



Updates & News for Winter Quarter 2012

We hope you are enjoying your winter quarter, and we can look forward to a little of the sunshine that we are seeing today, Friday, February 2, 2012. We have a number of events planned for you, as well as professional training opportunities, and free services:

- Careers in IT: The Real Story, Wednesday, April 18, 2012 hosted at Bellevue College ([register](#) now!)
- Professional development training opportunities: Absolutely Mobile, (Friday, April 20th, and Saturday, April 21st, 2012). Register [here](#).
- [Degree/certificate reviews](#): Application submission deadline **Friday, April 6, 2012** (Reviews and Report :May/June 2012)
- The IT Futures Summit at Microsoft (Friday, May 18, 2012)
- Center of Excellence [Website](#) News
- The free download of the Emerging Workforce Trends in Information and Computing Technology 2011 to 2018...: STEM Career Pathways for the Washington State Community and Technical College System

Careers in IT: The Real Story



Are your students curious about Information Technology (IT) or do they think IT is only for geeks? Do they think offshore outsourcing has eliminated all high paying technology jobs in the United States? Do your students believe they don't have the computer skills,

technical competence or aptitude to do well in the information technology sector? Tell them to think again!

Teachers, faculty, counselors, and career specialists are [invited](#) to bring their students to annual Careers in IT: The Real Story to learn how important Information Technology is to their future. This is a free, half-day event. Plan to attend the 6th annual event in the early spring of 2012 (Wednesday, April 18, 2012). This free half-day event is an excellent opportunity to learn more about the many career options available in Information Technology . . .

Technology touches every job, career, and industry! Technology knowledge is essential to succeed in today's market. This year's keynote is Franklin Donahoe, Director, Information Security and Compliance at [Costco](#).

Discover how to get started in a variety of careers including:

- From application tester to gaming, to programming, as well as, gaming , mobile and wireless, to data recovery, and more...
- Information Technology is not just programming! (But, **hint:** software engineering and application development – programming – are two of the most in-demand, and highest paid career pathways)

IT jobs require leadership skills, communication abilities, teamwork and a love for constant challenges!

[Register](#) here.

Learn IT Technology Today for Tomorrow: A Series of IT & CS Professional Training Opportunities for WA State Educators



The Center is committed to continuing to provide high-quality, time-compressed, affordable hands-on information and computing technology professional training opportunities for Washington State Educators.



The second professional development opportunity in this series is: [Absolutely Mobile: Developing Applications](#) Friday/Saturday, April 20/21, 2011, 9:00 a.m.-3:30 p.m. (Friday) and 8:30 a.m.-1:00 p.m. (Saturday), Bellevue College.

What do you get for the \$125 registration fee?

- Two-days of excellent instruction from Charlie Calvert, a CTC mobile applications instructor.
- Breakfast, lunch, and a p.m. snack
- Curricular materials as well as textbook(s)
- An exciting give-away opportunity

Faculty Audience: All disciplines

Prerequisites: Attendees should have basic understanding of using computer software, some experience writing code, whether it is creating simple HTML or XML documents, working with scripting languages, or working with strongly typed, general purpose languages such as C# or Java. You are welcome to attend even if you don't have this kind of background, but you should be prepared to feel a bit at sea from time to time. You should do well if you can browse the web, handle email, and work with Office documents, such as Word and Excel.

Day One: Friday

- **Morning**
 - **Session One:** Mobile Impact
 - **Session Two:** Hands On
- **Lunch**
- **Afternoon**
 - **Session Four:** *Data in the Clouds*
 - **Session Five:** Hands On

Day Two: Saturday

This second day is designed as a deep dive into the more technical side of mobile computing. If you have a little experience with writing code, or want to find a way to learn how to begin, these sessions should be of interest.

- **Morning**
 - **Session Six:** HTML5, CSS and JavaScript
 - **Session Seven:** The Android SDK
 - **Summary:** Review what we have learned about how to use mobile devices to access data.
- **Lunch**

[Register here.](#)

Information and Computing Technology Degree/Certificate Reviews: Spring 2012



Course Outline
Data Compression - COMP 423
(Winter 2008 3:00P-12:35-1:25 N-210)

Instructor: Professor Robert Lang
Office: Science Building 3021
Tel: 206 444 2275
Email: rlang@cs.wa.edu
Office Hours: By appointment

Introduction
Data Compression is the computational problem of how to encode a data file (text, image, audio, video) so that the new file has fewer bits than the original. Compression is possible when the original file contains redundancies, such as when certain symbols or sequences of symbols in the file occur more often than others. An example is the redundancy of English text: the letter "e" occurs more frequently than the symbol "z", the letter "q" is almost always followed by the letter "u", etc. The basic technique of data compression is to re-encode a data file using shorter

The Center of Excellence is now accepting up to five IT

degrees/certificates from Washington State Community and Technical Colleges for the Spring 2012 quarter for a review session from industry professionals

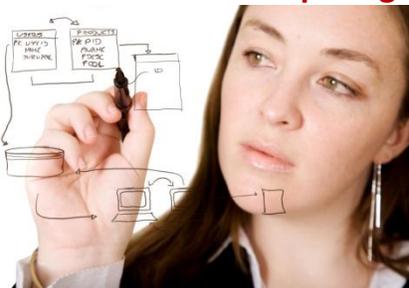
The Center is now opening up the application process for IT degrees and certificates. Any Washington State CTC can submit one information or computing technology degree or certificate for a two-hour review session by IT industry professionals. This service is offered at no charge to the participating college(s).

The reviews will take place May-June 2012, and reports will be issued to the colleges by June 2012. The reports summarize the recommendations made by the industry review team, as well as provide a high-level workforce trend scan, employment trends if applicable, and possibilities for emerging trends that might impact curricular changes or developments.

Find out more about the process, the history, and access to the application online form.

Please submit your college degree or certificate to Maureen Majury at maureen.majury@bellevuecollege.edu **by Friday, April 6, 2012.**

Information and Computing Technology Programs of Study Project



A brief overview has been provided of the project by Terri Colbert, WA Workforce Training Board.

Staff of the three agencies propose establishing workgroups to develop statewide Programs of Study that provide meaningful, useful pathways, linking secondary CTE with postsecondary career education and incorporating the required elements as defined by Perkins statute. The workgroups will use a sector/career cluster approach to develop statewide articulated Programs of Study models. Each program will include articulated dual credit, and must lead to a degree, diploma, certificate, or apprenticeship. (Attachment 2) During 2011-

2012 the workgroups will focus on Programs of Study for four of our state's high-demand occupational clusters:

- Advanced Manufacturing/Aerospace
- Healthcare
- Information Technology
- Agriculture

Over time, models will be available for all industry sectors where the state provides approved CTE programs. These models will be available for adoption by secondary and postsecondary partners throughout the state. Through this approach, we expect to establish statewide articulation agreements that provide greater dual credit opportunities for students.

The Center can share the following progress:

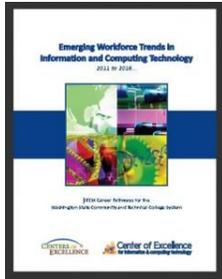
- 1) The Center and OSPI took the templates that had been created in four IT career pathways: IT Specialist, Networking, Programming, and Web and Graphic Media in 2009, and reformatted them to a national format. These updates reflected any new or emerging technical knowledge and skills as well as industry certifications aligned to each of the career pathways. This was completed in December 2011.
- 2) The templates were then re-validated by industry in January 2012. The Center and OSPI took the comments and suggested changes and created a second version of the four templates.
- 3) Working with the State Workforce Board, the Center and OSPI will discuss articulation possibilities with four-year universities and colleges, as well as convene all interested/vested parties (CTC, Tech Prep, CWU, EWU, OSPI, K-12, and OSPI math personnel) for a review of the four templates.
- 4) The updated templates will be presented (with a facilitated training/orientation) at the main OSPI conference in Yakima, Washington in August 2012. Ways to disseminate these templates and the user-guide will be explored by OSPI.

Center Website Upgrades

The screenshot shows the website for the Center of Excellence for Information & Computing Technology. The header includes the logo, the name 'Center of Excellence for information & computing technology', a search bar, and the tagline 'Advancing IT Education and the Workplace in Washington State'. A navigation menu contains links for Home, Events, Resources, Research, Services, and Blog. The main content area features a blue banner with the text 'Register for "Building Your Web 2.0 Website with WordPress"'. Below this is a detailed announcement for a professional development training opportunity for WA State Educators, including dates (November 4th and 5th, 2011), location (Bellevue College), and registration fee (\$100). To the right of the text is a small image of a computer keyboard and a document titled 'Search Engine' with handwritten statistics: 'All traffic sources sent a total of 814 visits', '19.04% Direct Traffic', '30.34% Referring Sites', '50.61% Search Engines', and '44.72% Bounce Rate'. Below the banner is a 'Featured news and stories from the web' section with two items: 'Are Millennials the First Post-Consumer Generation?' and 'Spurring the market for high-tech home health care'. A small box on the right contains a quote about spurring the market for high-tech home health care with a link to the article.

The Center is consistently making improvements and upgrades to its website. The Center can now be followed via twitter [@coeforict](#) , on [Vimeo](#), and [YouTube](#). The Center website (coeforict.org) has updates on events, resources, research, services, and a community blog with great features on industry trends, things the Center can do for you, highlights that are pertinent to information and computing educators, students, as well as industry partners and professionals. [Check in](#) now and find out something you might not have known before.

Emerging Trends in Information and Computing Technology Report



The *Emerging Workforce Trends in Information and Computing Technology 2011 to 2018...: STEM Career Pathways for the Washington State Community and Technical College System* report is now available for a free download. Click on the report's cover to start the download.

Each Washington State Community and Technical College workforce dean/vice-president received a complimentary copy in March 2011.

Please email maureen.majury@bellevuecollege.edu if you have any questions.