Rail Transportation Minor (Min. 19 Credits)

Required Courses (7 Credits)
- CE 4404 - Railroad Engineering
- CE 4490 - Rail Transportation Seminar
- OSM 4700 - Logistics and Transportation Management

Leadership/Professional Electives (3 Credits)
- MGT 3100 Leadership Development
- AF 3020 - Leadership Studies II
- HU 3120 - Technical and Professional Communication
- AF 3010 Leadership Studies I
- OSM 3200 - Project Management
- MGT 3000 - Organizational Behavior

Railroad Focus Technical Electives (9 Credits)

**Civil Track**
- CE 3401 – Transportation Engineering
- CE 4333 - Estimating and Planning of Construction Projects
- CE 4407 - Transportation Design
- CE 4905 - Senior Design (Railroad Theme)*
- CE 4990 - Independent Study in Rail Topics*
- CE 5408 - Public Transit
- XX-XXXX A course in rail topics from another University*

**Mechanical Track**
- MEEM 3911 – Mechanical Engineering Practice IV
- MEEM 4220 - Internal Combustion Engines I
- MEEM 4450 - Vehicle Dynamics
- MEEM 4901/4911 - Senior Capstone Design (Railroad Theme)*
- MEEM 4990 - Independent Study in Rail Topics*
- XX-XXXX A course in rail topics from another University*

**Electrical Track**
- EE 3120 – Electric Energy Systems
- EE 4219/4220 - Intro to Electric Machinery and Drives with lab
- EE 4227/4228 - Power Electronics with lab
- EE 3160 – Signal Systems
- EE 3171 – Microcontroller Applications
- EE 3250 – Introduction to Communications Theory
- EE 3261 – Control Systems
- EE 4253 – Real Time Signal Processing
- EE 4805 – Electrical Engineering Project with Railroad Focus*
- EE 4901/4910 – EE Design Project with Railroad Focus*
- XX-XXXX A course in rail topics from another University*