

OKLAHOMA STATE UNIVERSITY SCHOOL OF ARCHITECTURE

GRADUATE CERTIFICATE

INTEGRATIVE DESIGN OF THE BUILDING ENVELOPE

The School of Architecture offers students the opportunity to pursue a graduate certificate in Integrative Design of the Building Envelope. A graduate certificate is a post-graduate credential that is evidence of a more specialized study, in this case, of integrative building envelope design. The certificate is offered at a very low cost and doesn't add any extra time to graduation if students plan ahead. The cost of the certificate is the difference between the per-credit hour cost of enrollment in undergraduate and graduate course. Note that the out-of-state increase per hour is more than in-state. In addition, the fee to apply to the Graduate College is \$50 for US citizens, \$75 for International students.

Contact Professor Suzanne Bilbeisi, Dr. Tom Spector, Dr. Khaled Mansy, Prof. John Phillips, Prof. Jeanne Homer, or Lori Carroll to show interest.

Who Is Eligible to Apply

CEAT Students with a 3.0 or better GPA are eligible to enroll in the certificate program. Practitioners with an accredited Bachelors or Masters degree in Architecture, Architectural Engineering, and others with baccalaureate degrees from outside of architecture and engineering may apply and will be reviewed on a case-by-case, space-available basis. Undergraduate architecture students in their senior year are eligible to begin work on the certificate after approval of a petition to take graduate coursework by completing the form "Application for Graduate Credit for Graduating Seniors" from the Graduate College.

program. For foreign students, the University minimum TOEFL score of 79 / 550 is required.

A student designs a program of study in conjunction with a program advisor or the Graduate Program Coordinator (Tom Spector). The SOA submits a plan of study for the student to Graduate Office for incorporation in the degree requirements that must be met. This action cements the 3-way contract between Student, School, and Grad College.

How to Apply and Enroll

Students apply through the Graduate College Office.
<https://gradcollege.okstate.edu/prospective-students/application-process.html>

How to Plan Your Coursework

Once a student is officially enrolled, he or she may begin the graduate work, or a form "Application for Graduate Credit for Graduating Seniors" can be filled out before acceptance into the Graduate College at the beginning of the semester that course is taken. This coursework may include courses already taken that meet the program requirements depending on the student's major. Students should not commence the 5000-level coursework not taken for their undergrad degree until they are enrolled or complete the "Application for Graduate Credit for Graduating Seniors" form.

The Application Process is Simple

It requires evidence of degree completion and two letters of recommendation. Deadlines are April 30 for Fall semester entry and November 30 for Spring semester. Neither the GRE nor any other standardized test is required for the certificate

The certificate is 12 hours, and may include any three of the following courses totaling nine credit hours:

- ARCH 5023 Masonry Analysis and Design (2021)
- ARCH 5023 Timbers and Masonry Design & Analysis (2022)
- ARCH 5093 Real Estate Development
- ARCH 5133* Advanced Energy Issues in Architecture
- ARCH 5263 Advanced Architecture Technology Seminar*
- ARCH 5493 Entrepreneurship in Architecture
- ARCH 6243 Analysis III
- ARCH 6343 Steel III
- ARCH 6543 Concrete III
- CIVE 5113 Contracts and Specifications
- CIVE 5183 Construction Estimating
- CIVE 5193 BIM for Constructions
- CIVE 5273 Concrete Durability
- CIVE 5583 Advanced Construction Materials
- CIVE 5873 Air Pollution Control Engineering
- FPST 4143 Industrial Ventilation and Smoke Control
- FSEP 5033 Risk Analysis
- FSEP 5113 Fire and Explosion Hazard Recognition
- FSEP 5133 Principles of Process Safety
- FSEP 5143 Structural Design for Fire and Life Safety
- FSEP 5163 Principles of Industrial, Physical & Building Security
- FRNS 5103 The Chemistry of Pyrotechnics
- FRNS 5113 The Chemistry of Explosives
- FRNS 5123 Fire Dynamics in Forensic Investigations
- MSE 5013 Advanced Thermodynamics of Materials
- MSE 5023 Diffusion and Kinetics
- MSE 5033 Composite Materials
- MSE 5053 Smart Materials
- MSE 5093 Fundamentals of Materials Science
- MSE 5174 Fundamentals of Photovoltaics
- MSE 5223 Additive Manufacturing: Materials, Methods & Applications

Note: Other graduate level courses not on this list can be reviewed on a case-by-case basis. Not all courses are offered every semester or year, and some are online and/or offered in Tulsa. In addition, some will need instructor approval per the catalog so it is recommended for a student to plan ahead.

Finally, students must enroll in a 3-hour directed independent study, supervised by at least two graduate faculty representing two fields of expertise: ARCH 5003 Advanced Topics in Integrative Design Independent study with an in-depth focus on the analysis/design of a building envelope.

**denotes graduate section of existing 4000 level course*

How to Finish

Upon completion of the coursework, the student makes sure that his or her “degree conferred” certification for the student’s undergraduate work accompanies the file. Certification of completion of all requirements is by the Graduate College. Normally, the student cannot graduate in the same semester that he or she began the program — even if all the coursework is complete. This means that, for instance, if the student became a graduate student in the spring, he or she normally could not receive the graduate certificate until the end of summer semester.