

DATA ANALYTICS

MINOR CONCENTRATION

A minor concentration requires a minimum of six courses, representing at least eighteen credits, in the minor field of study. In addition, a department may add academic prerequisites or requirements in related fields, but the total will not exceed 60% of the department's major program requirements. Minor requirements are listed under departmental entries. In order to complete requirements for a minor, the student must take the majority of credits in the minor field at King's. Minor areas of concentration (minors) are permitted, but not required.

Monitoring of student progress in pursuing a minor in **Data Analytics** is necessary to enhance the student learning experience. Therefore, a written declaration must be submitted by the student to the Registrar.

Minor Requirements <i>(6 courses – 17-21 credits)</i>	Credits
Data Analytics Basics/Excel Competency (Two courses - 6 credits)	
CIS 110: Introduction to Business Information Systems ^(a)	3
MATH 123: Finite Mathematics and Business Analytics ^(a)	3
Statistics (3 or 4 credits) (Choose one course)	
ECON 221: Statistics and Predictive Analytics	3
MATH 126: Introduction to Statistics	3
MATH 128: Introduction to Statistics and Data Analysis	4
SOC 251: Probability and Statistics in Social Science	3
PSYC 220/Lab – Statistics for the Behavioral Sciences	3 or 4
PS 221: Probability and Statistics in Social Science	3
Programming (3 credits) (Choose one course)	
CIS 116: Fundamentals of Programming	3
CIS 244: Structured Programming	3
CS 111: Programming for Science and Engineering	3
CS 112: Introduction to Computer Programming	3
Applications (2-5 credits) (Choose one course)	
ACCT 340: Advanced Managerial Accounting	3
AT 410: Evidence Based Medicine I	2
BIOL 330: Introductory Bioinformatics	3
BUS 363/L: Operations Management (and lab) (3 + 1 for lab)	4
BUS 380/380L: Health Care Operations Mgmt. & Lab	4
CHEM 243: Analytical Chemistry (includes lab)	5
CHEM 244: Instrumental Analysis (includes lab)	5
CIS 255/GEOG 255: Geographic Information Systems	3
CS256/L CIS356: Database Mgmt. Systems	3 or 4
ECON 222: Statistics and Econometrics	3
ENGR 360: Probability and Engineering Statistics	3
ENST 410: Environmental Sampling and Analysis	2
EXSC 480: Research & Design	2
GEOG 312: Dynamics of Population	3
GEOG 355: Applied Geographic Information Systems	3
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Applications continued...	

HIST 261: Research and Methods in History (Revised to cover statistics, data summarization and visualization)	3
MATH 250: Linear Algebra	4
MATH 361: Probability and Statistics I	3
MATH 362: Probability and Statistics II	3
MATH 363: Mathematical Modeling	3
MKT 360: Digital Marketing	4
MKT 450: Marketing Research	3
NEUR 310: Research Methods in Neuroscience	3
PHYS 260: Introduction to Numerical Techniques in Physics	4
PHYS 430: Dynamical Systems and Chaos	3
PSYC 221: Research Methods	4
SOC 252/252L: Research Methods in Social & Behavioral Science	4

Project-Based Learning (3 credits) (Choose one course) ^(b)

ACCT 440: Accounting Information Systems	3
AT 550: Evidence-Based Medicine 2	3
BUS 354: Workforce Analytics	3
CE 450: Special Topics	3
CIS 471: Applied Global Information Systems	3
CS 455: Machine Learning	3
ECON 323: Econometrics	3
PS 422: Theories and Research Methods in International Relations	3

NOTES:

^(a) Substitutes:

CIS 119 can substitute for CIS 110;

Substitutes for MATH 123 include any of the following:

- MATH 125 Calculus (4)
- MATH 127 Logic and Axiomatics (3)
- MATH 129 Analytic Geometry and Calculus I (4)

^(b) Alternative project-based learning options include any of the following:

- Collaborating with an instructor of another existing course to incorporate a data analytics project.
- Completing an independent study that requires a data analytics project.
- Completing an internship involving data analytics.

For more information regarding the Data Analytics minor including but not limited to course descriptions and department chairpersons, please visit the online college course catalog.