

## **GEOGRAPHIC INFORMATION SYSTEMS – GIS (1719)**

The intent of this minor program is to provide students from any major discipline at Buffalo State College a means to apply spatial thinking to their chosen fields of study by delving into the concepts, techniques, and processes associated with GIS. It is understood that any student intending to minor in GIS will have a basic understanding of computers and computer software, such as Microsoft Office. We intend to provide a sound conceptual background on geographic information science as well as opportunities to explore applications and technologies associated with GISystems.

### **A. GIS Concentration 12 credits**

REQUIRED COURSES: 6 credits

GEG 425 Fundamentals of GIS

GEG 429 Advanced Topics in GIS

ELECTIVE COURSES: 6 credits

*Select two courses from the following:*

GEG/PLN 325 Remote Sensing and Mapping

GEG 405 Urban Analysis Using GIS (Formerly Advanced Urban Geography)

GEG 427 Corporate Applications in GIS

GEG 428 Environmental Assessment and Planning Applications in GIS

GEG 485 Interactive and Web-based Mapping

### **B. CIS and statistics**

Non-Majors:

GEG 390 Quantitative Methods or and equivalent upper level statistics course.

Majors: Select TWO courses from the following

Non-majors: Select ONE course from the following.

CIS 151 Computer based Information Processing I, AND

CIS 251 Computer based Information Processing II

OR

CIS 361 Fundamental Concepts in Object-oriented Programming

CIS 375 Programming for the Internet Environment (Permission of instructor)

CIS 475 Programming for the Internet Environment II (Permission of instructor)

Total number credits for Minor: 18