CVE528 Transportation Systems Analysis and Design (2 Units)

Department of Civil Engineering

Covenant University
1. CVE528
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Highway economics; benefit/cost ratio analysis of alternative schemes; Highway finance; Finance methods; Highway construction, maintenance and rehabilitation. Geotechnical issue related to performance; Source and types of aggregates; desirable properties of aggregates; Bituminous materials bitumen, asphalts and tar; sources of asphalt; Paving grades of asphalts; desirable properties of asphalts mixtures; Laboratory tests for asphalts and asphalt mixtures; Asphalts mixture calculations and design; Marshall Mixture design procedure and criteria; Recycled asphalts materials- process, types, benefits; Introduction to superpave mixture design.