

Program #	Program Title/Description	LU	HSW/SD
APC101	<p>Basics of Architectural Precast Concrete Overview of how architectural precast concrete is used to enclose a structure starting from material selection, detailing, forming, transportation, erection and weathering</p> <p>OBJECTIVES:</p> <ul style="list-style-type: none"> Responsibilities of the architect, engineer, construction manager and precaster when using architectural precast concrete Select among an almost endless variety of color, and texture (finishes and patterns) options to achieve most any 'look' desired to include multiple mixes and finishes, variegated stone look, polished precast and others Set realistic objectives for precast concrete samples and mockups Understand aesthetic benefits of design options for architectural precast concrete 	1.0	HSW
APC102	<p>Architectural Precast – Aesthetic Solutions Learn how to design high performance exterior wall systems that function both aesthetically and against the elements.</p> <p>OBJECTIVES:</p> <ul style="list-style-type: none"> Understand architectural precast aesthetic benefits and design options, precast samples and mockups Conceptualize color, form and texture through materials, molds and formliners and understand which tools can help ensure an economical design Learn about the sustainable features of architectural precast concrete and select among an almost endless variety of color, and texture (finishes and patterns) options to achieve most any 'look' desired to include multiple mixes and finishes, variegated stone look, and polished precast Learn how surface materials can be embedded into precast to achieve various 'looks' such as: thin brick, dimensional stone, and porcelain tile 	1.0	HSW
APC202	<p>Sustainable Precast Solutions An in-depth explanation of how to properly design a sustainable architectural precast concrete building enclosure system that complies with ASHRAE and other building design options.</p> <p>OBJECTIVES:</p> <ul style="list-style-type: none"> Learn how precast concrete's endless color and texture options can enhance your sustainable goals Understand how precast enclosure systems affect the long term performance of the building through Life Cycle Case Studies. Learn how to design precast building envelopes which act as the primary weather barrier. Understand how rigid insulation encapsulated within an architectural precast panel can meet Environmental standards. Discover the fundamentals of moisture management through the exterior wall system which will affect the Indoor Environmental Quality of the building 	1.5	HSW/SD
APC103	<p>Achieving Aesthetic Goals with Inlaid Clay Products An in-depth explanation of embedded materials in architectural precast systems such as thin brick, granite, limestone, slate and tile and an emphasis on the innovations in design and best practices together with appropriate applications and attachment methodologies. Project case studies will be used to highlight the materials being presented including energy savings, inherent air and vapor barriers and the differences in sustainable barrier walls.</p> <p>OBJECTIVES:</p> <ul style="list-style-type: none"> Explain the embedment of natural materials such as brick, stone and tile into architectural precast concrete panels creating the first line of defense for natural elements while offering an aesthetically pleasing facade. Define the difference between rain screen and rain barrier walls. Compare rain barrier systems comprised of thin brick embedded in precast concrete to traditional hand-set brick rain screen walls. Show through performance how rain barrier systems offer reduction of life cycle maintenance of the exterior facades. Observe energy savings on the University of Kentucky, Patient Care Facility when using a precast concrete rain barrier system versus rain screen cladding. The material selection in the project also has inherent air and vapor barriers which heighten the performance of the building. Understand how the use of thin brick embedded precast concrete walls on the exterior of the University of Florida's Cancer and Genetics Research Complex contributed to achieving a LEED Innovation Design credit. 	1.0	HSW/SD
APC104	<p>Architectural Precast BIM Design & Detailing – Case Studies Explanation of how BIM models are used to track, schedule, engineer, fabricate, transport, erect and in service use of architectural precast.</p> <p>OBJECTIVES:</p> <ul style="list-style-type: none"> Explain how the design assist process enables designers to create iconic structures using BIM and Architectural Precast Define BIM with regards to its use in the design of structures when using architectural precast Recognize the savings in the construction schedule due to enhanced collaboration between team members, resource and energy savings through streamlined workflow, and vertical integration of design elements See the use of BIM in precast through three case studies (OSU ProjectOne, LDS Temple, Ft. Lauderdale, FL and Perot Museum, Dallas, TX) from schematic design through in-service life 	1.0	HSW
APC105	<p>Designing Building Envelope Systems with Architectural Precast Learn how LEED and IgCC principles apply to precast enclosures, explore insulation types for precast wall assemblies and discuss how precast wall design affects heat transfer and can mitigate moisture flow.</p> <p>OBJECTIVES:</p> <ul style="list-style-type: none"> Understand how enclosure systems affect the long term performance of the building Learn how to design the building envelope with architectural precast concrete Fundamentals of moisture management through the exterior wall system which will affect the interior climate of the building Understanding insulation and its use encapsulated within an architectural precast panel 	1.0	HSW/SD

To schedule a Lunch-n-Learn Program in your office, Contact Beverly Ross at 251-575-2803
bross@gateprecast.com or Visit Our Website: www.gateprecast.com/#/education

