

# Construction Technology



The University of Tennessee  
College of Agricultural  
Sciences and Natural  
Resources (CASNR)



The Construction Technology concentration is designed to prepare you for entry into the very broad and diverse range of careers related to construction. This could lead to construction management opportunities in areas such as residential, agricultural, commercial, paving and excavation construction. Students in a program of this type typically enjoy the outdoors, and enjoy the sense of accomplishment that can be quickly realized seeing a project grow from an idea to finished product. This field relies on knowledge from engineering, construction, and business; skills related to teamwork and leadership are important as well. The program is designed to provide you a strong background in science and math, with exposure to relevant technology such as CAD, GPS/GIS, sensors and electronic information transfer. In addition, the added emphasis on business related coursework in the Construction Technology track leads to a Minor in Business Administration.

One of four Engineering Technology concentrations within the Environmental & Soil Sciences (ESS) Degree:

- Agricultural Systems Technology
- Construction Technology
- Land Surveying Technology
- Off Road Vehicle Technology

These concentrations are applied technology programs which are highly focused on specific technical areas. These tracks are designed to provide skills required to manage the sophisticated technological systems that are increasingly essential in today's world. The various tracks all provide a strong basic science foundation, and add coursework designed to create programs of study which emphasize the application of technology in today's world. Coursework in economics and the management of a small business are also included, along with oral and written communication.



While these programs provide a rigorous background in math and science, and include courses in engineering, they differ from those leading to B.S. in Engineering. The Engineering degrees have unique entrance requirements and are accredited programs which focus on design and lead to registration as a Professional Engineer.



## Department of Biosystems Engineering & Soil Science

2506 E.J. Chapman Drive  
The University of Tennessee  
Knoxville, TN 37996-4531

Contact: Eric C. Drumm, Ph.D., P.E.  
Professor and Head  
865-974-7266

<http://bioengr.ag.utk.edu/>



University of Tennessee  
**B.S. Environmental and Soil Sciences**  
**Construction Technology Concentration**  
(includes Minor in Business Administration)

**1st Semester**

**Freshman**

Geology 101	4
CHEM120 General Chemistry I*	4
ENGL101 English Composition I*	3
MA151 Math for the Life Sciences I*	<u>3</u>
	14

**Sophomore**

SPEECH210 or 240 Public Speaking (OC)*	3
ACCT200 Accounting <sup>2</sup>	3
ANR290 Computer Applications	3
ECON201 Intro. Econ. (Social Sciences)* <sup>2</sup>	4
PHYSICS221 Elements of Physics*	<u>4</u>
	17

**Junior**

Business Administration 201 <sup>2</sup>	4
BsET412 <a href="#">Surveying</a>	3
Business Law 301 (3) Legal Environment of Business	3
BsET414 <a href="#">CAD Applications to Biosystems Engineering Technology</a>	3
<a href="#">BsET 325 Soils in Construction</a>	<u>3</u>
	16

**Senior**

Technical Elective	3
Finance 301 <sup>2</sup>	3
CE 543 Construction Estimating	3
BsET434 <a href="#">Production Monitoring &amp; Automation</a>	3
Technical Elective	<u>3</u>
	15

**2nd Semester**

**Freshman**

<sup>1</sup> Gen Ed Elective (Social Sciences)*	3
Geology 102	4
CHEM130 General Chemistry II*	4
ENGL102 English Composition II*	3
MA152 Math for the Life Sciences II*	<u>3</u>
	17

**Sophomore**

<sup>1</sup> Gen Ed Elect.(Cultures & Civilizations)*	3
<sup>1</sup> Gen Ed Elective (Arts & Humanities)*	3
ENGL360 Tech & Prof Writing (WC)* or ENGL 295 Bus & Tech Writing (WC)*	3
ESS210 <a href="#">Introduction to Soil Science</a>	4
STAT201 Intro. to Statistics* <sup>2</sup>	<u>3</u>
	16

**Junior**

<sup>1</sup> Gen Ed Elect.(Cultures & Civilizations)*	3
BsET326 <a href="#">GIS/GPS Applications in Agriculture and Environmental Science</a>	3
CE 442 Construction Methods and Equipment Management 300 <sup>2</sup>	3
ESS324 <a href="#">Soil and Water Conservation</a>	<u>3</u>
	15

**Senior**

<sup>1</sup> Gen Ed Elective (Arts & Humanities)*	3
Marketing 300 <sup>2</sup>	3
BsE 404 Engineering Project Management	3
BsET432 <a href="#">Agricultural Machinery and Tractors</a>	3
<a href="#">BsET 411 Construction Issues Seminar</a>	<u>1</u>
	13

**123 Hours Total**

\* Meets University General Education Requirement

<sup>1</sup>Select from the corresponding University General Education list after consultation with advisor. This track specifically recommends Spanish 211 & 212 Intermediate Spanish (3 + 3).

<sup>2</sup>Requirement for Minor in Business Administration

Suggested Technical Electives: BsET 202, BsET474, Safety 443, Safety 452, Safety 460, ESS 334, ESS 444

