KELLOGG CERTIFICATES

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Overview

The Kellogg School of Management administers a program leading to an undergraduate certificate in either Financial Economics or Managerial Analytics. Each certificate requires completion of four courses taught at an advanced level by Kellogg faculty members. Building on students' existing analytical skills, the certificate curriculum serves as excellent preparation for careers in consulting, financial services, and other data-driven professions and/or for doctoral or professional school programs.

Certificate students also benefit from one-on-one counseling from a dedicated career development specialist to help them secure summer internships and full-time employment.

Application and Program Requirements

About 100 students each year are accepted into the certificate program through a competitive application process. Any Northwestern undergraduate who meets the program's rigorous selection criteria may apply. Program prerequisites include advanced calculus and microeconomics. Additional program corequisites include intermediate probability & statistics and advanced econometrics & statistics.

Certificate Prerequisites

The program prerequisites should be completed prior to applying to the program. One prerequisite course may be taken during the Winter Quarter of the year you apply. All other program prerequisites should be completed no later than the fall of the year you apply.

Course	Title
Calculus Prerequisite	
Option 1: Regular Math	
MATH 230-1	Multivariable Differential Calculus
MATH 230-2	Multivariable Integral Calculus
Option 2: MENU	
MATH 290-2	MENU: Linear Algebra and Multivariable Calculus
MATH 290-3	MENU: Linear Algebra and Multivariable Calculus
Option 3: MENU Accelerated	
MATH 291-2	MENU: Intensive Linear Algebra and Multivariable Calculus
MATH 291-3	MENU: Intensive Linear Algebra and Multivariable Calculus
Option 4: ISP	
MATH 281-1	Accelerated Mathematics for ISP. First Year
MATH 281-2	Accelerated Mathematics for ISP. First Year
Option 5: MMSS	
MATH 285-2	Accelerated Mathematics for MMSS
MATH 285-3	Accelerated Mathematics for MMSS
Option 6: McCormick	
MATH 228-1	Multivariable Differential Calculus for Engineering
MATH 228-2	Multivariable Integral Calculus for Engineering
Option 7: McCormick Honors	
ES_APPM 252-1	Honors Calculus for Engineers
ES_APPM 252-2	Honors Calculus for Engineers
Option 8: Data Science Major	
STAT 228-0	Series and Multiple Integrals *
*Must also take MATH 230-1	
Option 9: Alternative Math Option	
MATH 235-0	Series and Multiple Integrals
*Must also take MATH 230-1 or equivalent	
Microeconomics Prerequisite	
Complete one of the following courses:	
Option 1	
ECON 310-1	Microeconomics *
Option 2: MMSS	
MMSS 211-1	Social Science Theories & Meth-First Yr
*Please note that ECON 201-0 and ECON 202-0 are prerequisites	

Certificate Corequisites

Program corequisites must be completed within a year of entering the program. Please note that program corequisites may be prerequisites for individual certificate courses. Take this into account when planning your course schedule.

Course	Title
Probability Corequisite	
Option 1	
MATH 314-0	Probability and Statistics for Econometrics *
Option 2	
MATH 310-1	Probability and Stochastic Processes *
Option 3: MENU	
MATH 311-1	MENU: Probability and Stochastic Processes *
Option 4	
STAT 320-1	Statistical Theory & Methods 1 *
Option 5: ISP	
STAT 383-0	Probability and Statistics for ISP
Option 6: MMSS	
MATH 385-0	Probability and Statistics for MMSS
Option 7: McCormick	
IEMS 302-0	Probability
Option 8: McCormick	
ELEC_ENG 302-0	Probabilistic Systems
Option 9: McCormick	
BMD_ENG 220-0	Introduction to Biomedical Statistics
Option 10: McCormick	
CHEM_ENG 312-0	Probability and Statistics for Chemical Engineering
*MATH 226-0 is a prerequisite or corequisite for these courses. Review prerequisites when planning your schedule	
Econometrics/Statistics Corequisite	
Option 1	
ECON 381-1	Econometrics
Option 2: MMSS	
MATH 386-1	Econometrics for MMSS
Option 3: McCormick	
IEMS 303-0	Statistics
IEMS 304-0	Statistical Learning for Data Analysis
Option 4	
STAT 320-2	Statistical Theory & Methods 2
or STAT 383-0	Probability and Statistics for ISP
STAT 350-0	Regression Analysis
*Option 4: Data Science Major or Minor with R**	
STAT 301-1	Data Science 1 with R
STAT 301-2	Data Science 2 with R
STAT 301-3	Data Science 3 with R
*Option 5: Data Science Major or Minor with Python**	

STAT 303-1	*Data Science 1 with Python*
STAT 303-2	Data Science 2 with Python
STAT 303-3	Data Science 3 with Python

**Students should not plan to take these courses unless they have been admitted to the major or minor

See kellogg.northwestern.edu/certificate for a complete explanation of the program prerequisites and corequisites.