Computer Science

Typical Career Fields:

**Programming** (projected growth 11%)
- Operating Systems
- Application Systems

**Systems Development** (projected growth 17%)
- Planning/Analysis
- Design
- Building/Coding
- Integration/Testing

**Network Technology** (projected growth 3%)
- Intranet
- Hardware & Software Design

**Database Administration** (projected growth 8% - 15%)
- Development
- Installation
- Testing
- Archiving/ Security
- Upgrading

**Internet** (projected growth 11%)
- Programming
- Software Design
- Systems Development
- Web Design/ Maintenance

* = Bright Outlook  
Source: O*NET

Top Ten Career Fields Chosen by ESU Computer Science Grads:  *(Source: Linkedin)*

![Bar chart showing top ten career fields](image)

Where Our Grads Go (top eleven):
- Cerner Corporation
- Sprint
- IBM
- Hewlett-Packard
- Payless ShoeSource
- DST Systems
- Boeing
- BNSF Railway
- SE2, LLC
- Olathe School District
- CenturyLink

View a list of required courses for this major at [http://www.emporia.edu/sac/list-of-majors.html](http://www.emporia.edu/sac/list-of-majors.html).

Career Services  
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www.emporia.edu/careerservices

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Computer Science Majors
Strategies on how to become more marketable at graduation

Programming (Operating Systems, Application Systems, Maintenance, Research and Development)
- Seek programming experience through volunteer positions, internships and co-ops.
- Develop attention to detail, logical thinking and communication skills.
- Learn to work effectively independently on teams and with end-users while maintaining deadlines.
- Supplement computer degree with courses in business, science or engineering.
- Maintain current knowledge of programming languages; vendor and professional certifications may increase job prospects.
- Consider earning the Certified Computing Professional designation by completing a series of exams and experiential requirements.
- Earn a master’s degree for upper level positions.

Systems Development (Planning/Analysis, Design, Building/Coding, Integration/Testing, Operations/Maintenance, Project Management)
- Develop excellent interpersonal skills for effective communication with technical and non-technical colleagues and clients.
- Complete a minor to gain specialized knowledge related to a field of interest.
- Strengthen logical thinking and problem solving skills.
- Gain programming experience and specialize for increased opportunities.
- Obtain business experience through internships or part-time employment.
- Supplement program with courses such as accounting, management, human resources, consulting to increase understanding of business theory.
- Earn a graduate degree in technology or business for advanced opportunities in analysis, project management and executive operations.

Network Technology (Intranet, Hardware and Software Design)
- Seek work experience in university computer labs or through related part-time jobs, internships or volunteer opportunities.
- Develop effective analytical and problem solving skills.
- Expect to spend a significant amount of time responding to inquiries from colleagues, customers and employees.
- Acquire strong oral and written communication skills and an interest in helping others.
- Gain knowledge in a variety of computer areas including programming, software and hardware.
- Consider earning applicable certifications such as Cisco or Microsoft for some positions.

Database Administration (Development, Installation, Testing, Maintenance/Support, Archiving/Security, Upgrading, Systems Integration, Management)
- Obtain technical experience through paid or volunteer positions.
- Seek general knowledge of computer languages and database management software; consider specializing in one for increased marketability.
- Acquire strong communication skills to prepare for work with teams of programmers and with staff who may have limited computer training.

Internet (Programming, Software Design, Systems Development, Web Design/Maintenance)
- Supplement major with courses in web design, graphic design, internet development or network architecture.
- Pursue business classes or a business minor for consulting and systems development positions.
- Gain experience as a webmaster through part-time jobs, internships or volunteering to design web pages for student organizations.