

**WYOMING MATERIALS CERTIFICATION  
PROGRAM ONLINE  
2021-2022**



**UNIVERSITY OF WYOMING**

**AGGREGATE, ASPHALT, CONCRETE**

**SPONSORED BY:  
WYOMING DEPARTMENT OF TRANSPORTATION  
CERTIFICATION COMMITTEE**

## INTRODUCTION:

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

All aggregate, asphalt, and concrete instruction will take place online through Zoom. All written tests will be administered through an online test-taking platform.

The certification will include online 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 an online written test and a performance test. Wyoming DOT QC/QA projects require testing technicians to be certified for asphalt and concrete projects. **All three certifications are good for 5 years.**

***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 a 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 or training**. 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.***

## SEMINAR REQUIREMENTS

- This seminar is a certification program, not a training
- Access to a working computer with speakers
- Access to working printer (to print course materials & forms for exam)
- A way to download and save provided PDFs onto your computer
- We recommend having a webcam for Zoom videos
- Download free version of Zoom to have video calls <https://zoom.us/download>
- A calculator with the STAT function and an understanding of how to use it
- WYDOT Specification Book

Each day, we will have a zoom call with a code. Once you download Zoom, you can find a link to the course on our website or through email.

## SEMINAR INSTRUCTORS

Dr. Khaled Ksaibati, P.E.

Dr. Kim Basham, P.E.

Dr. Thom Edgar, P.E.

Jeffery Groom, P.E.

WYDOT Materials Office 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. Instruction and online exams will take place on the dates below. After you complete the online exams, we will let you know if you have passed. After passing all the online exams, you will go to the WYDOT Materials Lab in Cheyenne, WY at the scheduled dates below. If you had an IA inspection you are exempt from the hands-on performance exam.

**Session I**      **December 1-3, 2021**  
**Session II**     **January 24-26, 2022**  
**Session III**    **May 16-18, 2022**

**ASPHALT SEMINAR** includes asphalts, aggregates, mix designs, field testing, specifications, construction, and acceptance. Instruction and online exams will take place on the dates below. After you complete the online exams, we will let you know if you have passed. After passing all the online exams, you will go to the WYDOT Materials Lab in Cheyenne, WY at the scheduled dates below. If you had an IA inspection you are exempt from the hands-on performance exam.

**Session I**      **December 6-8, 2021**  
**Session II**     **January 31 – February 2, 2022**  
**Session III**    **May 23-25, 2022**

**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 recommended by ASTM and AASHTO. Instruction and online exams will take place on the dates below. After you complete the online exams, we will let you know if you have passed. After passing all the online exams, you will go to the WYDOT Materials Lab in Cheyenne, WY at the scheduled dates below. If you had an IA inspection you are exempt from the hands-on performance exam.

ACI Certification is no longer a mandatory portion of Wyoming Certification. If you want to be ACI certified contact the AGC/WCA in Casper, WY at (307) 237-4400.

**Session I**      **December 13-15, 2021**  
**Session II**     **February 7-9, 2022**  
**Session III**    **May 11-13, 2022**

**IN PERSON PERFORMANCE EXAM DATES:** (In Cheyenne, WY at the WYDOT Materials Lab)

**\*Per WMTC policy, testers that are recertifying may be exempt from the in person performance exam if they have sufficient Independent Assurance Inspections.**

**Contact Mike Reyes to verify your inspection status.**

**Phone: 307-777-4096**

**Email: [mike.reyes@wyo.gov](mailto:mike.reyes@wyo.gov)**

**Aggregate/Asphalt-** December 16, 2021 (8:00 am - 12:00 pm)

**Concrete-** December 17, 2021 (8:00 am - 12:00 pm)

**Aggregate/Asphalt-** February 15, 2022 (8:00 am - 12:00 pm)

**Concrete-** February 16, 2022 (8:00 am - 12:00 pm)

**Aggregate/Asphalt-** June 1, 2022 (8:00 am - 12:00 pm)

**Concrete-** June 2, 2022 (8:00 am - 12:00 pm)

**RETEST DATES:**

*You will be notified if you need to take a retest for the online written exam. You will register and pay for one of the following dates. On the day of the test, we will email you a link for the retest.*

**Aggregate, Asphalt, and Concrete Retest Dates:**

- December 9, 2021 10:00 am – 12:00 pm**
- December 20, 2021 10:00 am – 12:00 pm**
- February 3, 2022 10:00 am – 12:00 pm**
- February 10, 2022 10:00 am – 12:00 pm**
- May 19, 2022 10:00 am – 12:00 pm**
- May 26, 2022 10:00 am – 12:00 pm**

If these dates and times are not good for you, please contact us via email at [wyt2c@uwyo.edu](mailto:wyt2c@uwyo.edu) to arrange another date or time.

**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 WYDOT Materials Pavement Management staff for information concerning the Smoothness Profiler Certifications. **Telephone: 307-777-4476.**

**REGISTRATION INFORMATION**

**Cost\*:**

- Aggregate Sessions** ..... \$550
- Asphalt Sessions** ..... \$550
- Concrete Session, without ACI Certification (2021 and beyond no ACI)** ..... \$550
- Retesting Fee (Aggregate, Asphalt, Concrete)** ..... \$100  
(You will be notified if retesting is necessary)

\* Fees include instruction and exams.

**Payment:**

To pay online, go to <http://www.uwyo.edu/wyt2/>, select Workshops, then click the blue Click Here to Register button. If you register by mail, the 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 **UWYO/WYT2C.**

**Cancellation/No-Show Policy:** Cancellation at least 14 days prior to the selected certification session you will 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. DOT registrants who do not attend a seminar will be charged the full registration amount. If an applicant cannot attend a seminar due to an emergency, he/she should contact the Wyoming Technology Transfer Center (307-766-6743) as soon as possible.

## Agenda for Aggregate Sessions

<b>Day 1</b>	
1:00 pm	Registration & Welcome
1:10 pm	Aggregate Physical Properties
2:30 pm	Aggregate Types and Uses
3:15 pm	<b>Break</b>
3:30 pm	Aggregate Tests
5:00 pm	Adjournment
<b>Day 2</b>	
8:00 am	Questions & Answers
8:15 am	Aggregate Specifications
9:00 am	Developing A Job Mixing Formula (JMF)
9:30 am	<b>Break</b>
9:45 am	Aggregate Construction & Points of Acceptance
10:30 am	Aggregate Acceptance & Balance Verification
11:15 am	Correlation of Testing Techniques
12:00 pm	<b>Lunch ON YOUR OWN</b>
1:00 pm	Calculations
1:45 pm	Aggregate Tests – Demonstrations/Videos
	<b>Break</b>
5:00 pm	Adjournment
6:30 pm–8:30 pm	<i>Online Study Session (no new material)</i>
<b>Day 3</b>	
8:00 am-12 pm	Online Examinations

## Agenda for Asphalt Sessions

<b>Day 1</b>	
1:00 pm	Registration & Welcome
1:10 pm	Introduction to Asphalt
2:00 pm	Asphalt Performance Grading
2:45 pm	<b>Break</b>
3:00 pm	Aggregates for HPMBP
3:45 pm	Testing Technician Correlation
5:00 pm	Adjournment
<b>Day 2</b>	
8:00 am	Mix Design
8:00 am	CALCULATION REVIEW
8:30 am	Marshall Mix Design
9:00 am	Super pave
9:30 am	<b>Break</b>
9:45 am	Variables & Effects
10:00 am	Production & Construction
10:30 am	Calculations
12:00 pm	<b>Lunch ON YOUR OWN</b>
1:00 pm	QC/QA Specifications
1:45 pm	Verification Calculations
2:15 pm	Balance Verification
2:30 pm	<b>Break</b>
2:45 pm	Random Sampling Density
3:45 pm	Demonstration & Practices
5:00 pm	Adjournment
6:30 pm-8:30 pm	<i>Online Study Session (no new material)</i>
<b>Day 3</b>	
8:00 am-12:00 pm	Online Examinations

## Agenda for Concrete Sessions

<b>Day 1</b>	
1:00 pm	Registration
1:10 pm	Welcome & Introduction
1:15 pm	ASTM Test Methods: Temperature, Slump, Unit Weight, Air Content – Pressure, Air Content – Volumetric, Making Cylinders & Beams
2:45 pm	<b>Break</b>
3:00 pm	ASTM Test Methods Continued
5:00 pm	Adjournment
<b>Day 2</b>	
8:00 am	Fundamentals of Concrete
9:00 am	Batch Water, Aggregate Moisture, w/cm Ratio and Adjusting Slump
10:00 am	<b>Break</b>
10:15 am	WYDOT Concrete Specifications: Pavement & Structural
11:15 am	QC/QA Specifications & Testing
11:45 am	<b>Lunch ON YOUR OWN</b>
12:45 pm	QC/QA Specifications & Testing continued
1:30 pm	Chemical Admixtures, Hot & Cold Weather Concreting, and WYDOT Weather Limitations
2:15 pm	Solution to Practice Problems
2:30 pm	<b>Break</b>
2:45 pm	Practice ASTM Test Methods
5:00 pm	Adjournment
6:30 pm-8:30 pm	<i>Online Study Session (no new material)</i>
<b>Day 3</b>	
8:00 am-12:00pm	Online Examinations

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

An electronic copy of this brochure and registration form may be obtained from the WYDOT web page at <http://dot.state.wy.us>. Click on “Business with WYDOT” – “Training/Certification” – “Materials Technician Certification” or Wyoming Technology Transfer Center <http://www.uwyo.edu/wyt2/certifications/>

## INDIVIDUAL REGISTRATION FORM

(CHECK THE APPROPRIATE BOXES)

<u>AGGREGATE</u>	<u>ASPHALT</u>
<u>Session I, II &amp; III</u>	<u>Session I, II &amp; III</u>
December 1-3, 2021 <input type="checkbox"/>	December 6-8, 2021 <input type="checkbox"/>
January 24-26, 2022 <input type="checkbox"/>	January 1-February 2, 2022 <input type="checkbox"/>
May 16-18, 2022 <input type="checkbox"/>	May 23-25, 2022 <input type="checkbox"/>
<u>CONCRETE</u>	
<u>Session I, II &amp; III</u>	
December 13-15, 2021 <input type="checkbox"/>	
January 19-21, 2022 <input type="checkbox"/>	
May 11-13, 2022 <input type="checkbox"/>	
<b><u>PAVEMENT SMOOTHNESS PROFILER SEMINAR</u></b>	
Contact Sarah Rickgauer for registration information @ 307-777-4476	

Registration Aggregate (\$550): \$ \_\_\_\_\_  
 Registration Asphalt (\$550): \$ \_\_\_\_\_  
 Registration Concrete w/o ACI (\$550): \$ \_\_\_\_\_  
**Total Enclosed Registration Fee(s): \$ \_\_\_\_\_**

Full Name (no nicknames): \_\_\_\_\_  
**Print name clearly, as this is how it will appear on your Certification ID Card**

Present WYDOT Cert. #: \_\_\_\_\_ WYDOT Crew # \_\_\_\_\_

Company: \_\_\_\_\_

Phone #: \_\_\_\_\_ FAX # \_\_\_\_\_

Email: \_\_\_\_\_

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: UWYO/WYT2C**

**Mail with payment to:**

**Wyoming Technology Transfer Center  
 1000 E. University Ave., Dept. 3295  
 Laramie, WY 82071**

**ONLINE REGISTRATION IS PREFERRED, PLEASE VISIT OUR WEBSITE**

<http://www.uwyo.edu/wyt2/workshops/index.html>