INTEGRATIVE DESIGN OF BUILDING ENVELOPE, GCRT

Requirements for Students Matriculating in or before Academic Year 2021-2022. Learn more about Graduate College Academic Regulation 7.0 (http://catalog.okstate.edu/graduate-college/#70).

Total Hours: 12

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tr>
<td>ARCH 5003</td>
<td>Integrative Design</td>
<td>3</td>
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**Electives**
Select 9 hours of the following: 9

- ARCH 5023 Masonry Design and 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 and Architecture
- ARCH 6243 Structures: Analysis III
- ARCH 6343 Structures: Steel III
- ARCH 6543 Structures: Concrete III
- CIVE 5113 Construction Business Management
- 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 Industrial and Process Safety
- FSEP 5143 Structural Design for Fire and Life Safety
- FSEP 5163 Building Electrical Systems
- FRNS 5103 The Chemistry of Pyrotechnics
- FRNS 5112
- 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 and Applications

Other courses approved by advisor.

Hours Subtotal 9

Total Hours 12

Graduate College Certificate Requirements
Learn more about Graduate College 2021-2022 Graduate Certificate Program Requirements (http://catalog.okstate.edu/graduate-college/).
Check the General Graduate College academic regulations for minimal GPA, language proficiency and other general requirements.