

**Kellogg School of Management Certificate Program for Undergraduates
Prerequisite Checklist for Managerial Analytics Certificate (Updated 6/22/09)**

Requirement	Course(s) Satisfying Requirement
Calculus and linear algebra	290 MENU Sequence:
	Math 290-1 plus <input type="checkbox"/>
	Math 290-2 plus <input type="checkbox"/>
	Math 290-3 <input type="checkbox"/>
	OR MENU 291 Accelerated :
	Math 291-1 plus <input type="checkbox"/>
	Math 291-2 plus <input type="checkbox"/>
	Math 291-3 <input type="checkbox"/>
	OR Accelerated Math for ISP:
	Math 281-1 plus <input type="checkbox"/>
	Math 281-2 plus <input type="checkbox"/>
	Math 281-3 <input type="checkbox"/>
	OR MMSS:
	Math 285-1 plus <input type="checkbox"/>
	Math 285-2 plus <input type="checkbox"/>
	Math 285-3 <input type="checkbox"/>
	OR Non- honors Math:
	Math 230 plus <input type="checkbox"/>
	Math 234 plus <input type="checkbox"/>
	Math 240 <input type="checkbox"/>
	OR Honors Calculus for Engineers:
	Honors Calc. ES APPM 252-1 plus <input type="checkbox"/>
	Honors Calc. ES APPM 252-2 <input type="checkbox"/>
	OR Honors Engineering Analysis:
	GEN_ENG 206-1 plus <input type="checkbox"/>
	GEN_ENG 206-2 plus <input type="checkbox"/>
	GEN_ENG 206-3 plus <input type="checkbox"/>
	GEN_ENG-206 4 <input type="checkbox"/>
	OR Non Honors Engineering Analysis:
	GEN_ENG 205-1 plus <input type="checkbox"/>
GEN_ENG 205-2 plus <input type="checkbox"/>	
GEN_ENG 205-3 plus <input type="checkbox"/>	
GEN_ENG 205-4 <input type="checkbox"/>	

Requirement	Course(s) Satisfying Requirement
Probability	Math 310-1 <input type="checkbox"/>
	OR ISP:
	Math 383 <input type="checkbox"/>
	OR MMSS:
	Math 385 <input type="checkbox"/>
	OR Engineering:
IEMS 202 or EECS 302 <input type="checkbox"/>	
Econometrics/ Statistics	Econ 381-1 <input type="checkbox"/>
	OR MMSS:
	Math 386-1 <input type="checkbox"/>
	OR Engineering:
IEMS 303 <input type="checkbox"/>	
Microeconomics	Econ 310-1 <input type="checkbox"/>
	OR MMSS:
MMSS 211-1 <input type="checkbox"/>	
Optimization	Math 368 (WCAS) <input type="checkbox"/>
	OR Engineering:
	IEMS 313 <input type="checkbox"/>

Students who participate in the MA Certificate and take IEMS 303 to fulfill the econometrics/statistics prerequisite must also take IEMS 304 concurrently with their certificate courses (if they haven't taken it before entering the program). MA students who take Econ 381-1 or Math 386-1 (MMSS) to fulfill the econometrics/statistics requirement do not have to take the second course of those sequences.

In general, students should have completed at least five of the prerequisite courses when they apply. Acceptance to the program is contingent on the successful completion ("B" or better) of prerequisite courses taken during the spring or summer terms prior to entering the program in the fall.

Many of the Certificate Program prerequisite courses have their own prerequisites, which are determined by the departments offering them. Students should check the Undergraduate Catalog or appropriate department for specifics.