This transfer guide is designed as an advising tool to facilitate a smooth transition between institutions by identifying relevant course work recommended to be completed prior to transfer.

Courses Needed Prior to Transfer (if student is transferring in as a junior)

- MATH 229 - Calculus I Credits: 4
- MATH 230 - Calculus II Credits: 4
- MATH 232 - Calculus III Credits: 4
- ACCY 288 - Fundamentals of Accounting Credits: 3
- ECON 260 - Principles of Microeconomics Credits: 3
- ECON 261 - Principles of Macroeconomics Credits: 3

Courses to be Completed at NIU

- MATH 240 - Linear Algebra and Applications Credits: 4
- MATH 360 - Model Building in Applied Mathematics Credits: 3
- MATH 430 - Advanced Calculus I Credits: 3
- STAT 350 - Introduction to Probability and Statistics Credits: 3
- STAT 382 - Theory of Interest and Financial Derivatives Credits: 4
- STAT 470 - Introduction to Probability Theory Credits: 3
- STAT 473 - Statistical Methods and Models I Credits: 3
- AND STAT 473A - Statistical Computing Packages Credits: 1
- STAT 478 - Statistical Methods of Forecasting Credits: 3
- STAT 481 - Probabilistic Foundations in Actuarial Science Credits: 3
- STAT 483 - Stochastic Processes I Credits: 4
- STAT 485 - Life Contingencies and Payment Models I Credits: 3
- STAT 486 - Life Contingencies and Payment Models II Credits: 3
- STAT 495 - Special Topics in Actuarial Science Credits: 1-3

Three courses from the following (7-10)

- STAT 483 - Stochastic Processes I Credits: 4
- STAT 485 - Life Contingencies and Payment Models I Credits: 3
- STAT 486 - Life Contingencies and Payment Models II Credits: 3
- STAT 495 - Special Topics in Actuarial Science Credits: 1-3

Requirement outside Department

- CSCI 240 - Computer Programming in C++ Credits: 4
- ACCY 306 - Financial Accounting Information for Business Decisions Credits: 3
- FINA 320 - Principles of Finance Credits: 3
- FINA 330 - Corporate Finance Credits: 3
- FINA 340 - Investments Credits: 3
Community college students are encouraged to do the following:

- Complete an A.A. or A.S. degree prior to transferring to NIU
- Utilize the *NIU Articulation Handbook* for information regarding the transferability of courses. [http://www.niu.edu/admissions/transfer/transfercenter/handbook/tables.shtml](http://www.niu.edu/admissions/transfer/transfercenter/handbook/tables.shtml)
- Review “Limited Admissions Programs transfer Course Equivalents” (if appropriate) proved by the NIU Transfer Center [http://www.admissions.niu.edu/admissions/transfer/credits/limited/index.shtml](http://www.admissions.niu.edu/admissions/transfer/credits/limited/index.shtml)
- Consult with the College of Liberal Arts & Science and/or review the websites for your intended major for detailed information about special requirements, program admission requirements, and course requirements.

A major in Actuarial Science uses mathematics, statistics, and financial theory to assess the risk that an event will occur, and they help businesses and clients develop policies that minimize the cost of that risk. Actuaries’ work is essential to the insurance industry. Actuaries analyze the financial costs of risk and uncertainty.

The Actuarial Science Degree prepares students for careers in the actuarial profession and helps them learn material included in the Exams P / 1 (Probability), FM / 2 (Financial Mathematics) and M / 3 (Actuarial Models) of the Society of Actuaries (SOA) / Casualty Actuarial Society (CAS). A few courses relevant to Exam C / 4 (Construction and Evaluation of Actuarial Models) of the SOA / CAS are also available to actuarial students. Interested students should contact the Division of Statistics for advising in this emphasis.

Note: A student seeking to attain membership with the SOA and/or CAS is required to complete the Validation by Educational Experience (VEE) requirements of the societies in three areas: applied statistics, economics, and corporate finance. Although not a requirement for completion of this emphasis, a student may receive VEE credits by completing STAT 473, STAT 478, ECON 260, ECON 261, FINA 330 and FINA 340 with a grade of B or better in each course.

Students with an undergraduate degree in actuarial science often pass two to three of the SOA exams before they graduate. Once they graduate, the majority of our students have obtained employment at many various insurance companies where they will continue the process of learning about the actuarial field.

Internship opportunities in statistics are available with many employers, including pharmaceutical companies, insurance companies, manufacturing companies, and government agencies.

---

**For more information contact:**
Carrie Helmig, MS, Recruiting and Advising Assistant
Division of Statistics, DuSable Hall 366, Northern Illinois University
815-753-6778 [chelmig@niu.edu](mailto:chelmig@niu.edu)
[http://www.niu.edu.stat](http://www.niu.edu.stat)