Name (please print): ___________________________________________________________________________________________
(Last)                                                     (First)                                                (Middle)
Student Number: _____________________Primary Major: _______________Expected Major Completion Term: ________________

Required courses (7 credits)

_____ CE 4404 Railroad Engineering (3)
_____ CE 4490 Rail Transportation Seminar (1)
_____ OSM 4700 Logistics and Transportation Management (3)

Leadership/Professional Elective (choose one course for 3 credits)

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

Choose one area of study:

Civil (choose 9 credits)

_____ CE 3401 Transportation Engineering (3)
_____ CE 4333 Estimating and Planning of Construction Projects (3)
_____ CE 4407 Transportation Design (3)
_____ CE 4905 Engineering Design Project* (3)
_____ CE 4920 Independent Study in Civil Engineering* (3)
_____ CE 5408 Public Transit (3)

Mechanical (choose 9 credits)

_____ MEEM 3911 Mechanical Engineering Practice IV (3)
_____ MEEM 4220 Internal Combustion Engines I (3)
_____ MEEM 4450 Vehicle Dynamics (3)
_____ MEEM 4665 Production Planning (3)
_____ MEEM 4901 Senior Capstone Design I* (2) and
_____ MEEM 4911 Senior Design II* (2)
_____ MEEM 4990 Independent Study in Mechanical Engineering* (3)

Minimum Credits Required = 19

Continued next page
### Electrical (choose 9 credits)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EE 3120 Electric Energy System (3)</td>
<td></td>
</tr>
<tr>
<td>EE 4219 and 4220 Introduction to Electric Machinery and Drives with lab (4)</td>
<td></td>
</tr>
<tr>
<td>EE 4227 and 4228 Power Electronics with lab (4)</td>
<td></td>
</tr>
<tr>
<td>EE 3160 Signal Systems (3)</td>
<td></td>
</tr>
<tr>
<td>EE 3171 Microcontroller Applications (4)</td>
<td></td>
</tr>
<tr>
<td>EE 3250 Introduction to Communications Theory (3)</td>
<td></td>
</tr>
<tr>
<td>EE 3261 Control Systems (3)</td>
<td></td>
</tr>
<tr>
<td>EE 4253 Real Time Signal Processing (3)</td>
<td></td>
</tr>
<tr>
<td>EE 4805 Electrical Engineering Project* (3)</td>
<td></td>
</tr>
<tr>
<td>EE 4901 EE Design Project I* (2) and</td>
<td></td>
</tr>
<tr>
<td>EE 4910 EE Design Project II* (2)</td>
<td></td>
</tr>
</tbody>
</table>

*Prior written approval by the Director of the Rail Transportation Program is required.

Prior written approval by the Director of the Rail Transportation Program is required to substitute a rail topics course from another university.

Courses listed in this minor have the following prerequisites (shown in parenthesis). Concurrency is illustrated by the letter C.

CE4333 (CE3332), CE4407 (CE3401, SU2000), HU3120 (UN1015), OSM3200 (MA2710 or MA2720 or MA3710 or EET2010 or BUS2100 or BA2100) OSM4700 (MA2710 or MA3710) and (MA1135 or MA1160 or MA1161), MEEM3911 (MEEM3901 and EE3010 and MEEM3400 and MEEM3600), MEEM4220 (MEEM3210), MEEM4450 (MEEM3502 and MEEM3000) or (EE3305 and MEEM2700), MEEM4655 (MEEM3501), MEEM4901 (MEEM3000(C) and MEEM3502(C) and MEEM3900), MEEM4911(MEEM4901 and MEEM3000(C) and MEEM3502(C) and MEEM3900), EE3120 (EE2110 or EE3010 or (EE2111 and EE2112(C))), EE3160 ((EE2110 or EE2112) and (MA2320 or MA2321 or MA2330) and (MA3520 or MA3521 or MA3530 or MA3560)), EE3171 ((EE2241 or CS1112 or CS1111) and (EE2174 or EE2173)), EE3250 (EE3160), EE3261 (EE3160), EE4219 (EE2110 or EE2112 or EE3010), EE4220 (EE4219(C)), EE4227 (EE3120 and (EE3130(C) or EE3131)), EE4228 (EE4227(C)), EE4253 (EE4252), EE4805 (Permission of instructor), EE4901 (EE3131 or (EE3130 and EE3305) and (EE3901 or EE4900) and (EE3170 (C or EE3171 (C) or EE3173(C))), EE4910 (EE4901)