Course Name:
Transportation Engineering

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