

Addendum B to the 2019 Dual Degree Agreement between WMU and INTEC
Aerospace Engineering Program

Below are the degree requirements for WMU's Aerospace 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.

WMU AE Program			INTEC courses			Courses to be taken at WMU and credit hours
WMU code	WMU name	WMU Credits	INTEC code	INTEC Course Equivalent	Credits Transferred	
First Semester						
MATH 1220 or MATH 1700	Calculus I	4	CBM-102	Differential Calculus	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	
EDMM 1420	Engineering Graphics	3	INM 201	Mechanical Drawing I	3	
			INM 202	Mechanical Drawing II	3	
IEE 1020	Technical Communication	3	AHH-201	Rhetoric and Composition	3	
TGE D8	General Education Area VIII- Health & Well Being	2	AHD 101	Physical Education and Sport	2	
Second Semester						
WMU code	WMU name	WMU Credits		INTEC Course Equivalent	Credits	
MATH 1230	Calculus II	4	CBM-201	Calculus II	4	
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	
AE 2610	Intro to Aerospace Engineering	3	MEC-302	Intro to Aerospace Eng	3	
			MEC-302L	Lab of Intro to Aerospace Eng	3	
CS 1200	Programming in C for Engineers	3	INS 212	Programming I	3	
			INS 212L	Programming I Lab	3	
TGE D2	General Education Area II - Humanities	4	CSS-101	Human Being and Society	4	
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	
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	
ME 2320	Thermodynamics I	3	INM 300	Thermodynamics	3	
ME 2560	Statics	3	ING 216	Statics	3	
			ING 216L	Statics Lab	3	
TGE D5	General Education Area V - Social Behavioral Sciences	3	CSG-204	Social and Cultural Anthropology	3	
			ECO 201	Principles of Microeconomics	3	
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	
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	3	
			OR			
			INC 213	Mechanics of Deformable Solids		
			INC 213L	Mechanics of Deformable Solids Laboratory		
ECE 2100	Circuit Analysis	4	INE 377	Electric Circuits I	4	INE 319 is equivalent to INE 377 and INE 377L (all of these courses still exist)
			INE 377L	Electric Circuits I Lab	4	
			OR			
ME 2580	Dynamics	3	INE 319	Electrical Circuits	3	
			ING 212	Dynamics	3	
			ING 212L	Dynamics Lab	3	
CHEM 1120	General Chemistry II	4	CBQ 208	Chemistry II	4	
CHEM 1130	General Chemistry II Lab		CBQ 208L	Chemistry II Lab		
	or					
PHYS 3090	Introductory Modern Physics	4	CBF 212	Mechanical Physics III	4	
PHYS 3090	Introductory Modern Physics Lab		CBF 212L	Mechanical Physics III Laboratory		
Fifth Semester						
WMU code	WMU name	WMU Credits		INTEC Course Equivalent	Credits	
AE 3610	Aerodynamics I	4			4	
ME 3600	Control Systems	3			3	
ME 3520	Theory of Engineering Experimentation	3			3	
TGE D3	General Education Area III -U.S. Cultures and Issues	3			3	
TGE D4	General Education Area IV - Other Cultures	3			3	

Sixth Semester					
WMU code	WMU name	WMU Credits	INTEC Course Equivalent	Credits	
AE 3710	Aerodynamics II	3			3
AE 3800	Flight Vehicle Performance	3			3
ME 3350	Instrumentation	3			3
AE 4700	Orbital Mechanics	3			3
TGE D1	General Education Area I - Fine Arts	3	AHA 201	Art Appreciation I	3
Seventh Semester					
WMU code	WMU name	WMU Credits	INTEC Course Equivalent	Credits	
AE 4600	Aircraft Stability & Control	3			3
AE 4630	Aircraft Structural Design	3			3
AE 4660	Aerospace Propulsion I	3			3
ELEC	ELECTIVE	3			1
ME 4790	Aero Engineering Project planning	1			3
Eighth Semester					
WMU code	WMU name	WMU Credits	INTEC Course Equivalent	Credits	
AE 4690	Aircraft Design	3			3
AE 4760	Aerospace Propulsion II	3			3
ME 4800	Aero Engineering Project	3			3
ELEC	Aerospace Elective	3			3
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Required Credits to graduate		130			74
Total credits accounted for in this program		130			56

- 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

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