

# WOMEN IN IT INITIATIVE

 | INFORMATION SCIENCE & TECHNOLOGY

## WHY TEACH COMPUTING AND INFORMATION SCIENCE IN HIGH SCHOOL?

By the year 2020, the Bureau of Labor Statistics projects there will 4.2 million jobs in computing and information technology in the United States. Unfortunately, there are simply not enough students going into these areas of study to fill the gap. Only nine states count computer science as a core graduation credit, and Nebraska is one of the many states that focus on skills courses instead of deeper computing concepts.

Across the country a rigorous computing curriculum is missing our K-12 schools. If our students are to succeed in the digital age, we must require high-quality computing education be available.

## GETTING INVOLVED

By engaging your school administrators, you can help change the future of the classroom and give more students a 21st century education.

Introducing students to a computing education early helps them understand how computing and information technology works. We live in a world where technology surrounds us; digital literacy is now a fundamental skill. It is now more important than ever that our students receive an education on par with the innovation which is driving future job prospects.

## QUESTIONS TO ASK YOUR SCHOOL ADMINISTRATORS

**Q: Do you require a computer science course in your curriculum?**

**A:** By providing rigorous and engaging computer science courses, you can help students gain relevant skills for the future as well as critical knowledge proven to improve their success in high education.

**Q: Does your school have a recommended individual for students to talk to if they are interested in computer science?**

**A:** Having a counselor or a teacher who has expert knowledge in computer science can help young students find their passions, feel supported, and start mapping out a career path at an early age.

**Q: Do your computer science credits count towards graduation?**

**A:** By allowing computer science classes to count as math or science graduation credits instead of electives, students will be more likely to select these courses and gain a deeper knowledge of computing.

**Q: How does your school integrate computing concepts into its regular curriculum?**

**A:** Computing concepts can be integrated into a wide range of topics, helping with critical thinking and problem solving skills in the common core.

**Q: How do you help your teachers prepare and develop skills in computer science areas?**

**A:** Supporting teachers is a crucial step in offering effective computer science classes. As technology progresses quickly, keeping teachers up-to-date is essential in delivering high-quality information technology education.

For more resources: [www.ncwit.org](http://www.ncwit.org) and [www.computinginthecore.org](http://www.computinginthecore.org)

## THE WOMEN IN IT INITIATIVE

Diverse teams create innovative work. Yet, few women see a career for themselves in information technology. We want to change that. The Women in IT Initiative is part of a community-driven task force, designed to recruit and retain women in the University of Nebraska Omaha College of Information Science and Technology programs. Join executives from ConAgra Foods, CRI, BlueCross BlueShield, Baldwin Hackett & Meeks, Inc., Physicians Mutual, Union Pacific Railroad, The Gallup Organization, and Interpublic Group of Companies in fighting the IT workforce shortage and diversifying the IT talent pool in Omaha.

To donate and find out more about our initiative: [www.ist.unomaha.edu/women-in-it](http://www.ist.unomaha.edu/women-in-it)

# THE TOP 10 REASONS TO INCLUDE COMPUTING IN YOUR STUDIES

## **1. Computing is part of everything we do!**

Computing and computer technology are part of just about everything that touches our lives from the cars we drive, to the movies we watch, to the phones we use. Understanding different dimensions of computing is part of the necessary skill set for every person in the 21st century.

## **2. Expertise in computing enables you to solve complex, challenging problems.**

Computing is a discipline that offers rewarding and challenging possibilities for a wide range of people regardless of interests. Computing requires and develops capabilities in solving deep, multidimensional problems requiring imagination and sensitivity to a variety of concerns.

## **3. Computing enables you to make a positive difference in the world.**

Computing drives innovation in every area of science and engineering. In turn, science and engineering is driving computer science into new areas of computation and control. There isn't a segment of human activity that is not being touched by computer science today.

## **4. Computing offers careers with high job satisfaction.**

It is said that money is why you take a job. Satisfaction on the job is what keeps you coming back. With so many rewards in the field of computers and computer science, the opportunities for a long and satisfying career are great.

## **5. Computing jobs are here to stay, regardless of where you are located.**

U.S. IT employment was 17% higher in 2004 than in 1999. The Bureau of Labor Statistics says computing has the greatest potential for new jobs through 2014.

## **6. Expertise in computing helps you even if your primary career choice is something else.**

Having a computing major will provide you with a foundation of knowledge, problem solving and logical thinking that will serve as a competitive advantage to you in your career, in whatever field you choose.

## **7. Computing offers great opportunities for true creativity and innovativeness.**

Creating high-quality computing solutions is a highly creative activity, and computing supports creative work in many other fields. The best solutions in computing exhibit high levels of elegance and beauty.

## **8. Computing has space for both collaborative work and individual effort.**

Computing is often about being part of a team that requires people with many different kinds of skills. Yet there is also plenty of space for individual flair and imagination.

## **9. Computing is an essential part of well-rounded academic preparation.**

An increasing number of universities and employers see successful completion of a computer science course as a sign of academic well-roundedness.

## **10. Future opportunities in computing are without boundaries.**

Computing is one of those fields where it is almost impossible to predict what will happen next. This is why we cannot even begin to imagine all the ways that you can apply your computing training. There are many enjoyable and high-demand applied careers that involve computer skills. And new and interesting variations of computer jobs emerge every year.

*Source: From the Association for Computing Machinery  
[www.acm.org](http://www.acm.org)*

