

OKLAHOMA STATE UNIVERSITY SCHOOL OF ARCHITECTURE

GRADUATE CERTIFICATE

INTEGRATIVE DESIGN OF THE BUILDING ENVELOPE (IDBE)

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. It can serve both as a steppingstone onto more advanced study leading to a master's or doctoral degree, or as a standalone educational achievement to assist graduates in their career. The certificate is offered at an exceptionally low cost, if any, and doesn't add any extra time to graduation if students plan ahead. It is a 12-credit hour certificate, and students can double count all 12 hours towards their undergraduate degree. The fee to apply to the Graduate College is \$50 for US citizens, \$75 for international students. For current OSU students, the fee is waived for the first-time applicants to the Graduate College.

Contact Professor John Phillips, Graduate Program Coordinator Dr. Khaled Mansy, or Academic Advisor Lori Carroll to express interest. You may also contact faculty who have advised students in this program, Professors Nathan Richardson, Jay Yowell, Keith Peiffer, Christina McCoy, Sarah Ra, Jared Macken, and Blake Mitchell or other interested faculty members.

Who Is Eligible to Apply

CEAT Students with a 3.0 or better GPA are eligible to enroll in the certificate program. Students with a GPA between 2.5 and 3.0 may be accepted with academic probation and must make at least 3.0 GPA in the first nine hours of the program. Practitioners with an accredited bachelor's or master's degree in architecture, Architectural Engineering, and others with baccalaureate degrees in allied fields may apply and will be reviewed on a case-by-case, space-available basis. Senior undergraduate architecture and architectural engineering students are encouraged to apply no later than the first semester of their fourth year.

How to Apply

Students apply online through the Graduate College website. (<https://gradcollege.okstate.edu/prospective-students/application-process.html>) The application process requires submission of the most current transcript and two letters of recommendation. Soft Deadline is 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 program. For international students, the University minimum TOEFL score of 79/550 is required. Once the Graduate College admits the student into the program, he/she will receive a decision letter. Make sure to inform the Graduate Program Coordinator (Dr. Khaled Mansy) of the progress of your application.

How to Plan Your Coursework

Once admitted, a student prepares a plan of study (POS) in conjunction with the faculty advisor or the Graduate Program Coordinator. The School of Architecture submits the plan of study on behalf of the student to the Graduate College for incorporation in the degree requirements that must be met. This action cements the 3-way contract between Student, School, and Graduate College. The plan of study may include courses already taken that meet the program requirements. Students should not commence the 5000-level coursework not taken for their undergraduate degree until they are officially enrolled in the certificate.

Certificate students should take at least 9 credit hours from the list of approved courses on page 2. Students who enroll in ARCH 4216/5226, Integrative Design, should concurrently enroll in ARCH 5263, the graduate section of the Advanced Architecture Technology Seminar. Finally, students must enroll in a 3-hour directed capstone 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. Deliverable of the independent study can be a research report or a creative component. ARCH 5003 can count as an elective for your undergraduate degree.

Submit Forms on Time

Students need to fill out **four** necessary forms at certain times. Forms are available in paper and/or digital form.

Once admitted into the certificate program and discussed your coursework with the faculty advisor, submit the paper form *'Plan of Study for a Graduate Certificate'* to the Graduate Program Coordinator to be signed and forwarded to the Graduate College.

At the beginning of every semester, if you take courses that double count towards your graduate certificate and undergraduate degree, submit the paper form *'Dual Level Credit Approval for Accelerated Master's Degree Program Courses'* to the Graduate Program Coordinator to be signed and forwarded to the Office of the Registrar.

Before the end of your graduating semester when your draft research report or creative component is approved by the faculty advisor, submit the paper form *'Graduation Clearance for Graduate Students'* to the Graduate Program Coordinator to be signed and forwarded to the Graduate College. Also, submit the online form *'Application for Graduation'* for the graduate certificate using the Student Records menu in Self-Service on your myOKSTATE account. Instructions for online submission are available on the Office of the Registrar's webpage. (https://registrar.okstate.edu/commencement/apply_graduate.html)

Students must submit a graduation application for each degree (curriculum) separately. If your graduate certificate is not listed on your Self-Service Graduation Application, contact the Office of the Registrar, 322 Student Union or registrar@okstate.edu.

The first three forms above should be signed by the student and require the approval of the Graduate Program Coordinator and/or the Academic Advisor. When you submit all forms on time, completion of the certificate is also listed on your official undergraduate transcript.

In case students do not receive the certificate diploma after graduation, request a printed certificate by mail, submit the form *'Graduation Paper Application'* to the Office of the Registrar.

Graduation

Certification of completion of all degree 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. Students may elect to participate in the Graduate commencement to be recognized for their above and beyond achievement.

Approved Courses

The graduate certificate is 12 hours, besides the capstone independent study, ARCH 5003, it may include any three of the following courses totaling nine credit hours:

- ARCH 5023 Timbers and Masonry Design & Analysis
- ARCH 5093 Real Estate Development
- ARCH 5100 Special Topics in Architecture
- 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
- 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.

**Denotes a graduate section of existing 4000 level course*