HEALTH SCIENCE CLUSTER:

SUPPORT SERVICES MAJOR:

High School

Algebra 1 English 1 Physical Science **Global Studies** Computer Science Physical Education or Jr. ROTC

10 Geometry English 2 Biology Social Studies Elective Introduction to Health Science Foreign Language

> 11 Algebra 2 English 3 Biology U. S. History

Health Science Technology 1 or Biotechnical Engineering (PLTW) Foreign Language

12 Precalculus English 4 Biology 2 or Chemistry 2 Economics/Government **Anatomy and Physiology Medical Terminology** Foreign Language **Health Science Technology 2**

Recommended Electives: Based on a student's career goals and college requirements, the recommended electives may include an additional course in the same foreign language, or specific math, science, or language arts courses.

Note: Core academic courses listed represent the more commonly chosen courses and sequences. Any number of course combinations are possible depending on local school district offerings

York Technical College Major: Environmental Elective of the Associate in Science (EEAS)

First Semester	Second Semester	Third Semester	Fourth Semester
ENG 101 – English	ECO 210	CHM 220	CHM 225
Composition I	CHM 111	MAT 165	BIO 225 or 210
MAT 110 – College	ENG 102		
Algebra	HIS 201	EVT 206	EVT 254 Industrial Safety and Emergency Response
CHM 110 – College			
Chemistry I		PSY 201	OR EVT 110 Introduction to
EVT 206 – Introduction to		ENG 201	Treatment Facilities
Environmental Compliance			
COL 101			ENG 208
			1110 000
			HIS 202

Source: York Technical College http://www.yorktech.com/department/science/Environment/

Clemson University – Major: Biosystems Engineering Concentration: Applied Biotechnology (Bachelor of Science)

Freshman CES 102 Introduction to Engineering (portfolio) CH 101 General Chemistry MTHSC 106 Calculus of one Variable I ENGL 103 Composition I or Humanities Social science Reg Humanities/Social Science Requirement ENGR 130 Intro Engr Design/Problem Solving CH 102 General Chemistry MTHSC 108 Calculus of one Variable II PHYS 122 Physics w/Calculus I ENGL 103 Composition I or Humanities Social Science Reg.

Sophomore BE 210 Introduction to Biosystems Engineering BIOL 103 or 110 MTHSC 206 Calculus of Several Variables PHYS 221 Physics w/Calculus II EG 209 Intro to Engr/Computer Graphics BE 212 Fundamentals of BE MICRO 305 General Microbiology MTHSC 208 Intro Ord Differential Equations CE 203 Engr Mech Statics/Dynamics or ME 201 Statics / Dynamics ME ME 310 Thermodynamics/Heat Transfer

or ChE 220 ChE Thermodynamics

Junior BE 312 Biological Kinetics / Reactor Modelling Ch Organic Chemistry Option EM 304 Mechanics of Materials CE 341 Introduction to Fluid Mechanics or ChE 230 Fluids/Heat Transfer E&CE 307 Basic Electrical Engineering BE 412 Heat & Mass Transport BIOCH Biochemistry Option 3 BE 314 BE Mechanical Design or ME 306 Fund of Machine Design BE 428 Biochemical Engineering BF 415 Instrumentation/Control BF

Project Management / Portfolio Life Science Option BE 438 Bioprocess **Engineering Design** BE 414 BE Unit Operations STS Requirement Humanities/Social

Senior

BE 474 Engineering

BE 475 Biosystems Capstone Design **Engineering Option** BE 435 Applications in Biotech Engr Minor/Communication Option

Science Reg.

Humanities/Social Science Requirement

Source: Clemson University

http://www.registrar.clemson.edu/publicat/catalog/2005/hehd.html