

# TRANSPORTATION AND ENGINEERING MANAGEMENT (MS)

**Offered at: Solano Campus**

Master of Science in Transportation and Engineering Management program provides advanced instruction in business and management fundamentals, coupled with specialized preparation for career advancement in the participant's chosen specialization - Transportation, Engineering Management, or Humanitarian Disaster Management.

The 10-course degree program (30 credit hours) is offered completely online with accepted students proceeding through the learning process as a cohort. Current students report that the support offered by the cohort model along with 24/7 online access are big benefits for those juggling careers and families with graduate coursework.

All graduate students take five core courses in basic management, then each graduate student takes four courses focusing on their chosen degree track of Transportation, Engineering Management, or Humanitarian Disaster Management. Finally, graduate students complete a Capstone course designed to help them demonstrate their learning through an extensive project in their work setting.

## Specializations

### Engineering Management

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The Specialization in Engineering Management prepares students to integrate critical thinking and best practices in a manner that enables them to face real-world challenges with poise, and to contribute to the body of knowledge and practice in their industry.

### Humanitarian/Disaster Management

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Humanitarian and disaster relief reflect a growing emphasis on social responsibility in the undergraduate curriculum. These areas are fundamentally logistics based, and are an essential part of the mission and work done by a maritime institution.

### Transportation

**Offered at: Solano Campus**

Developed and delivered in close collaboration with business and industry, the Transportation Specialization provides a mix of cutting-edge theory and creative real-world applications to prepare students to succeed in a challenging and changing global market, with a particular focus on mid-career professionals in maritime and related fields who wish to further their education and employment opportunities, while facilitating their transition from sea to shore.

1. Lead a project team or multiple project teams, develop project proposals (including budgets and timelines) and manage the entire project life cycle.
2. Apply expertise in systems analysis and operations research to support project development and management.
3. Apply decision making, technical, and human resource principles to manage projects in a dynamic business and global economic context.
4. Awareness of organization's role in a global context; including environmental issues, and political, social, and ethical norms.
5. Ability to appreciate the security, economic, and legal dimensions that affect global supply chain management.
6. Ability to advance to higher levels of institutional responsibility with an increased understanding of organizational, financial, human resource and information systems management.
7. Ability to recognize and appreciate one's own ability to lead, direct, and advance the goals and vision of the organization.

Code	Title	Units
<b>REQUIRED CORE</b>		
TEM 5500	Project Management	3
TEM 5510	International Transportation Economics	3
TEM 5520	Organizational Behavior and Management	3
TEM 5530	Financial Management	3
TEM 5540	Information Systems Management	3
TEM 5900	Capstone	3
<b>Specialization</b>		
(See list of Specializations below)		12
<b>Total Units</b>		<b>30</b>

**Specializations****Engineering Management**

Code	Title	Units
<b>REQUIRED COURSES</b>		
TEM 5700	Systems Engineering Management	3
TEM 5705	Strategic Management	3
TEM 5710	Technology Management and Innovation	3
TEM 5720	Energy Resource Management	3
<b>Total Units</b>		<b>12</b>

**Humanitarian/Disaster Management**

Code	Title	Units
<b>REQUIRED COURSES</b>		
TEM 5800	The Global Humanitarian System	3
TEM 5810	Rapid and Slow Onset Disaster Management	3
TEM 5820	Humanitarian Project Management	3
TEM 5830	National and International Humanitarian Logistics	3
<b>Total Units</b>		<b>12</b>

**Transportation**

Code	Title	Units
<b>REQUIRED COURSES</b>		
TEM 5600	Global Logistics and Supply Chain Management	3
TEM 5610	International Transportation Law	3
TEM 5620	International Trade and Finance	3
TEM 5630	Port and Terminal Management	3
<b>Total Units</b>		<b>12</b>