studies, Measures and Costs." *ASHRAE Transactions*, Vol. 100, Pt. 2, pp. 741-749.
- Lorsch, H. and **Abdou, O.** (1994). "The Effect of Indoor Environment on Occupant Productivity -- Part 2: Effect of Temperature." *ASHRAE Transactions*, Vol. 100, Pt. 2, pp. 895-901.
- **Abdou, O.** and Lorsch, H. (1994). "The Effect of Indoor Environment on Occupant Productivity -- Part 3: Effect of Indoor Air Quality." *ASHRAE Transactions*, Vol. 100, Pt. 2, pp. 902-913.
- **Abdou, O.** and Sando, F. (1994). "Microbial Contamination in Building HVAC Systems: Causes and Solutions." *Building Research Journal*, Vol. 3, No. 1, pp. 23-41.
- **Abdou, O.** (1994). "Energy Performance Evaluation of Fenestration Patterns in Non-Daylit Peripheral Office Spaces." *ASHRAE Transactions*, Vol. 100, Pt. 1, pp. 390-401.

- **Abdou, O.** (1993). "An Approach to Integrated Design and Construction Planning Systems." *Proceedings of the Annual ASEE Conference* in Urbana, IL, June.
- Morris, J. and Abdou, O. (1993). "Explorations into 'Intelligent Design' in Architectural Engineering Education." *Proceedings, Annual American Society for Engineering Education (ASEE) Conference* in Urbana, IL, June.
- **Abdou, O.** and Burdette, J. (1993). "The Performance of Masonry Stairs." *Proceedings of the 6th North American Masonry Conference*, Philadelphia, PA, June.
- **Abdou, O.** and Hamid, O. (1993). "Thermal Energy Performance of Loadbearing Concrete Masonry in Residential Buildings in Hot Dry Climates." *Energy Sources Journal*, Vol. 15, pp. 159-170.
- Sakr, Y. and **Abdou**, **O**. (1992). "Integration: A New Horizon in Teaching CAD." *Proceedings of the Annual American Society for Engineering Education Conference* in

- Toledo, OH, June 21-25, pp. 729-733.
- Hamid, A., **Abdou, O.** and Ghanem, G. (1992). "Concrete Masonry Design Competition: Hands-on Experience for Undergraduate Students." *Proceedings of the 6th Canadian Masonry Symposium,* Saskatoon, Saskatchewan, Canada, June 15-17, pp. 147-154.
- **Abdou, O.** (1992). "The Impact of Window Size and Location on Energy Consumption in Office Buildings." *Proceedings of the CIB'92 Conference,* Montreal, Canada, May.
- **Abdou, O.** and Hamid, A. (1991). "Thermal Performance Analysis of Pre-Insulated Concrete Masonry Walls." *Proceedings of the 9th International Brick/Block Masonry Conference,* Berlin, Germany, Oct., pp. 1152-1159.
- **Abdou, O.** (1991). "The Dynamic Thermal Performance of Masonry Wall Assemblies of Similar Thermal Resistance." *Proceedings of the 9th International Brick/Block Masonry Conference*, Berlin, Germany, Oct., pp. 1144-1151.

- **Abdou, O.** (1991). "Hands-on Experience in the Class-room: A Dynamic exposure to Architectural, Structural, Environmental and Construction Concepts." *Proceedings of the Annual American Society for Engineering Education (ASEE) Conference* in New Orleans, LA, June 16-19, pp. 729-733.
- **Abdou, O.** (1991). "A Computer-Aided Process for Simulating the Thermal Performance of Buildings under Different Orientations." *Proceedings of the 22nd Annual Conference on Modeling and Simulation*, Pittsburgh, PA, May 2-3.
- **Abdou, O.** and Hamid, A. (1990). "Loadbearing Concrete Masonry: A Viable Energy-Efficient Building System in Hot Dry Climates." *Proceedings of the 2nd International Symposium on Renewable Energy Sources*, Cairo, Egypt, Oct. 1-4.
- Vakalo, E-G. and **Abdou, O**. (1990). "Orientation and the Thermal Behavior of Housing in Hot, Dry Climates." *Ekistiks*, Vol. 344/345, Sept/Oct Nov/Dec, pp. 337-341.

- **Abdou, O.** and Mitchell, J. (1990). "Understanding Industrialized Building --Goals for an Architectural Engineering Curriculum." Proceedings of the Annual American Society for Engineering Education Conference Toronto, Canada, June 24-26, pp. 88-90.
- **Abdou, O.** (1990). "The Impact of Building Form on the Thermal Performance of Buildings." Proceedings of the 4th National Conference on Microcomputer Applications in Energy, Tucson, AZ, April 25-27, pp. 43-49.
- **Abdou, O.** and Mitchell, J. (1990). "Shading Devices for Improved Energy Conservation in Office Buildings." Proceedings of the 15th Passive Solar Energy Conference, Austin, TX, March 19-22, pp. 65-70.
- Vakalo, E-G. and **Abdou, O.** (1989). "Assessing and Improving the Thermal Performance of Housing in Hot, Dry Climates." Proceedings of the Symposium on Architecture and Building Construction Issues, Baton Rouge, LA, February, pp. 55-58.

- **Abdou, O.** (1987). "The Impact of Passive Solar Building Parameters on the Thermal Behavior of Buildings." Proceedings of the International Solar Energy Conference (Solar '87), Hamburg. Germany. Sept., pp. 3374-3378.
- **Abdou, O.** (1986). "Investigations and Proposed Strategies Aimed at Resolving the Urbanization Crisis in Islamic Countries." Paper submitted to *King Fahd Award for Design and Research Competition in Islamic Architecture*, Istanbul, Turkey.
- **Abdou, O.** (1986). "A Critical Look at the Urban Housing Problem in Egypt." *Journal of the Egyptian Student* Association of USA and Canada, Washington, DC, June.
- **Abdou, O.** and Vakalo, E-G. (1986). "Toward the Enhancement of the Thermal Performance of Housing in Hot, Dry Climates." *Proceedings of the 1st Intern. Symposium on Solar Energy*, Cairo, Egypt, March.

CONTRIBUTION TO BOOKS/ MANUALS

- Aldakheel, R., Bahammam, A. and **Abdou, O. (2008)**. Methods for Reducing the Cost of Interior Finishings in Small Housing Units in the City of Riyadh. Riyadh: KSU Press.
- BaHammam, A., Alhussayn, M., Idris, M., **Abdou, O.,** and Ballouz, I. (2008). "Provision of Housing through User Participation." (in Arabic). Riyadh: King Abdullah bin Abdulaziz Foundation Chair for Developmental Housing (King Saud University).
- Abdou, O. (2007). Chapter VIII. "Appropriate Building Technology" in Affordable Housing, Hope for the Homeless. (in Arabic).(ed.) Dr. A. Bahammam, Riyadh: Research & Information Center, College of Architecture & Planning, King Saud University.
- **Abdou, O. (2003).** "Brick Architecture of the City of Rosetta" in Egypt: Genius Loci; Environmental Architecture and Vernacular Architects, ed., Committee on Architecture. Cairo: Ministry of Culture, Supreme Council of Culture, pp. 27-30.
- **Abdou, O. (2003).** "The Architectural Heritage of the City of Quseir" in Egypt: Genius Loci- Environmental Architecture and Vernacular Architects, ed., Committee on Architecture. Cairo: Ministry of Culture, Supreme Council of Culture, pp. 41-44.
- **Abdou, O.** (in print). "Passive Cooling Systems." A newly developed section to be included in a chapter in a forthcoming ASHRAE Handbook of Applications.
- **Abdou, O. (1997).** "Thermal Mass." A newly developed section included in a chapter on Building Envelopes in the ASHRAE Handbook of Fundamentals.
- **Abdou, O.** and Mitchell, J. (1995). "A Computer-based Building Systems Design Manual for Undergraduate Instruction in Architectural Engineering." Drexel University TLC Grant.
- Wehrer, J., Vakalo, E-G., **Abdou, O**. and Shuler, M. (1985). "Fundamentals of Design." Instructional Manual for Introductory Design Studios, College of Arch and UP, The University of Michigan, Ann Arbor, MI.

TECHNICAL REPORTS

- Alghamdi, M. and Abdou, O. (2008). Evaluation of the Design Entries of the International Architectural Competition for the Saudi Arabian Pavilion for the Shanghai Expo 2010 in China. Ministry of Municipal and Rural Affairs, Riyadh, Saudi Arabia.
- Aldakheel, R. and **Abdou, O. (2008).** "Methods for Reducing the Cost of Interior Finishings in Small Housing Units in the City of Riyadh." Research performed for the Research Center of the College of Architecture and Planning, King Saud University.
- Al-Zahrani, M. and **Abdou, O. (2006).** "Merryland: Arriyadh Touristic Resort Project in Al-Haissiyah Valley: Environmental Studies and Classification." Report performed for RAE Training and Environmental Consultants, Riyadh, Saudi Arabia. June.
- **Abdou. O. (2001).** "Building Materials, Design, and Construction: Energy, Environmental, and Climatic Aspects." Research performed for Hagler Bailly Services, Inc. for the USAID/EEPP Red Sea Sustainable Tourism Initiative Project, c/o Tourism Development Authority, Cairo, June.
- **Abdou, O. (2000).** "Best Practices Guidelines: Building Materials for Ecolodges." Research performed for Hagler Bailly Services, Inc. for the USAID/EEPP Red Sea Sustainable Tourism Initiative Project, c/o Tourism Development Authority, Cairo, June.
- **Abdou, O. (1999).** "Technical Evaluation of Architectural Design and Planning Scheme and Proposal for a new Environmentally-Friendly Residential and Touristic Development in Hurghada. Work performed for SAMIRAM Co., Giza, Egypt.
- Lorsch, H. and **Abdou, O. (1993).** "The Effect of Indoor Environment on Office Worker Productivity -- A Quantifiable Approach." Research performed for the Radnor Mid-Atlantic Corporation, Philadelphia, PA, August.
- Adiv, A., **Abdou, O.** and Abdou, A. **(1984).** "Proposal for Intercity Passenger and Freight Transport Analysis for Egypt." Transport Planning Authority, Ministry of Transport, Cairo, Egypt.

TECHNICAL REPORTS (cont'd)

Abdou, O., Bergstrom, J. and Percich, G. (1983). "Space Use/Cost Performance of the Architecture Studio of the Art and Architecture

- Building." College of Architecture and Urban Planning, The University of Michigan, Ann Arbor, MI.
- **Abdou, O. (1983).** "Climatic Impacts on Passive Solar Strategies." Monograph, College of Architecture and Urban Planning, The University of Michigan, Ann Arbor, MI.
- **Abdou, O. (1983).** "The Design of Fixed Shading Devices for the City of Ann Arbor." Monograph, College of A&UP The University of Michigan, Ann Arbor, MI.
- **Abdou, O. (1982).** "Proposal for a Design and Procurement Process of an Industrialized Building System for Post Offices."

 Monograph, College of Architecture and Urban Planning, The University of Michigan, Ann Arbor, MI.
- Oberdick, W., Wu, H., Kim, K. and **Abdou, O. (1981).** "Solar Conservation: Appropriate Technology Retrofit of Ann Arbor Housing." Research Report, Building Technology Laboratory, College of Architecture and Urban Planning, The University of Michigan. (Sponsored by the City of Ann Arbor and the US Department of Energy).
- Brandle, K., Wu, H., Boonyatikarn, S., **Abdou, O.** and Kim, K. **(1982).** "Energy Audit of Four University Buildings -- A University- wide Energy Audit Program." Building Technology Laboratory, College of Architecture and Urban Planning, The University of Michigan, Ann Arbor, MI

COMPUTER SOFTWARE DEVELOPMENT

- Abdou, O. and Elhinnawy, T. (2005). "Solar Envelope Calculator."

 An Interactive Visual Basic/AutoCAD Computer Code developed to facilitate the determination of optimum building envelopes for solar access.
- Abdou, O. and Elhinnawy, T. (2004). "Shading Device Calculator." An Interactive Visual Basic/AutoCAD Computer Code developed to facilitate the accurate design of shading devices in buildings.
- Abdou, O. and Mitchell, J. (1996). "An Electronic Building Systems Design Manual for Undergraduate Instruction in Architectural Engineering." *Drexel University*, Drexel TLC Grant.
- Abdou, O. (1982). "Climatic Decisions at the Sketch Design Stage." An Interactive FORTRAN IV Computer Program and User

- Manual, *College of Architecture and Urban Planning*, The University of Michigan, Ann Arbor, MI.
- Abdou, O., Korrek, W. and Bicknell, J. (1982). "F-Chart Performance and Economic Analysis." An Interactive FORTRAN IV/WATFIV Computer Program and User Manual. Department of Mechanical Engineering, The University of Michigan, Ann Arbor, MI..

OTHER RELEVANT EXPERIENCE

UNIVERSITY SERVICE

Academic Administrative Assignments

- Head, Dept. of Architecture, Higher Institute of Engineering, 15th of May Academy, Egypt. Sept. 2013-2018
- Head, Dept. of Architecture, Higher Institute of Engineering, Shorouk Academy, Shorouk City, Egypt. August, 2012- Aug. 2013
- Acting Dean, Faculty of Engineering, Nahda University at Beni Suef (NUB), May July 2012
- Consultant to Dar Al-Oloom University, Riyadh, Saudi Arabia to assist in developing an Undergraduate Curriculum *in Architecture*, *Interior Design and Graphic Design*. Nov 2009-April 2010.
- Coordinator, International Academic Cooperation, College of Architecture and Planning, King Saud University, Riyadh, Nov. 2008 2012.
- Director, Graduate Studies (Master Level), Dept. of Architecture & Building Sciences, College of Architecture and Planning, King Saud University, Riyadh, Sept. 2006 2012.
- Consultant to Taiba University in Madinah, Saudi Arabia to develop an Undergraduate Curriculum *in Architectural Engineering*, College of Engineering. May 2008.
- Development of an Undergraduate Curriculum *in Architectural Engineering*, College of Architecture & Planning, King Saud University, Riyadh, Saudi Arabia, April, 2006.
- Head of MIU's Architectural Delegate to Bari Polytechnical University, Bari, Italy, to participate in the Urban Design Development and Salt Landscape of the City of Margherita di Savoia, June 2004.

Head of MIU's Architectural Delegate to Technische Universitat Berlin (TU Berlin) to participate in the International Summer School sponsored by TU Berlin, July 2002.

OTHER RELEVANT EXPERIENCE (cont'd)

Academic Administrative Assignments (cont'd)

- Development of an Undergraduate Curriculum *in Civil Engineering* for the College of Engineering, MIU, Cairo, Egypt, 2000.
- Proposal for the Development of Laboratories for the Department of Civil Engineering, Misr International University (MIU), Cairo, Egypt, 2000.
 - 1. Construction Materials Lab & Soil Mechanics Lab.
 - 2. Construction Surveying Lab.
- Development of an Undergraduate Program in Building Systems Engineering in the Department of Architecture at MIU, Cairo, Egypt, 1999.
- Development of Academic Undergraduate Curricula for *Architectural Engineering* and *Construction Engineering* for the College of Engineering, Misr University for Science and Technology (MUST), 6th of October City, Giza, Egypt, 1997.
- Development of a Proposal for a Building Materials Laboratory for the College of Engineering, Misr University for Science and Technology (MUST), 6th of October City, Giza, Egypt, 1996.
- Planning and Layout Design for the Laboratories of the College of Pharmacy, Misr Univ. for Science and Technology (MUST), 6th of October City, Giza, Egypt, 1996.
- Proposal submitted to the Civil and Architectural Engineering Department Head to establish a nationally/internationally recognized <u>Building Envelope Research Institute</u> within the Department at Drexel University. 1994.
- Member, Civil Engineering Laboratory Committee (NSF Project). 1992-94.
- Member, Civil and Architectural Engineering Curriculum Committee, BSAE Curriculum Subcommittee, Drexel University, 1992-1996.
- Member, Space Committee, Department of Civil & Architectural Engineering, Drexel University (Study, allocation and coordination of spaces for the department's programs and institutes), 1991-1993.

Member, Faculty Search Committee, Department of Civil and Architectural Engineering, Drexel University, 1991-1994.

OTHER RELEVANT EXPERIENCE (cont'd)

Academic Administrative Assignments (cont'd)

- Study and Evaluation of the Transition of the Curriculum for Enhanced Educational Experience for Engineering (E⁴) Students into the Traditional Architectural Engineering Curriculum at Drexel, 1990-1991.
- Member, Construction Committee, Zagazig University (Banha Branch, Cairo, Egypt. (Evaluation and Supervision of New and Existing University Buildings), 1987-1989.
- Coordinator, "Teach-In" Discussions related to Creativity and Diversity in the Fields of Art and Architecture. College of Architecture and Urban Planning, The University of Michigan, Ann Arbor, MI, 1987.
- Member, Admissions Committee, Doctoral Program in Architecture, The University of Michigan. 1987.
- Monitor and Coordinator, "Willeke Student Design Competition." College of Architecture and Urban Planning, The University of Michigan. 1987.
- University of Michigan's Delegate to the ACSA/AIA Teacher's Seminar, Cranbrook Academy of Art, Michigan, June 1983.

Advising

- External Examiner, Senior Capstone Project, Dept. of Architecture, King Faisal University, Dammam, Saudi Arabia, 2008-09.
- External Examiner, Senior Capstone Project, Dept. of Architecture Faculty of Engineering @ Shoubra, Banha University, 2004-2006.
- Academic Advisor, Department of Architecture, Misr International University (MIU), 1997 2006.
- Faculty Advisor, Drexel University Student Chapter for the American Society of Heating, Refrigerating and Air- Conditioning Engineers (ASHRAE), 1994-1996.

OTHER RELEVANT EXPERIENCE

(cont'd)

Advising (cont'd)

Senior Honors Thesis Co-advisor: Derek Robert Scott
Energy Conservation and Public Housing: Implementation and
Design Options, Drexel University, 1995

Master Thesis Examining Committee, Department of Civil and Architectural Engineering, Drexel University:

- 1. Development of Corrosion Resistant Composite Reinforcement for Concrete (by K. Vachekrilas), 1994.
- 2. Development of Fiber-Reinforced Plastic Wall Ties for Masonry Construction (by J. Burdette), 1994.
- Graduate Student Research Advisor on topics related to Building Envelope Environmental Performance, Department of C&AE, Drexel University.
- Academic Advisor, Department of Civil and Architectural Engineering, Drexel University, 1991-1996.
- Project Co-director, Annual Student Masonry Design Competition, Drexel University (sponsored by the Pennsylvania Concrete Masonry Association and the Delaware Valley Masonry Association), 1994-1996.
- Project Advisor, E4 Students, Freshman Year Final Design Projects, Drexel University, 1991.
- Senior Design Projects and Theses, Department of Civil and Architectural Engineering, Drexel University, 1989-1996.

OTHER RELEVANT EXPERIENCE (cont'd)

Advising (cont'd)

Master/Doctoral Thesis Advisor / External Examiner on Topics Related to Housing, Construction Systems, and Energy-conscious / Bioclimatic Building Design and Analysis at the following Institutions:

- Zagazig University, Department of Architecture, Cairo, Egypt, 1987-1989.
- Drexel University, Dept. of Civil & Architectural Engineering, Philadelphia, USA, 1991-1996.
- Al-Azhar University, Department of Architecture, Cairo, Egypt, 1998 – 2004

- Helwan University @ Matariya, Department of Architecture, Cairo, Egypt, 2000-2009
- Cairo University, Dept. of Architecture, Cairo, Egypt, 2004.
- Ain Shams University, Dept of Architecture, Cairo, Egypt, 2005 –
 2006
- King Saud/ University, Riyadh, SA, Department of Architecture, Saudi Arabia, 2007-present.
- King Faisal University, Dammam, SA, Department of Architecture, Saudi Arabia, 2007-present.
- El-Minia University, El-Minia, Department of Architectural Engineering, 2013
- Benha University, Dept. of Architecture, 2013 2018.

OTHER RELEVANT EXPERIENCE (cont'd)

PROFESSIONAL ACTIVITIES

Technical and Editorial Committees

- Peer Reviewer, Journal of Building Construction and Planning Research (JBCPR), since April 2021.
- Member, Peer Review Committee, 1st International Conference on Technology Sustainability in the Built Environment. Riyadh, Saudi Arabia, Jan. 2010.
- Member, Peer Review Committee, 3rd International Symposium on Housing, Supreme Commission on Riyadh Development, Riyadh, Saudi Arabia, May 2007.
- Member, Editorial Board, King Saud University (KSU) Journal, (Architecture and Planning Division), since August 2006.
- Head, Delegation of the Dept. of Architecture & Building Science at KSU, to participate in a workshop on "Technical Requirements for Fire Protection in Buildings," organized by the Saudi Building Code National Committee, Riyadh, May, 2006
- Member, Organizing Committee, 1st International Conference on Restoration of Heritage Masonry Structures, Cairo 24-27 April, 2006.
- Member, Peer Review Committee, 1st Symposium on Charitable and Affordable Housing in Saudi Arabia, King Faisal University, Dammam, 18 19 April, 2006.

- Member, Editorial-Scientific Board of Al Azhar University Engineering Journal (since 2004).
- Peer Review Committee, 8th International Engineering Conference of Al-Azhar University, Cairo, December 2004.
- Member, Organizing Committee and Reviewer, 2nd International MIU Conference (Mediterranean Architecture). 15-17 February, 2004.

OTHER RELEVANT EXPERIENCE (cont'd)

Technical and Editorial Committees (cont'd)

- Member, Building Simulation Group for the Establishment of Thermal Criteria and Appropriate Construction Practices for the Toshka Area (hot, dry environment), Upper Egypt, Egypt.

 National Housing and Building Research Center, Cairo, Egypt. (2000 2006).
- Member, Standing Egyptian and Arab Building Code Committees. (Sub-Committees: Site Development, Building Envelopes, Non-Loadbearing Walls), National Housing and Building Research Center, Cairo, Egypt. (1999 2005).
- Member, Committee on Establishing Effective Building Systems for Hot Climates. National Housing and Building Research Center, Cairo, Egypt. (1999 2005)
- Member, Organizing Committee and Reviewer, *UIA-MIU Conference on Cultural Heritage and Architectural Education*, Dec. 27-29, 1997, Cairo, Egypt 1997.
- Member, *Advisory Board of Directors*, the American Institute for Professional Training and Development (AIPTD), Timonium, MD, USA. 1996.
- Member, Technical Committee TC 04.04 (BuildingMaterials & Building Envelope Performance), American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), Atlanta, GA, USA.
- Member, *Publications Committee*, American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), Cairo Branch, Egypt.

- Member, *Industrial Buildings Committee*, American Society of Civil Engineers (ASCE), Architectural Engineering Division, New York, NY, USA.
- Editorial Board, Drexel Insulation Report, the Newsletter of the Center for Insulation Technology, Drexel University, Philadelphia, PA, USA. (1991-1996)

OTHER RELEVANT EXPERIENCE (cont'd)

Technical and Editorial Committees (cont'd)

- Session Program Coordinator, American Society of Civil Engineers (ASCE), Architectural Engineering Division; ASCE Annual Convention, November 10-14, Washington, DC, USA.1996.
 - Member, *Technical Committee*, Sixth North American Masonry Conference (6NAMC), Philadelphia, PA, 1993
- Session Organizer, *CAD in Architectural Engineering*, 23rd Annual Conference on Modeling and Simulation, Pittsburgh, PA, USA, April 30-May 1, 1992.
- Chair, Architectural Engineering Division, American Society for Engineering Education (ASEE) Conference, Urbana-Champaign, IL, USA (1992-93).
- Program Chair, *Architectural Engineering Division*, American Society for Engineering Education (ASEE) Conference, Toledo, OH, USA (1991-92).
- Chair, *Peer Review Committee*, Architectural Engineering Division, American Society for Engineering Education (ASEE) Conference, (1991-92).
 - Reviewer, Sixth North American Masonry Conference
 (6NAMC) Research Papers. (1993)
 - Peer Reviewer:
 - 1. National Science Foundation (NSF)-sponsored Research Proposals
 - 2. *Journal of Materials in Civil Engineering* (JMCE), American Society of Civil Engineers (ASCE).
 - 3. *Journal of Architectural Engineering* (JAE), American Society of Civil Engineers (ASCE).
 - 4. Journal of the American Society of Mechanical Engineers (ASME).

OTHER RELEVANT EXPERIENCE

(cont'd)

Technical and Editorial Committees (cont'd)

- Technical Reviewer:
 - 1. King Saud University Publications, Architecture / Engineering, Riyadh, Saudia Arabia.
 - 2. Emirates Journal for Engineering Research, <u>United Arab</u> Emirates (UAE) University, Al-Ain, UAE.
- Member, Healthy Buildings (HB) Work Programme,
 International Union of Architects (UIA), Paris, France.
- Development and Organization of Professional Development Workshops and Seminars for Continuing Education of Building Professionals, co-sponsored by AIPTD and Drexel University and endorsed by the Architectural Engineering Division (AED) of ASCE.

INVITED LECTURES AND CRITIQUES

"Sustainability Issues in Building Design and Construction." Presentations and Workshops given at several academic institutions and professional forums in Egypt and Saudi Arabia (since Feb 2006)

"Indoor Air Quality (IAQ) Issues in Buildings."
Lectures/Presentations given at various forums in Egypt.
(Since June 2013).

"Personal Professional Work."

Presentation given at the Bund der Aegypter Deutscher Bildung, Cairo, June 2013.

"The Relocation and Reconstruction of Hager El-Dabiah Village in Upper Egypt."

Presentation sponsored by the Saudi Umran Society at the King Abdulaziz Historic Center, Riyadh, Nov. 2006

"The Impact of Building Materials and Furnishings on Indoor Air Quality."

Presentation given in the Department of Architecture, Alexandria University, Alexandria, July 2003.

"Architecture without Architects in Egypt: The Cases of Rosetta, Ouseir and Suez."

Presentation given to the Committee on Architecture, Supreme Council of Culture, Cairo, February 2002.

"Indoor Air Quality Issues in Public Buildings."

Lecture given in the Department of Architecture, Faculty of Fine Arts in Cairo, April 2001.

"Modern and Contemporary Art and Architecture in the World." Lecture given in the School of Art, The American University in Cairo (AUC), April, 2000.

"Cross-Cultural Art Visualization."

Semester-long Seminar given to Graduate Students of the University of the District of Columbia (UDC) in Washington, DC at the Maadi Modern Academy in Cairo. Academic Fall Term 1999.

INVITED LECTURES AND CRITIQUES (cont'd)

"Utilization of Solar Energy in Buildings."

Lecture given at the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) - Philadelphia Chapter, February 1994.

"Creativity and Ethics in Design."

A 2-day seminar held at Drexel University, organized with Dr. F. Seif of the University of Washington, Seattle, June 1992.

"Traditional Architecture of the Middle East."

Lecture given at the Department of Civil and Architectural Engineering, Drexel University, Philadelphia, October 1991.

"Architecture in the Middle East."

Lecture given at the Department of Civil and Architectural Engineering, Drexel University, Philadelphia, September 1990.

"Housing in Third World Countries."

Lecture given at the College of Architecture and Urban Planning, The University of Michigan, Ann Arbor, MI, March, 1987.

"Design and Planning in Hot Climates."

Lecture given at the Department of Architecture, University of Detroit, Detroit, MI, August 1986.

"Circulation Systems in Buildings."

Lecture given at the College of Architecture and Urban Planning, The University of Michigan, Ann Arbor, MI, October, 1982.

"Industrialized Building Systems."

Lecture given at the School of Architecture, The University of Oklahoma, Norman, OK, May 1981.

"The Prefabrication of Buildings and Building Components."

Seminar held under the direction of Jean Prouve at the Department of Architecture, Technische Universität München, Germany, July 1976.

AWARDS/ HONORS

Award of Appreciation, High Institute of Engineering, 15th May City, Cairo, Egypt. 2018

Award of Appreciation, Shorouk Academy, Cairo, Egypt. 2013.

Listed in Madison Who's Who in Architecture and Environmental Design, New York, USA. 2008.

Jury Member, International Architectural Competition for the *Saudi Arabian Pavilion*, Shanghai, China - Expo 2010.

Ministry of Municipal and Rural Affairs, Riyadh, Saudi Arabia, February 2008.

Nationwide Architectural Exhibit and TV Interview on "Architecture without Architects in Egypt: The Cases of the Cities of Rosetta, Quseir and Suez." Cairo, Egypt, June 2004.

Jury Member and External Examiner, Senior Year Project, Department of Architecture, Technical University of Berlin (TU Berlin), 2002.

Third Prize, *Architectural Design Competition*,
Housing Units for the City of Suez (for the Cooperative Housing Association of the City of Suez), Egypt, 1998.

ASCE Award of Appreciation in recognition of Distinguished Service and Leadership, American Society of Civil Engineers, 1996-1997.

Nominated Best Professor, Drexel University, Academic Years

1994/95 and 1995/96.

ASHRAE *Award of Appreciation*, Philadelphia ASHRAE Chapter, 1995.

ASHRAE Conference, Orlando, Florida: Research Paper Sell- out, 1994.

Teaching/Learning Committee (TLC) Grant, Drexel University, 1992-93.

Faculty Development Mini-Grant, Drexel University, 1990-91.

AWARDS/ HONORS (cont'd)

Citation, Architectural Design Competition, Office Building and Exhibition Facilities for Oriental Weavers Co., 10th of Ramadan City, Egypt, 1988.

Design Juror, International/Local Design Competitions, Cairo – Egypt. 2013 – present.

Guest Critic in *Design Juries and Theses Evaluations*, College of Architecture and Urban Planning, The University of Michigan, 1982-86.

Scholarship, Egyptian Cultural and Educational Bureau (Doctoral Studies), Washington, DC, 1982-1986.

Fellowship, University of Oklahoma (Graduate Studies), 1980-1981.

Academic Achievement Award, Cairo University, Egypt, 1973-1974.

REGISTRATION/ CERTIFICATION

Registered Architect (# 4222/4), Syndicate of Engineers, Architectural Engineering Section, Cairo, Egypt.

Certified Consulting Architectural Engineer (# 2296/2), Syndicate of Engineers, Architectural Engineering Section, Cairo, Egypt.

PROFESSIONAL AFFILIATIONS

Saudi Umran Society, Riyadh, Kingdom of Saudi Arabia.

Syndicate of Engineers, Architectural Engineering Section, Cairo, Egypt.

The Egyptian Society of Architects, Cairo, Egypt. Egyptian

Society of Earth Construction, Cairo, Egypt.

International Union of Architects (UIA), Paris, France. (Healthy Buildings Work Group)

American Society of Heating, Refrigerating and Air- Conditioning Engineers (ASHRAE), Atlanta, GA, USA.

American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), Cairo Branch, Egypt.

American Society of Civil Engineers (ASCE), Architectural Engineering Division (AED), New York, NY, USA. American

Solar Energy Society (ASES), Boulder, CO, USA. International Solar

Energy Society (ISES), Victoria, Australia.

American Society for Engineering Education (ASEE), Washington, DC, USA.

The Masonry Society (TMS), Boulder, CO, USA.

Pennsylvania Concrete Masonry Association (PCMA), Lebanon, PA, USA.

American Institute for Professional Training and Development (AIPTD), Timonium, MD, USA.

APPENDIX

COURSEWORK PERFORMED AT VARIOUS EDUCATIONAL INSTITUTIONS

College of Architecture and Urban Planning, The University of Michigan, Ann Arbor, Michigan, USA

- Visual Studies (2-Course Sequence)
- Architectural Design (various levels)
- Environmental Technology (3-Course Sequence)

Department of Architecture, Faculty of Engineering @ Shoubra, Zagazig University, Banha Branch

- Building Construction (2-Course Sequence)
- Architectural Design (Various levels)
- Graduation Project
- Working Drawings (2-Course Sequence)
- Environmental Control Systems

The University of the District of Columbia (UDC), Washington, DC, USA (in collaboration with the Department of Architecture, Modern Academy in Maadi, Cairo, Egypt).

- Architectural Graphics and Perspective
- Art Appreciation
- Architectural Design (Various levels)
- Graduation Project

Department of Civil, Architectural and Environmental Engineering, Drexel University, Philadelphia, Pennsylvania, USA

- Architectural Engineering Design (all levels)
- Senior Design Project (3-Course sequence)
- Building Systems Integration (2-Course Sequence)
- Construction Materials
- Building Envelope Systems (Graduate Level)

Department of Architectural Engineering, Faculty of Engineering, Misr International University (MIU), El-Obour City, Egypt

- Descriptive Geometry and Engineering Graphics
- Architectural Drawing (2-Course sequence)
- Architectural Design (all levels)
- Graduation Project

- Working Drawings & Detailing (2-course sequence)
- Specifications, Quantities and Tender Documents
- Building Construction (2-Course sequence)
- Appropriate Building Technology
- Architecture and Energy Conservation
- Design Fundamentals and Visual Training
- Building Air-Conditioning Systems
- Architectural Programming
- Interior Design Studio
- Community Design Studio
- Urban Design Studio
- Architectural Perspective
- Architectural Workshops and Modeling
- Reinforced Concrete Design for Architects
- Architectural Shop Drawings

Department of Construction Engineering, The American University in Cairo (AUC), Cairo, Egypt

- Drawing for Architecture and Civil Engineering
- Methods and Equipment for Construction

Department of Performing and Visual Arts, Art Unit, The American University in Cairo (AUC), Cairo, Egypt

- Introduction of Architectural Design and Drafting
- Modern and Contemporary Architecture

Department of Architectural Engineering & Environmental Design, College of Engineering & Technology, The Arab Academy for Science, Technology and Maritime Transport, Cairo, Egypt

- Physical Environment in Buildings
- Technical Systems and Environmental Control

Department of Architecture & Building Science, College of Architecture & Planning, King Saud University, Riyadh, Kingdom of Saudi Arabia

- Architectural Design II (Environmental Design)
- Architectural Design IV (New Trends in Design)
- Architectural Design V (Building Systems Integration)
- Graduation Project

- Man and the Built Environment
- Climate and Architecture
- Lighting and Acoustics
- Sanitary Installations in Buildings
- Special Topics in Theory and History of Architecture (Graduate Level)
- Special Topics in Environmental Design (Graduate Level)
- Principles of Facilities Design (Graduate Level)
- Integrated Architectural Workshop (Graduate Level)

Higher Institute of Engineering, El Shorouk Academy, El Shorouk City, Egypt

- Environmental Technology (Elective)
- Building Construction
- Architectural Design (Senior Level)
- Working Drawings (Senior Level)
- Graduation Project

Higher Institute of Engineering, 15th May City, Cairo Metropolitan Area, Egypt

- Environmental Control of Buildings
- Building Construction (II)
- Architectural Design (several levels)
- Working Drawings (Junior/Senior Levels)
- Interior Design
- Building Economics
- Graduation Project