

Addendum E to the 2019 Dual Degree Agreement between WMU and INTEC
Paper Engineering Program

Below are the degree requirements for WMU's Paper 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 Paper E 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	
CHEM 1100	General Chemistry I	3	CBQ 207	Chemistry I	3	
CHEM 1110	General Chemistry Laboratory I	1	CBQ 207L	Chemistry I Lab	1	
IEE 1020	Technical Communication	3	AHH 201	Rhetoric and Composition	3	
PAPR 1000	Introduction to Pulp and Paper Manufacture	3				3
TGE D1	General Education Area I - Fine Arts	3	AHA 201	Art Appreciation I	3	
Second Semester						
WMU code	WMU name	WMU Credits		INTEC Course Equivalent	Credits	
MATH 1230	Calculus II	4	CBM-201	Calculus II	4	
CHEM 1120	General Chemistry II	3	CBQ 208	Chemistry II	3	
CHEM 1130	General Chemistry Lab II	1	CBQ 208L	Chemistry Lab II	1	
CHEG 1810	Introduction to Chemical Engineering Computation	2				2
PAPR 2040	Stock Preparation and Papermaking	4				3
TGE D8	Health & Well-Being	2	AHD 101	Physical Education and Sport	2	
Third Semester						
WMU code	WMU name	WMU Credits		INTEC Course Equivalent	Credits	
CHEM 3750	Organic Chemistry I	3				
CHEM 3760	Organic Chemistry Lab I	1	CBQ 204	Organic Chemistry I	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	
IEE 2610	Engineering Statistics	3	CBM 302	Statistical Inference	3	
PAPR 2550	Paper Physics Fundamentals	4				4
ECON 2010	Principles of Microeconomics	3	ECO 201	Principles of Microeconomics	3	
Fourth 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 II Laboratory	1	CBF 211L	Mechanical Physics II Lab	1	
CHEG 2960	Material and Energy Balance	4				4
CHEG 2611	Environmental Engineering	3	INC 349	Environmental Engineering	3	
	Elective	4				4
Fifth Semester						
WMU code	WMU name	WMU Credits		INTEC Course Equivalent	Credits	
CHEG 3110	Unit Operations in Chemical Engineering I	3				3
PAPR 3030	Pulping and Bleaching	4				4
TGE D2	General Education Area II - Humanities	4	CSS-101	Human Being and Society	4	
TGE D3	General Education Area III -U.S. Cultures and Issues	3				3
	Elective	4				4
Sixth 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 3120	Unit Operations in Chemical Engineering II	3				3
PAPR 3330	Carbohydrate and Lignin Chemistry	3				3
	Elective	3				4
TGE D4	General Education Area IV - Other Cultures	3				3
Seventh Semester						
WMU code	WMU name	WMU Credits		INTEC Course Equivalent	Credits	
CHEM 4300	Physical Chemistry I	3				3
CHEG 4830	Process Control I	4				4
PAPR 4600	Plant Economics and Project Design	3				3
PAPR 4400	Seminar	1				1
PAPR 4850	Research Design	3				3

CHP 3100	Work Exp	1			1
Eighth Semester:					
WMU code	WMU name	WMU Credits		INTEC Course Equivalent	Credits
PAPR 4300	Surface and Wet End Science	3			3
CHEG/GPS 4400	Seminar	1			1
PAPR 4860	Independent Research	3			3
CHEG 4811	Unit Operations Lab	1			1
	Elective	3			3
	Elective	3			3
Required Credits to graduate		135			59
Total credits accounted for in this program		135			76


- 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

 10/22/19
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