



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

**SDSU- Taylors**

**Major: Mechanical 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 Catalog.

**First Year**

**Fall**

Prefix + Number	Course Title	Prerequisites/Comments	College	Course	Credits
CHEM 112	General Chemistry I	p. MATH 102	Taylors	CHEM 105	3
CHEM 112L	General Chemistry I Lab		Taylors	CHEM 105	1
GE 101	Introduction to Engineering & Technical Professions		Taylors	ENGR 196	1
MATH 123	Calculus I (SGR #5)	p. Placement or MATH 115. Minimum grade of "C" required.	Taylors	MATH 171	4
ME 121-121L	Production and Fabrication Processes and Lab		SDSU		2
SGR #3	Social Sciences/Diversity		Taylors		3
SPCM 101	Fundamentals of Speech (SGR #2)		Taylors	SPCH 105	3
<b>Total Credit Hours</b>					17

**Spring**

Prefix + Number	Course Title	Prerequisites/Comments	College	Course	Credits
EM 214	Statics	p. MATH 123. Minimum grade of "C" required.	Taylors	MECH 270	3
ENGL 101	Composition I (SGR #1)	p. Placement	Taylors	ENGL 101	3
MATH 125	Calculus II	p. MATH 123. Minimum grade of "C" required.	Taylors	MATH 172	4
ME 212-212L	Mechanical Engineering Design Technologies & Lab	p. MATH 115 or consent	SDSU		2
PHYS 211-211L	University Physics I and Lab	p. MATH 123. Minimum grade of "C" required.	Taylors	PHYS 211	4
<b>Total Credit Hours</b>					16

**Second Year**

**Fall**

Prefix + Number	Course Title	Prerequisites/Comments	College	Course	Credits
EM 215	Dynamics	p. EM 214. Minimum grade of "C" required.	Taylors	MECH 274	3
EM 321	Mechanics of Materials	p. EM 214. Minimum grade of "C" required	SDSU		3
MATH 321	Differential Equations	p. MATH 125	Taylors	MATH 353	3
ME 241	Engineering Materials	p. MATH 123 and CHEM 112-112L	SDSU		3
PHYS 213-213L	University Physics II and Lab	PHYS 211-211L and MATH 123	Taylors	PHYS 212	4
<b>Total Credit Hours</b>					16

**Spring**

Prefix + Number	Course Title	Prerequisites/Comments	College	Course	Credits
ECON 201	Principles of Microeconomics (SGR #3)		Taylors	ECON 202	3
ENGL 277	Technical Writing in Engineering	p. ENGL 101 and GE 101 or GE 109 or PHYS 109 or PHYS 119, or consent	SDSU		3
GE 231	Technology, Society, and Ethics				3
MATH 331 or MATH 471	Advanced Engineering Math or Numerical Analysis	p. MATH 321 or p. MATH 225	SDSU		3
ME 230-230L	Engineering Design Methods and Lab	p. EM 214 and ME 121-121L and ME 212-212L	SDSU		2
ME 311	Thermodynamics I	p. PHYS 211-211L and EM 215. Minimum grade of "C" required.	Taylors	MECH 200	3
<b>Total Credit Hours</b>					17



**Third Year**

**Fall**

Prefix + Number	Course Title	Prerequisites/Comments	College	Course	Credits
EE 300	Basic Electrical Engineering I	p. MATH 125 and PHYS 213	SDSU		2
EE 300L	Basic Electrical Engineering I Lab		SDSU		1
EM 331	Fluid Mechanics	p. EM 215. Minimum grade of "C" required.	SDSU		3
MATH 225	Calculus III	p. MATH 125	Taylor	MATH 271	4
ME 312	Thermodynamics II	p. ME 311 and MATH 321. Minimum grade of "C" required.	SDSU		3
ME 321	Fundamentals of Machine Design	p. EM 215	SDSU		3
<b>Total Credit Hours</b>					16

**Spring**

Prefix + Number	Course Title	Prerequisites/Comments	College	Course	Credits
EE 302	Basic Electrical Engineering II	p. EE 300-300L	SDSU		2
EE 302L	Basic Electrical Engineering II Lab		SDSU		1
ME 376-376L	Measurements and Instrumentation and Lab	p. ENGL 277 and Co-requisites EM 321 and EM 331	SDSU		2
ME 415	Heat Transfer	p. ME 311 and EM 331 and MATH 321 or consent	SDSU		3
ME 421	Design of Machine Elements	p. EM 321 and ME 321	SDSU		3
SGR #4	Arts and Humanities/Diversity		Taylor		3
STAT 381	Introduction to Probability and Statistics	p. MATH 125	Taylor	STAT 261	3
<b>Total Credit Hours</b>					17

**Fourth Year**

**Fall**

Prefix + Number	Course Title	Prerequisites/Comments	College	Course	Credits
ME 323	Vibrations	p. EM 215 and EM 321 and Math 331 or Math 471	SDSU		3
ME 476	Thermo-fluids Lab	p. ME 376-376L and EM 331 and ME 312 and ME 415	SDSU		1
ME 478	Mechanical Systems Design I	p. ME 421 and MATH 331 or MATH 471	SDSU		2
ME 490	Seminar		SDSU		1
Tech Electives			Taylor	CSCI 102 or CSCI 251	3
Tech Electives	Choose from list		SDSU		3
Tech Electives	Choose from list		SDSU		3
<b>Total Credit Hours</b>					16

**Spring**

Prefix + Number	Course Title	Prerequisites/Comments	College	Course	Credits
ME 451	Automatic Controls	p. EE 300-300L or consent and MATH 331 or MATH 471	SDSU		3
ME 452	Dynamic Systems Lab	p. ME 323	SDSU		1
ME 479-479L	Mechanical Systems Design II and Lab	p. ME 478	SDSU		2
SGR #4	Arts and Humanities/Diversity		Taylor		3
Tech Electives	Choose from list		SDSU		3
Tech Electives	Choose from list		SDSU		3
<b>Total Credit Hours</b>					15

\*Minimum overall GPA of 2.0 (C average) in Mathematics/Statistics courses required.

\*Minimum overall GPA of 2.0 (C average) in all ME-prefix courses required.

Taylor – 64

SDSU Credits – 66

**Information Subject to Change. This is not a contract.**

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



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

**System General Requirement #3      Social Sciences/Diversity      Three Credits Required**

Choose one class from the classes below:

- 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 Taylors 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)