

Addendum A to the 2019 Dual Degree Agreement between WMU and UNIBE Civil Engineering Program

Below are the degree requirements for WMU's Bachelor of Science in Engineering (Civil) as of July 2019. WMU will award a Bachelor of Science in Engineering (Civil) to all students who successfully complete all of the degree requirements (as detailed in the current degree catalog on the WMU Registrar's Office website <https://wmich.edu/registrar>) and who meet all of WMU's graduation requirements. Students are encouraged to meet with their academic advisor at WMU to ensure they will meet all of the requirements to graduate.

WMU CCE Program			UNIBE courses				Courses to be taken at WMU and credit hours	NOTES
WMU code	WMU name	WMU Credits	UNIBE code	UNIBE Course Equivalent	Credits at UNIBE	Credits Transferred		
First Semester								
GEOS 1300	Physical Geology	4	IC4-221	Physical Geology	4	4		
IEE 1020	Technical Communication	3					3	
EDMM 1420	Engineering Graphics	3	IC4-112	Computer Designed	2	3		
			IC4-111	Engineering Drawing	3			
MATH 1220 or MATH 1700	Calculus I	4	EGC-154	Calculus I	4	4		
CCE 1001	Intro to Engineering Design	1	IC4-110	Principles of Civil Engineering	4	2		
CCE 1002	Intro to Engineering Analysis	1						
Second Semester								
WMU code	WMU name	WMU Credits		UNIBE Course Equivalent	UNIBE	Transfer Credits		
CHEM 1100	General Chemistry I	3						
CHEM 1110	General Chemistry Laboratory I	1	EGC-160	General Chemistry I	4	4		
CS 1022	Introduction to Engineering Computing II: Mathematical Software	1	IC4-210	Computer Programming	3	2	Transferred as CS 1200 Programming in C for Engineers which can substitute for CS 1022 and CS 1023.	
CS 1023	Introduction to Engineering Computing III: Computer Programming	1						
MATH 1230	Calculus II	4	EGC-155	Calculus II	4	4		
			EGC-156	Matrices and Linear Algebra	3			
PHYS 2050	University Physics I	4	EGC-170	General Physics I	4	5		
PHYS 2060	University Physics I Laboratory	1						
Third Semester								
WMU code	WMU name	WMU Credits		UNIBE Course Equivalent	UNIBE	Transfer Credits		
IEE 2610	Engineering Statistics	3	UNB-202	Statistics	3	3		
MATH 2720	Multivariate Calculus and Matrix Algebra	4	EGC-252	Vector Calculus	4	4		
			EGC-156	Matrices and Linear Algebra	3			
ME 2560	Statics	3	IG1-210	Statics	3	3		
PHYS 2070	University Physics II	4	EGC-271	General Physics III	4	5		
PHYS 2080	University Physics II Laboratory	1						
CCE 2360	Geomatics	3					3	
Fourth Semester								
WMU code	WMU name	WMU Credits		UNIBE Course Equivalent	UNIBE	Transfer Credits		
TGE D1	General Education Area I - Fine Arts	3	EGH-140	Arts and Humanities	4	3		
CHEG 2611	Environmental Engineering I	3					3	
MATH 3740	Differential Equations and Linear Algebra	4	EGC-253	Differential Equations	4	4		
			EGC-254	Mathematical Methods	3			
ME 2570	Mechanics of Materials	3	IG1-212	Solid Mechanics I	4	3		
			IG1-310	Solid Mechanics II	3			
ME 2580	Dynamics	3	IG1-211	Dynamics	3	3		
Fifth Semester								
WMU code	WMU name	WMU Credits		UNIBE Course Equivalent	UNIBE	Transfer Credits		
ECON 2010	Principles of Microeconomics	3					3	
IEE 3100	Engineering Economy	3					3	
ME 3560	Fluid Mechanics	3	IC4-312	General Hydraulics	5	3		
			IG1-311	Fluid Mechanics	4			
PHIL 3160	Ethics in Engineering and Technology	3					3	
CCE 3360	Soil Mechanics	3					3	
Sixth Semester								
WMU code	WMU name	WMU Credits		UNIBE Course Equivalent	UNIBE	Transfer Credits		
CCE 3080	Civil & Construction Eng Materials	3					3	
CCE 3300	Transportation Engineering	3					3	

Transferred as CS 1200 Programming in C for Engineers which can substitute for CS 1022 and CS 1023.

Topography I and II could not be found equivalent; Calculus not listed as a prerequisite

In order to preserve the integrity of WMU program, we cannot transfer any more courses after Mechanics of Materials

evaluated, but cannot be articulated

CCE 3330	Constr. Codes, Specs & Contracts	3					3
CCE 3860	Structural Analysis	3					3
TGE D4	General Education Area IV - Other Cultures	4	EGS-110	Historical Processes and Social Collective Construction	3	4	
Seventh Semester							
WMU code	WMU name	WMU Credits		UNIBE Course Equivalent	UNIBE	Transfer Credits	
CCE 4300	Traffic Design	3					3
CCE 4400	Intro to Structural Design	3					3
CCE 4830	Project Design & Control	1					1
CCE	Construction Elective	3					3
CCE	Elective	3					3
CCE 4561	Foundation & Earth Retaining Structure Design	3					3
Eighth Semester							
WMU code	WMU name	WMU Credits		UNIBE Course Equivalent	UNIBE	Transfer Credits	
CCE	Structural Elective	3					3
CCE 4850	Senior Project	3					3
CCE	Elective	3					3
	General Education Area VIII- Health & Well Being	2					2
	General Education Area III -U.S. Cultures and Issues	3					3
Required Credits to graduate		126					63
Total credits accounted for in this program		126					63

Courses to be taken at WMU in the 3rd and 4th year
 Multiple courses need to be transferred to be equivalent to 1

At the time of the signing of this addendum, WMU is undergoing changes to its general education curriculum. The courses highlighted in green may or may not change during this curriculum revision, and therefore any green courses taken at UNIBE may not count for this program beginning Fall 2020. If changes are made, WMU will work with students to help them understand their options to complete the program.

Authorized By:

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