

Textile Engineering
GEP FORMAT A

(SEMESTER-BY-SEMESTER CURRICULUM DISPLAY)

Current: Proposed: **X**

Proposed Effective Semester: **7/2009**

DEGREE TITLE: **B. S. in Textile Engineering**
CONCENTRATION TITLE: **Product Engineering**
CURRENT DEGREE KEY: **18 TE 068P**

		Freshman Year			
		<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
CH	101 Chemistry, A Molecular Science ¹	3	TE	105 TE: Materials & Systems ¹	2
CH	102 General Chemistry Lab ¹	1	TE	110 Comp Model Engr ¹	3
E	101 Introduction to Engr & Prob Solv ¹	1	MA	241 Calculus II ¹	4
E	115 Intro to Computing Environ	1	PY	205 Physics for Engr & Sc I ¹	4
ENG	101 Academic Writing and Research ¹	4	***	*** GEP Requirement*	3
MA	141 Calculus I ¹	4	PE	1** Fitness & Wellness Course*	1
T	101 Intro to College of Textiles	2			
		Semester Total 16		Semester Total	17

		Sophomore Year			
		<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
MA	242 Calculus III	4	MA	341 Appl Differential Eq	3
MAE	206 Engr Statics or		MSE	201 Struct & Prop of Engr Mat'ls	3
CE	214 Engr Statics	3	TE	201 Textile Engr. Sci.	4
PY	208 Physics for Engr & Sc II	4	TE	205 Analog & Digital Circuits	4
TE	200 Polymer Sci & Engr	3	EC	205 Economics (GEP Soc Sci Req*)	3
GC	120 Found of Graphics	3			
		Semester Total 17		Semester Total	17

		Junior Year			
		<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
TE	301 Engr Textile Structures I	3	TE	302 Textile Mfg Proc II	4
TE	303 Thermodynamics for TE.	3	TE	404 Six Sigma Quality	3
MAE	314 Solid Mechanics or		TE	424 Tex Engr Qual Impr Lab	1
CE	313 Mech of Solids	3	PCC	301 Tech of Dyeing & Finish	4
***	*** GEP Requirement*	2-3	***	*** GEP Requirement*	3
ST	370 Prob & Stat for Engr	3	PE	*** Phys Ed/Healthy Living Elective*	1
		Semester Total 14-15		Semester Total 16	

		Senior Year			
		<i>Fall Semester</i>	<i>Credits</i>	<i>Spring Semester</i>	<i>Credits</i>
TE	401 Textile Engr Des I	4	TE	402 Textile Engr Des II	4
TE	463 Polymer Engineering	3	***	*** Engineering Elective ²	3
***	*** Engineering Elective ²	3	***	*** Engineering Elective ²	3
***	*** GEP Requirement*	3	***	*** GEP Requirement*	3
***	*** GEP Requirement*	3			
		Semester Total 16		Semester Total 13	

Minimum Total Credit Hours Required for Graduation 126-127

Major/Program requirements and footnotes:

¹Must be completed with grade of C- or higher (CH 101 & 102, E 101, E 115, ENG 101, MA 141 & 241, and PY 205 required for matriculation.).

²Three engineering electives should be chosen from one of the following focus areas:

Machine Design: MAE 208, TE/CHE 435, and one other elective with an MAE or TE prefix (selected with the approval of advisor). In addition, students wishing to pursue the machine design focus area should take MAE 301 instead of TE 303, and MAE 206 for their Statics requirement.

Medical Textiles: TE(BME) 466, TE(BME) 467, TE 565, TE 566. In addition, students wishing to the medical textiles should have had one year of biology or BIO 183 and take MSE(BME) 203 instead of MSE 201.

Materials Science and Engineering: MSE 350 & 450, and one other elective with an MSE or TE prefix (selected with the approval of advisor). In addition, students wishing to pursue the materials science and engineering focus area may take MSE 301 instead of TE 303.

***General Education Program (GEP) requirements:**

To complete the requirements for graduation and the General Education Program, the following credit hours and co-requisites must be satisfied. University approved GEP course lists for each category can be found at <http://www.ncsu.edu/uap/academic-standards/>.

PHYSICAL EDUCATION - 2 hours to be selected from the approved GEP Physical Education list.

a. One fitness and wellness course (any PE 100-level course).

b. One additional credit hour of PE activity courses.

HUMANITIES - 6 credits to be selected in two different disciplines (two different course prefixes) from the approved GEP Humanities list.

SOCIAL SCIENCES - 3 credits to be selected in a discipline other than economics from the approved GEP Social Sciences list. EC 205 taken as part of the Major requirements satisfies 3 credit hours of the 6 credit hours needed to fulfill the GEP Social Sciences requirement.

ADDITIONAL BREADTH - 3 credits to be selected from the approved GEP Humanities, Social Sciences or Visual and Performing Arts lists.

INTERDISCIPLINARY PERSPECTIVES - 6 credits to be selected from the approved GEP Interdisciplinary Perspectives list.

Co-requisites:

U.S. Diversity and Global Knowledge co-requisites must be satisfied to complete the General Education requirements. Choose course(s) that are identified on the approved GEP course lists as meeting the U.S. Diversity and Global Knowledge co-requisites.

Foreign Language proficiency at the FL_102 level will be required for graduation.