



**COURSE NUMBER**

FHWA-NHI-131014

**COURSE TITLE**

**Highway Pavements**

The course presented at Michigan State University provides intensive study in highway pavements and microcomputer applications. The six major subject areas to be addressed are: 1. Pavement Design. 2. Pavement Monitoring & Evaluation 3. Pavement Rehabilitation & Maintenance 4. Quality Assurance 5. Pavement Research 6. Pavement Management TEST2

**OUTCOMES**

Upon completion of the course, participants will be able to:

- Testing--Upon completion of the course, the participants should be able to: 1. Identify and describe empirical and mechanistic/empirical design concepts including those found in the AASHTO Guide for Design of Pavement Structures and elastic layer design systems. 2. Describe how planning, design, budgeting, programming, construction, maintenance, rehabilitation, monitoring, evaluation, and research interact to create a Pavement Management System (PMS). 3. Differentiate between network and project level pavement management considerations and develop the elements of a well designed feedback system for evaluating performance as it relates to design and construction. 4. Emphasize the economic impact of good design on life cycle costs and how these costs are affected by construction and maintenance practices. 5. Discuss several of the more prominent rehabilitation techniques available to highway agencies. Develop an understanding of the data, assumptions, and design methods used as input. Explain how input may range widely in complexity, scope, and cost. 6. Understand the purpose of a network level PMS. Define the basic elements of a PMS which are the inventory, pavement data and traffic data collection process, integrated data base, data analysis capabilities, outputs, and products. Develop and implement a PMS through the state development process. Explain the engineering, management, and cost benefits of a PMS. 7. Understand the roles and applications of microcomputer in the various activities required for designing, evaluating, rehabilitating, and managing the pavement network.test2

**TARGET AUDIENCE**

Testing--This course will provide training for engineers, planners, and administrators at the Federal, State, and local agencies who by virtue of education and/or experience have a basic knowledge of pavement principles. Applicants should be staff professionals and managers or individuals with potential to be promoted, who anticipate working in a pavement related position.

**TRAINING LEVEL:** Basic

**FEE:** 2016: \$3 Per Person; 2017: N/A

**LENGTH:** 33 DAYS (CEU: 3 UNITS)

**CLASS SIZE:** MINIMUM: 17; MAXIMUM: 23

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