



What You Can Do With a Major in Civil and Environmental Engineering

Description:

Civil engineers plan, design and supervise the construction of air pollution control systems, airports, dams, bridges, environmental engineering facilities, foundations for structures, highways and roads, hydroelectric facilities, reservoirs and lakes, structural frameworks for large buildings, traffic systems, and water supply systems. They protect our environment and conserve our natural resources, while providing the conveniences that we take for granted. The University of Alabama offers an undergraduate, masters and doctoral degrees in Civil Engineering. Please see the undergraduate and graduate catalogs for more information of these programs. Professional work experience before graduation, either through cooperative education or internship, is highly recommended.

Possible Areas of Specialization:

Major specialties within civil engineering are structural, water resources, environmental, construction, transportation, and geo-technical engineering.

Skills:

Active listening
Critical thinking
Idea evaluation
Judgment and decision making
Management of financial resources
Management of material resources
Operations analysis

Problem identification
Processing information
Reading comprehension
Solution appraisal
Speaking
Systems evaluation
Writing

Typical Work Activities:

Analyzing data or information
Coordinating work and activities
Evaluating information
Identifying objects, actions and events
Implementing ideas, programs

Inspecting equipment, structures, materials
Interpreting meaning of information
Making decisions and solving problems
Organizing, planning, prioritizing
Providing consultation and advice

Employment Settings:

Airports
Architectural Firms
Construction Industry
Consulting Firms
Engineering Firms
Environmental Engineering
Forests
Geo-technical Engineering
Highways
Hydraulics
Manufacturing Companies

Oil Companies
Public Works and Urban Planning
Railroads
Structural Engineering
Surveying and Mapping
Telecommunications
Transportation
Utility Companies
Waste Materials Management
Waterworks

Career Center Resources:

Careers in Engineering, by Geraldine O. Garner, 1993
Careers in Focus: Engineering, by Ferguson Publishing, 1999
College Majors Handbook, by Neeta Fogg, Paul and Thomas Harrington, 1999
Great Jobs for Engineering Majors, by Geraldine O. Garner, 1996
Is There an Engineer Inside You? by Celeste Baine, 2002
Occupational Outlook Handbook, by US Dept of Labor, 1998-99
Opportunities in Civil Engineering Careers, by D. Joseph Hagerty & Louis F. Cohn, 1997
Opportunities in Engineering Careers, by Nicholas Basta, 1996
CHOICES, FOCUS - Computer Assessment Programs
INFO USA – Computer Program to assist in job searching

Internet Sites:

| | |
|--------------------------------------|--|
| Career Information | www.collegegrad.com/careers |
| Civil Engineering Job.com | www.civilengineeringjobs.com |
| A/E/C Job Bank | http://aecjobbank.com |
| Ultimate Civil Engineering Directory | www.tenlinks.com/engineering/civil/ |

Professional Organizations:

| | |
|--|--|
| American Society of Civil Engineers | www.asce.org |
| National Society of Professional Engineers | www.nspe.org |
| ASCE – University of Alabama Student Chapter | http://civil.eng.ua.edu |
| American Assn. of State Highway and Transportation | www.transportation.org |

For additional professional organization listings see:

National Trade and Professional Associations of the United States 2000
State and Regional Associations of the United States 1999

Visit UA's Dept. of Engineeringwww.eng.ua.edu**Visit UA's Career Center**www.career.ua.edu

GERALD E. HUDSON

geh@hotmail.com

Local Address

P.O. Box 2345
Tuscaloosa, Alabama 35486
(205) 555-2234

Permanent Address

620 Willow Creek Lane
Foley, Alabama 36543
(334) 555-1405

OBJECTIVE (optional)

To obtain an entry-level position in the civil engineering industry with an emphasis in the geo-technical and/or structural field and eventually management.

EDUCATION

Bachelor of Science: Civil Engineering, May 20XX

The University of Alabama, Tuscaloosa, Alabama, Cumulative GPA 3.65/4.0: CE 3.89/4.0

EXPERIENCE

Engineering Technician Summer 2000

TTL, Inc. Tuscaloosa, Alabama

Created soil Boring Sheets, performed compaction test using a nuclear density gage, tested fresh concrete for porous and viscous properties and made test cylinders, performed proctor densities and index limits experiments in the lab.

Geotech Lab Teaching Assistant Spring 2000

The University of Alabama, Tuscaloosa, Alabama

Instructed civil engineering students principles of Geo-technical engineering through the use of lab equipment and procedures.

Research Assistant Summer 2000

The University of Alabama, Tuscaloosa, Alabama

Researched methods on converting the Alabama Department of Transportation's paperback manuals to HTML computer code to be viewed on the Internet efficiently.

Tutor January 1999 – March 2000

The University of Alabama, Tuscaloosa, Alabama

Tutored students in engineering courses (e.g., Mechanics of Materials, etc.) in classroom setting

COMPUTER SKILLS

AutoCAD, Microsoft Word, Excel, PowerPoint, Word Perfect, Intergraph, RISA, Lotus

HONOR SOCIETIES/HONORS/ACTIVITIES

Phi Theta Kappa, National Honor Society for Junior College (1998)

Phi Kappa Phi, National Honor Society (1999)

Golden Key, National Honor Society (1999)

The National Society of Collegiate Scholars, National Honor Society (2000)

Tau Beta Pi, National Engineering Honor Society (2000)

National Dean's List (1999-2001)

The Chad Hawkins Award (outstanding freshman) nominee (2000)