

Western CATS

Industrial Engineering

To schedule an appointment with an advisor, call Samuel Peffers: (928) 317-7067

Recommended Four-Year Course Plan

2019-2020

Year One

Summer Before			
Course	Title	Units	Complete
MAT 187	Precalculus +	4	
	Total	4	

Fall - Semester One			
Course	Title	Units	Complete
ENGL 101	Freshman English	3	
CHM 151~	General Chemistry I	4	
MAT 220~	Calculus I with Analytic ¹	5	
AGEC-S	Art	3	
	Total	15	

Spring - Semester Two			
Course	Title	Units	Complete
ENGL 102	Freshman English	3	
MAT 230~	Calculus II with Analytic	5	
CHM 152~	General Chemistry II	4	
EGR 188~	Fundamentals of Engineering ¹	4	
	Total	16	

Total Year 1 Credits 31

Year Two

	Fall - Semester Three			
Course	Title	Units	Complete	
MAT 241~	Calculus III	4		
PHY 121~	Mechanics	4		
ECN 250	Intro to Microeconomics	3		
AGEC-S	Social Science	3		
EGR 123~	Structured Programing ¹	3		
	Total	17		

	Spring - Semester Four			
Course	Title	Units	Complete	
MAT 262~	Differential Equations	3		
PHY 131~	Electromagnetism	4		
AGEC-S	Humanities-WI	3		
EGR 207	Intro to Electrical Engineering	3		
EGR 251	Statics	3		
	Total	16		

Total Year 2 Credits	33	

¹ Prerequisites include MAT 187 or MAT 151 & 183 or placement testing

^{*}Course serves as pre-requisite, completion not required for degree

[~] Prerequisite courses for entry into UA program – MUST have 3.0 GPA

Year Three Year Four

Fall - Semester Five			
Course	Title	Units	Complete
SIE 250 (IT)	Intro to Sys Eng	3	
SIE 265 (IT)	Eng Mngt I	3	
SIE 277 (IT)	Object Oriented Design	3	
SIE 295S (Y)	Sophomore Colloquium	1	
SIE 305 (Y)	Engineering Prob & Stats	3	
(TE) (IT)		3	
	Total	16	

Fall - Semester Seven				
Course	Title	Units	Complete	
ENGV 308 (IT)	Technical Writing	3		
SIE 340 (IT)	Deterministic Ops Res	3		
SIE 377 (IT)	Software for Engineers	3		
SIE 410A (IT)	Human Factors & Ergo	3		
SIE 454A (IT)	Sys Eng Process	3		
SIE 498A (Y)	Senior Design	3		
	Total	18		

Spring - Semester Six			
Course	Title	Units	Complete
SIE 270 (IT)	Math Foundations of SE	3	
SIE 321 (IT)	Prob Models in Ops Res	3	
SIE 330 (IT)	Eng Exper Design	3	
SIE 370 (Y)	Embedded Compt Sys	4	
SIE 383 (IT)	Integrated Manufacturing Sys.	3	
	Total	16	

Spring - Semester Eight			
Course	Title	Units	Complete
SIE 431 (IT)	Sim Model Analysis	3	
SIE 498B (Y)	Senior Design	3	
(TE) (IT)		3	
	Total	18	

Total Year 3 Credits	32	
Total Year 4 Credits	36	

AS in Engineering	64	
BS Degree	132	

- (TE) denotes technical electives
- (Y) section meets in Yuma
- (IT) course transmitted to Yuma from Tucson