STATISTICS DEPARTMENT - APPROVED SUPPORT ELECTIVES

All Statistics majors will take 8 units of approved electives outside the major. Every student will select a pair of courses in consultation with a major advisor. The major advisor must approve the student's selections. Students should meet with a major advisor before taking any possible approved electives.

Critically, **approved electives must belong to the same general field** (e.g., two from life sciences, or two from mathematics).

The lists below show courses that are commonly approved, grouped by general field. A meeting with your major advisor is still required to approve these electives, even if they are on the list. If you are interested in any elective courses not listed here, discuss this with your major advisor when you meet to choose your electives.

Biology & Life Sciences		*Prereqs**
BIO 302	Human Genetics	*BIO 111 or 161 or BOT 121*
BIO 303	Survey of Genetics	*BIO 111 or 161 or BOT 121*
BIO 305	Biology of Cancer	*GE Area B2*
BIO 308	Genetic Engineering Technology	*GE Area B; CHEM 110, 111, 124, or 127*
BIO 351	Principles of Genetics	*BIO 161; CHEM 216 or CHEM 312*
BIO 419	Analytic Methods in Ecology	
BIO 426	Immunology	*BIO 351 or CHEM 373*
BIO 428	Hematology	*BIO 351 or BIO 302 or BIO 303 or CHEM 373*
BIO 435	Plant Physiology	*BOT 121 or BIO 162*
BIO 441	Bioinformatics Applications	*BIO 161 or 303*
BIO 444	Population Ecology	*BIO 263 or NR 306*
KINE 319	Introduction to Research Methods in Kinesiology	
KINE 402	Motor Learning and Control	
NR 306	Natural Resource Ecology and Habitat Management	*GE B2&B4*
NR 315	Measurements and Sampling in Forested Environments	*BRAE 239 or BRAE/NR 247*
NR 317	The World of Spatial Data and Geographic Information Technology	*Jr standing, GE B2*

* Prereqs listed here do not include calculus or intro statistics.

Business & Economics

BUS 319	Accounting Information Systems	*BUS 214*
BUS 320	Federal Income Taxation for Individuals	*BUS 319*
BUS 321	Intermediate Accounting I	*BUS 319*
BUS 322	Intermediate Accounting II	*BUS 321*
BUS 342	Fundamentals of Corporate Finance	*BUS 214*
BUS 431	Security Analysis and Portfolio Management	*BUS 342, ECON 339, or STAT 324*
BUS 439	Fixed Income Securities Market	*BUS 342*
BUS 444	Financial Engineering and Risk Management	*BUS 431*
ECON 303	Economics of Poverty, Discrimination and Immigration	*Jr standing, GE Area A, and ECON 222*
ECON 311	Intermediate Microeconomics I	*ECON 221 and 222, or 201*
ECON 312	Intermediate Microeconomics II	*ECON 312*
ECON 313	Intermediate Macroeconomics	*ECON 312*
ECON 337	Money, Banking, and Credit	*ECON 221 and 222, or 201*
ECON 339	Econometrics	*ECON 221 and 222, or 201*
ECON 406	Applied Forecasting	*ECON 311, ECON 339*
ECON 408	Mathematical Economics	*ECON 313*
ECON 409	Probability Models for Economic Decisions	*ECON 311*
ECON 431	Environmental Economics	*ECON 311*
ECON 440	Advanced Econometrics	*ECON 339*

Computer Science & Data Science

CSC/CPE 202	Fundamentals of Computer Science II	*CSC 101, MATH 141*
CSC/CPE 203	Fundamentals of Computer Science III	*CSC 202, MATH 141*
CSC 225	Introduction to Computer Organization	*CSC 202*
CSC 348	Discrete Structures	*CPE 203*
CSC 349	Design & Analysis of Algorithms	*CPE 203, MATH 142*
CSC 365	Introduction to Database Systems	*CPE 203*
CSC 369	Distributed Computing I	*CPE 203*
CSC 448	Bioinformatics Algorithms	*CPE 203 or BIO 441*
CSC 466	Knowledge Discovery from Data	*CSC 365*
DATA 301	Introduction to Data Science	*CPE 202*
DATA 401	Data Science	*CSC 365, CSC 466, DATA 301*
DATA 451/452	Data Science Capstone I/II	*DATA 401*

* Prereqs listed here do not include calculus or intro statistics.

Industrial Engineering & Technology

IME 301	Operations Research I	*MATH 244*
IME 405	Operations Research II	*IME 301 or STAT 321*
IME 420	Simulation	*IME 326, IME 405*
IME 430	Quality Engineering	
ITP 303	Lean Six Sigma Green Belt	
ITP 371	Decision Making in Supply Chain, Services, and Project Management	

Journalism

JOUR 350	Data Journalism	*JOUR 285*
JOUR 390	Visual Communication for the Mass Media	*JOUR 203*

Mathematics

MATH 242	Differential Equations I	*MATH 206, 241*
MATH 306	Linear Algebra II	*MATH 206, 241, 248*
MATH 335	Graph Theory	*MATH 248 or jr standing*
MATH 336	Combinatorial Mathematics	*MATH 248 or jr standing*
MATH 341	Theory of Numbers	*MATH 248*
MATH 344	Linear Analysis II	*MATH 206 & 242, or MATH 241 & 244*
MATH 406	Linear Algebra III	*MATH 306*
MATH 412	Introduction to Analysis I	*MATH 306*
MATH 413	Introduction to Analysis II	*MATH 412*
MATH 414	Introduction to Analysis III	*MATH 413*
MATH 437	Game Theory	*MATH 206, 248*
MATH 451	Numerical Analysis I	*MATH 206, 241, 242*
MATH 452	Numerical Analysis II	*MATH 451*
MATH 453	Numerical Optimization	*MATH 306 and MATH 451*

Political Science

POLS 359	Research Design	
POLS 361	Quantitative Methodology	*POLS 359*

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Psychology

PSY 329	Research Methods in Psychology	*PSY 201 or 202*
PSY 330	Behavioral Effects of Psychoactive Drugs	*Completion of D4*
PSY 340	Biopsychology	*PSY 201 or 202*
PSY 375	Forensic Psychology	*PSY 201 or 202*
PSY 432	Psychological Testing	*PSY 333*
PSY 457	Memory & Cognition	*PSY 333*