

Graduate Certificate in Geographic Information Systems for Educators

Eastern Michigan University offers a fully online graduate certificate in Geographic Information Systems (GIS) for educators. The certificate addresses classroom concerns and implementation of GIS and adapts teaching methods to include GIS into K–12 classroom curriculums. The program has been written for K–12 teachers specifically with a focus on what teachers need to know in GIS to include this exciting application into their classroom activity. If you later decide to pursue a full degree, all of the credits you earn with the certificate can be applied toward a master's degree in earth science education at EMU.

Through EMU-Online, you can learn virtually anywhere, anytime and take advantage of our online registration, discussions, homework and examinations; and guaranteed technical support within a day when a request is posted. And, out-of-state students can take all EMU-Online courses at in-state tuition rates.

Career Opportunities

The Graduate Certificate in Geographic Information Systems for Educators focuses on the professional and effective use of GIS in the classroom by teachers. Students who complete this program will be able to:

- provide a rationale for using GIS in the educational process,
- integrate GIS technology into instructional programs,
- identify contributions of major leaders in the field of GIS and the affect each leader has had on the field,

- assess current trends in the GIS area and relate the trends to past events and future implications,
- teach the operation and various uses of GIS, and
- evaluate the effectiveness of GIS in classroom curricula.

The mission of the Graduate Certificate in Geographic Information Systems for Educators is to prepare professionals capable of facilitating student learning in a variety of settings. The program is designed to provide students with both the knowledge base and the application skills that are required to use GIS effectively in education. Focusing on the design, development, utilization, management and evaluation of instructional systems moves us toward achieving this mission.

Complete your application for admission to Eastern Michigan University on the Web – <http://www.emich.edu/admissions/apply/>

Number of Credits

The graduate certificate requires 15 credit hours of GIS courses, all of which are offered online. Each of the first four courses will be 7.5 weeks in duration allowing for two complete cycles of courses in the fall semester (Sept.–Dec.) and two in the winter semester (January- April). The fifth course (School GIS Projects) is offered during the summer and can either be completed online at a GIS workshop offered in various national locations, or by attending one of our project-based summer institutes on EMU's main campus.

Program of Study

The program requires the following 15 credit hours for completion:

- GEOG 520 GIS Introduction for Educators (3)
- GEOG 522 Internet GIS Resources for Educators (3)
- GEOG 524 GIS as an Instructional Tool in Classrooms (3)
- GEOG 667 School GIS Projects (3)
- ESSC 669/GEO 669 GIS Lesson Plan Development (3)

Admission

1. Comply with the Graduate School's admission requirements.
2. Hold a 2.75 undergraduate GPA or 3.0 in the last half of the undergraduate work or 3.3 GPA in 12 hours or more of work at the graduate level or a minimum 50th percentile on the GRE writing. International students must have a minimum score of 550 on the TOEFL.
3. Furnish an analysis of professional goals written by the candidate. This analysis should include a description of how the chosen degree program will help meet the selected goals and how the candidate's life experiences, accomplishments and interests will contribute to his or her success in the program; and
4. Request and have submitted two letters of recommendation that address the candidate's professional commitment, experience and potential. The transcripts, analysis of goals and letters of recommendation should give evidence of potential for graduate-level scholarship.

Special GIS Technical Requirements

You do not need to purchase GIS software for the introductory course. Free GIS software (ArcExplorer Java Edition for Educators) will be used for the introductory course. This software will adequately accommodate Windows as well as Mac teaching environments.

After the first course teachers will be required to purchase the Mapping Our World laboratory manual for use in the courses (they will then be licensed to use this text in their school as well). Teachers can choose either Mapping Our World for ArcView 3.x or ArcView 9.0. Both versions provide a one-year site license of the software (AV3.x or AV9.0) with the book.

ArcExplorer comes with a free data set and can avail itself of data from the Internet automatically. This tool is a strong stepping-stone to ArcView 9.x and 3.x that will be introduced through the Mapping Our World texts in future courses (as noted in the syllabi).

For More Information

For an application packet and information about requirements for admission to the program, contact:

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EMU–Online

24 Hours a Day, 7 Days a Week

EMU–Online allows you to attend class when it's convenient for you—early in the morning, during the weekend or even at 2 a.m. If you work while balancing a family, EMU–Online allows you to fit a college education into your busy life.

EMU's Closest Campus... Right On Your Desktop

Whether you live just five or 500 miles from EMU's campus, you'll be able to learn conveniently from your home, office, hotel room, military base or "virtually" any other location in the world. And because you have little time to spare, don't waste it commuting to campus. The only driving you'll do is along the information superhighway.

What's All This Talk About E-learning?

E-learning combines some elements of self-paced learning (your homework assignments will be due at certain times) with the person-to-person interactivity of a traditional classroom, including discussions, assignments and examinations. The endless reservoir of online resources available at your fingertips will offer you a wealth of information, simulations and research materials. And, best of all, studies show that E-learning can result in students not only retaining more knowledge, but also receiving better grades.

Everything is a Keystroke Away

Your online education will be completed effortlessly via the Internet—registration, book buying, discussions, homework assignments and exams—all available at the click of your mouse.

"Clicks" Instead of "Bricks"

If you're concerned about working on your own, you'll never be alone in the online classroom. Not only will you and your fellow students participate in group discussions and assignments, but you'll also have constant interaction with your online instructor. And while you might not ever meet your online classmates face-to-face, you'll be surprised at the dynamic level of interaction you'll experience as you "chat," study and learn with one another. Your classmates may be across the country or even across the world, as opposed to across the room. This, however, won't stop you from learning with and from one another and your instructor as well.

What's the Cost?

EMU tuition rates are an excellent value and are very competitive with other institutions. Total cost of an online course includes tuition, university and online fees, which may vary and can be found on the Web site.

Do I Need to be a "Techie"?

No, but you'll need the following:

1. A computer:

PC

Windows 95, 98 or NT / 90 MHz Pentium Processor / 32 MB of RAM / 28.8 kbps Modem / Sound Card / Speakers / RealPlayer Basic

Mac

MacOS 8.1 or later / 604 PowerPC Processor / 32 MB of RAM / 28.8 kbps Modem / Speakers / RealPlayer Basic

2. An Internet Service Provider (ISP), which is a company that can provide you with the software necessary for getting onto the Internet. You will need Internet access to take your courses
3. An e-mail account, which is established when you sign up with an ISP. Check with your ISP if you do not know what your email address is. Check out Yahoo! Mail or MSN Hotmail for information on these two free email providers.
4. A Java capable browser; minimally a browser version 4.0 or better. Downloads for the newest browser versions are free of charge.

Eastern Michigan University

Located in Ypsilanti, Michigan, Eastern Michigan University is a public, comprehensive, metropolitan university that offers programs in the arts, sciences and professions. Founded in 1849, the University is composed of more than 24,000 students who are served by 680 full-time faculty, as well as 1,200 staff, both on campus, off campus and electronically. EMU offers undergraduate, graduate, specialist, doctoral and certificate programs in its colleges of arts and sciences, business, education, health and human services, and technology. www.emich.edu

For more information

Visit our Web site at: www.emuonline.edu
OR

E-mail us at: distance.education@emich.edu
OR

Call us at: 734.487.1081
OR

Toll free at: 800.777.3521