

Wood Products (BS): Manufacturing (15WOODPBS- 15WOODPMNF)

Freshman Year

Fall Semester	Credit	Spring Semester	Credit
WPS 104 Intro. To Wood Products	2	CH 101 Chemistry – A Molecular Science*	3
ENG 101 Academic Writing & Research*	4	CH 102 General Chemistry Lab*	1
MA 131 Calculus for Life & Mgt. Sci. A* ¹	3	SMT 203 Physical Properties of Sustainable Materials (previously WPS 203 Wood Physical Properties)	4
SMT 202 Anatomy & Properties of Renewable Materials* (previously WPS 202 Wood Anatomy & Properties)	3	MA 231 Calculus for Life & Mgt. Sci. B* ¹	3
HES_*** Health & Exercise Studies Course*	1	HES_*** Health & Exercise Studies Course*	1
GEP Humanities Requirement*	3	Free Elective	3
	16		15

Sophomore Year

Fall Semester	Credit	Spring Semester	Credit
EC 205 Fund. of Economics*	3	PB 200 Plant Life*	4
ISE 210 Intro. Eng. Graphics for IE	3	PY 212 College Physics II*	4
PY 211 College Physics I*	4	SMT 301 Chemistry of Sustainable Materials (previously WPS 301 Wood Chemistry)	4
GEP Interdisciplinary Perspectives Requirement*	3	ST 361 Intro to Statistics for Engineers*	3
COM Speech Elective ²	3		
	16		15

Summer

Summer Session	Credit
SMT 210 Wood Products Internship (<i>previously WPS 210 Forest Products Internship</i>)	1

Junior Year

Fall Semester	Credit	Spring Semester	Credit
ISE 216 Mfg. Engineering Practicum	3	ISE 311 Engineering Econ. Analysis	3
WPS 302 Wood Processing (previously WPS 302 Wood Processing)	4	ISE 316 Mfg. Engineering I Process	3
WPS 308 Wood Prod. Proc: Facilities & Infrastruct.	4	WPS 344 Introduction to Quality Control	3
ENG 331 Comm. Eng. & Tech	3	WPS 346 Forest Products Business & Marketing	3
Technical Elective ²	3	GEP Interdisciplinary Perspectives Requirement*	2-3
	17		14-15

Senior Year

Fall Semester	Credit	Spring Semester	Credit
ISE 352 Fundamentals of Human-Machine Systems Design	3	SMT 441 Mechanical Properties of Sustainable Materials (<i>Previously WPS 441 Wood Mechanics</i>)	4
SMT 444 Sustainable Composites & Biopolymers (<i>Previously WPS 444 Wood Composites</i>)	3	WPS 450 Wood Industry Case Studies	2
SMT 483 Capstone in Sustainable Materials & Tech (<i>Previously WPS 483 Senior Topics in WPS</i>)	3	ISE 452 Advanced Human-Machine Systems Design	3
GEP Social Science Requirement*	3	GEP Additional Breadth Requirement*	3
Technical Elective ³	3	Free Elective	3
GEP Humanities Requirement*	3		
	18		15

Minimum Credit Hours Required for Graduation*:

127

Major/Program Footnotes

1. Students with appropriate math aptitude are encouraged to take the math sequence MA 141 & MA 241
2. Select from COM 110, COM 112, COM 146, or COM 211
3. Technical Electives are selected from business, management, science or applied fields with advisor approval

* General Education Program (GEP) requirements and GEP Footnotes

To complete the requirements for graduation and the General Education Program, the following category credit hours and co-requisites must be satisfied. University approved GEP course lists for each of the following categories can be found at <https://oucc.dasa.ncsu.edu/general-education-program/>.

* Courses/groupings in the above display with an asterisk may fulfill all or part of a GEP requirement. See categories below.

A. Mathematical Sciences (6 credit hours; one course with MA or ST prefix)

Choose from the University approved GEP Mathematical Sciences course list or the following course(s) if completed as part of the Major requirements may fulfill part or all of this requirement: MA 131, MA 231, ST 361

B. Natural Sciences (7 credit hours; include one laboratory course or course with a lab)

Choose from the University approved GEP Natural Sciences course list or the following course(s) if completed as part of the Major requirements may fulfill part or all of this requirement: CH 101, CH 102, PY 211, PY 212, PB 200, WPS 202

C. Humanities (6 credit hours selected from two different disciplines/course prefixes)

Choose from the University approved GEP Humanities course list.

D. Social Sciences (6 credit hours selected from two different disciplines/course prefixes)

Choose from the University approved GEP Social Sciences course list or the following course(s) if completed as part of the Major requirements may fulfill part or all of this requirement: EC 205

E. Health & Exercise Studies (2 credit hours; at least one 100-level Fitness and Wellness Course)

Choose from the University approved GEP Health & Exercise Studies course list.

F. Additional Breadth (3 credit hours to be selected from the following checked University approved GEP course lists)

X Humanities/Social Sciences/Visual and Performing Arts

G. Interdisciplinary Perspectives (5-6 credit hours)

Choose from the University approved GEP Interdisciplinary Perspectives course list.

H. Introduction to Writing (4 credit hours satisfied by completing ENG 101 with a C- or better)

The following **Co-Requisites** must be satisfied to complete the General Education Program requirements

I. U.S. Diversity (USD)

Choose from the University approved GEP U.S. Diversity course list or choose a course identified on the approved GEP course lists as meeting the U.S. Diversity (USD) co-requisite. The following course(s) completed as part of the Major requirements may fulfill this requirement: None

J. Global Knowledge (GK)

Choose from the University approved GEP Global Knowledge course list or choose a course identified on the approved GEP course lists as meeting the Global Knowledge (GK) co-requisite. The following course(s) completed as part of the Major requirements may fulfill this requirement: None

K. Foreign Language proficiency Proficiency at the FL_102 level is required for graduation.