## Prerequisite Checklist for Financial Economics Certificate

Revised 11/18/13

Students interested in applying for the Financial Economics Certificate must take prerequisite courses in four (4) subject areas. Each requirement is fulfilled when one of the Options listed under that requirement below is completed.

## Notes:

- 1. Students do not have to complete all of their prerequisite courses by the time they apply in January, but should have completed all of them by the end of the spring quarter. Those who are accepted into the program and are still taking prerequisite courses during the spring term must receive a "B" or better in those courses in order to enter the program in the fall.
- 2. Many CPU prerequisite courses have their own prerequisites, which are set by the departments offering them. Please check the Undergraduate Catalog or the appropriate department for specifics.
- 3. Equal consideration is given to students who take non-honors courses.

**Requirement 1: Calculus and Linear Algebra** 

- 4. Most pre-reg courses are offered in both WCAS and McCormick, and students may take them in either or both schools.
- 5. Students are required to have a combined 3.0 average among all Certificate Program prerequisite courses in order to apply. Receiving a letter grade below a "B" in any individual course is acceptable, as long as the overall average of all your prerequisite courses is 3.0 or higher.

Option 1: Regular Math		Option 5: Wilviss students only	Option 7: For Miccormick Students	
MATH 230-0 and		MATH 285-1 and	Honors Calc. ES APPM 252-1 and	
MATH 234-0 and		MATH 285-2 and	Honors Calc. ES APPM 252-2 and	
MATH 240-0		MATH 285-3		
			One of the following combinations:	
Option 2: MENU 290		Option 6: For McCormick students	<ol> <li>Honors Engineering Analysis</li> </ol>	
MATH 290-1 and		MATH 230-0 and	GEN_ENG 206-1 and	
MATH 290-2 and		MATH 234-0 and	GEN_ENG 206-2	
MATH 290-3			or	
		One of the following combinations:	2. Non Honors Engineering Analysis	
Option 3: MENU 291 Accele	rated	<ol> <li>Honors Engineering Analysis</li> </ol>	GEN_ENG 205-1 and	
MATH 291-1 and		GEN_ENG 206-1 and	GEN_ENG 205-2	
MATH 291-2 and		GEN_ENG 206-2		
MATH 291-3		or		
		2. Non Honors Engineering Analysis		
Option 4: ISP students only		GEN_ENG 205-1 and		
MATH 281-1 and		GEN_ENG 205-2		
MATH281-2 and				
MATH 281-3				
Requirement 2: Probability	V			
	У			
Option 1:		Option 4: ISP students only	Option 7:	
MATH 310-1		STAT 383-0	EECS 302-0	
Option 2:		Option 5: MMSS students only	Option 8:	
MATH 311-1		MATH 385-0	BMD ENG 220-0	
			_	
Option 3: STAT 320-1		Option 6: IEMS 202-0	Option 9:	
31A1 32U-1		IEIVIS ZUZ-U	CHEM_ENG 312-0	
			Option 10:	
			MATH 314-0*	

\* MATH 314 ("Probability and Statistics for Econometrics") is a new course, designed to prepare students for ECON 381-1 and 2.

Requirement 3: Econometrics				
Option 1:				
ECON 381-1 and				
ECON 381-2				
Option 2: MMSS students only				
MATH 386-1 and				
MATH 386-2				

Requirement 4: Microeconomics	
Option 1: ECON 310-1	
Option 2: MMSS students only MMSS 211-1	



## Prerequisite Checklist for Managerial Anayltics Certificate

Revised 11/18/13

Students interested in applying for the Managerial Analytics Certificate must take prerequisite courses in five (5) subject areas. Each requirement is fulfilled when one of the Options listed under that requirement below is completed.

## Notes:

- 1. Students do not have to complete all of their prerequisite courses by the time they apply in January, but should have completed all of them by the end of the spring quarter. Those who are accepted into the program and are still taking prerequisite courses during the spring term must receive a "B" or better in those courses in order to enter the program in the fall.
- 2. Many CPU prerequisite courses have their own prerequisites, which are set by the departments offering them. Please check the Undergraduate Catalog or the appropriate department for specifics.
- 3. Equal consideration is given to students who take non-honors courses.
- 4. Most pre-req courses are offered in both WCAS and McCormick, and students may take them in either or both schools.
- 5. Students are required to have a combined 3.0 average among all Certificate Program prerequisite courses in order to apply. Receiving a letter grade below a "B" in any individual course is acceptable, as long as the overall average of all your prerequisite courses is 3.0 or higher.

Requirement 1: Calculus an	d Linear	Algebra			
Option 1: Regular Math		Option 5: MMSS students only		Option 7: For McCormick students	
MATH 230-0 and		MATH 285-1 and		Honors Calc. ES APPM 252-1 and	
MATH 234-0 and		MATH 285-2 and		Honors Calc. ES APPM 252-2 and	
MATH 240-0		MATH 285-3			
				One of the following combinations:	
Option 2: MENU 290		Option 6: For McCormick students		1. Honors Engineering Analysis	
MATH 290-1 and		MATH 230-0 and		GEN_ENG 206-1 and	
MATH 290-2 and		MATH 234-0 and		GEN_ENG 206-2	
MATH 290-3				or	
		One of the following combinations:		2. Non Honors Engineering Analysis	
Option 3: MENU 291 Accelerated		1. Honors Engineering Analysis		GEN_ENG 205-1 and	
MATH 291-1 and		GEN_ENG 206-1 and		GEN_ENG 205-2	
MATH 291-2 and		GEN_ENG 206-2			
MATH 291-3		or			
		2. Non Honors Engineering Analysis			
Option 4: ISP students only		GEN_ENG 205-1 and			
MATH 281-1 and		GEN_ENG 205-2			
MATH 281-2 and					
MATH 281-3					

Requirement 2: Probabil	ity			
Option 1: MATH 310-1		Option 4: ISP students only STAT 383-0	Option 7: EECS 302-0	
Option 2: MATH 311-1		Option 5: MMSS students only MATH 385-0	Option 8: BMD_ENG 220-0	
Option 3: STAT 320-1	0	Option 6: IEMS 202-0	Option 9: CHEM_ENG 312-0	
			Option 10: MATH 314-0*	

<sup>\*</sup> MATH 314 ("Probability and Statistics for Econometrics") is a new course, designed to prepare students for ECON 381-1 and 2.

Requirement 3: Econom	etrics/Statistic	S		
Option 1:		Option 3:	Option 5:	
ECON 381-1		IEMS 303-0 and	STAT 320-2 and	
		IEMS 304-0*	STAT 350-0*	
Option 2: MMSS student	s only	Option 4:		
MATH 386-1		STAT 320-2 and		
		IEMS 304-0*		

<sup>\*</sup> IEMS 304-0 or STAT 350-0 may be taken concurrently with the certificate courses.

Requirement 4: Microeconomics			
Option 1: ECON 310-1			
Option 2: MMSS students only			
MMSS 211-1			

Requirement 5: Optimization			
Option 1: MATH 368-0		Option 3: CHEM ENG 345-0	
Option 2: IEMS 313-0	0		