



IREF
GLOBAL

Advances in Pavement Design, Analysis & Construction

Online Training
May 18 – June 10, 2021



Online Training

16 Professional Development Hours



Advances in Pavement Design, Analysis and Construction

May 18 – June 10, 2021

Online Workshop

Background

This on-line training course is designed to provide a comprehensive knowledge of the basic concepts and recent advances related to pavement design, analysis and construction. Participants will be guided through various interactive course modules to develop skills and knowledge to employ standard guidelines and specifications related to both flexible and rigid pavements. Throughout this course, the sustainability considerations for design and construction of pavements will be discussed. Innovations and advances in pavement engineering with regards to design, analysis and construction, will also be addressed through dedicated modules for each topic.

Format

The lectures will be taught during a four-week period with live two hour on-line sessions held on Tuesday and Thursday of each week. Upon completion of the training program, the IRF will administer an on-line knowledge test. Participants with a score of 80% or higher will be awarded with a certificate verifying their successful completion of the course.

Learning Objectives

- ✓ Understand the basic concepts of different pavement structures
- ✓ Become familiar with local standards and specifications regarding the design and construction of pavements
- ✓ Understand the basic concepts of pavement structures and their functional properties
- ✓ Understand the process for design of pavement system using both empirical and mechanistic approaches
- ✓ Become familiar with different materials used in the pavement structures and their fundamental properties
- ✓ Learn about the advances and innovations in pavement construction

Target Audience

- ✓ Road Authorities & Operators
- ✓ Road Design Consultants
- ✓ Road Contractors
- ✓ Maintenance Personnel
- ✓ Pavement design engineers
- ✓ Geotechnical engineers
- ✓ Materials engineers

Speakers



Mehran Mazari, Ph.D.

Assistant Professor, California State University Los Angeles

Dr. Mehran Mazari is an Assistant Professor in the Department of Civil Engineering at Cal State LA, specializing in Transportation Infrastructure and Materials. He is the director of Sikand Center for Sustainable and Intelligent Infrastructures (SITI-Center) and founder of Sustainable Infrastructure Materials Research Lab (SIM-Lab) at Cal State LA. His research interests include sustainable and resilient transportation infrastructure, transportation infrastructure materials, and non-destructive evaluation of transportation infrastructure. He is a member of technical committees at the Transportation Research Board of National Academies of Science and Engineering and co-chair of the LTPP subcommittee of the Highway Pavement Committee of the American Society of Civil Engineers (ASCE). Dr. Mazari has published more than 60 peer-reviewed journal and conference papers. He has been actively involved in a number of national and state research projects, including National Highway Cooperative Research Program (NCHRP) and Federal Highway Administration (FHWA), among others.

Registration

- 1,700 USD IRF Members
- 2,000 USD Non IRF Members
- 1,400 USD Groups of 3 or More
- 1,000 USD IFIs, US State DOTs & City Officials

Registration: <https://www.irf.global/event/a-pvmt21-may-online-training>

For any support, please contact melabyad@irf.global

Schedule

Tuesdays & Thursdays (12:00 PM– 2:00 PM US EDT/ 4:00 PM – 6:00 PM GMT)

Tuesday May 18, 2021

Introduction and Background
Pavement Types (Rigid and Flexible)
Pavement Design Methods

Thursday May 20, 2021

Empirical Pavement Design Methods
Mechanistic-Empirical Design Approach
Advances in Pavement Structural Design and Analysis

Tuesday May 25, 2021

Pavement Materials (Rigid and Flexible)
Material Properties and Testing (Laboratory and Field)
Specifications and Local Standards

Thursday May 27, 2021

Mix Design Approaches
Performance Based Mix Design
Advances in Mix Design and Evaluation

Tuesday June 1, 2021

Review of Pavement Construction Methods
Construction Specifications and Guidelines
Quality Control and Quality Assurance

Thursday June 3, 2021

Innovations and Advances in Pavement Construction
Performance Monitoring and Evaluation
Maintenance and Rehabilitation

Tuesday June 8, 2021

Special Topics in Pavement Engineering
Non-Destructive Testing and Evaluation
Advances in Pavement Research

Thursday June 10, 2021

Advances in Sustainable Design and Construction
Recycled Materials
Sustainability Rating for Pavements

System Requirements

Computer Requirements

Operating System

Windows 7 - Windows 10, Mac OS X 10.9 (Mavericks), macOS Catalina (10.15), Linux, Google Chrome OS, Android OS 5 (Lollipop) - Android 9 (Pie), iOS 10 - iOS 12, Windows Phone 8+, Windows 8RT+

Web browser

Google Chrome (most recent 2 versions)

Mozilla Firefox (most recent 2 versions)

Internet Explorer v11 (with Adobe Flash if running Windows 7)

Apple Safari (most recent 2 versions)

Microsoft Edge (most recent 2 versions)

Internet connection

1 Mbps or better (broadband recommended)

Hardware

2GB of RAM (minimum), 4GB or more of RAM (recommended)

Microphone and speakers (USB headset recommended)

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Better Roads. Better World.



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