

BACHELOR OF SCIENCE, MAJOR IN DESIGN AND DEVELOPMENT

Bachelor of Science, Major in Design and Development

Core Curriculum (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum)

Component Area I (Communication)	6
Component Area II (Mathematics)	3
Component Area III (Life and Physical Science)	8
Component Area IV (Language, Philosophy, and Culture)	3
Component Area V (Creative Arts)	3
Component Area VI (U.S. History)	6
Component Area VII (Political Science/Government)	6
Component Area VIII (Social and Behavioral Sciences)	3
Component Area IX (Component Area Option)	4

Degree Specific Requirements

ACOM 3360 or ENGL 3330	Communication Skills for Agriculturists Intro To Technical Writing	3
Select one of the following: ¹		3
MATH 1314	Pre Calculus Algebra	
MATH 1324	Mth For Mngl Decision Making	
MATH 1420	Calculus I	
MATH 1316	Plane Trigonometry	3
PHYS 1301 & PHYS 1101	General Phy-Mechanics & Heat and General Physics Laboratory I	4
PHYS 1302 & PHYS 1102	Gen Phy-Snd,Lght, Elec, & Mag and General Physics Laboratory II	4
Select 8 hours from BIOL, CHEM, GEOL OR GEOG 1401 (excluding PHYS)		8

Major Core

ETDD 1361 or ETDD 1390	Engineering Graphics Intro -Computer Aided Drafting	3
ETEC 1010	Engineering Foundations	1-2
ETEC 1371	Descriptive Geometry	3
ETEE 1340	Electronics Technology I	3

Major

ETCM 2363	Architectural Design	3
ETDD 3310	Product Design & Development	3
ETDD 3379	Industrial Systems Drafting	3
ETDD 4339	Computer-Aided Drafting Produc	3
ETDD 4380	Material Hand & Plant Layout	3
ETDD 4388	3D Parametric Design	3
ETEC 3374 or INED 4310	Time And Motion Study Occup. Human Relations in CTE	3
ETEC 3375	Statics	3
ETEC 4367	Engineering Materials Techn	3
ETEC 4384 or ETEC 3300	Supervisory Personnel Practice Technology Innovations	3
ETEC 4391	Work Base Mentorship	
6 hours Internship		6
ETSM 4382	Industrial Safety	3

Minor (Suggest GBA or a program in ETEC Department)

Minor		9
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Minor (9 hours advanced)	9
Total Hours	123-124

¹ MATH 1316 or MATH 1314 or MATH 1420 or MATH 1324 satisfies the Core Curriculum requirement for Component Area II (Mathematics) and the Degree Specific requirement.

First Year

Fall	Hours Spring	Hours
Component Area I (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareai)	3 Component Area I (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareai)	3
Component Area IX (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaix)	4 Component Area IV (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaiv)	3
ETDD 1361 or 1390	3 ETEC 1371	3
EETC 1010	1-2 ETEE 1340	3
MATH 1314, 1324, or 1420 ¹	3 MATH 1316	3
	14-15	15

Second Year

Fall	Hours Spring	Hours
Component Area VI (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareavi)	3 Component Area VI (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareavi)	3
ETCM 2363	3 Component Area VII (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareavii)	3
ETDD 3310	3 Component Area VIII (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaviii)	3
PHYS 1301 & PHYS 1101	4 ACOM 3360 or ENGL 3330	3
Minor Course	3	
	16	12

Third Year

Fall	Hours Spring	Hours
Component Area III (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaiii) ²	4 Component Area III (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaiii) ²	4
ETDD 3379	3 Component Area V (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareav)	3
EETC 3375	3 ETEC 4367	3
PHYS 1302 & PHYS 1102	4 ETEC 3374 or INED 4310	3
	ETSM 4382	3
	14	16

Fourth Year

Fall	Hours Spring	Hours
Component Area VII (catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareavii)	3 ETDD 4388	3
ETDD 4339	3 Internship	6
ETDD 4380	3 ETEC 4391	
EETC 4384 or 3300	3 Minor Courses	9

Minor Courses	6	
	18	18

Total Hours: 123-124

¹ Satisfies Core Curriculum requirement for Component Area II (Mathematics). MATH 1420 also satisfies one semester credit hour of the Core Curriculum requirement for Component Area IX (Core Component Option).

² Must be taken from BIOL, CHEM, GEOL, or GEOG 1401 only.