Curriculum Guide for AS to BS Engineering-Mechanical at WCU

Freshman/First Year

1st Semester	Fall				2nd Semester	Spring			
	WCU Course	LS	Credit			WCU Course	LS	Credit	
CC Course	Equivalent	Cat.	Hours	Required/Notes	CC Course	Equivalent	Cat.	Hours	Required/Notes
ENG 111	ENGL 101	C1	3		ENG 112	ENGL 202	C1	3	
					COM 231 (Other				
MAT 171	MATH 130	C2	4	Pre-Requisite	Hours)	COMM 201	C3	3	
Social/Behavioral									
Sciences (Other									
Hours)	History	Р3	3	Preferred	MAT 172	MATH 146		3	Pre-Requisite
Humanities/Fine	Fine & Performing				Social/Behavioral				
Arts	Arts	P5	3		Sciences	Social Sciences	P1	3	
									Not required for
CHM 151	CHEM 139	C5	4	Required	CHM 152	CHEM 140		4	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.

Sophomore/Second Year

3rd Semester	Fall				4th Semester	Spring			
	MCH Course	ıc	Canadia			MCH Course	ıc	Consult.	
	WCU Course	LS	Credit			WCU Course	LS	Credit	
CC Course	Equivalent	Cat.	Hours	Required/Notes	CC Course	Equivalent	Cat.	Hours	Required/Notes
DFT 170 (Other	ENCD 422			Required (Instead	DUV 254	DUNC 220	65		Demained
Hours)	ENGR 132		3		PHY 251	PHYS 230	C5	4	Required
Social/Behavioral					EGR 150/Other				
Sciences	Social Sciences	P1	3		Elective	ENGR 199		2	Required
Social Science (Global Perspective)	World Cultures	Р6	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.

^{*}Mechanical Engineering is unlikely to be completed in a 4 year time span.

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

5th Semester	Fall	6th Semester	Spring
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		Credit				Credit	
WCU Course	Course Title	Hours	Notes	WCU Course	Course Title	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	Fall			8th Semester	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	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	

Suggested Course Sequence to transfer from NCCCS Senior/Fifth Year

9th Semester	Fall			10th Semester	Spring		
		Credit				Credit	
WCU Course	Course Title	Hours	Notes	WCU Course	Course Title	Hours	Notes
ENGR 400	Engineering Capstone I	3		ENGR 450	Engineering Capstone II	3	
Technical Elective		3		ME 403	Control of Dynamic Systems	3	
ME 401	Design of Machine Elements II	3					
Technical Elective	ENGR 331 or EE 451 or others	3					
Total Credit Hours		12				6 * *	k

**FULL TIME STATUS = 12 Hours; Student may need to take additiona courses to remain at Full time for On Campus Housing or Financial Aid

Total Credit Hours

133

NOTE:

- a. Liberal studies (General Education) requirements will be waived for students transferring to WCU with the AS degree.
- b. A grade of C or above is required to obtain transfer credit at WCU.
- d. Students in the BSE Mechanical program at WCU need 126 credits to graduate.
- e. Students need a GPA of 2.3 to graduate with the BSE Mechanical degree at WCU.
- f. At least 30 hours of 300-400 level courses must be taken at WCU.