Course Name:
Transportation Engineering

<table>
<thead>
<tr>
<th>Course Number: 20-433</th>
<th>Credit: 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program: Undergraduate</td>
<td>Course Type: Technical elective</td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>Corequisite: Highway &amp; Traffic Engineering</td>
</tr>
</tbody>
</table>

Course Description (Objectives):

Course Content (outline):

- Introduction (Role of transportation in society, transportation and urban structure, transportation as a system, and transportation system components)
  - Transportation planning process
  - Problem identification and Objective setting
  - Definition of study area and zoning
  - Data needs and information gathering in supply and demand of transportation, land use, and socioeconomic variables
  - Transportation demand (trip generation and distribution, mode and path of travel)
  - Transportation supply (shortest path, traffic assignment) supply relations
  - Transportation externalities (air and noise pollution)
  - Evaluation and Decision-making
  - Transportation system Management (TSM)
Country-wide transportation planning
- Other modes of transportation

References: