

INTERDISCIPLINARY STUDIES

Phone: 620-341-5726

Chair: Alberto Montalvo

Graduate Faculty

Professors: Rich Sleezer

Assistant Professors: Bekah Selby, Paul Zunkel,
Deborah Hann

Instructors: Keith Rocci

Graduate Application Process for Master of Science in Informatics

Academic requirements are a BA or BS degree from an accredited four-year institution with an undergraduate GPA of 3.0 for full admissions.

Applicants with a GPA under 3.0 may be considered for probationary admission. Applicants are expected to demonstrate competence in written and oral communication.

It is essential that applicants apply and receive acceptance into the ESU Graduate School prior to being considered for acceptance by Interdisciplinary Studies. Following acceptance by the ESU Graduate School, prospective students should begin the Interdisciplinary Studies admission process.

1. For the Master of Science in Informatics, your degree objective is MS with a major in Informatics (INF). If you have a postgraduate degree or have taken graduate course work, you must list those institutions as well. You must apply for admission online at <https://www.emporia.edu/grad/admissions/>.
2. Transcripts. Arrange to have an official transcript from each institution attended sent directly to the Graduate Office (see address above or on application). The grade point average that is used for admission purposes is always based on your bachelor's degree. Students are expected to have a grade point average of 3.0 overall or in the last 60 hours of course work toward the initial bachelor's degree. We consider a post-graduate degree, or graduate courses taken, to give us a full picture of your academic record.

3. Letter of reference from two people who know you and your work (academic and/or community work) that address your intellectual capability, ability to express thoughts orally, ability to express thoughts in writing, maturity, and motivation. The letters should also include how long the writers have known you and their relationship to you (teachers, colleague, co-worker, etc.). References may be sealed or open.
4. Current resume.
5. An advising interview.
6. A written two-page statement of objectives, double-spaced.

Each application will be considered by applying the admissions criteria on an individual basis. Academic requirements, for instance, may be waived in favor of applicants of unusual ability and background where rationale for that waiver can be demonstrated. However, only those applicants showing strong evidence of intellectual promise and leadership potential will be admitted.

MASTER OF SCIENCE IN INFORMATICS

The M.S. in Informatics is a 36-credit hour graduate degree program. It is a collaboration between the College of Liberal Arts and Science and the School of Library and Information Management and is administered by the Department of Interdisciplinary Studies. The program can be taken entirely online or be a mixture of online and on campus courses. Students should have the following pre-requisites in preparation of the master's program:

Bachelor's degree from an accredited 4-year institution.

At least one course in statistics.

At least one course in computer programming (e.g., Fortran, Visual Basic, C++, Perl, Python, R).

Required Informatics Core Courses - 15 Credit Hours:

LI 800 Introduction to Informatics	3 hours
ID 745 Programming and Data Analysis for Informatics	3 hours
ID 810 Informatics Capstone Seminar	3 hours

LI 844 Database Design	3 hours
LI 819 Information Retrieval	3 hours
Capstone – 6 Credit Hours	
ID 871 Directed research	3 hours
ID 872 Practicum	3 hours
ID 873 Internship	3 hours
ID 875 Thesis	3 hours
Concentration	15 hours
Total Hours	36 hours

MASTER OF SCIENCE IN INFORMATICS/ GEOINFORMATICS CONCENTRATION

The M.S. in Informatics is a 36-credit hour graduate degree program. It is a collaboration between the School of Library and Information Management, the School of Business, and the College of Liberal Arts and Sciences and is administered by the Department of Interdisciplinary Studies. The program can be taken entirely online or be a mixture of online and on campus courses.

Required Informatics Core Courses - 21 Credit Hours

Required Core Courses – 15 credit hours

LI 800 Introduction to Informatics	3 hours
ID 745 Programming and Data Analysis for Informatics	3 hours
ID 810 Informatics Capstone Seminar	3 hours
LI 844 Database Design	3 hours
LI 819 Information Retrieval	3 hours

Capstone – 6 Credit Hours

ID 871 Directed research	3 hours
ID 872 Practicum	3 hours
ID 873 Internship	3 hours
ID 875 Thesis	3 hours
GE 573 Internship in Geographic Information Systems	3 hours

Geoinformatics Concentration – 15 Credit Hours

Geoinformatics Core – 10 Credit Hours

GE 572 GIS Applications	3 hours
ES 555 Small-Format Aerial Photography	3 hours
ES 771 Remote Sensing	4 hours

Geoinformatics Electives

Any Earth Science (ES), Geology (GO) or Geography (GE) courses approved by advisor

Total Hours **36 hours**

Pre-requisites

- Bachelor of Science in Geography, Geology, Earth Science or closely related field.
- At least one course in geographic information systems (GIS)
- At least one course in Cartography
- At least one course in Statistics
- At least one course in Computer Programming (Fortran, Visual Basic, C++, Perl, Python, R, etc.)

MASTER OF SCIENCE IN INFORMATICS, QUANTITATIVE ECONOMICS CONCENTRATION

The M.S. in Informatics Quantitative Economics Concentration is a 36-credit hour graduate degree program. It is a collaboration with the School of Library and Information Management, the School of Business, and the College of Liberal Arts and Sciences and is administered by the Department of Interdisciplinary Studies. Program can be taken entirely online or be a mixture of online and on campus courses.

Required Informatics Core Courses – 21 Credit Hours

Required Core Courses – 15 credit hours

LI 800 Introduction to Informatics	3 hours
ID 745 Programming and Data Analysis for Informatics	3 hours
ID 810 Informatics Capstone Seminar	3 hours
LI 844 Database Design	3 hours
LI 819 Information Retrieval	3 hours

Capstone – 6 Credit Hours

ID 871 Directed research	3 hours
ID 872 Practicum	3 hours
ID 873 Internship	3 hours
ID 875 Thesis	3 hours

Quantitative Economics Concentration – 15 Credit Hours

Economics Core - 12 Credit Hours

EC 710 Econometrics I	3 hours
OR	
EC 711 Econometrics II	3 hours
AND	
EC 712 Economic Theory	3 hours
and two of the following:	
Seminars in Quantitative Economics	3 hours

<i>EC 741 Health Economics</i>	<i>3 hours</i>
<i>EC 731 Economics of Crime</i>	<i>3 hours</i>
<i>EC 727 Industrial Organization</i>	<i>3 hours</i>
<i>EC 737 Game Theory</i>	<i>3 hours</i>
<i>EC 751 Labor Economics</i>	<i>3 hours</i>
<i>EC 713 Mathematical Economics</i>	<i>3 hours</i>

Quantitative Economics Elective – 3 Credit Hours

EC 797 Graduate Internship in Economics	1-3 hours
EC 798 Directed Research in Economics	1-3 hours
EC740 Business Cycles and Forecasting	3 hours
BC 807 Managerial Economics	3 hours
MA 532 Mathematical Statistics I	3 hours
MA 581 Mathematical Modeling	3 hours
MA 731 Statistics Using SAS	3 hours
MA 732 Categorical Data Analysis	3 hours
MA 733 Mathematical Statistics II	3 hours
MA 763 Simulation Techniques	3 hours
MA 764 Regression Analysis	3 hours

Any 500+ Economics (EC or BC), Math (MA),
 Science (ES, GO, PH, CH) or Geography (GE)
 course 1-3 hours

Total Hours 36 hours

Prerequisites –

A bachelor's degree with a major, minor, or
 concentration in economics, mathematics, statistics,
 sciences, social science or related field.

At least one course in economics (or equivalent)

At least one course in statistics (or equivalent)

At least one course in calculus (or equivalent)