Teaching

Assistant Professor, August 2004 – Present
Soil Mechanics, Foundation Engineering, Theoretical Soil Mechanics, Computational Geotechnics, Geoenvironmental Engineering, Geosynthetics, Design of Earth Dam, In-situ Testing

Course Taught
Theoretical Soil Mechanics – CE5365 , Fall 2004, Fall 2005, Fall 2008
Designing with Geosynthetics – CE4322/CE5372, Spring 2005, Fall 2006
Computational Geotechnics – CE5300, Summer 2005, Spring 2006
Introduction to Geoenvironmental Engineering – Fall 2005, Fall 2007, Spring 2009
Design of Earth Dam – Summer 2006
Foundation analysis and Design – Spring 2006, Spring 2007, Spring 2008, Spring 2009
Soil Mechanics – Fall 2006, Summer 2007, Fall 2008, Summer 2009
Soil Mechanics Laboratory – Fall 2007
In-Situ Testing – Spring 2007

New Curricula Developed

1. **CE 5300 (Computational Geotechnics)** was offered in Summer 2005. The main objective of the course was to provide the student with a fundamental understanding of computational geotechnics, and to improve problem-solving skills by using computer programs in geotechnical, geoenvironmental, and geostructural systems.

2. **CE4300/C35375 (Introduction to Geoenvironmental Engineering)** was offered in Fall 2005. This course was introduced as a new senior elective also at the same time. The major objective of the course was to provide the students with an understanding of geotechnical and geo-environmental aspects of landfill design.

3. **CE6300 (Design of Earth Dam)** was offered in Summer 2006. The major objective of the course was to provide the students with an understanding of analyses and design aspects of earth dam design.

Ph.D. Dissertations Advised

1. Haque, Adil. (2007). "Dynamic Characteristics and Stability Analysis of Municipal Solid Waste in Bioreactor Landfill". Ph.D. Dissertation, University of Texas at Arlington, May 2007.

2. Shihada Huda (in progress). "Development of Advance tools for Brownfields Redevelopment" . Ph.D. Dissertation, University of Texas at Arlington, Expected: Summer 2010.

3. Kiran Kuma Penmethsa (in progress). "Performance Monitoring of Leachate Recirculation Systems in Bioreactor Landfills" Ph.D. Dissertation, University of Texas at Arlington, Expected: Fall 2010.

4. Jubair Hossain: Enrolled for Ph.D. in Fall 2009

5. Jose Hernandez: Part Time Ph.D. Student

M.S. Theses Advised

1. Krishna, T. (2006). "Numerical Modeling and Analyses of Pile Supported Embankments". M.S. Thesis, University of Texas at Arlington.

2. Kiran, K. (2007). "Permeability Of Municipal Solid Waste In Bioreactor Landfill With Degradation". M.S. Thesis, University of Texas at Arlington, Spring 2007.

3. Dharmateja, M. (2008). "Assessment of Geo-hazard Potential and Site Investigations using High Resolution Resistivity (HRR) Equipment" M.S. Thesis, University of Texas at Arlington, Spring 2008.

4. Mahmood, T. (2009). "Failure Analysis of A Mechanically Stabilized Earth (MSE) Wall using Finite Element Program PLAXIS". M.S. Thesis, University of Texas at Arlington, Spring 2009.

5. Hossain, J. (2009). "Development of Brownfield Database using GIS". M.S. Thesis, University of Texas at Arlington, Summer 2009.

6. Fujimoto, K. (2009) . "Application of The Resistivity Imaging Method to Identyfy Seepage Flow Paths Case Study: Lewisville Dam, Lewisville, TX". M.E. Project. Spring 2009.

7. Hubbard, J. – Expected Fall 2009

8. Taufiq, T. – Expected Spring 2010

9. Manzur, S. – Expected Spring 2010

10. McNem, B. – Expected Fall 2010

Support of Students' Academic Activities

- UTA Student Chapter, American Society of Civil Engineers (ASCE): Chapter meetings' regular attendee, Fall 2004 - Present.

- UTA Student Chapter, Chi Epsilon (The Civil Engineering Honor Society): Chapter meetings and initiation ceremonies' regular attendee, Fall 2004 - Present.