The American Institute of Architects Continuing Education System

AIA/CES Registered Provider Program Summary | Garland Programs

ROOFING

- An Innovative Approach to Commercial Roofing
- Choosing the Right Roof System
- Devils in the Details
- Engineering Principles of Roofing
- Getting the Most Out of Your Roof Asset
- History of Roofing and Risk Management
- Limit Liability with Quality Flashing Details
- Properly Designed Tapered Insulation Systems
- Roof System Overview
- Roof System Overview Online Version

099 IAR

Program

AN INNOVATIVE APPROACH TO COMMERCIAL ROOFING

Programs Hour(s):
1 LU/HSW

Program Level:
Intermediate

Learning Objective:
This program offers participants a unique approach to evaluating, designing and specifying roof systems and services. Through a slide presentation and discussion, participants will also gain a better understanding of past, present and future technology.

Participant Interaction:
Group exercises and discussion
Planned Q&A throughout program

0615 CRS

Program

CHOOSING THE RIGHT ROOF SYSTEM

Programs Hour(s):
1 LU

Program Level:
Intermediate

Learning Objective:
This presentation is intended to provide participants with an understanding of the three most common commercial low slope roofing systems and the various application options available. It also provides an overview of various ASTM testing methods used to define the performance of each system.

Participant Interaction:
Group exercises and discussion
Planned Q&A throughout program

0311 DD

Program

DEVILS IN THE DETAILS

Programs Hour(s):
1 LU

Program Level:
Intermediate

Learning Objective:
Provides participants an overview of the typical details and roofing design necessary to ensure the building has superior protection from the elements. The presentation provides an outline of the key factors in roof design including water management, slope design, code requirement, building movement, and rooftop equipment concerns. Following the identification of the key factors during the design phase, the presentation outlines the associated impact on detail design and techniques to ensure proper job-site implementation.

Participant Interaction:
Group exercises and discussion
Planned Q&A throughout program

0913 EPR

Program

ENGINEERING PRINCIPLES OF ROOFING

Programs Hour(s):
1 LU/HSW

Program Level:
Intermediate

Learning Objective:
The session provides an explanation of the engineering concepts essential to a successful roofing project. Those new to roofing concepts will gain an introduction to important Division 7 principles, while those with more experience will receive a valuable refresher course on subjects such as wind uplift engineering, energy efficiency of roofing, quality control and testing, and durability.

Participant Interaction:
Instructor-led, face-to-face
Planned Q&A throughout program

099 PM

Program

GETTING THE MOST OUT OF YOUR ROOF ASSET

Programs Hour(s):
1 LU/HSW

Program Level:
Intermediate

Learning Objective:
Participants will gain an understanding of the basic components of today's complicated roof systems. They will be able to identify the most common roof maintenance problems and learn how they can be fixed. Finally, they will learn how to set up a preventive maintenance program that includes budgeting.

Participant Interaction:
Group exercises and discussion
Planned Q&A throughout program

002 HR

Program

HISTORY OF ROOFING AND RISK MANAGEMENT

Programs Hour(s):
1 LU

Program Level:
Intermediate

Learning Objective:
Participants will learn about the evolution of roofing through decades of advancements and get a clear understanding of a design professional's liability during the design and construction phases of a roofing project.

Participant Interaction:
Group exercises and discussion
Planned Q&A throughout program

052 FL

Program

LIMIT LIABILITY WITH QUALITY FLASHING DETAILS

Programs Hour(s):
1 LU/HSW

Program Level:
Intermediate

Learning Objective:
This presentation will discuss roof flashings and why they are the most common area of failure on roofs. It will provide suggestions on how to specify a quality flashing with NRCA details and new flashings. The importance of inspections during construction will also be discussed.

Participant Interaction:
Group exercises and discussion
Planned Q&A throughout program

1014 TIS

Program

PROPERLY DESIGNED TAPERED INSULATION SYSTEMS

Programs Hour(s):
1 LU/HSW

Program Level:
Intermediate

Learning Objective:
Participants will develop an understanding of building code requirements regarding positive drainage and roof slope. They will learn about the role crickets play in tapered insulation systems and how to achieve recommended R-values. Various design elements that need to be considered in tapered insulation systems will be discussed. They will also learn about the dangers of value engineering.

Participant Interaction:
Group exercises and discussion
Planned Q&A throughout program

004 RSO

Program

ROOF SYSTEMS OVERVIEW

Programs Hour(s):
1 LU/HSW

Program Level:
Intermediate

Learning Objective:
The participants will obtain general roofing knowledge about the advantages/disadvantages of various types of commercial roofing systems: built-up, modified bitumen, metal, single ply, and fluid-applied roof systems. Detailed application photos are discussed.

Participant Interaction:
Group exercises and discussion
Planned Q&A throughout program

002 RSO

Program

ROOF SYSTEMS OVERVIEW ONLINE VERSION

Programs Hour(s):
2 LU/HSW

Program Level:
Intermediate

Learning Objective:
The participants will obtain general roofing knowledge about the advantages/disadvantages of various types of commercial roofing systems: built-up, modified bitumen, metal, single ply, and fluid-applied roof systems. It also illustrates the construction methods of each system.

Participant Interaction:
Online
Test upon completion

SUSTAINABLE DESIGN

- Cool Roofing Made Simple
- Green Roof Systems
- Solar Roofing 101
- Sustainable Design/Green Roofing

037 CO

Program

COOL ROOFING MADE SIMPLE

Programs Hour(s):
1 LU/HSW/SD

Program Level:
Intermediate

Learning Objective:
The participants will gain knowledge about cool roof systems and how they prevent sun-related damage, increase roof life and help cut energy costs. They will learn the basics of how the sun attacks roofs and solutions that can reduce roof surface temperatures and cooling energy usage.

Participant Interaction:
Group exercises and discussion
Planned Q&A throughout program

053 GR

Program

GREEN ROOF SYSTEMS

Programs Hour(s):
1 LU/HSW/SD

Program Level:
Intermediate

Learning Objective:
This course is designed to be an introduction to “green” or vegetative roof systems. Participants will gain an understanding of the benefits of green roof systems and the differences between intensive and extensive systems. They will become knowledgeable of the system components as well as their purpose and have a better understanding of what steps are involved in a green roof project.

Participant Interaction:
Group exercises and discussion
Planned Q&A throughout program

086 SE

Program

SOLAR ROOFING 101

Programs Hour(s):
1 LU/HSW/SD

Program Level:
Intermediate

Learning Objective:
Participants will gain an understanding of the benefits and options of solar roof systems for commercial applications. They will become knowledgeable of the system components as well as their purpose and have a better understanding of what steps are involved in a commercial solar roofing project.

Participant Interaction:
Group exercises and discussion
Planned Q&A throughout program

099 GR

Program

SUSTAINABLE DESIGN/GREEN ROOFING

Programs Hour(s):
1 LU/HSW/SD

Program Level:
Intermediate

Learning Objective:
The participants will understand the concept of sustainable design as it relates to commercial roofing applications. Innovative technologies such as cool roofs, photovoltaic roofing, vegetative roof systems, recyclable roofing, roofing materials manufactured with post consumer recycled content, and low VOC roofing options will be discussed.

Participant Interaction:
Group exercises and discussion
Planned Q&A throughout program

WATERPROOFING

- Commercial Liquid Waterproofing
- Fluid-Applied Air Barrier Systems

011 CLW

Program

COMMERCIAL LIQUID WATERPROOFING

Programs Hour(s):
1 LU/HSW

Program Level:
Intermediate

Learning Objective:
The participants will obtain general waterproofing knowledge, along with advantages/disadvantages of various types of commercial liquid waterproofing systems. Different uses and common types will be reviewed.

Participant Interaction:
Group exercises and discussion
Planned Q&A throughout program

011 AB

Program

FLUID-APPLIED AIR BARRIER SYSTEMS

Programs Hour(s):
1 LU/HSW

Program Level:
Intermediate

Learning Objective:
An introduction designed to provide a thorough overview of fluid-applied air barrier systems and how they enhance building performance by preventing air leakage into and out of the building.

Participant Interaction:
Group exercises and discussion
Planned Q&A throughout program

METAL

- Design Applications for Standing Seam Metal Roofs
- Design Principles for Rainscreen Wall Systems
- Low-Slope Metal Edge System

004 SS

Program

DESIGN APPLICATIONS FOR STANDING SEAM METAL ROOFS

Programs Hour(s):
1 LU

Program Level:
Intermediate

Learning Objective:
Participants will have a thorough understanding of the basic principles to follow when preparing a specification for standing seam metal roofs. Also, some basics of wind uplift, material differences, paint finishes, etc. will be discussed.

Participant Interaction:
Group exercises and discussion
Planned Q&A throughout program

0312 RWS

Program

DESIGN PRINCIPLES FOR RAINSCREEN WALL SYSTEMS

Programs Hour(s):
1 LU/HSW

Program Level:
Intermediate

Learning Objective:
Participants will gain an understanding of the various components that lead to water penetration in walls and how to prevent it with rainscreen wall system solutions. The importance of air barriers, vapor control and thermal control in the walls will be discussed. Examples of proper rainscreen details and construction will be provided.

Participant Interaction:
Group exercises and discussion
Planned Q&A throughout program

0211 LS ES1

Program

LOW-SLOPE METAL EDGE SYSTEM

Programs Hour(s):
1 LU/HSW

Program Level:
Intermediate

Learning Objective:
Participants will gain an understanding of the primary function of low-slope metal edge systems as well as proper design, testing, and specification methods to ensure secure, functional, and code-compliant systems. They will become knowledgeable in the various ANSI/SPRI ES-1 testing methods and how they apply to each component of the metal edge system. Participants will also learn how to apply the ES-1 Test results in addition to learning how to correctly specify them.

Participant Interaction:
Group exercises and discussion
Planned Q&A throughout program

PLAZA DECKS

- Plaza Decks

0815 PD

Program

PLAZA DECKS

Programs Hour(s):
1 LU/HSW

Program Level:
Intermediate

Learning Objective:
This presentation is intended to provide participants with an understanding of the role plaza decks play in the overall building envelope as well as their role in waterproofing. It also provides an overview of the benefits, application techniques and ways to extend the life of plaza deck systems.

Participant Interaction:
Group exercises and discussion
Planned Q&A throughout program

FLOORING

- Concrete Flooring Protection Overview

092 CFO

Program

CONCRETE FLOORING PROTECTION OVERVIEW

Programs Hour(s):
1 LU/HSW

Program Level:
Intermediate

Learning Objective:
The participants will obtain general flooring knowledge along with advantages/disadvantages of various types of commercial flooring systems: including densifiers, thin build, high build, resurfacers, decorative products and repair materials. Detailed application procedures are discussed. They will learn what steps to take to ensure a successful project.

Participant Interaction:
Group exercises and discussion
Planned Q&A throughout program

INDUSTRY RELATED

- Building Codes
- Building Envelope Solutions
- Design and Construction Guidance for Community Shelters per FEMA 361 and ICC 500
- Extremely Bonded Composites for Structural Strengthening
- Mold Litigation in the Construction Industry

0515 BC

Program

BUILDING CODES

Programs Hour(s):
1 LU/HSW

Program Level:
Intermediate

Learning Objective:
Participants will learn where to find building code information as well as recent industry updates and upcoming changes in the energy code. They will gain an understanding of the impact code revisions have on reroofing projects. The role building and energy codes play in the design of buildings will also be discussed.

Participant Interaction:
Group exercises and discussion
Planned Q&A throughout program

1015 BES

Program

BUILDING ENVELOPE SOLUTIONS

Programs Hour(s):
1 LU/HSW

Program Level:
Intermediate

Learning Objective:
This presentation is intended to provide participants with an overview of the building envelope and an understanding of the most common building envelope problems. In addition to an overview of problems, solutions will be addressed for a variety of categories, including maintenance, restoration, roofing, metal, plaza decks and air barriers.

Participant Interaction:
Group exercises and discussion
Planned Q&A throughout program

0416 CS

Program

DESIGN AND CONSTRUCTION GUIDANCE FOR COMMUNITY SHELTERS PER FEMA 361 & ICC 150

Programs Hour(s):
1 LU/HSW

Program Level:
Intermediate

Learning Objective:
The presentation provides a thorough review of the requirements and applications for designing and constructing safe rooms in accordance with the FEMA 361 and ICC 500 standards of which several states have adopted. The 2015 IBC adoption of ICC 500 for “Essential Facilities” will also be discussed.

Participant Interaction:
Group exercises and discussion
Planned Q&A throughout program

0815 C

Program

EXTREMELY BONDED COMPOSITES FOR STRUCTURAL STRENGTHENING

Programs Hour(s):
1 LU/HSW

Program Level:
Intermediate

Learning Objective:
This presentation is intended to provide participants with an understanding and overview of externally bonded composites for structural strengthening. It includes a review of the different types of strengthening as well as design guidelines. Participants will learn about the use of composites for three types of strengthening (Flexural, Shear and Confinement) and gain an understanding of the limitations of composites. It also covers various application methods. Participants should gain knowledge on when using composites is an appropriate solution.

Participant Interaction:
Group exercises and discussion
Planned Q&A throughout program

039 ML

Program

MOLD LITIGATION IN THE CONSTRUCTION INDUSTRY

Programs Hour(s):
1 LU/HSW

Program Level:
Intermediate

Learning Objective:
This presentation will examine mold; how, why and where it grows inside buildings; how can building owners and the design community minimize or eliminate mold growth; and how costly legal fees can be avoided.

Participant Interaction:
Group exercises and discussion
Planned Q&A throughout program

GARLAND UNIVERSITY

- Extreme Building Solutions - Garland University
- Garland University Plant Tour

0910 GU

Program

EXTREME BUILDING SOLUTIONS - GARLAND UNIVERSITY

Programs Hour(s):
8 LU/HSW

Program Level:
Intermediate

Learning Objective:
This two-day program will provide participants education in several areas surrounding the building envelope. Attendees will learn what it takes to evaluate their exterior building envelope, and then apply those same principles to the rooftop. There will be a comprehensive overview of roof systems available in today's marketplace, green roof technologies, the importance of building details, and building verticals.

Participant Interaction:
Instructor-led, face-to-face
Please contact your local representative if you are interested in attending a Garland University program.

0311 GUPT

Program

GARLAND UNIVERSITY PLANT TOUR

Programs Hour(s):
2 LU/HSW

Program Level:
Intermediate

Learning Objective:
Take a two hour tour through the manufacturing facility, including the Research & Development lab, and watch the process of the manufacturing line, learn about R & D techniques, and the quality control processes that are in place.

Participant Interaction:
Instructor-led, face-to-face

CUSTOMER TOUR

- Garland Plant Tour

1013 GPT

Program

GARLAND PLANT TOUR

Programs Hour(s):
1 LU/HSW

Program Level:
Intermediate

Learning Objective:
Take a one-hour tour through the manufacturing facility, and watch the manufacturing line while being taught about the process and quality control measures.

Participant Interaction:
Instructor-led, face-to-face