NC STATE Wilson College of Textiles

Prospective Student Degree Planning Sheet

B.S. Textile Engineering (TE)
Concentration: Information Systems – Effective Fall 2024

Use as a guide only. Students will enter the most current curriculum as of the semester in which they are first enrolled at NC State. Current curricula can be found on the NC State Catalog Page: http://catalog.ncsu.edu/undergraduate/textiles/#departmentsandplanstext

Students can search course equivalencies through NC State's Transfer Course Credit Database: https://webappprd.acs.ncsu.edu/php/transfer/ or the Transfer Planner

NC State Requirement	NCCC Equivalent	Equivalent Course at Current Institution	Credit Hours
Orientation			
T 101 – Strategies for Success in the Wilson College of Textiles	No equivalent	No equivalent	1
E 101 – Introduction to Engineering and Problem Solving	EGR 150		1
E 115 – Introduction to Computing Environments	No equivalent		1
Math and Sciences			
MA 141 – Calculus 1 *pre-requisite C- or better in MA 108 or MA 111 or 550 or better on the SAT Math Subject Test Level 2 or the NCSU Math Skills Test, or 2 or better on the AP Calculus Exam	MAT 271		4
MA 241 – Calculus 2 *pre-requisite C- or better in MA 141 or Math Placement Score	MAT 272		4
MA 242 – Calculus 3 *pre-requisite C- or better in MA 241 or Math Placement Score	MAT 273		4
MA 341 – Applied Differential Equations 1 *pre-requisite MA 242	MAT 285		3
CH 101 & 102 – Chemistry A Molecular Science with lab *pre-requisite C- or better in CH 111 or Chem Placement Score	CHM 131/131A or CHM 151		4
PY 205 & 206 – Physics for Engineers and Scientists I with lab *pre-requisite C- or better in MA 141	PHY 251		4
PY 208 & 209 – Physics for Engineers and Scientists II with lab *pre-requisite C- or better in PY 205 and MA 241	PHY 252		4
Major Requirements			
E 102 – Engineering in the 21st Century	No equivalent		2
TE 105 – Textile Engineering: Materials and Systems *co-requisite CH 101	No equivalent		2
TE 110 – Computer-Based Modeling for Engineers *pre-requisite E 115; co-requisite MA 141	No equivalent		3
TE 200 – Introduction to Polymer Science and Engineering *pre-requisite C- or better in CH 101	No equivalent		3

TE 201 – Fiber Science *pre-requisite CH 101, C- or better in MA 141	No equivalent		4
TE 205 – Analog and Digital Circuits *pre-requisite C- or better in TE 110, PY 208; co-requisite MA 341	No equivalent		4
TE 301 – Engineering Textile Structures 1: Linear Assemblies *pre-requisite MAE 206 or CE 214 and MA 242	No equivalent		3
TE 302 – Textile Manufacturing Processes and Systems II *pre-requisite TE 301 and C- or better in TE 110	No equivalent		4
TE 303 – Thermodynamics for Textile Engineers *pre-requisite MA 242, PY 208	No equivalent		3
TE 401 – Textile Engineering Design I *pre-requisite TE 302	No equivalent		4
TE 402 – Textile Engineering Design II *pre-requisite TE 401	No equivalent		4
TE 404 & 424– Textile Engineering Quality Improvement with lab *pre-requisite ST 370 and C- or better in TE 110; courses are co-requisites	No equivalent		4
PCC 301 & 304 – Technology of Dyeing and Finishing with lab *pre-requisite TE 200; courses are co-requisite	No equivalent		4
GC 120 – Foundations of Graphics	DFT 170		3
MAE 206 or CE 214 – Engineering Statics *pre-requisite C or better in MA 241 and PY 205	EGR 220		3
ST 370 – Probability and Statistics for Engineers *pre-requisite MA 241	No equivalent		3
EC 201 – Microeconomics (or ARE 201 or EC 205)	ECO 251		3
Information Systems Concentration Requirements			
ISE 135 – Computer-Based Modeling for Engineers *pre-requisite E 115; co-requisite MA 141	No equivalent		3
ISE 311 – Engineering Economic Analysis *pre-requisite C or better in MA 141	No equivalent		3
ISE 361 – Deterministic Models in Industrial Engineering *pre-requisite C or better in ISE 135 and MA 341	No equivalent		3
TE 440 – Textile Information Systems Design *pre-requisite C- or better in TE 110, Junior Standing	No equivalent		4
Concentration Elective (6 hours)			6
GEP Courses (General Education) To see which courses satisfy each GEP category, review these GEP lists. http://catalog.ncsu.edu/undergraduate/gep-category-requirements/			
ENG 101 – Academic Writing and Research (or FLE 101)	ENG 111 & ENG 112 or ENG 113		4
Humanities Electives *Students need to have two courses from two different subject areas	Multiple- use list above		6
Social Science Elective	Multiple- use list above		3
HES* 100 level *May be taken S/U	Multiple- use list above		1
HES* 100 or 200 level *May be taken S/U	Multiple- use list above		1
US Diversity, Equity and Inclusion Elective	Multiple- use list above		3
Interdisciplinary Perspective Electives	Multiple- use list above		5

Global Knowledge – one course from general education requirements or free electives must focus on Global Knowledge *co-requisite- can double count toward 3 hours of humanities, social science, or interdisciplinary perspective	Multiple- use list above		0
World Language Proficiency– typically satisfied through 2 levels of the same language in high school with at least a C			0
Minimum Total Credit Hours in Degree Required for Graduation			**126 Hours**