

**WYOMING MATERIALS CERTIFICATION
PROGRAM**

2011 -2012



at the
UNIVERSITY OF WYOMING
AGGREGATE,
ASPHALT,
CONCRETE,
AND
PAVEMENT SMOOTHNESS
SESSIONS

SPONSORED BY:
WYOMING DEPARTMENT OF TRANSPORTATION
CERTIFICATION COMMITTEE

INTRODUCTION:

These seminars will offer a specialized certification program emphasizing Wyoming DOT specifications and procedures.

The certification will include classroom sessions covering topics specific to the area of emphasis. All certification sessions will include demonstrations and review of testing procedures. The successful completion of this seminar will fulfill the testing technician certification requirements for Wyoming DOT QC/QA projects. A certification certificate for each program will be issued upon successful passing of both a written test and a performance test. Wyoming DOT QC/QA projects require testing technicians to be certified for asphalt and concrete projects.

Please note that successful completion of the Aggregate Seminar is not required in order to attend the Concrete or Asphalt Seminars.

WHO SHOULD ATTEND:

People desiring certification or the necessary qualifications for conducting or overseeing the testing of materials on Wyoming DOT QC/QA projects are encouraged to apply.

Note: These certification courses are not introductory programs. It is advised that applicants have at least one (1) year of experience in road or bridge construction, including aggregate testing.

Applicants must exhibit basic math and reading comprehension skills, be able to perform the calculations required for each test procedure including the use of percentages, have a basic knowledge of metric measurement, and be able to use metric conversions.

Class size will be limited to 25 individuals allotted as follows: 10 people from WYDOT; 8 people from the contracting industry; and 7 people from the consulting industry. Selected applicants will be notified by mail and will receive additional seminar information.

WHAT TO BRING

Attendees must bring the following items:

- 1) Calculator with statistical functions (please be familiar with the operation of your calculator).
- 2) 2010 Wyoming DOT Specification Book*
- 3) WYDOT Materials Testing Manual*

*Available through Wyoming DOT, Plan Sales Division, 307-777-4434

SEMINAR INSTRUCTORS

Dr. Khaled Ksaibati, P.E.
Dr. Kim Basham, P.E.
Dr. Thom Edgar, P.E.
WYDOT Staff and UW Staff

TOPICS TO BE COVERED (BY SESSION)

AGGREGATE SEMINAR includes topics on aggregate materials including physical properties, types & uses, testing, job mix formulas, specifications, construction, and acceptance.

Session I - December 5 – 7, 2011

Session II – January 9 – 11, 2012

Session III – May 7 – 9, 2012

ASPHALT SEMINAR will include asphalts, aggregates, mix designs, field testing, specifications, construction, and acceptance.

Session I – December 7 – 9, 2011

Session II – January 11 – 13, 2012

Session III – May 9 – 11, 2012

CONCRETE FIELD TESTING SEMINAR includes properties of concrete materials, fundamentals of concrete, proper practices for placing concrete, a review and hands-on training of testing procedures. Included are methods and practices as recommended by ACI and AASHTO. ACI Certification is a mandatory portion of the Wyoming Certification. For participants currently certified by ACI, the ACI testing portion of the seminar is optional.

Session I – November 14 – 16, 2011

Session II – February 6 – 8, 2012

Session III – March 12 – 14, 2012

RETEST DATES: *(Please go to Engineering Room 2094)*

Aggregate, Asphalt, and Concrete Retest Dates:

February 2, 2012 10-12 a.m.

March 8, 2012 10-12 a.m.

April 12, 2012 10-12 a.m.

May 24, 2012 10-12 a.m.

PAVEMENT SMOOTHNESS PROFILER SEMINAR This seminar offers a **Driver Certification** for operators who will be performing pavement smoothness and profile analysis and a **Vehicle Certification** for inertial profiler vehicles used for profile analysis testing. Applicants must bring the profiling equipment that they will be operating to the seminar. The seminar will be conducted by the WYDOT Materials Program staff at the Materials Laboratory in Cheyenne. Contact Joel Dagnillo, of the WYDOT Materials Program for information concerning the Smoothness Profiler Certifications. **Telephone: 307-777-4476.**

REGISTRATION INFORMATION

Cost*:

Aggregate Sessions	\$500
Asphalt Sessions	\$500
Concrete Session, without ACI Certification	\$500
Concrete Session, with ACI Certification	\$575
Retesting Fee	\$ 75

* Fees include instruction, lunch (on days of full instruction), and a course notebook. All other meals and lodging are the responsibility of the party attending.

Payment:

Registration fee must be sent with each application form. Application forms will not be processed nor confirmed without receipt of full payment. Please make check payable to ***Civil & Architectural Engineering Department***.

Cancellation/No-Show Policy: Selected applicants may cancel at least 14 days prior to the selected certification session and receive a full refund. Registrants canceling 7-13 days prior to seminars will not be eligible for a refund, but will be eligible to use the fees at other seminars within one year. Cancellation less than 6 days prior to the seminar will not receive a refund. If an applicant cannot attend a seminar due to an emergency, he/she should contact the University as soon as possible.

Send Applications to:

Dr. Khaled Ksaibati, P.E., WYDOT Certification
UW Civil & Architectural Engineering
Department 3295, 1000 E. University Ave.
Laramie, WY 82071
Phone: (307) 766-6743 Fax: (307) 766-6784

Agenda for Aggregate Sessions

Room 3044, Engineering Bldg., UW

Day 1	
1:00 p.m.	Registration & Welcome
1:10 p.m.	Aggregate Physical Properties
2:30 p.m.	Aggregate Types and Uses
3:15 p.m.	Break
3:30 p.m.	Aggregate Tests
5:00 p.m.	Adjournment
Day 2	
8:00 a.m.	Questions & Answers
8:15 a.m.	Aggregate Specifications
9:00 a.m.	Developing A Job Mixing Formula (JMF)
9:30 a.m.	Break
9:45 a.m.	Aggregate Construction & Points of Acceptance
10:30 a.m.	Aggregate Acceptance & Balance Verification
11:15 a.m.	Correlation of Testing Technicians
12:00 p.m.	Lunch
1:00 p.m.	Calculations
1:45 p.m.	Aggregate Tests – Demonstrations & Practice
	Break
5:00 p.m.	Adjournment
Tutorial Session	
Day 3	
7:30 to 7:45 a.m.	Questions & Answers
7:45 to 9:00 a.m.	Written Examination
9:15 to 12:00 p.m.	Performance Testing

Agenda for Asphalt Sessions

Room 3044, Engineering Bldg., UW

Day 1	
1:00 p.m.	Registration & Welcome
1:10 p.m.	Introduction To Asphalt
2:00 p.m.	Asphalt Performance Grading
2:45 p.m.	Break
3:00 p.m.	Aggregates for HPMBP
3:45 p.m.	Testing Technician Correlation
5:00 p.m.	Adjournment
Day 2	
7:45 a.m.	Mix Design
8:30 a.m.	Marshall Mix Design
9:00 a.m.	Superpave
9:30 a.m.	Break
9:45 a.m.	Variables & Effects
10:00 a.m.	Production & Construction
10:30 a.m.	Nuclear Testing Variability
11:00 a.m.	Nuclear Gauge Correlation
12:00 a.m.	Lunch
1:00 p.m.	QC/QA Specifications
1:45 p.m.	Verification Calculations
2:15 p.m.	Balance Verification
2:30 p.m.	Break
2:45 p.m.	Random Sampling Density
3:45 p.m.	Demonstration & Practices
5:00 p.m.	Adjournment
7:00-9:00 p.m.	Tutorial Session
Day 3	
7:30-7:45 a.m.	Questions & Answers
7:45 to 9:00 am	Written Examination
9:15 to 12 pm	Performance Testing

Agenda for Concrete Sessions

Room 3044 Engineering Bldg., UW

Day 1	
1:00 p.m.	Registration
1:10 p.m.	Welcome & Introduction
1:15 p.m.	ASTM Test Methods: Temperature, Slump, Unit Weight, Air Content – Pressure, Air Content – Volumetric, Making Cylinders & Beams
2:45 p.m.	Break
3:00 p.m.	ASTM Test Methods Continued
5:00 p.m.	Adjournment
Day 2	
8:00 a.m.	Fundamentals of Concrete
9:00 a.m.	Batch Water, Aggregate Moisture, w/cm Ratio and Adjusting Slump
10:00 a.m.	Break
10:15 a.m.	WYDOT Concrete Specifications: Pavement & Structural
11:15 a.m.	QC/QA Specifications & Testing
11:45 a.m.	Lunch
12:45	QC/QA Specifications & Testing continued
1:30 p.m.	Chemical Admixtures, Hot & Cold Weather Concreting, and WYDOT Weather Limitations
2:15 p.m.	Solution to Practice Problems
2:30 p.m.	Break
2:45 p.m.	Practice ASTM Test Methods
5:00 p.m.	Adjournment
7:00-9:00 pm	Study Session (no lectures or new material)
Day 3	
7:00 a.m.	ACI Written Exam (Room 3044)
8:00 a.m.	WYDOT Written Exam
9:00 a.m.	ACI Performance Testing
1:00 p.m.	Adjournment

****For Additional information about workshops, please contact us at 307-766-6743.**



Parking Information

Participants will receive a parking permit with their registration. A pamphlet and campus map will be mailed along with the parking permit marking designated parking areas. Please be sure to park in the designated "A" parking areas. Do not park in the metered areas as you will receive a parking ticket. If you park in any area other than the "A" lots, you will be ticketed and will be responsible for paying your own fines.

Parking in the neighborhoods surrounding the Engineering building is permitted only to the residents of those neighborhoods who have obtained appropriate parking permits from the city. WYDOT certification participants who park in these city-permitted districts without the appropriate permit are subject to a city issued parking fine of \$50.

An electronic copy of this brochure and registration form may be obtained from the WYDOT web page at <http://dot.state.wy.us>. Under "Working with WYDOT"

PROCTOR'S APPLICATION FORM

The Wyoming Certification program is a self-supported program managed by a committee representing WYDOT, contractors, and consultants. Volunteer proctors are needed for all training sessions in order to insure the success of the program. The program will pay each proctor \$125 per session to help offset the living expenses during the session. In addition to helping the training program, volunteers will benefit from interacting with other technicians and the training staff. If you are interested in being a proctor for a session, **you must be certified at the time of filling out the application.** Confirmation and required attendance times will be sent out approximately two weeks prior to each session.

(CHECK THE APPROPRIATE BOXES)

<u>AGGREGATE</u>	<u>ASPHALT</u>
<u>Session I, II & III</u> December 5 – 7, 2011 <input type="checkbox"/> January 9 – 11, 2012 <input type="checkbox"/> May 7 – 9, 2012 <input type="checkbox"/>	<u>Session I, II & III</u> December 7 – 9, 2011 <input type="checkbox"/> January 11 – 13, 2012 <input type="checkbox"/> May 9 – 11, 2012 <input type="checkbox"/>
<u>CONCRETE</u>	
<u>Session I, II & III</u> November 14 – 16, 2011 <input type="checkbox"/> February 6 – 8, 2012 <input type="checkbox"/> March 12 – 14, 2012 <input type="checkbox"/>	

Name: _____

Company: _____

Phone #: _____ FAX # _____

Address: _____

City: _____ State: _____ Zip: _____

Applicant's certification types & dates: _____

The reimbursement should be sent to: ___ Applicant, ___ Company, or ___ Reimbursement for expenses is not needed.

(Signature of Company Official)

Mail to: Dr. Khaled Ksaibati, P.E., WYDOT Certification, Civil & Architectural Engineering, Dept. 3295, 1000 E. University Ave., Laramie, WY 82071 or fax to 307-766-6784.

INDIVIDUAL APPLICATION FORM

(CHECK THE APPROPRIATE BOXES)

<u>AGGREGATE</u>	
<u>Session I & II</u> December 5 – 7, 2011 <input type="checkbox"/> January 9 – 11, 2012 <input type="checkbox"/>	<u>Session III</u> May 7 – 9, 2012 <input type="checkbox"/>
<u>ASPHALT</u>	
<u>Session I & II</u> December 7 – 9, 2011 <input type="checkbox"/> January 11 – 13, 2012 <input type="checkbox"/>	<u>Session III</u> May 9 – 11, 2012 <input type="checkbox"/>
<u>CONCRETE</u>	
<u>Session I, II & III</u> November 14 – 16, 2011 <input type="checkbox"/> February 6 – 8, 2012 <input type="checkbox"/> March 12 – 14, 2012 <input type="checkbox"/>	
<u>PAVEMENT SMOOTHNESS PROFILER SEMINAR</u> Contact Joel Dagnillo for registration information @ 307-777-4476	

Registration Aggregate: \$ _____ Registration Asphalt: \$ _____

Registration Concrete w/o ACI: \$ _____ w/ACI: \$ _____

Total Enclosed Registration Fee(s): \$ _____

****A parking pass will be provided and is included in the registration.**

Full Name (no nicknames): _____

Print name clearly, as this is how it will appear on your certification ID Card

ACI Cert. #: _____ ACI Cert. Expiration Date: _____

Present WYDOT Cert. #: _____

Company: _____

Phone #: _____ FAX #: _____

Address: _____

City: _____ State: _____ Zip: _____

(Signature of Company Official)

These certification courses are not introductory programs. It is advised that applicants have at least one (1) year of experience in road or bridge construction, including aggregate testing.

Make check payable to: Civil & Architectural Engineering Department

Mail with payment to: Dr. Khaled Ksaibati, P.E., WYDOT Certification, Civil & Architectural Engineering, Dept. 3295, 1000 E. University Ave., Laramie, WY 82071