



**Bachelor of Science
2018-2019 Sample 4-Year Plan**

TAYLORS

**Major: Agricultural and Biosystems Engineering
Total Degree Requirements: 130 credits**

Students are not limited to this plan; it is meant to be used as a guide for planning purposes in consultation with your advisor. The sample schedule is one possible path to completing your degree within four years. For official program requirements, please refer to the [Undergraduate Catalog](#).

First Year

Fall

Prefix + Number	Course Title	Prerequisites/Comments	College	Course	Credits
ABE 101	Intro to ABE		SDSU		1
BIOL 101/101L	Biology Survey and Lab		Taylor	BIOL 160 w/lab	3
GE 101	Intro to Engineering and Technical Professions		Taylor	ENGR 196	1
MATH 123	Calculus I (SGR #5)	p. Placement or MATH 115	Taylor	MATH 171	4
SGR #3	Social Sciences/Diversity (SGR #3)	See Notes	Taylor		3
SPCM 101	Fundamentals of Speech (SGR #2)		Taylor	SPCH 105	3
Total Credit Hours					15

Spring

Prefix + Number	Course Title	Prerequisites/Comments	College	Course	Credits
ABE 132	Engineering Tools for ABE		SDSU		1
CHEM 112/112L	General Chemistry and Lab		Taylor	CHEM 105 w/lab	4
ENGL 101	Composition I (SGR #1)	p. Placement	Taylor	ENGL 101	3
GE 121	Graphics I		Taylor	ENGR 121	1
MATH 125	Calculus II	p. MATH 123	Taylor	MATH 172	4
SGR #4	Arts and Humanities/Diversity (SGR #4)	See Notes	Taylor		3
Total Credit Hours					16

Second Year

Fall

Prefix + Number	Course Title	Prerequisites/Comments	College	Course	Credits
ABE 343/343L	Properties of Biomaterials & Lab		SDSU		3
EM 214	Statics	p. MATH 123	Taylor	MECH 270	3
GE 123	Computer Aided Drawing		Taylor	ENGR 121	1
MATH 225	Calculus III	p. MATH 125	Taylor	MATH 271	4
PHYS 211/211L	Physics I and Lab (SGR #6)		Taylor	PHYS 211 w/lab	4
SGR #3	Social Sciences/Diversity (SGR #3)	See Notes	Taylor		3
Total Credit Hours					18

Spring

Prefix + Number	Course Title	Prerequisites/Comments	College	Course	Credits
ABE 222	Project Development for ABE		SDSU		1
EM 215	Dynamics	p. EM 214	Taylor	MECH 274	3
MATH 321	Differential Equations	p. MATH 125	Taylor	MATH 353	3
PHYS 213/213L	Physics II and Lab (SGR #6)	p. PHYS 211/L	Taylor	PHYS 212 w/lab	4
SGR #4	Arts and Humanities/Diversity (SGR #4)	See Notes	Taylor		3
Total Credit Hours					14

Third Year

Fall

Prefix + Number	Course Title	Prerequisites/Comments	College	Course	Credits
ABE 314/314L	Ag Power and Machines & Lab	p. EM 215	SDSU		4
CSC 130	Visual BASIC		Taylor	CSCI 102 or 116	3
EE 300/300L	Circuits and Lab	p. MATH 125	SDSU		3
EM 321	Mechanics of Materials	p. EM 214	SDSU		3

Information Subject to Change. This is not a contract.

p. = Course Prerequisite
Semester: F = Fall, S = Spring, SU = Summer



Prefix + Number	Course Title	Prerequisites/Comments	College	Course	Credits
ME 314	Thermodynamics		Taylor	MECH 200	3
Total Credit Hours					16

Spring

Prefix + Number	Course Title	Prerequisites/Comments	College	Course	Credits
ABE 350/350L	Hydraulics		SDSU		3
ABE 444/444L	Unit Operations and Lab		SDSU		4
CHEM 108/L or CHEM 326/L	Organic and Biochemistry and Lab (4,1) or Organic Chemistry I and Lab (3, 1)		SDSU		4
ENGL 277	Technical Communications (SGR #1)	p. ENGL 101 and GE 101, GE 109, PHYS 109, or PHYS 119 or instructor consent	SDSU		3
	TECH ELECTIVE	Select from Emphasis - Food and Biomaterials, Power and Machinery, Structures and Environment, Water and Natural Resources	SDSU		3
Total Credit Hours					17

Summer

Prefix + Number	Course Title	Prerequisites/Comments	College	Course	Credits
ABE 494 or ABE 496 or ABE 498	Internship or Field Experience or Undergraduate Research/Scholarship		SDSU		2
Total Credit Hours					2

Fourth Year

Fall

Prefix + Number	Course Title	Prerequisites/Comments	College	Course	Credits
ABE 411	Design Project III		SDSU		2
ABE 434/434L	Natural Resources Engineering and Lab	p. Take EM 331	SDSU		4
ABE 463/463L	Instrumentation and Lab	p. EE 300	SDSU		3
EM 331	Fluid Dynamics	p. EM 215	SDSU		3
	TECH ELECTIVE	Select from Emphasis - Food and Biomaterials, Power and Machinery, Structures and Environment, Water and Natural Resources	SDSU		3
Total Credit Hours					15

Spring

Prefix + Number	Course Title	Prerequisites/Comments	College	Course	Credits
ABE 324/324L	Ag Structures and Environment & Lab	p. ME 314, take EM 331	SDSU		4
ABE 422	Design Project IV		SDSU		2
ABE 464/464L	Monitoring and Control & Lab	p. ABE 463	SDSU		2
STAT 281 or MATH 331	Introduction to Statistics or Advanced Engineering Mathematics	p. MATH 102 or higher p. MATH 321	Taylor	STAT 230	3
	TECH ELECTIVE	COE 300 level or higher; Select from Emphasis - Food and Biomaterials, Power and Machinery, Structures and Environment, Water and Natural Resources	SDSU		3
	TECH ELECTIVE	COE 300 level or higher; Select from Emphasis - Food and Biomaterials, Power and Machinery, Structures and Environment, Water and Natural Resources	SDSU		3
Total Credit Hours					17

Information Subject to Change. This is not a contract.

p. = Course Prerequisite
Semester: F = Fall, S = Spring, SU = Summer



Comments/Notes

Students from all academic majors can pursue graduation with Fishback Honors College distinction. View the [Honors program requirements](#).
Select Emphasis from Catalog – Food and Biomaterials, Power and Machinery, Structures and Environment, or Water and Natural Resources.

Taylor's Credits = 66 SDSU Credits = 64

General Education Requirements for the System General Education Requirement 3 & 4:

System General Requirement #3 Social Sciences/Diversity Six Credits Required

Choose two classes (six credits) from the classes below and the classes must be from different departments. Choose any two Taylor's classes from the list below:

- ECON 202 (Microeconomics) or ECON 203 (Macroeconomics)
- HIST 105 (US History to 1877) or HIST 106 (US History since 1877)
- POLS 101 (American Government)
- PSYC 101 (General Psychology)
- SOC 101 (Sociology I) or SOC 102 (Sociology II)

System General Requirement #4 Arts & Humanity/Diversity Six Credits Required

Choose two classes (six credits) from the classes below and the classes must be from different departments (unless two French or Spanish classes are taken). Choose any two Taylor's classes from the list below:

- ENGL 202 (Literary Appreciation)
- ENGL 201 (Introduction to World Poetry) Or ENGL 200 (Introduction to American Literature)
- UCM00703U2 (French for Communication and Culture 1)
- UCM00803U2 (French for Communication and Culture 2)
- HIST 101 (World Civilizations I (to 1500)) or HIST 102 (World Civilizations (from 1500))
- COMM 101 (Introduction to Communication) or FILM 101 (Introduction to Film Studies)
- MUSC 103 (Introduction to Music)
- PHIL 101 (Introduction to Philosophy) or PHIL 203 (Introduction to Logic) or UCU60303U2 (Introduction to Philosophy)
- WREL 105 (World Religion)
- UCM00103U2 (Spanish for Communication and Culture 1)
- UCM00203U2 (Spanish for Communication and Culture 2)
- UCM60203U2 (Introduction to Acting) or THTR 101 (Foundation of Acting I)