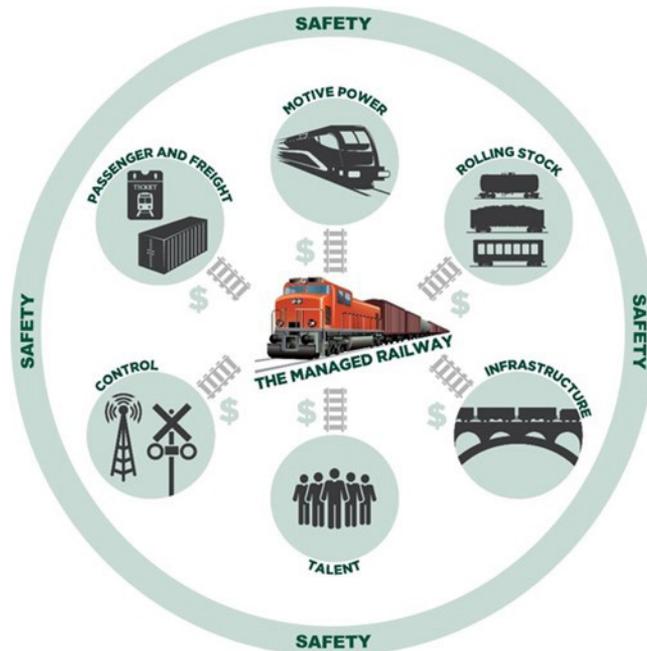




Center for Railway  
Research and Education  
Broad College of Business  
MICHIGAN STATE UNIVERSITY

# RAILWAY ENGINEERING AND TECHNOLOGY

PUEBLO, COLORADO AT MxV (FORMERLY TTCI)  
DATES TBA 2023



## **OVERVIEW**

A stand-alone module of the established and highly respected **Railway Management Certificate Program**, this residential five-day program covers the essentials of railway engineering and technology with a managerial perspective. We combine classroom presentation of concepts with discussions led by rail industry subject matter experts and site visits to see railroad engineering in action. Railway Engineering and Technology brings together many aspects of the complex railway ecosystem.

## **KEY LEARNING OBJECTIVES**

By the end of the program, participants will have improved their understanding of the following engineering and technological topics, which can impact managing today's and tomorrow's railroad:

- Railway Engineering, Technology and Research and Development Policy
- Vehicle Dynamics
- Infrastructure - Track, Bridges, and other structures
- Motive Power and Rolling Stock
- Concepts of Railway Control and Signaling / Communications
- Signaling and Interlocking
- Positive Train Control
- Hazardous Materials and Incident Response
- Railway Telecommunications

## **WHO SHOULD ATTEND?**

- Railroad superintendents, trainmasters, and middle managers from engineering and technological functions with capacity to perform at higher levels
- Managers/leaders requiring learning opportunity beyond their experience who have had limited business administration education
- Shippers needing to learn about the business of railroading to build better relationships to improve performance
- Suppliers to the rail industry wishing to learn about the business of railroading to improve communication and understanding
- Staff of rail agencies, regulators, policy bodies, and state/local government.

## **TENTATIVE SCHEDULE**

### **MONDAY – WEDNESDAY**

On site at MxV with mix of classroom sessions and site visits

### **THURSDAY**

Rail Rolling Mill Visit; Locomotives and Rolling Stock classes

### **Friday**

Communication Technology and Wrap-Up

**For a copy of the latest schedule please email:  
littlen@msu.edu**

## **SITE VISIT INFORMATION**

Regional/short line railroad, major rail customer loading facilities, economic development sites (subject to availability.)

## **FACULTY**

### **NICK LITTLE, FACULTY LEADER**

is the Director Railway Education, Center for Railway Research and Education (MSU/CRRE). Before joining the CRRE team, Nick had a career with British Railways, supply chain management, and executive education.

### **MICHIGAN STATE UNIVERSITY FACULTY**

from the #1 ranked University for both graduate and undergraduate Supply Chain Management programs for many years (US News & World Report).

### **SELECT SUBJECT MATTER EXPERTS**

will join for guest lectures and presentations.

## **COST**

\$5,000 – full tuition. Price includes instructional materials and site visits, faculty and staff support, overnight hotel rooms, daily breakfast, and lunch.

Transportation to and from the program, and dinner most nights are not included.

Discounts are available for multiple participants from the same company.

To utilize the best in adult learning practices, class size will be limited to twenty-five participants.

This program will comply with COVID-19 requirements at all class and site visit locations.

**For More Information** on MSU/CRRE and our research, please visit:  
[raileducation.com](http://raileducation.com)

**Online registration:** [execed.broad.msu.edu](http://execed.broad.msu.edu)

**Phone registration:** +1 517-353-8711

## **CONFIRMATION**

Following review and approval of your application, you will receive confirmation of your enrollment in the program.

## **CANCELLATION POLICY**

Cancellations must be made in writing within 15 business days prior to the start of the program for a full refund (March 28, 2021). Refunds may be returned, credited towards a future program within a one year time frame, or applied to a substitute enrollee per request. Participant substitutions are welcome at any time prior to the start of the program. If a registered participant does not attend the program and does not forward written notification in advance, the participant will be charged the full program fee.

## **CONTACT**

Have a question? Contact us at [crre@broad.msu.edu](mailto:crre@broad.msu.edu) or +1 517-353-8711.