

Construction Science

2012-2013 Curriculum



The University of Tennessee



The Construction Science 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 comes from 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, adds fundamental concepts from engineering, and exposure to relevant technology and techniques such as CAD, land surveying, and GPS/GIS. The business related coursework in the Construction Science track leads to a Minor in Business Administration. This business background is supplemented with courses addressing construction-specific issues in accounting, finance, and law; issues related to green/sustainable construction practices are also covered.

This is one of four Biosystems Technology concentrations within the Environmental & Soil Sciences (ESS) Degree:

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

Additional information can be found at:

<http://bioengr.ag.utk.edu/students/Tech.asp>



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



Department of Biosystems Engineering & Soil Science
College of Agricultural Sciences and Natural Resources (CASNR)

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



<http://construction.utk.edu/>

or

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

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Professor

865-974-7266

**B.S. Environmental and Soil Sciences
Construction Science Concentration**
(includes Minor in Business Administration)
2012-2013 Curriculum



1st Semester		2nd Semester	
Freshman		Freshman	
Geology 101	4	¹ Gen Ed Elective (Social Sciences)*	3
CHEM120 General Chemistry I*	4	Geology 102	4
ENGL101 English Composition I*	3	CHEM130 General Chemistry II*	4
MA151 Math for the Life Sciences I*	<u>3</u>	ENGL102 English Composition II*	3
	14	MA152 Math for the Life Sciences II*	<u>3</u>
			17
Sophomore		Sophomore	
SPEECH210 or 240 Public Speaking (OC)*	3	¹ Gen Ed Elect.(Cultures & Civilizations)*	3
ACCT 200 Foundations of Accounting ²	3	BsET335 Construction Documents and Estimating	3
BsET 202 – Materials and Fabrication	3	ENGL360 Tech & Prof Writing (WC)* or	
ECON 201 Introductory Economics : (Social Sciences)* ²	4	ENGL 295 Bus & Tech Writing (WC)*	3
PHYSICS221 Elements of Physics*	<u>4</u>	ESS210 Introduction to Soil Science	4
	17	STAT 201 Intro to Statistics * ²	<u>3</u>
			<u>16</u>
Junior		Junior	
BsET 412 Surveying	3	¹ Gen Ed Elect.(Cultures & Civilizations)*	3
MGT 201 Intro to Business Management ²	4	¹ Gen Ed Elective (Arts & Humanities)*	3
Business Law 301 Legal Environment of Business	3	BsET 345 Green Construction & Constr. Safety	3
BsET 414 CAD Applications to Biosystems Engineering Technology	3	FINC 300 Fundamentals of Finance ²	3
BsET 325 Structural & Soil Mechanics in Construction	<u>3</u>	ESS 324 Soil and Water Conservation	<u>3</u>
	16		15
Senior		Senior	
BsET355 Project Planning and Scheduling	3	¹ Gen Ed Elective (Arts & Humanities)*	3
MGT300 Organizational Management ²	3	MARK300 Marketing & Supply Chain Management ²	3
BsET435 Construction Finance/Accounting and Law	3	Technical Elective	3
¹ Gen Ed Elective (Arts & Humanities)*	3	BsET432 Agricultural Machinery and Tractors	3
BsE 404 Engineering Project Management	<u>3</u>	BsET411 Construction Issues Seminar	<u>1</u>
	15		13

123 Hours Total

* Meets University General Education Requirement

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

²Requirement for Minor in Business Administration. Courses highlighted with **bold text** indicate construction specific content

