Course Name:
Concrete Pavement Design

<table>
<thead>
<tr>
<th>Course Number: 20027</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: Concrete Technology</td>
<td>Corequisite: -</td>
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</tbody>
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Course Content (outline):

- Introduction of pavements (asphalt vs. concrete)
- Major types of concrete pavements and their performance
- Overview of construction technology
- Subgrade, subbase, and drainage
- Brief concrete technology (relevant to conditions the pavement structures are exposed to).
- Major Distresses in PCC Pavements (overview)
- Rigid pavement response analysis
- KENPAVE computer program
- Traffic analysis
- Rigid pavement design (AASHTO, PCA)
- Concrete pavement construction
- Roller-Compacted Concrete (RCC) pavements
- Concrete pavement maintenance (including overlays and inlays)
- Rehabilitation

References: