

## Curriculum Guide for AS to BS Engineering-Mechanical at WCU

## Freshman/First Year

1st Semester		Fall			2nd Semester		Spring			
CC Course	WCU Course Equivalent	LS Cat.	Credit Hours	Required/Notes	CC Course	WCU Course Equivalent	LS Cat.	Credit Hours	Required/Notes	
ENG 111	ENGL 101	C1	3		ENG 112	ENGL 202	C1	3		
MAT 171	MATH 130	C2	4	Pre-Requisite	COM 231 (Other Hours)	COMM 201	C3	3		
Social/Behavioral Sciences (Other Hours)	History	P3	3	Preferred	MAT 172	MATH 146		3	Pre-Requisite	
Humanities/Fine Arts	Fine & Performing Arts	P5	3		Social/Behavioral Sciences	Social Sciences	P1	3		
CHM 151	CHEM 139	C5	4	Required	CHM 152	CHEM 140		4	Not required for WCU Program	
ACA 122	USI 130		1							
Total Credit Hours				18	Total Credit Hours				16	

\*This assumes placement into college level courses. This is only meant to be a guide. Please see your academic advisor to develop your individual plan.

\***Mechanical Engineering is unlikely to be completed in a 4 year time span.**

## Sophomore/Second Year

3rd Semester		Fall			4th Semester		Spring			
CC Course	WCU Course Equivalent	LS Cat.	Credit Hours	Required/Notes	CC Course	WCU Course Equivalent	LS Cat.	Credit Hours	Required/Notes	
DFT 170 (Other Hours)	ENGR 132		3	Required (Instead of Wellness)	PHY 251	PHYS 230	C5	4	Required	
Social/Behavioral Sciences	Social Sciences	P1	3		EGR 150/Other Elective	ENGR 199		2	Required	
Social Science (Global Perspective)	World Cultures	P6	3		Humanities/Fine Arts	Humanities	P4	3		
MAT 271 (Other Hours)	MATH 153	C2	4	Required	MAT 272	MATH 255	C2	4	Required	
Total Credit Hours				13	Total Credit Hours				13	

\*\*A.S. is a 60 Hour Program \*If cannot take Required Courses, plan for more time at WCU.

rev. Fall 2022

UGETC=purple shading

Other required hours=blue shading

Suggested Course Sequence to transfer from NCCCS  
Junior/Third Year (at WCU)

5th Semester				6th Semester			
Fall				Spring			
WCU Course	Course Title	Credit Hours	Notes	WCU Course	Course Title	Credit Hours	Notes
MATH 320	Ordinary Differential Equations	3		MATH 256	Calculus III	4	
PHYS 231	General Physics II	4		ENGR 211	Materials Science	3	
ENGR 201	Engineering Mechanics Statics	3		ME 211	Mechanical Engineering Lab I	1	
ENGR 231	3-D Solid Modeling	3		EE 200	Computer Utilization	3	
ENGR 200	Engineering Practices and Principles II	3		ENGR 202	Mechanics of Materials	3	
Total Credit Hours		16		Total Credit Hours		14	

Senior/Fourth Year

7th Semester				8th Semester			
Fall				Spring			
WCU Course	Course Title	Credit Hours	Notes	WCU Course	Course Title	Credit Hours	Notes
MATH 370	Probability & Statistics I	3		ENGR 350	Engineering Practices and Principles III	3	
ENGR 315	Electrical Engineering Fundamentals	3		ENGR 353	Thermodynamics	3	
ME 301	Engineering Mechanics: Dynamics	3		ME 302	Design or Machine Elements I	3	
ME 311	Mechanical Engineering Lab II	1		ME 312	Mechanical Engineering Lab III	1	
ME 321	Fluid Dynamics	3		ME 332	Heat Transfer: Analysis & Applications	3	
ENGR 411	Eng. Numerical Analysis	3					
Total Credit Hours		16				13	

UGETC=purple shading

Other required hours=blue shading

rev. Fall 2022

