

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

Below are the degree requirements for WMU's Civil Engineering Program as of July 2019. WMU will award a degree 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.

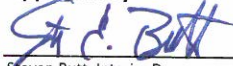
CCE Program			INTEC courses			Courses to be taken at WMU and credit hours
WMU code	WMU name	First Semester WMU Credits	INTEC code	INTEC Course Equivalent	Credits Transferred	
MATH 1220 or MATH 1700	Calculus I	4	CBM-102	Differential Calculus	4	
GEOS 1300	Physical Geology	4				4
CCE 1001	Intro to Engineering Design	1	INS-209	Spreadsheets for Engineers	1	Both INS-209 and INC-211 must be taken to
IEE 1020	Technical Communication	3	AHH-201	Rhetoric and Composition	3	
EDMM 1420	Engineering Graphics	3	INM 201	Mechanical Drawing I	3	
			INM 202	Mechanical Drawing II		
Second Semester						
WMU code	WMU name	WMU Credits		INTEC Course Equivalent	Credits	
MATH 1230	Calculus II	4	CBM-201	Calculus II	4	
CHEM 1100	General Chemistry I	3	CBQ 207	Chemistry I	3	
CHEM 1110	General Chemistry Laboratory I	1	CBQ 207L	Chemistry I Lab	1	
PHYS 2050	University Physics I	4	CBF 210	Mechanical Physics I	4	
PHYS 2060	University Physics I Laboratory	1	CBF 210L	Mechanical Physics I Lab	1	
CS 1022	Introduction to Engineering Computing II: Mathematical Software	1	INS 208	Programming Fundamentals	2	Dr. Abudayyeh has approved INS 208 and INS 208L for transfer as both CS 1022 and 1023 for CCE program
CS 1023	Introduction to Engineering Computing III: Computer Programming	1	INS 208L	Programming Fundamentals Lab		
CCE 1002	Intro to Engineering Analysis	1	INC-211	Civil Engineering Fundamentals	1	
Third Semester						
WMU code	WMU name	WMU Credits		INTEC Course Equivalent	Credits	
MATH 2720	Multivariate Calculus and Matrix Algebra	4	CBM-202	Calculus III	4	Both INS-209 and INC-211 must be taken to count for both CCE 1001 and CCE 1002
PHYS 2070	University Physics II	4	CBF 211	Mechanical Physics II	4	
PHYS 2080	University Physics Lab II	1	CBF 211L	Mechanical Physics Lab II	1	
CCE 2360	Geomatics	3	CIV 301	Topography I (prereq. CBM 102)	3	
			CIV 301L	Topography I Lab		
IEE 2610	Engineering Statistics	3	CBM 302	Statistical Inference	3	
ME 2560	Statics	3	ING 216	Statics	3	
			ING 216L	Statics Lab		
Fourth Semester						
WMU code	WMU name	WMU Credits		INTEC Course Equivalent	Credits	
MATH 3740	Differential Equations and Linear Algebra	4	CBM 203	Differential Equations	4	
CHEG 2611	Environmental Engineering	3	INC 349	Environmental Engineering	3	
ME 2580	Dynamics	3	ING 212	Dynamics	3	
			ING 212L	Dynamics Lab		
ME 2570	Mechanics of Materials	3	ING 217	Mechanics of Materials	3	Both ING 217 and INC 213 are equivalent courses, but students generally pick the one that suits their schedule
			ING 217L	Mechanics of Materials Laboratory		
			OR			
			INC 213	Mechanics of Deformable Solids		
TGE D1	General Education Area I - Fine Arts	3	INC 213L	Mechanics of Deformable Solids Laboratory	3	
		AHA 201	Art Appreciation I			
Fifth Semester						
WMU code	WMU name	WMU Credits		INTEC Course Equivalent	Credits	
CCE 3360	Soil Mechanics	3			3	
IEE 3100	Engineering Economy	3			3	
ME 3560	Fluid Mechanics	3			3	
TGE D5	ECON 2010 Principles of Microeconomics	3	ECO 201	Principles of Microeconomics	3	
PHIL 3160	Ethics in Engineering and Technology	3			3	
Sixth Semester						
WMU code	WMU name	WMU Credits		INTEC Course Equivalent	Credits	

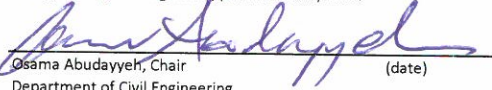
CCE 3080	Civil & Construction Eng Materials	3				3
CCE 3300	Transportation Engineering	3				3
CCE 3330	Constr. Codes, Specs & Contracts	3				3
CCE 3860	Structural Analysis	3				3
TGE D4	General Education Area IV - Other Cultures	4				3
Seventh Semester						
WMU code	WMU name	WMU Credits		INTEC Course Equivalent		Credits
CCE 4300	Traffic Design	3				3
CCE 4400	Intro to Structural Design	3				3
CCE 4830	Project Design & Control	1				1
ELEC	Construction Elective	3				3
ELEC	Elective	3				3
CCE 4561	Foundation & Earth Retaining Structure Design	3				3
Eighth Semester						
WMU code	WMU name	WMU Credits		INTEC Course Equivalent		Credits
ELEC	Structural Elective	3				3
CCE 4850	Senior Project	3				3
ELEC	Elective	3				3
TGE D8	General Education Area VIII - Health & Well Being	2	AHD 101	Physical Education and Sport		2
TGE D3	General Education Area III -U.S. Cultures and Issues	3				3
Required Credits to graduate		126				66
Total credits accounted for in this program		126				60

- Courses to be taken at WMU in the 3rd and 4th year
- Courses with alternative options
- Multiple courses need to be transferred to be equivalent

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 INTEC 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.

Approved By


 Steven Butt, Interim Dean (date) 10/22/19
 College of Engineering and Applied Sciences, WMU


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 Tulio Rodriguez (date)
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