

CE 890 Graduate Seminar

SPEAKER: Greg Sanders, Distance Learning M.S. Candidate
(major professor: Dr. Asad Esmaeily)

TOPIC: “Design and Construction of Underground Structures”

DATE: September 16, 2009

TIME: 4:00 p.m. (refreshments at 3:45 p.m.)

PLACE: 2144 Fiedler Hall

ABSTRACT

The presentation will address the general aspects of design and construction of underground structures. Planning, design and construction of Tunnels, shafts and other underground structures will be discussed. In addition to explaining the general engineering challenges required during the design of underground structures such as tunnels, an introduction to underground excavation and designs processes will be provided. The topics covered include, benefits and drawbacks to underground structures, underground design considerations, geotechnical investigation requirements and excavation methods. The presentation will also include a brief explanation of the design of a six-piece precast ring with gasketed segments, and design of a cast in place tunnel lining as sample design cases of underground structures.