# **Pavement Academy**

Get access to all courses for \$39.99 a month!

Course name	Running time	Cost
Aggregate Testing Bundle	5 hours	\$299.00

This course bundle is designed to familiarize technicians and engineers with the origins, procedures, calculations, and results associated with common aggregate tests.

\$55.00

\$55.00

\$55.00

\$55.00

\$55.00

30 mins

30 mins

30 mins

30 mins

### Coarse Aggregate Angularity (CAA)

This course describes the coarse aggregate angularity (CAA) test, a method of determining the angularity of coarse aggregate, which is important in determining hot mix asphalt mixture susceptibility to deformation under load (rutting). This includes a discussion on the origins of this test, the alternate uncompacted void content test, a description of the current visual test method, and an examination of typical results.

Gradation and Size 30 mins \$55.00

This course describes basic terminology and gradation testing associated with the maximum aggregate particle size and distribution of individual particle sizes within a mixture. This includes gradation terminology, a description of the gradation chart and 0.45 power graphs, basic procedures for the standard gradation (sieve) test, and an examination of typical results.

# Fine Aggregate Angularity (FAA)

This course describes the fine aggregate angularity (FAA) test, a method of determining the angularity of fine aggregate, which is important in determining hot mix asphalt mixture susceptibility to deformation under load (rutting). This includes a discussion on the origins of this test, the alternate compacted aggregate resistance test, alternate video imaging tests, a description of the current uncompacted voids test method, and an examination of typical results.

# **Flat and Elongated Particles**

This course describes the flat and elongated particle test method which is used to determine the dimensional ratios for coarse aggregate particles of specific sizes. This includes the definition of "flat and elongated," issues with the test, a description of the current test method and an examination of typical results.

Sand Equivalent 30 mins \$55.00

This course describes the sand equivalent test which is used to determine the relative proportion of fine dust or clay-like materials in fine aggregate. This includes a discussion on alternate tests for dust and plastic fines, a description of the current sand equivalent test method, and an examination of typical results.

### Los Angeles (L.A.) Abrasion

This course describes the Los Angeles (L.A.) Abrasion test method which is used to indicate the toughness and abrasion characteristics of coarse aggregate. This includes a discussion on the origins of the test, the alternate Micro-Deval test, a description of the L.A. abrasion test method, and an examination of typical results.

Soundness \$55.00

This course describes the sulfate soundness test used to determine an aggregate's resistance to disintegration by weathering and, in particular, freeze-thaw cycles. This includes a discussion on the origins of the test, alternate weathering tests that are sometimes used, a description of the sulfate soundness test method, and an examination of typical results.

### Coarse Aggregate Specific Gravity 30 mins

This course describes the specific gravity test method used for coarse aggregates. This includes a discussion on the origins of the test, a description of the standard test method, and an examination of typical results. Aggregate specific gravity is used in key mix design and volumetric calculations.

# Fine Aggregate Specific Gravity 30 mins \$55.00

This course describes the specific gravity test method used for fine aggregates. This includes a discussion on the origins of the test, a description of the standard test method, and an examination of typical results. Aggregate specific gravity is used in key mix design and volumetric calculations.

**Running time** Course name Cost

### **Asphalt Fundamentals Bundle**

8 hours

\$549.00

This is a bundle of all of the courses in the HMA fundamentals series. It will familiarize the user with the basics of hot mix asphalt paving design, construction, and maintenance.

\$99.00 **Materials** 1 hour

This course provides descriptions of the basic types of materials used to construct flexible pavements. These descriptions include information on material tests and specifications.

Mix Design 1 hour \$99.00

This course provides an overview of the available HMA mix design procedures. This includes fundamentals common to all mix design processes with special attention given to the Superpave mix design process.

**Structural Design** 30 mins \$55.00

This course provides descriptions of the structural components (layers) of a flexible pavement. This is followed by a discussion on how these pavements respond to loads and an brief overview of available structural design methods.

\$99.00 **Pavement Evaluation** 1 hour

This course provides descriptions of the major types of pavement distress and performance measures for flexible pavement including why these measures are important. This is followed by brief discussion on pavement management.

Maintenance & Rehabilitation \$99.00 1 hour

This course provides descriptions of the activities associated with maintenance and rehabilitation of flexible pavements.

Construction 1.5 hours \$149.00

This course provides an overview the construction activities associated with HMA paving. This includes the five major construction-related activities: surface preparation, HMA production, transport, placement, and compaction.

1 hour \$99.00 **Pavement Types** 

This course provides descriptions of the two pavement types and how they differ. HMA mix types are discussed and explained. The benefits associated with recycling of HMA are provided.

## **RoadReady Diamond Bundle**

5 hours

\$549.00

This is a bundle of all of the courses in the HMA fundamentals series. It will familiarize the user with the basics of hot mix asphalt paving design, construction, and maintenance.

**Asphalt Mix Transport** 30 mins \$55.00

This course explains how asphalt mixes are transported from the plant to the paving site by truck. It covers how different types of trucks are loaded, safety considerations for trucking operations, and delivery of material to the paver.

#### 30 mins \$55.00 **Components of Compaction**

This course provides an overview of how compaction contributes to asphalt paving operations. It covers the types of rollers used, the phases of the compaction process, and the physical forces applied to the pavement during compaction.

#### 30 mins \$35.00 **Introduction to Asphalt Paving**

This course will provide an introduction to the asphalt paving industry and construction process. Included are descriptions of the key players involved in asphalt paving, the different facilities associated with asphalt paving, and asphalt operations.

#### **Environmental Awareness** 30 mins \$35.00

This course provides an overview of environmental issues in the context of paving operations. It describes principles and best practices to be aware of in order to prevent potential pollution that could result during paving projects.

#### **Hearing Loss Prevention** 30 mins \$35.00

This course will provide an introduction to the hazards of noise exposure and discuss common practices for avoiding permanent hearing loss.

Course name Running time Cost

Paver Operations 30 mins \$55.00

This course covers operation of a paver as it places an asphalt pavement. It describes the function of various paver components and safety issues related to paving. Proper techniques and best practices for mix transfer and placement are also addressed.

Paving Handwork 30 mins \$55.00

This course describes techniques for handwork needed in placing hot mix asphalt. It includes coverage of circumstances that require handwork, essential tools, and best practices to maintain consistency between handwork and HMA placed by machine.

# **Quality Control for Paving**

30 mins

\$55.00

This course provides an introduction to the principles of quality control for hot mix asphalt paving projects. It covers the basic roles of management and staff in planning, testing, and recordkeeping related to quality control.

# **Site Preparation and Planning**

30 mins

\$55.00

both new construction and existing pavements.

This course covers site preparation for hot mix asphalt paving projects. It includes inspection of the job site and preparation strategies for

Work Zone Safety 30 mins \$35.00

This course will provide an overview of safety procedures in road construction work zones. It will cover the potential hazards that are found in the work zone, best practices to deal with these hazards, and additional safety guidelines.

### **Confined Spaces Awareness**

30 mins

\$55.00

This course describes the hazards, procedures, and precautions associated with entry of confined spaces located at a hot mix asphalt plant or facility.

Cool Weather Paving 1 hour \$99.00

This course describes the sand equivalent test which is used to determine the relative proportion of fine dust or clay-like materials in fine aggregate. This includes a discussion on alternate tests for dust and plastic fines, a description of the current sand equivalent test method, and an examination of typical results.

Design Factors 1 hour \$99.00

This course provides descriptions of the primary factors used in the design of flexible pavements. These factors include subgrade characterization, traffic loads, and environmental effects.

# Flagging Fundamentals 30 mins

This course provides an overview of traffic control flagging in a road construction work zone.

# **Hazardous Materials Transportation**

2 hours

\$149.00

\$35.00

This course satisfies the DOT/Hazmat refresher training requirements and describes federal regulations that affect transportation of hazardous materials.

### **Reclaimed Asphalt Pavement**

30 mins

\$35.00

This course provides an overview of reclaimed asphalt pavement (RAP) and its implications for the paving industry. It surveys the background behind RAP use and covers how RAP is handled during production and paving of hot mix asphalt.

# **Rubberized Hot Mix Asphalt**

30 mins

\$35.00

This course provides an overview of Rubberized Hot Mix Asphalt (RHMA). It covers RHMA production and the differences between RHMA and conventional HMA. This includes the types of mixes and situations in which RHMA is most likely to be beneficial.

### **Stormwater Pollution Prevention Awareness/SPCC**

1 hour

\$99.00

This course covers plan requirements for stormwater pollution prevention (SWPP) & spill prevention, control, and countermeasures (SPCC). It discusses regulations and permits, monitoring for pollutants, and best practices to prevent pollution and spills.

### **Sustainability and Paving**

30 mins

\$35.00

This course introduces the concept of sustainability for asphalt paving. It defines the term sustainability, discusses the primary considerations for analyzing sustainability, and provides examples of paving practices related to sustainability.

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	Heavy Equipment Operators	Paver Operators	Roller Operators	Truck Driver	Laborers/ Craft Workers	Plant Operators	Quality Control/ Testing	Engineer	Lab/ Field Technician	Inspector	Sales/Marketing	Office/ Administration	Supervisor/ Foreman
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