The Illinois School of Architecture announces the new

**Concentration in High-Performance Building Design**

**DESCRIPTION**

Courses offered by the Building Performance Program address aspects of overall performance through the integrated design of structural, environmental, enclosure, and related systems. This work is grounded in a historical knowledge base of best practices while also promoting experimentation and innovation, focusing on sustainability, environmentally responsible use of energy and materials, human comfort, and constructability.

For graduate students who wish to develop expertise in this area, the School offers a *Concentration in High-Performance Building Design* in the M.Arch. and M.S. in A.S. degree programs. This optional concentration can be completed within the normal timeframe of each degree. This is considered an informal or advisory concentration (it is not a formal concentration and therefore does not appear on students’ transcripts) and is intended to provide guidance to students seeking knowledge in the design of high-performance buildings. Students who wish to complete the concentration can do so by signing up in the Graduate Office and enrolling in courses as described below. Questions may be directed to the Chair of the Building Performance Program.

**REQUIREMENTS**

The completion of this concentration is in addition to (and not in replacement of) any required core courses that exist or that may be established in the M.Arch. or M.S. degree programs. To attain the concentration, students must successfully complete:

- at least one semester of ARCH 573: Technology & Performance Studio taught by Building Performance Program faculty, or other studio as approved by the Building Performance Program Chair; and
- at least 12 credit hours of electives from the list below of approved courses currently offered within the Building Performance Program.

Students may choose from among the following courses in compiling 12 credit hours of electives in the concentration:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ARCH 544</td>
<td>Building Systems &amp; Design Integration (3 or 4 hrs)</td>
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<tr>
<td>ARCH 576.CLI</td>
<td>Climate Design (3 hrs)</td>
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<tr>
<td>ARCH 576.CRW</td>
<td>Curtain Wall Design &amp; Construction (3 hrs)</td>
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<tr>
<td>ARCH 576.EM</td>
<td>Eco-Mini (3 hrs)</td>
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<tr>
<td>ARCH 576.EXP</td>
<td>Experimental Envelopes (3 hrs)</td>
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<tr>
<td>ARCH 576.ISH</td>
<td>Innovative Solar-Powered Homes (3 hrs)</td>
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<tr>
<td>ARCH 576.PIN</td>
<td>Performance and Design: Parametric Integration (3 hrs)</td>
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<tr>
<td>ARCH 594.BCS</td>
<td>Building Energy Case Studies (3 hrs)</td>
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<tr>
<td>ARCH 594.DD</td>
<td>Daylighting Design (3 hrs)</td>
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<tr>
<td>ARCH 594.GDS</td>
<td>Assessment of Green Design Strategies through Simulation (3 hrs)</td>
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<tr>
<td>ARCH 594.M</td>
<td>Building Mechanical Systems (3 hrs)</td>
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<tr>
<td>ARCH 594.SIM</td>
<td>Building Energy Simulation (3 hrs)</td>
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<tr>
<td>ARCH 595.EQ</td>
<td>Seismic Analysis and Design (3 hours)</td>
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<tr>
<td>ARCH 595.IN</td>
<td>Integrated Design and Construction of Buildings (4 hrs)</td>
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Note: The course list above may be adjusted, edited, or expanded by the Building Performance Program in the future as new courses become available.

Updated 10 March 2017
BENEFIT TO STUDENTS
The American Institute of Architects (AIA) states: “The only way for architects to build a more sustainable future is to understand how the buildings that will populate it will perform—in terms of water usage, climatic conditions, materials—and perhaps most importantly, in terms of energy.”1 Because employers in the architecture and construction industries are increasingly and actively seeking employees with knowledge and skills in the area of building performance, it is expected that students who have studied these issues in graduate school will be valued by prospective employers and will be poised to make a greater impact on these issues earlier in their careers. The courses offered within the Concentration in High-Performance Building Design give students a strong foundation in the various principles, systems, and technologies that contribute to the design of high-performance buildings: energy, envelopes, materials, and design integration. In this way, we can contribute to the building of “a more sustainable future,” as posited by the AIA.

FACULTY OF THE BUILDING PERFORMANCE PROGRAM
Prof. Abbas Aminmansour, Ph.D. Prof. Sudarshan Krishnan Prof. Rick Strand, Ph.D.
Prof. Mohamed Boubekri, Ph.D. Prof. Vidar Lerum, Ph.D. Prof. Mark Taylor
Prof. Randy Deutsch, LEED-AP Prof. Scott Murray, RA Prof. Marci Uihlein, P.E.
Prof. Ralph Hammann, Ph.D. Prof. Jeff Poss, FAIA Prof. Yun Kyu Yi, Ph.D.
Prof. Michael Kim, Ph.D.

SAMPLE SCHEDULE
Below is a sample schedule for the M.Arch. degree with a Concentration in High-Performance Building Design.
Please note that Concentration Electives may be taken in any semester and do not need to follow this sample schedule exactly, provided that the requirements noted above are met.

Master of Architecture with a Concentration in High-Performance Building Design
Degree Total: 62 hours

First Semester (Total: 15 hours)
• ARCH 57X: Architectural Design Studio (6 hours)*
• ARCH 577: Theory of Architecture (3 hours)
• Electives or requirements for focused area of study (6 hours) – including 3 hours of Concentration Electives

Second Semester (Total: 16 hours)
• ARCH 502: Structural Planning (4 hours)
• ARCH 57X: Architectural Design Studio (6 hours)*
• ARCH YYY: Professional Issues Electives (3 hours)
• Electives or requirements for focused area of study (3 hours) – 3 hours of Concentration Electives

Third Semester (Total: 16 hours)
• ARCH 57X: Architectural Design Studio (6 hours)*
• Electives or requirements for focused area of study (10 hours) – including 3 hours of Concentration Electives

Fourth Semester (Total: 15 hours)
• ARCH 501: Architectural Practice (3 hours)
• ARCH 57X: Architectural Design Studio (6 hours)*
• Electives or requirements for focused area of study (6 hours) – including 3 hours of Concentration Electives

* For Concentration, at least one of the four required 57X studio courses must be ARCH 573: Technology & Performance.

1 http://www.aia.org/practicing/AIAB095959