

STRATEGIES TO INCREASE FEMALE ENROLLMENT AND RETENTION IN INFORMATION SECURITY PROGRAMS

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Overview

- National Statistics
 - Facts on the state of Working Women in IT Careers
- Davenport University Program Statistics
 - Statistics of Student in the Computer Security
 - Initiatives to increase female enrollment/retention
- Towson University Program Statistics
 - Statistics of Student in the Computer Security Track 2
 - Initiatives to increase female enrollment/retention
- Brainstorming
 - How do you market your Information Assurance/Security Programs?

Facts on Working Women

<http://www.dol.gov/wb/factsheets/hitech02.htm>

Computer occupations for all workers are projected to have some of the steepest gains between 2000 and 2010

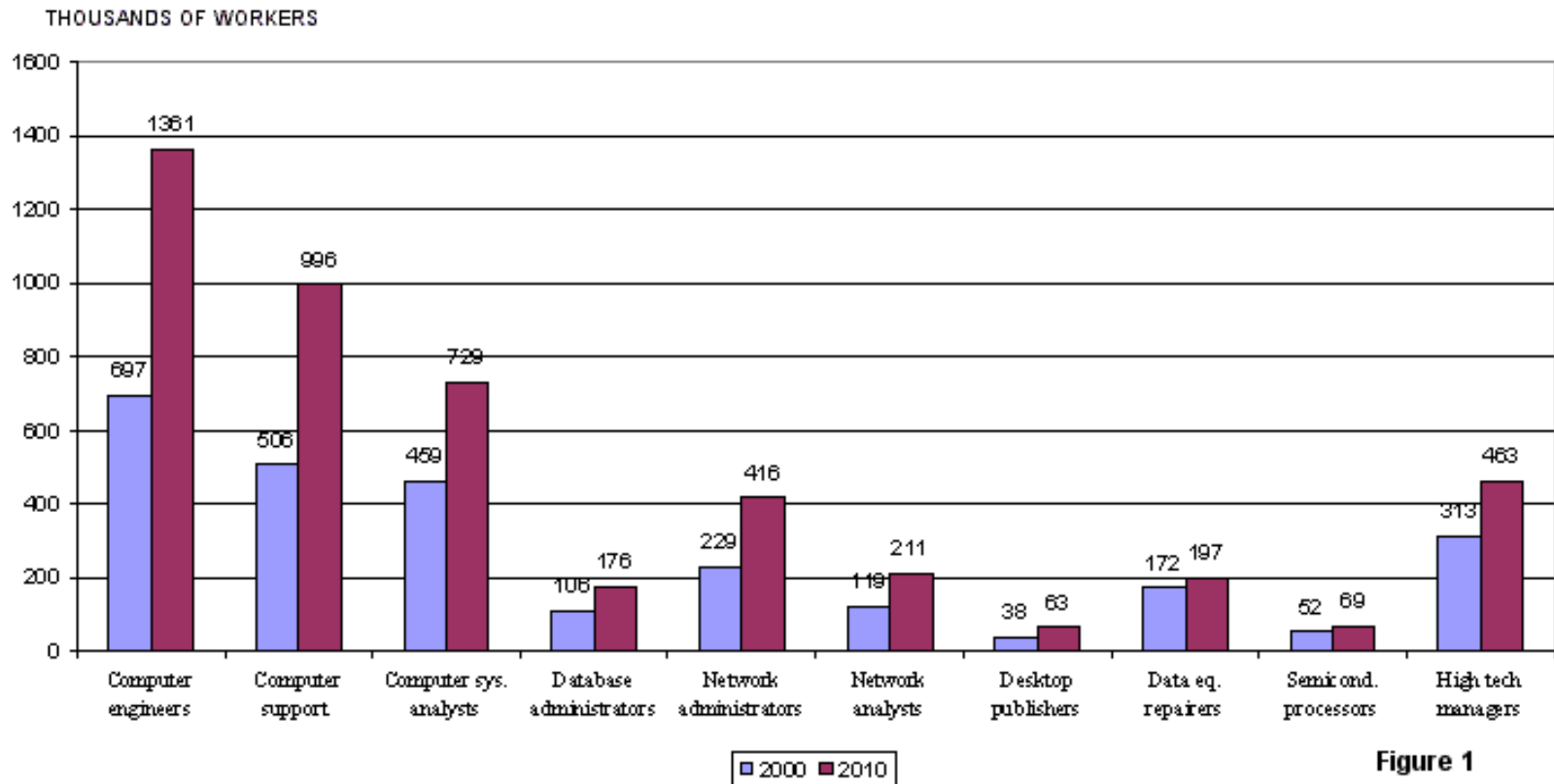


Figure 1



DAVENPORT UNIVERSITY STATISTICS

Strategies to increase female enrollment and retention in Information Security Programs

Davenport University Statistics

Student Demographics by Program - College of Technology

	% Full-time	% Male	Average Age	Total Students at Freeze *	%Women
	2011	2011	2011	2011	2011
Bachelor					
Biometric Security	59%	80%	28	74	20%
Computer Gaming And Simulation	63%	93%	24	87	6%
Computer Information Systems	34%	75%	33	153	25%
Computer Networking	50%	91%	28	266	9%
Database Management	32%	65%	33	31	35%
Global Project Management	42%	77%	33	53	23%
Information & Computer Security	46%	83%	31	107	17%
Network Security	48%	88%	29	133	12%
Programming	65%	75%	28	51	25%
Web Design and Development	45%	73%	29	51	27%
Sub-Total	48%	83%	29	904	17%
Associate					
Computer Information Systems	34%	74%	31	118	26%
Networking Technology	30%	87%	31	117	13%
Security and Information Assurance	30%	78%	34	50	22%
Sub-Total	28%	77%	31	285	23%
Post-Baccalaureate Certificate					
Global Project Management	0%	43%	39	7	57%
Master Of Science					
Information Assurance	73%	75%	35	67	25%
Grand Total	73%	81%	30	1,263	26%

* Statistics calculated using scheduled students at first freeze date; therefore, total students does not reflect total number of students in program for semester. For this information, see enrollment by program section.

Davenport University - Increasing Female Populations in IT/IA Programs (Initiatives)

- Davenport University started a Women in Technology student organization for young women.
 - WIT@DU
 - Faculty (Leadership)
 - Mentoring Model

Davenport University - Increasing Female Populations in IT/IA Programs (Initiatives)

- Recruitment and Outreach
 - Girls Camp Michigan Council of Women in Technology (MCWT)
 - Technology Workshop for girls in 10th-12th grade
 - Attend Career Days
 - April 6, 2012 Female Technology Workshop
 - Technology Camp (Girls 6th-9th) March, 2013



Towson University Statistics

Strategies to Increase female enrollment and retention in Information Security Programs

Towson University

- Current Status of Females in the Computer Science Undergraduate and Graduate Programs

ALL COMPUTER SCIENCE							
Semester	COSC		XCSMA		Total		% Women
	Women	Men	Women	Men	Women	Men	
Spring 2012	49	268	1	9	50	277	18.1%
Fall 2011	42	266	1	9	43	275	15.6%
Spring 2011	41	248	2	12	43	260	16.5%
Fall 2010	38	241	4	13	42	254	16.5%
Spring 2010	31	206	4	14	35	220	15.9%
Fall 2009	33	201	5	13	38	214	17.8%
Spring 2009	28	179	4	13	32	192	16.7%

Towson University

- Current Status of Females in the Computer Security Track in the Computer Science Undergraduate and Graduate Programs

SECURITY TRACK ONLY							
	COSC		XCSMA		Total		
Semester	Women	Men	Women	Men	Women	Men	% Women
Spring 2012	16	58	0	6	16	64	25.0%
Fall 2011	13	58	1	6	14	64	21.9%
Spring 2011	10	62	0	5	10	67	14.9%
Fall 2010	10	64	0	5	10	69	14.5%
Spring 2010	6	57	1	4	7	61	11.5%
Fall 2009	7	52	0	4	7	56	12.5%
Spring 2009	4	46	1	5	5	51	9.8%

Towson University - Increasing Female Populations in Computer Security(Initiatives)

- Offering a pilot section of a programming logic course with secure coding techniques to high school girls.
- The overall goals of this capacity building initiative are to:
 - Increase the interest of high school girls in computing and IA majors.
 - Better prepare high school girls for college majors such as computer science, information science, information assurance, and engineering.

Towson University-Increasing Female Populations in Computer Security(Initiatives)

- *Recruitment and Outreach*
 - Developing marketing and recruitment materials for a formal high school outreach program
 - Using female role models and speakers to engage students in face-to-face recruitment activities
 - Notre Dame Preparatory School (All girls) – Private
 - Western High School (All girls) – Public
 - Cyber Camp – (Geared to Middle/High School Students)
 - Y of Central Maryland STEM Initiatives

BRAINSTORMING

- Ideas/Suggestions
- Issues
- Next Steps

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THANK YOU

Resource

- www.iwitts.org