

Summer Semester 2005

# Graduate Institute

## Member Universities

### Degree Programs

Louisiana State University  
Engineering Sciences  
Environmental Studies  
Experimental Statistics

### Mississippi State University

Civil Engineering  
Environmental  
Geotechnical  
Hydraulics  
Structural

Computational Engineering  
Engineering Management  
Electrical Engineering  
Industrial Engineering  
Computer Science and  
Engineering  
Mathematics and Statistics  
Business

### Texas A&M University

Ocean Engineering  
Oceanography

## Inquiries and Questions

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U.S. Army Engineer Research  
and Development Center  
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Vicksburg, MS 39180-6199  
(601) 634-4279  
<http://graduate-institute.erd.c.usace.army.mil>  
E-mail: [graduate-institute@erd.c.usace.army.mil](mailto:graduate-institute@erd.c.usace.army.mil)

## The Graduate Institute

The Graduate Institute is an association of universities and the U.S. Army Engineer Research and Development Center (ERDC) through which academic credit and graduate degrees can be earned from Member Universities that offer programs at ERDC. The Institute was established in 1986 and functions through joint agreement between ERDC and Member Universities (Louisiana State University, Mississippi State University, and Texas A&M University). Academic oversight is given by the Graduate Institute Administrative Board, a group composed of a representative from ERDC and each Member University.

## The Graduate Program

Under the program, you may enroll as either a nondegree student or in a graduate degree program at a Member University.

If you plan a degree, it will be necessary to apply for admission from the Member University offering the program desired. Completed admission forms should be submitted to the University through the U.S. Army Engineer Research and Development Center, ATTN: Director, Graduate Institute, 3909 Halls Ferry Road, Vicksburg MS 39180-6199. Application forms can be obtained from the Director's office or from the Admissions Office at the University. Please note that if you have been accepted in selected out-of-state programs, you may be eligible to enroll on an in-state tuition basis through the Academic Common Market.

Upon admission as a degree candidate into a graduate program, it will be necessary to form a graduate committee to advise and work with you in the selection of a thesis topic and the selection of courses. The graduate committee will consist of members from the university graduate faculty and a member from ERDC who has adjunct, visiting, or affiliate faculty status. The committee will be chaired by a member of the graduate faculty appointed by the head of the major department. The Institute Director will assist you in contacting and making arrangements to form your graduate committee.

In addition to providing courses to meet degree requirements, the Institute also offers graduate credits in other scientific disciplines.

*The Graduate Institute does not discriminate against anyone because of age, creed, color, national origin, race, religion, sex, or handicap.*

# Courses: Summer Semester 2005

## Mississippi State University

### Civil Engineering

#### **CE 6993. Introduction to Geotechnical Engineering.** (3).

Instr. Dr. E. Berney, ERDC.

This course introduces the student to the principles of soil properties and behavior. Emphasis is placed on understanding these principles as they pertain to index tests, compaction, seepage analysis, consolidation and settlement, stress distribution, pore pressure response, and shear strength. Prereq.: Consent of Instructor/Advisor.

Tu & Th, 3:00 - 6:00 p.m., Classroom No. 1, Bldg. 3072.

### Industrial Engineering

#### **IE 8333. Production Control.** (3). Instr. Staff, MSU.

Inventory systems, static and dynamic production planning, operations scheduling, and forecasting systems.

Day & Time TBA, Classroom No. 3, Bldg. 3072. (VTC).

#### **IE 8913. Engineering Economy II.** (3). Instr. Staff, MSU.

Advanced principles and methods for engineering analysis of industrial problems. Topics include criteria for decisions, project investment and analysis, and elements of risk and uncertainty.

Day & Time TBA, Classroom No. 3, Bldg. 3072. (VTC).

### Engineering Mechanics

#### **EM 3213. Mechanics of Materials.** (3). Instr. Dr. D. Smith, ERDC.

Free body diagrams, equilibrium of simple structures; shear and bending moment diagrams; analysis of stress and strain; deflections of beams.

Day & Time TBA, Classroom No. 2, Bldg. 3072.

#### **EM 6123. Introduction to Finite Element Analysis.\*** (3).

Instr. Dr. T. Lacy, MSU.

Introduction to the finite element theory and formulation; use of existing computer programs, with applications to the area of mechanics.

Day & Time TBA, Classroom No. 2, Bldg. 3072. (VTC).

\*Meets core curriculum requirements.

### Computer Science

#### **CSE 6153. Data Communication.** (3). Instr. Dr. Y. Dandass, MSU.

The concepts and practices of data communications to provide the student with an understanding of the hardware and software used for data communications. M, W, & F, 11:00 a.m. - 12:40 p.m., Classroom 3, Bldg. 3072. (VTC).

#### **CSE 6214. Software Engineering.** (3). Instr. Dr. T. Philip, MSU.

Software planning; software requirements analysis and specification; software design; testing and debugging; maintenance; documentation. This class has a laboratory with it.

M & W, 3:00 - 5:20 p.m., Classroom No. 3, Bldg. 3072. (VTC).

#### **CSE 9633. Topics in Artificial Intelligence: Data Mining and Knowledge Discovery.** (3). Instr. Dr. C. Butler, ERDC.

Technology is creating huge databases of business data, such as consumer data, transaction histories, etc.

Scientists and engineers in many fields are capturing increasingly complex experimental data sets. An objective is to extract interesting patterns, associations, rules, changes, anomalies, and general regularities from the data to improve decision making. In this course we will study the knowledge discovery process, key data mining techniques, and exposure to applications of data mining. Prereq.: CSE 6633 or permission of instructor.

M & Th, 3:30 - 6:30 p.m., Classroom No. 2, Bldg. 3072.

### Business

#### **Core Courses**

#### **BL 8112. Law Ethics Dispute Resolution.** (2).

Instr. Dr. J. Bryant, MSU.

Legal and ethical issues faced by the business firm with emphasis on prevention and resolution of disputes, mediation, negotiation, and alternative dispute resolution. Th, 6:00-9:30 p.m., Classroom No. 3, Bldg. 3072. (VTC).

**TUITION: \$748.00**

#### **Term 1 (1 Jun 05 – 1 Jul 05)**

#### **MGT 8121. Strategic Management.** (1). Instr. Staff, MSU.

A detailed study of strategic management covering such topics as environmental analysis, competition between firms, establishing and sustaining a competitive advantage, and strategy implementation.

Day & Time TBA, Classroom No. 3, Bldg. 3072. (VTC).

**TUITION: \$354.00.**

#### **MKT 6213. Internet Marketing.** (2). Instr. Dr. M. Moore, MSU.

Introduction to practical marketing use of Internet technologies, including basic business and society and strategic implications.

MSU Internet. **Tuition: \$1,062.00**

## Calendar: Summer Semester 2005

31 May 05	Semester begins for TAMU.
1 Jun 05	Semester begins for MSU.
13 Jun 05	Semester begins for LSU.
14 Jul 05	Last day to drop a class from MSU.
20 Jul 05	Last day to drop a class from TAMU without a grade.
19 Jul 05	Last day to withdraw from LSU.
20 Jul 05	Last day to withdraw from TAMU.
27 Jul 05	Last day to withdraw from MSU.
3 Aug 05	Semester ends for MSU.
1 Aug 05	Semester ends for LSU.
8 Aug 05	Semester ends for TAMU.

### Registration

Registration will be held 11 April through 19 May 2005, 8:30 a.m. until 4:00 p.m., Building 3072.

### Tuition and Fees

MSU – \$684.75/3 SCH (Except as noted for MBA classes)

LSU – \$778.00/3 SCH (Subject to change)

TAMU – \$1,550.00/3 SCH (Subject to change)

Tuition and fees are payable at registration by check, money order, or a copy of an **approved** purchase request (DD Form 1556 for Corps employees).

### New Students and Readmit Students

**New students** enrolling in courses from MSU **MUST** have a copy of their undergraduate transcript mailed to the Graduate Institute prior to registration and **MUST** register by 22 April to ensure admission to the university before the semester begins. Students who have not been enrolled in classes at MSU for one semester (Fall or Spring) or more should also register by 22 April to ensure timely readmission to the university and enrollment in classes. **New students** enrolling in courses offered by LSU and TAMU will have to pay an application fee of \$25 and \$50, respectively.

### Withdrawals and Refunds

Requests to withdraw from a course must be submitted in writing to the Director, Graduate Institute. Refunds, if applicable, will be by the university according to their policy.

### Textbooks

Books can be purchased through the colleges' bookstore or any retail source. A list of books and sources will be provided at registration.

## Louisiana State University

**No classes being offered by LSU.**

## Texas A&M University

### Ocean Engineering

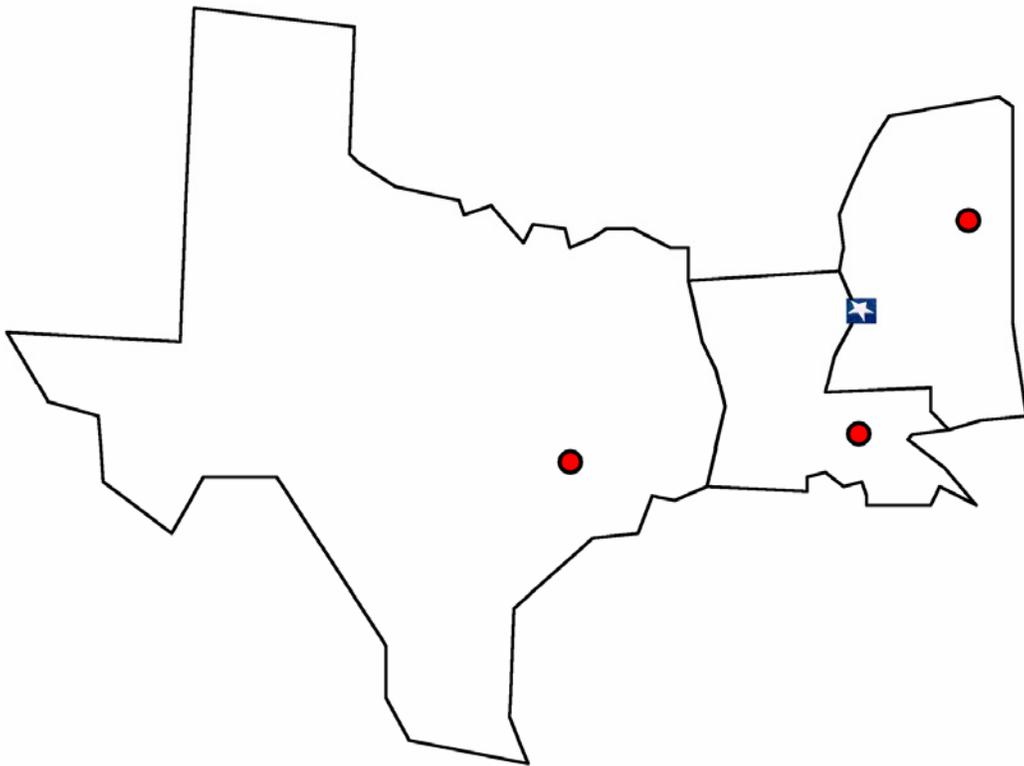
**OCEN 685. Problems.** (1-6). Research for thesis or dissertation.

**OCEN 691. Research.** (1-6). Research for thesis or dissertation.



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