

# BSET Electromechanical Engineering Technology Checksheet

Name: \_\_\_\_\_  
 Student ID: \_\_\_\_\_

A.S A.A.S

Revised: 03/18/24  
 Catalog Date: 2024-2025

Lower-Level Courses							
Freshman Fall	SEM & YR	Course #	Course Title	Hrs	Grade	Prerequisites	Comments
			ETGR 1201	Intro to ET and CM*	2		MATH 1100
		MATH 1103	Precalculus Mathematics for Science and Engineering*	3			
		MATH/STAT	Quantitative/Data General Education (Any MATH/STAT)	3			
		XXXX 1501	Global Theme (Social Science)	3			
		XXXX 1511	Local Theme (Social Science)	3			
				Total:	14		
Freshman Spring	SEM & YR	Course #	Course Title	Hrs	Grade	Prerequisites	Comments
			MATH 1121	Calculus for Engineering Technology*	3		MATH 1103
		PHYS 1101	Introductory Physics I*	3		MATH 1100 or MATH1103	
		PHYS 1101L	Introductory Physics I Lab*	1		PHYS 1101	
		WRDS 1103	Writing and Inquiry in Academic Contexts I and II*	3			
		XXXX 1502	Global Theme (Arts / Humanities)	3			
		XXXX 1512	Local Theme (Arts / Humanities)	3			
				Total:	16		

Sophomore Fall	SEM & YR	Course #	Course Title	Hrs	Grade	Prerequisites	Comments
			ETEL 2101	Circuit Fundamentals*	3		MATH 1103
		ETEL 2161	Foundations of Mechanics	3		PHYS 1101	
		ETEL 2171	Algorithms and Programming*	3			
		ETEL 2181	Circuits in Action	2		ETEL 2101 and ETEL 2161	
		ETME 1111	CAD Modeling I	3			
				Total:	14		
Sophomore Spring	SEM & YR	Course #	Course Title	Hrs	Grade	Prerequisites	Comments
			ETGR 2272	Engineering Analysis II	3		ETGR 2171 or MATH 1121
		ETEL 2271	Digital Fundamentals*	3		MATH 1103 and ETEL 2171	
		ETEL 2281	Doing and Making	3		ETEL 2181 and ETEL 2271	
		ETEL 2291	Practical System Design	3			
		PHYS 1102	Introductory Physics II	3		PHYS 1101	
				Total:	15		

Upper-Level Courses							
Junior Fall	SEM & YR	Course #	Course Title	Hrs	Grade	Prerequisites	Comments
			ETEL 3101	Principles of Control	3		MATH 1121, ETEL 2101, and ETEL 2161
		ETEL 3131	Electromechanical Devices	3		ETEL 2101 and ETEL 2161	
		ETEL 3171	Digital Devices	3		ETEL 2271	
		ETEL 3181	Exploring Devices	1		ETEL 3171 and ETEL 3131	
		ETEL 3191	From Concept to Product	3			
		CTCM 2530	Critical Thinking and Communication	3		WRDS 1103/1104	
				Total:	16		
Junior Spring	SEM & YR	Course #	Course Title	Hrs	Grade	Prerequisites	Comments
			ETGR 3171	Engineering Analysis III	3		ETGR 2272
		ETEL 3231	Power, Machines, and Energy	3		ETEL3131	
		ETEL 3261	Applied Control Systems	3		ETEL 3101	
		ETEL 3281	More Doing and Making	3		ETEL 2281, ETEL 3171, and ETEL 3191	
		ETEL 4161	Elements of Automation	3		ETEL 3181	
				Total:	15		

Senior Fall	SEM & YR	Course #	Course Title	Hrs	Grade	Prerequisites	Comments
			ETGR 3295	Multidisciplinary Professional Development	1		Junior or Senior standing
		ETGR 4100	Capstone Design Project I	2		Senior standing and ETEL3281	
		ETEL 4131	Intelligent Industrial Systems	3		ETEL 3231	
		ETEL 4141	Digital Manufacturing Methods	3		Senior standing	
		Major Elective		3			
		Major Elective		3			
				Total:	15		
Senior Spring	SEM & YR	Course #	Course Title	Hrs	Grade	Prerequisites	Comments
			ETGR 3222	Engineering Economics	3		
		ETGR 4200	Capstone Design Project II	2		ETGR 4100	
		ETEL 4261	Robotics and Cyberphysical Systems	3		ETEL 3261 and ETEL 4161	
		ETEL 4600	Technology Seminar	1		Senior standing	
		Major Elective		3			
		Major Elective		3			
				Total:	15		

\* = grade of C or better is required for degree progression

Course in *italics* can be taken as a pre or co-requisite