

NJDOE Office of Career and Technical Education
Program Reapproval Webinar:

INFORMATION TECHNOLOGY

January 14, 2014

Audio Check using the Audio Wizard at the left of your screen in the Participants Pane.



**New Jersey Department of Education
Office of Career and Technical Education**

INFORMATION TECHNOLOGY

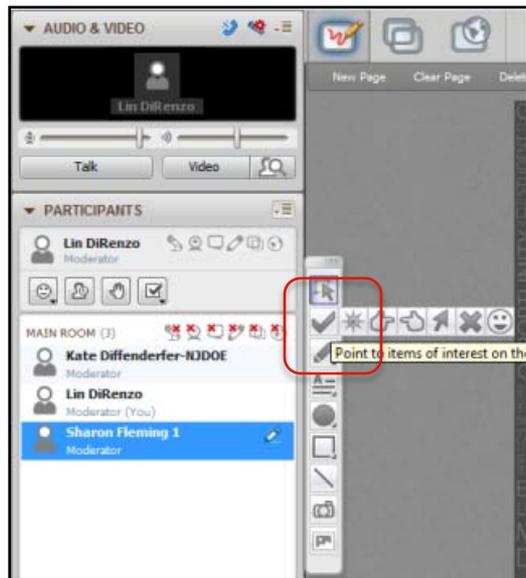
**Lin DiRenzo - Lead
Sharon Fleming
Melissa Stager**

Housekeeping

- Audience audio is disabled, please type any questions in the chat area. The questions should be addressed in the chat area by members of our Information Technology Team, either during a break in our webinar or during the final wrap-up.
- This webinar is being **recorded!** You will be notified when it becomes available on our website.

Where are you?

Using the Shape tool on the Tools Palette, mark your school's location on the New Jersey map.



Our Goals for Today:

- Overview of the Reapproval Process**
- Information on Information Technology**
- Program Reapproval Application Information**

Information Technology

Webinar: Today, January 14, 2014!

(And Recorded)

Applications due: April 1, 2014

Overview of the Reapproval Process & Application

Overview Webinar of the Reapproval Process



On November 21, 2013, a webinar was held to provide guidance on the new/revised CTE Re-approval Application for CTE programs.

That informational session has been recorded, and is available at:

<http://www.nj.gov/education/cte/study/approval/>

Application Downloads/Uploads

<http://www.nj.gov/education/cte/study/approval/>

DOE Folders

CTE Program

This website is for the Secondary districts that have state approved secondary Career and Technical programs which need to be reapproved through the New Jersey Department of Education Office of Career and Technical Education. This web site allows LEA's to submit their application electronically to NJDOE. Please visit <http://www.nj.gov/education/cte/study/approval/> for more information.

You can download the revised CTE Reapproval Application by clicking on the link below:

Applications	
NEW CTE Program Application Application for a new program that has not currently been assigned a CIP code at the district.	CTE Reapproval Application Application to have a CIP reapproved that is currently operating at a district.

Instructions: [Instructions for CTE New Program or Re-approval Application](#)

TO UPLOAD your application, you will need to login with the username and

Sign In

District Id

Username

Password

Districts without an account for this application must contact their district's Homeroom Administrator to establish an account.

Application Sections

Section	2013-2014 Application	2013-2014 Reapproval Includes
Section 1	Applicant Information	
Section 2	Program Information (CIP Code, Labor Market Info, Teacher Certification)	
Section 3	Enrollment Data	CTE Performance Data
Section 4	Advisory Committee Meeting Dates (includes upload of meeting minutes)	
Section 5	CTE Program or CTE Program of Study	
Section 6	Course Details (includes course syllabus upload)	
Section 7	End-of-Program Technical Skills Assessment & Industry Credentials	
Section 8	Structured Learning Experience (SLE)	
Section 9	Career and Technical Student Organization (CTSO)	
Section 10	Business and Labor Partners	
Section 11	Statement of Assurances	

Performance Reports

DOE Folders

Welcome test [logout](#)

CTE Program

Downloading the CTE Performance Data Report (Reapproval Applications only)

For Reapproval applications, download and review the report. You will be asked to respond to questions in Section 3 of the Reapproval application using this data. For technical assistance or questions regarding the information in the Performance Data Report, please contact your NJDOE Program Officer for your county: <http://www.nj.gov/education/cte/contact.htm>. To download the report, please follow the instructions below:

1. Go to the "Download Files" area
2. Click the link to the file you would like to download
3. Click the "Open" button in the dialog box to open the file
4. After viewing the file, you can save a copy of it on your computer by clicking on "File" and "Save As"

Uploading (all applications)

Please ensure that you have filled out your application in its entirety. If you have any questions about any items, please contact the Perkins Program Officer. Their contact information can be found on the bottom of the CTE Contact Information Page. **Please make sure your file has the correct file name (refer to the instructions: [Instructions for CTE New Program or Re-approval Application](#)).**

1. Click the browse button
2. Find and select your file from your computer
3. Click the "Open" button in the dialog box
4. Click the "Upload" button
5. Once uploaded, a green box will appear that says your file has been uploaded successfully
6. Upload all other supporting documents by following the same instructions as above

Download Files

/CTEPR/Production/OUTBOX/01/0110/

Name	Modified	Description
 New Text Document.txt	27-Nov-2013 10:46	

Upload Files

/CTEPR/Test/INBOX/ /01/0110/

Use the browse or choose file button to select the file you'd like to upload.

File

Additional Documentation

Section	Name	File #	Required/ Applicable	Detail
4	Advisory Committee	File 1	Required	Upload a copy of the meeting minutes for meeting 1
		File 2	Required	Upload a copy of the meeting minutes for meeting 2
5	CTE Program or CTE Program of Study	File 3	If Applicable	PROGRAM OF STUDY ONLY: Articulation Agreement signed by college president and secondary chief school administrator
6	Course Details	File 4	Required	Course syllabus for course 1
		File 5	Required	Course syllabus for course 2
		File 6	Required	Course syllabus for course 3
		File 7	If applicable	Course syllabus for course 4
9	CTSO	File 8	If applicable	Copy of CTSO affiliation if available
11	Statement of Assurances	File 9	Required	Copy of Statement of Assurances page signed by chief school administrator

This Chart of Uploads is available in the application.

Questions on the Reapproval Application Process?



Information on Information Technology

What are Career Clusters[®] ?

Used to organize academic and technical knowledge and skills into a coherent sequence of courses.

And

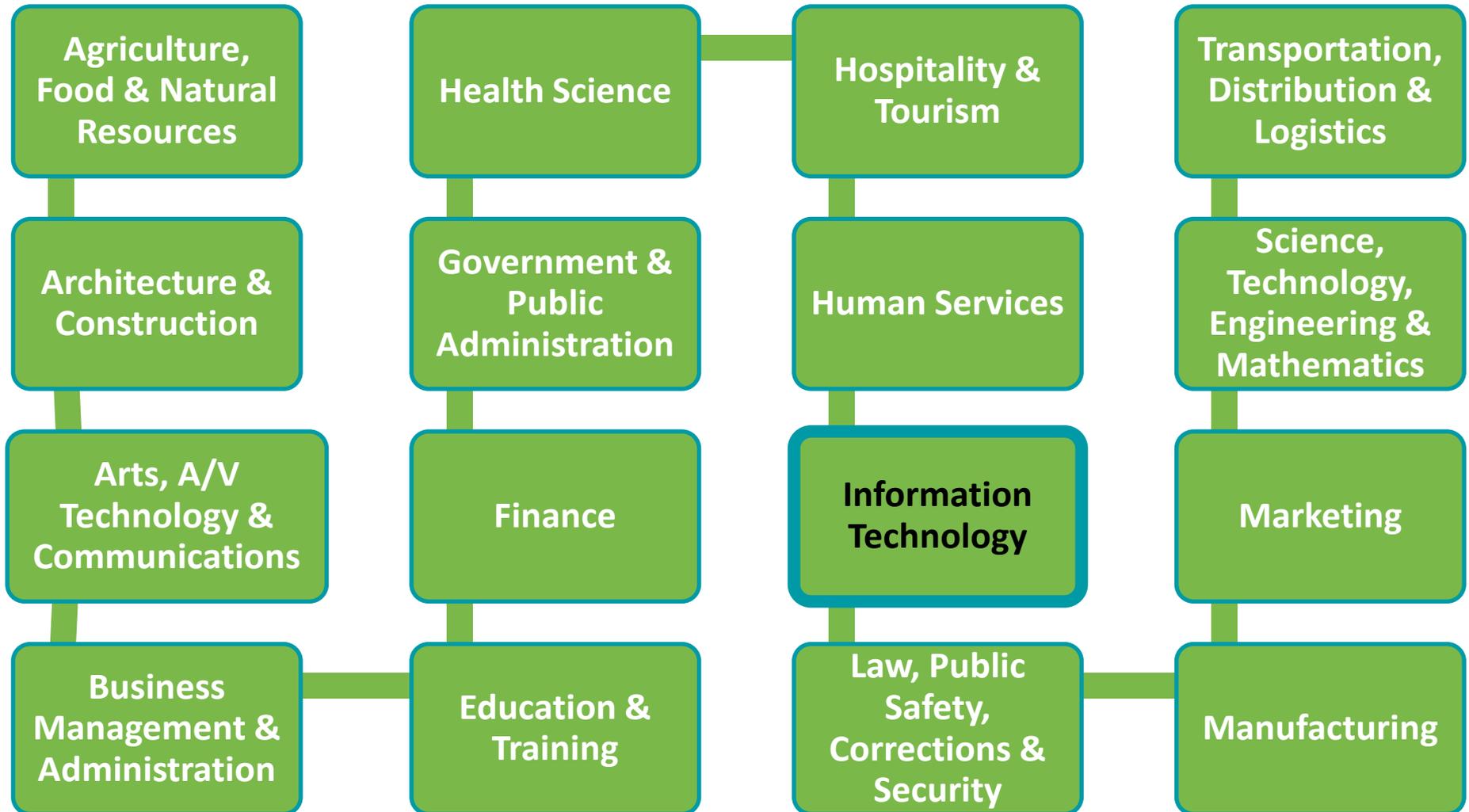
Identify pathways from secondary to postsecondary education.

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PATHWAYS TO COLLEGE & CAREER READINESS

Career Clusters



What's a CIP Code

- **Classification of Instructional Program**
- [National Center for Education Statistics](#) designed the [Classification of Instructional Program \(CIP\) code](#) “to provide a taxonomic scheme that will support the accurate tracking, assessment, and reporting of fields of study and program completions activity.”
- Provides guidance for the curriculum content of a program/program of study via the CIP description

Information Technology (IT) Career Cluster[®] & Pathways



- Building linkages in IT occupations for entry level, technical, and professional careers related to the *design, development, support and management of hardware, software, multimedia and systems integration services.*
 - **Information Support & Services**
 - **Network Systems**
 - **Programming & Software Development**
 - **Web and Digital Communication**

Eligibility Chart

- NJ created resource documents:
<http://www.nj.gov/education/cte/study/approval/>
 - All CIPs
 - Organized by Pathway
 - Marked with eligibility status
 - Technical Skills Assessments
 - Every eligible CIP has at least one option for TSA
 - Teacher Certifications
 - Apprenticeships
 - Occupation Information for each job a person trained might ultimately hold.
 - SOC – Standard Occupational Code

Sample of the Eligibility Chart

	A	B	C	D	H	I	J	L	M	N	P	Q	R	S
	Pathway	Program Name	Eligibility	CIP	Program Description	Assessments	Teacher Credentials	SOC Code	SOC Job Title	Apprenticeships	Median Wages State	Median Wages National	Employment Trends State	Employment Trends National
1														
2	Information Support & Services	Computer & Information Sciences, General	Yes	110101	A general program that focuses on computing, computer science, and information science and systems. Such programs are undifferentiated as to title and content and are not to be confused with specific programs in computer science, information science, or related support services.	Comp TIA Strata IT Fundamentals NOC TI: Computer Networking Fundamentals, Computer Programming, Computer Technology Microsoft Tehcnology Associate	4145-Data Management 4151-Information, Support & Services	15-1199	Computer Occupations, All Other	No	\$73,700	\$81,000	6%	8%
3								15-1142	Network and Computer Systems Administrators	Yes	\$82,000	\$72,560	17%	28%
4								11-3021	Computer and Information Systems Managers	Yes	\$136,900	\$120,950	11%	18%
5								11-3021	Computer and Information Systems Managers	Yes	\$136,900	\$120,950	11%	18%
6								15-1141	Database Administrators	Yes	\$87,700	\$77,100	20%	31%
7								15-1143	Computer Network Architects	No	\$108,000	\$91,000	6%	22%
8								15-1121	Computer Systems Analysts	Yes	\$79,700	\$86,900	15%	22%
9								15-1111	Computer and Information Research Scientists	No	\$112,200	\$102,300	6%	19%

Information Support & Services Pathway

Eligible CIPs

CIP	Program Name
11.0101	Computer and Information Sciences, General
11.0103	Information Technology
11.0301	Data Processing and Data Processing Technology/Technician
11.0401	Information Science/Studies
11.1006	Computer Support Specialist

Network Systems Pathway

Eligible CIPs

CIP	Program Name
11.0901	Computer Systems Networking and Telecommunications
11.1001	Network and System Administration/Administrator
11.1003	Computer and Information Systems Security/Information Assurance

Programming & Software Development Pathway



Eligible CIPs

CIP	Program Name
11.0201	Computer Programming/Programmer, General
11.0202	Computer Programming, Specific Applications
11.0203	Computer Programming, Vendor/Product Certification
11.0701	Computer Science
14.0901	Computer Engineering, General

Web & Digital Communications Pathway



Eligible CIPs

CIP	Program Name
11.0801	Web Page, Digital/Multimedia and Information Resources Design
11.0803	Computer Graphics
11.1004	Web/Multimedia Management and Webmaster

Moves of CIP Codes

CIP	Program Name	Moving to Cluster:	Alternative Eligible IT CIPs	
15.1201	Computer Engineering Technology/Technician	Manufacturing	14.0901	Computer Engineering, General
15.1202	Computer Technology/Computer Systems Technology	Manufacturing	11.1006 OR-- 14.0901 OR 11.0701	Computer Support Specialists Computer Engineering, General Computer Science
47.0104	Computer Installation & Repair Technology/Technician (A+)	Manufacturing	11.1006	Computer Support Specialists

- The above CIPs are moving to Manufacturing due to a national realignment.
- Districts can opt to move CIPs OR reapply as Change of CIP using the suggested eligible IT CIPs listed above.

Questions on the Information Technology Career Cluster[®] and CIPs?

Information Technology Application

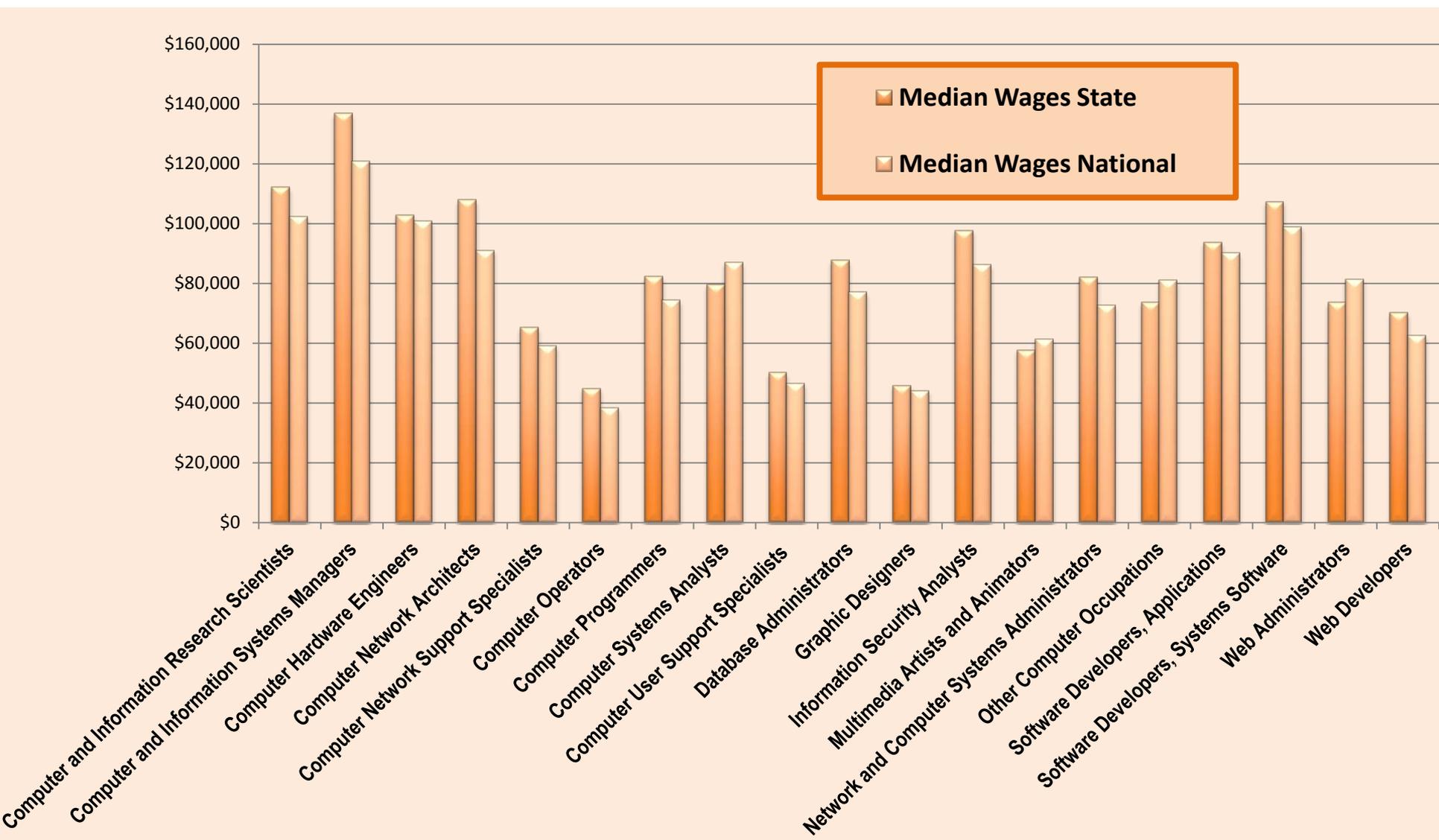
Specific Guidance

District Program Considerations

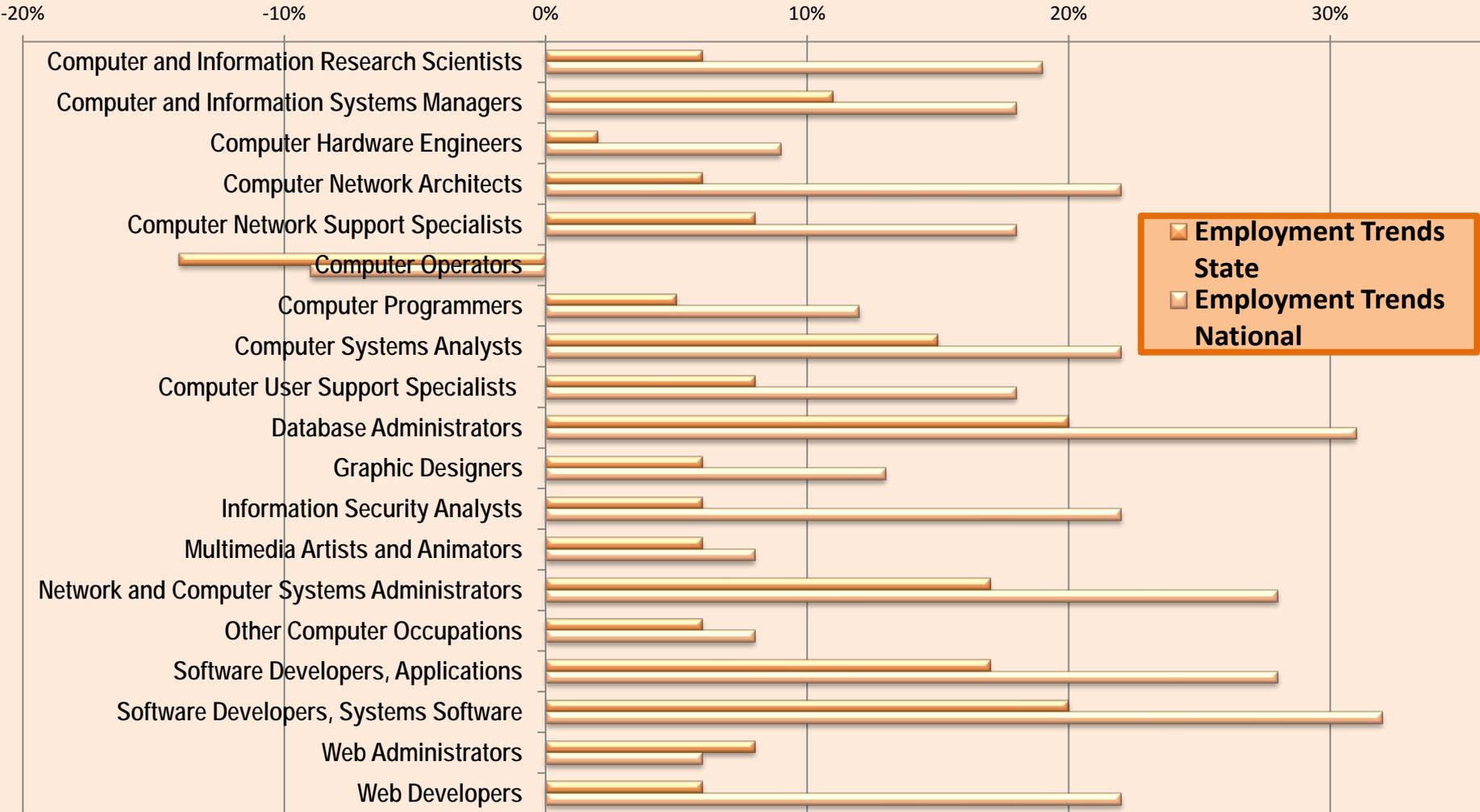
Job Forecasts for IT Careers

- The **Eligibility Chart** is organized to include the Job Descriptions of persons receiving training for each CIP.
- There are 20 occupations in Information Technology
- Each Standard Occupational Code (SOC) code includes information on:
 - Apprenticeships
 - Median Wages for State & National
 - Employment Trends for State & National

Wages for IT Careers - State and National



IT Careers Employment Trends - State & National



Teacher Certifications

Pathway Alignment	Certification Name	Certification Number
Info Support & Services Endorsement	Data Management	4145
Info. Support & Services Endorsement	Computer Service Technicians	4147
Info. Support & Services Endorsement	Information, Support and Services	4151
Network Systems Endorsement	Computer Network Systems	4146
Network Systems Endorsement	Computer Systems Engineering	4149
Programming & Software Development	Computer Science Technology	4148
Web & Digital Communications	Internet and Online Technology	4152

Program vs. Program of Study

What is a Career & Technical Education (CTE) Program?

- Coherent and rigorous sequence of courses (at least three)
- Organized under a CIP code (Classification of Instructional Program)
- Provides technical skill proficiency, an industry-recognized credential, a certificate or an associate degree.
- Includes applied learning that contributes to the academic knowledge, technical and employability skills, work attitudes, and knowledge of all aspects of an industry.

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EXPERIENCE

Program or Program of Study

CTE Program	CTE Program of Study
<p>Prepares students for entry-level employment in a specific occupation, and is aligned with business/industry standards;</p>	<p>All of the program elements to the right and ADDING the following:</p> <div data-bbox="981 539 1883 791" style="border: 2px solid cyan; padding: 10px;"> <p>Incorporates and aligns secondary and postsecondary education elements such as curricula, standards and assessment;</p> </div> <div data-bbox="981 858 1883 1109" style="border: 2px solid cyan; padding: 10px;"> <p>Provides students with opportunities to earn college credit for college courses successfully completed during high school;</p> </div> <div data-bbox="981 1176 1883 1310" style="border: 2px solid cyan; padding: 10px;"> <p>Includes an articulation agreement or memorandum of understanding.</p> </div>
<p>Coherent sequence of 3 or more courses;</p>	
<p>May lead to an industry-recognized credential/certificate at the secondary level;</p>	
<p>Incorporates opportunities to participate in structured learning experiences and career and technical student organizations (CTSO);</p>	
<p>Incorporates applied, contextual, cross curricular and interdisciplinary instructional strategies into the curricula.</p>	

Types of Articulations

- **Advanced Standing**
- **Articulated Credit** - College credits students earn for successfully completing an articulated course are “banked” at the community college until the student enrolls in a program at that college.
- **Dual Credit** - Students simultaneously earn both credits towards high school graduation requirements, and college credits for successfully completing a POS course.

Rules of the Road

- **Some Don'ts!**
 - Do not select A.A. (Associate of Arts) programs;
 - Do not select General Studies or Liberal Arts degree programs;
and,
 - Do not select Continuing Education programs (i.e. non-credit bearing programs).

Rules of the Road-con't.

- **Some Do's!!**
 - Select **Certificate of Achievement** or **Certificate** programs that include at least 12 college credits that promote technical/skill proficiency;
 - Select **A.S. (Associate of Science)** degree programs that include at least 15 college credits that promote technical/skill proficiency;
 - Select any **A.A.S (Applied Associate of Science)** degree program

Postsecondary Linkages

- National [Resource Document](#) for:
 - Postsecondary Degree Options
- New Jersey Resource Documents
 - [Articulation Specialists](#) at NJ Community Colleges (Page 74)
<http://www.nj.gov/education/cte/study/approval/>
 - Listing Postsecondary Options
 - By [Institution](#)
 - By [CIP](#)

Comparison of Postsecondary Options for an A.A.S in IT



College A	College B
<p>A.A.S <u>Information Systems and Technology</u> Focus</p> <ul style="list-style-type: none"> •CISSP •Networking •HTML 	<p>A.A.S <u>Information Systems</u> Focus</p> <ul style="list-style-type: none"> •Database (A.A.S.IT.DB), •Networking (A.A.S.IT.NET) •Web Development and Management (A.A.S.IT.WEB)
College C	College D
<p>A.A.S <u>Computer and Information Systems</u> Focus</p> <ul style="list-style-type: none"> •Java •Visual BASIC •UNIX 	<p>A.S. - Transfer to a 4 year expected <u>Computer Science</u> Focus</p> <ul style="list-style-type: none"> •C++ •JAVA



Application Required Information

- Type of credit
 - Advanced Standing
 - Articulated Credit
 - Dual Credit
- Institution name
- High School Course(s) articulated
- College Course(s) articulated
- Number of Credits



Questions on Career Forecast, Teacher Certifications, or Programs of Study (POS)?

Required Program Elements

Advisory Committee

Technical Skills Assessments

Structured Learning Experiences

Career and Technical Student Organizations

Advisory Committee

- Required Information/Uploads:
 - Dates of last two meetings
 - Upload meeting minutes
- Advisory Committee Handbook
 - [NJ OCTE Advisory Committee Handbook](#)

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How Are You Using Your Advisory Committee?

- Please Share Using Chat Window
 - Strategies in creating a successful & productive Advisory Committee
 - Examples of Input from an Advisory Committee
 - Suggestions & Feedback for Best Practices



Technical Skills Assessment

1. Every CTE Program/POS, where available, **MUST** administer a *third-party end of program assessment*.
 - New Jersey [Recognized Technical Skills Assessments](#)
2. If there is no NJDOE recognized assessment listed for a particular CIP, an **alternate vendor assessment** may be listed. (All IT CIPs have a recognized assessment!)
3. If an alternate vendor assessment is not available, a **teacher-made and approved** assessment may be listed.
 - If a teacher-made assessment is given, be aware that the student outcomes **do not count** toward meeting the performance indicator.
 - ❖ If option 2 or 3 is used, a justification must be provided.

Technical Skills Assessments

- Options for Third Party Assessments
 - National [Resource Document](#) of Credentials/Tests published by National Association of State Directors of Career Technical Education Consortium—NASDCTE^c
 - Collegeboard’s AP Test for Computer Science A

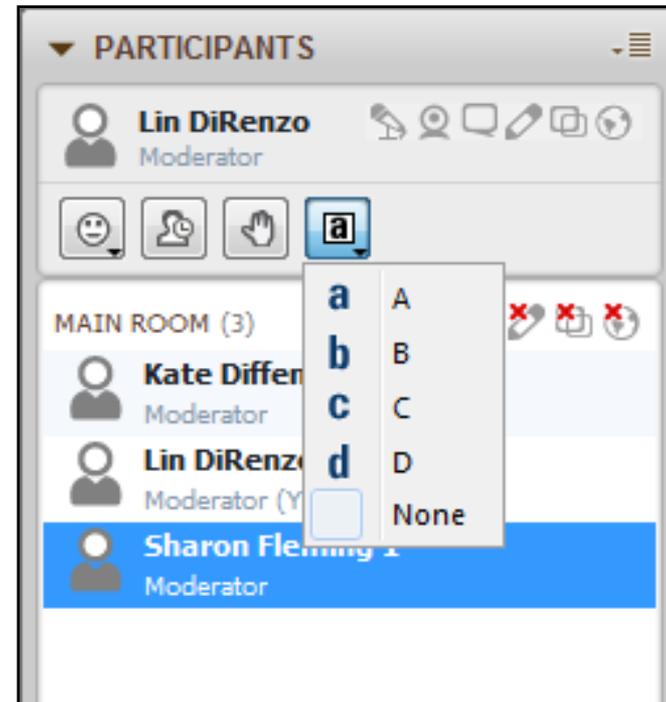
Structured Learning Experiences

- Types
 - Job Shadowing – entry level students
 - Volunteering (at a non-profit)
 - Internship (Paid and Unpaid)
 - Cooperative Education Experience
- <http://www.state.nj.us/education/cte/sle/>

District's Share for SLEs

Using the Polling Feature, please select from the following:

- A. Job Shadowing**
- B. Volunteering**
- C. Internship Paid**
- D. Internship Unpaid**
- E. Cooperative Education Experience**



CTSO - SkillsUSA

NJ State Advisor

Peter Carey

Email:

pcarey@raritanval.edu

P.O. Box 3300
Somerville, NJ
08876-1265

908-526-1200, ext. 8627

Fax: 908-253-6696

Website Addresses

New Jersey:

<http://www.nj-skillsusa.org>

National:

<http://www.skillsusa.org>

- 3-D Visualization and Animation
- Advertising Design
- Computer Maintenance Technology
- Computer Programming
- Graphic Communications
- Graphic Imaging Sublimation
- Interactive Application and Game Development
- Internetworking
- Technical Computer Applications
- Telecommunications Cabling
- Web Design

CTSO - TSA

NJ State Advisor	
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Website Addresses	
New Jersey: http://njtsa.pages.tcnj.edu/	National: http://www.tsaweb.org/

- Animatronics
- Debating Technological Issues
- Desktop Publishing
- Essays on Technology
- Open Source Software Development
- Promotional Graphics
- Video Game Design
- Webmaster

Questions on

- **Advisory Boards**
- **Technical Skills Assessments**
- **Structured Learning Experiences**
- **Career and Technical Student Organizations**

State & National Program Supports

Industry Certifications & Apprenticeships

- National [Resource Document](#) for:
 - Education and Industry Licenses
 - Education and Industry Certificates

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CISCO Networking Academy

Curriculum	Description	Certification
IT Essentials	IT Essentials covers the fundamentals of computer hardware and software and advanced concepts such as security, networking, and the responsibilities of an IT professional.	CompTIA A+
CCNA Routing and Switching	CCNA Routing and Switching provides a comprehensive overview of networking concepts and skills, from network applications to the protocols and services provided to those applications by the lower layers of the network, with an emphasis on practical application, work-force readiness, and soft-skills development.	Cisco CCENT Cisco CCNA
CCNA Security	CCNA Security introduces the core security concepts and skills needed to install, troubleshoot, and monitor a network to maintain the integrity, confidentiality, and availability of data and devices.	Cisco CCNA Security
CCNP	CCNP teaches the advanced skills needed to install, configure, monitor, and troubleshoot enterprise-sized networks and manage wireless, security, and voice applications.	Cisco CCNP
Health Information Networking	Health Information Networking helps students prepare for networking careers in the healthcare industry.	N/A

CISCO Information and Contacts

- **CISCO Virtual Academy Conference**

- Live sessions from Cisco and chats with NetAcad leaders and innovators on March 18-19, 2014
- Agenda and additional information coming in January 2014. If you have questions, please email Cisco at acadconfreg@external.cisco.com

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Information Technology Program Reapprovals

Summary

- **To ensure our students receive the best preparation:**
 - Review Information Technology Career outlooks for both wages and employment trends
 - Review CIP descriptions to determine eligibility and that your curriculum aligns
 - Ensure teaching staff is qualified
 - Your Advisory Board, Structured Learning Experiences, CTSO and Technical Skills Assessments are aligned to cluster and are working in tandem to inform and guide student learning

Questions?

The Information Technology Team

LEAD: Lin DiRenzo
Sharon Fleming
Melissa Stager

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Thank You!