Ph.D. program
is sponsoring the Fifth Ph.D. Seminar Series for Continuing Education
Building Energy Seminar 5
(AUTODESK® ECOTECT ™ ANALYSIS 2010)
October 12-13, 2009 (One and half day seminar)

Day 1: Monday, October 12, 8:30am – 4:30pm
Morning: Introduction of ECOTECT & 3D modeling (import file)
Afternoon: Weather Tool, Solar Tool & Shadow, Sun path, and Shading Analysis
                - Solar Access Analysis, Daylight level, Shading, Solar radiation
**Day 2: Tuesday, October 13, 8:30am – Noon**
Morning: Evaluation of various building performances using ECOTECT
   (Building Analysis, Lighting, RADIANCE & Green Building Studio)

PROGRAM DONWLAD HERE

OBJECTIVES:
We hold the key to reducing global temperatures and CO_2 emissions, because building design can decide the total building performances during the early design process. Computer simulations are becoming increasingly popular among design teams as an effective means to design energy-efficient buildings. Further, the use of simulation and analysis software is becoming increasingly common at all stages of the building design process. This course reflects the growing importance of energy efficiency, sustainability, and the green building issues for architects and engineers, especially for environmental design analysis. This seminar will introduce the attendants to ECOTECT building simulation and sustainable techniques using ECOTECT computer simulation.
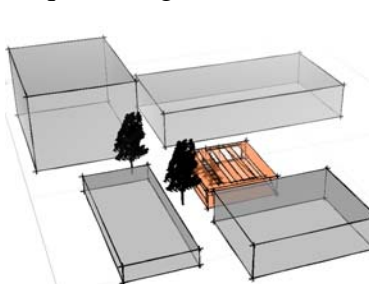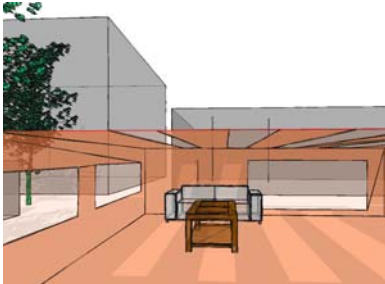
AUTODESK® ECOTECT ™ 2010 ANALYSIS
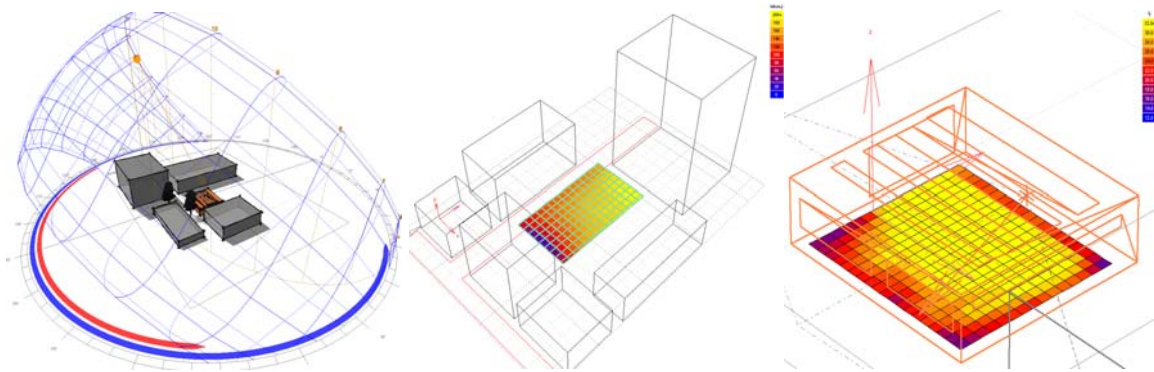
Overview of AUTODESK® ECOTECT ™ ANALYSIS 2010

Autodesk® Ecotect™ Analysis software is a concept-to-detail sustainable design analysis solution with architect-designed desktop tools that measure the impact of environmental factors on a building's performance and web-based technology for whole building analysis. Ecotect Analysis makes it easier for building designers to conduct simulations and visualize results. Because analysis can be conducted on a building model as soon as the thermal zones are defined, your team can make fact-based, more sustainable design decisions during the schematic stage when designs are easier and less expensive to change. Ultimately, these capabilities result in better building performance, faster time to market, and lower project costs, as well as lower total cost of ownership over time. Unlike complicated engineering analysis tools, Autodesk Ecotect Analysis was developed specifically for architects and designers to provide powerful feedback that's easier to interact with, interpret, and communicate.
(Source: Autodesk ECOTECT website, http://usa.autodesk.com/adsk/servlet)

In this seminar, you will learn:

• How to use ECOTECT programs that will help you make better design decisions
• The purpose and benefits of ECOTECT modeling
• How to interpret and report their results
• When to use ECOTECT for improving green & sustainable design
• To understand the techniques and design principles for low energy buildings and the review of energy-efficient design strategies
• To understand the interdependence of design, location, weather, and scientific factors in developing energy-efficient buildings
• To acquire the simulation skills to research weather and contexts in the schematic design process and run simulation programs to analyze building energy performance

Registration and Fees

- $350 for Regular Registration: Registration includes a workbook containing copies of presentations materials, Morning and Afternoon Coffee breaks and Lunch.
- $50 for Student (ID required), $125 for Faculty Member

How to register:

1. Online (For Credit Card payment)
2. By mail (For Check payment): download the registration form, print, attach payment, and mail. Check is made payable to Ph.D. Seminar.

Continuing Education Units (CEUs)

Every participant will be issued a certificate from the Dean of College of Architecture, IIT, as a document to report the continuing education of your professions. College of Architecture, IIT, is a registered AIA/CES provider. According to AIA/CES guideline, Building Energy Analysis Seminar 5 is considered the HSW (Health, Safety and Welfare) subject area. AIA members will receive upto 6 AIA/CEUs per day.

Contact:

Building Energy Analysis Seminar 5
Ph.D. Program, College of Architecture, Illinois Institute of Technology
3410 S. State Street, Chicago IL 60616
Tel: 312-567-3930
Fax: 312-567-6816

Questions:

If you want to register 'IIT ECOTECT Seminar' or need more information, please contact;

- D.H. Ko, PhD, LEED AP, kodongh@iit.edu.
- Payam Bahrami, PhD Administrative Assistant, 312.567.3930 or arch_phd@iit.edu

Ph.D. program

is sponsoring the Fifth Ph.D. Seminar Series for Continuing Education

Building Energy Seminar 5

(AUTODESK® ECOTECT ™ ANALYSIS 2010)

October 12-13, 2009 (One and half day seminar)

PROGRAM

Day 1: Monday, October 12

Lecture-1 (08:30-09:00): Registration and Opening Remarks
Lecture-2 (09:00-09:30): Introduction – Program Install, Setup
Lecture-3 (09:30-10:15): 3D Modeling (Ecotect & import file)

(Coffee Break)

Lecture-4 (10:30-11:15): Weather Tool - Weather data, Climate zone
Lecture-5 (11:15-12:00): Sun-Path Diagram, Sun position, Shadow Analysis

(Lunch)

Lecture-6 (13:00-13:45): Solar Tool and Shading
Lecture-7 (13:45-14:45): Solar Radiation

(Coffee Break)

Lecture-8 (15:00-15:45): Solar Radiation (Solar Panel, Occupant Comfort, Glare)
Lecture-9 (15:45-16:30): Solar Radiation (BIPV, Location, Angle, Shading)

Day 2: Tuesday, October 13

Lecture-10 (08:30-09:00): Daylight Requirements (Daylight Factor, Daylight
                           Autonomy, and LEED 2.2 and 2009 (V3) Requirements)
Lecture-11 (09:00-10:15): Lighting Analysis (Indoor illuminance, FC and DF)
                           & RADIANCE (Analysis of all Daylight Performance)
(Coffee Break)

Lecture-12 (10:30-11:15): Green Building Studio 1
Lecture-13 (11:15-12:00): Green Building Studio 2

* Every Lecture contain '15 minutes individual practice' and 'Q&A session'.