

Applied Technology I

Course Description

Our Applied Technology pathway is based on the same curriculum that is being taught at the college level, allowing students who meet the criteria to enroll as part of the dual enrollment program with PCCC. ALL students in either the standard or dual enrollment programs, who complete the 10th & 11th grade pathways are eligible to sit for the COMTIA A+ certification exam. This program is designed for students in 11th grade.

Information Technology Fundamentals and Applications- This course provides IT students with an introduction to information technology fundamentals encompassing both hardware and software. An emphasis is placed on the system unit components, peripheral devices, and systems and applications software. Topics include CPU, RAM, machine cycle, data representations, number systems, operating system characteristics, utility programs, language translators, communication devices, media and networks. Students learn how to: efficiently search the Internet for information, use Microsoft Windows, and use Microsoft productivity software.

Software and hardware maintenance and diagnostics- This course provides students with the knowledge and skills necessary to install, troubleshoot, and upgrade software and hardware components, and to maintain and replace parts for PCs. Students learn how to properly handle system components, use hardware and software diagnostic tools to troubleshoot problems, and fix or replace the failed components. Proper techniques to assemble and disassemble a microcomputer system are also covered. Successful completion of this course prepares students

to take the CompTIA (Computing Technology Industrial Association) A+ certification exam and Microsoft Technology Associate (MTA) exam.

This course will build upon students' existing user-level knowledge and experience with personal computer software and hardware in order to present fundamental concepts and techniques that technicians will use every day on the job. Upon completing this course, students will gain the essential skills and technical expertise necessary to install, upgrade, configure, troubleshoot, optimize, repair and perform preventative maintenance on basic personal computer hardware and operating systems.

This course provides students with the basic knowledge and skills necessary for a career in PC support. The course is designed to fully prepare students to sit for and pass the CompTIA A+ 220-901 and 220-902 certification exams. The exam covers a broad range of hardware and software technologies that is not tied to any specific vendor products. Examinees must successfully complete 2 parts for the exam – Essentials and Practical Applications modules. Provided both modules are passed within a 90 day period, successful candidates will receive CompTIA A+ Certification. Course topics include installation, configuration, preventative maintenance of PC hardware components, and the basics of networking, security, virtualization, desktop imaging, and deployment. Students will also gain knowledge of diagnostic and troubleshooting processes for various types of technical issues.

**** it should be noted that students who do not successfully complete classes 107 and 116 cannot go on to classes 160 & 180 as part of the dual enrollment program.***

Applied Technology I

Pacing Guide		
Unit	Topic	Suggested Timing
Unit 1	Information Technology and the IT Professional	approx. 7 weeks
Unit 2	The PC and its Peripherals	approx. 10 weeks
Unit 3	Mobile Devices, Networking and Security	approx. 8 weeks
Unit 4	System Implementation and Maintenance	approx. 10 weeks

Educational Technology Standards

8.1.12.A.1, 8.1.12.A.3, , 8.1.12.B.2, 8.1.12.C.1, 8.1.12.D.2, 8.2.12.A.2, 8.2.12.B.2, 8.2.12.C.3

➤ **Technology Operations and Concepts**

- Create a personal digital portfolio which reflects personal and academic interests, achievements, and career aspirations by using a variety of digital tools and resources.
Collaborate in online courses, learning communities, social networks or virtual worlds to discuss a resolution to a problem or issue.

➤ **Creativity and Innovation**

Apply previous content knowledge by creating and piloting a digital learning game or tutorial

➤ **Communication and Collaboration**

- Develop an innovative solution to a real world problem or issue in collaboration with peers and experts, and present ideas for feedback through social media or in an online community.

➤ **Digital Citizenship**

- Demonstrate appropriate application of copyright, fair use and/or Creative Commons to an original work.
- Evaluate consequences of unauthorized electronic access (e.g. hacking)

➤ **Critical Thinking, Problem Solving, Decision Making**

- Evaluate the strengths and limitations of emerging technologies and their impact on educational, career, personal and or social needs.

Career Ready Practices

Career Ready Practices describe the career-ready skills that all educators in all content areas should seek to develop in their students. They are practices that have been linked to increase college, career, and life success. Career Ready Practices should be taught and reinforced in all career exploration and preparation programs with increasingly higher levels of complexity and expectation as a student advances through a program of study.

CRP1. Act as a responsible and contributing citizen and employee

Career-ready individuals understand the obligations and responsibilities of being a member of a community, and they demonstrate this understanding every day through their interactions with others. They are conscientious of the impacts of their decisions on others and the environment around them. They think about the near-term and long-term consequences of their actions and seek to act in ways that contribute to the betterment of their teams, families, community and workplace. They are reliable and consistent in going beyond the minimum expectation and in participating in activities that serve the greater good.

CRP2. Apply appropriate academic and technical skills.

Career-ready individuals readily access and use the knowledge and skills acquired through experience and education to be more productive. They make connections between abstract concepts with real-world applications, and they make correct insights about when it is appropriate to apply the use of an academic skill in a workplace situation.

CRP3. Attend to personal health and financial well-being.

Career-ready individuals understand the relationship between personal health, workplace performance and personal well-being; they act on that understanding to regularly practice healthy diet, exercise and mental health activities. Career-ready individuals also take regular action to contribute to their personal financial well-being, understanding that personal financial security provides the peace of mind required to contribute more fully to their own career success.

CRP4. Communicate clearly and effectively and with reason.

Career-ready individuals communicate thoughts, ideas, and action plans with clarity, whether using written, verbal, and/or visual methods. They communicate in the workplace with clarity and purpose to make maximum use of their own and others' time. They are excellent writers; they master conventions, word choice, and organization, and use effective tone and presentation skills to articulate ideas. They are skilled at interacting with others; they are active listeners and speak clearly and with purpose. Career-ready

Career Ready Practices

individuals think about the audience for their communication and prepare accordingly to ensure the desired outcome.

CRP5. Consider the environmental, social and economic impacts of decisions.

Career-ready individuals understand the interrelated nature of their actions and regularly make decisions that positively impact and/or mitigate negative impact on other people, organization, and the environment. They are aware of and utilize new technologies, understandings, procedures, materials, and regulations affecting the nature of their work as it relates to the impact on the social condition, the environment and the profitability of the organization.

CRP6. Demonstrate creativity and innovation.

Career-ready individuals regularly think of ideas that solve problems in new and different ways, and they contribute those ideas in a useful and productive manner to improve their organization. They can consider unconventional ideas and suggestions as solutions to issues, tasks or problems, and they discern which ideas and suggestions will add greatest value. They seek new methods, practices, and ideas from a variety of sources and seek to apply those ideas to their own workplace. They take action on their ideas and understand how to bring innovation to an organization.

CRP7. Employ valid and reliable research strategies.

Career-ready individuals are discerning in accepting and using new information to make decisions, change practices or inform strategies. They use reliable research process to search for new information. They evaluate the validity of sources when considering the use and adoption of external information or practices in their workplace situation.

CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.

Career-ready individuals readily recognize problems in the workplace, understand the nature of the problem, and devise effective plans to solve the problem. They are aware of problems when they occur and take action quickly to address the problem; they thoughtfully investigate the root cause of the problem prior to introducing solutions. They carefully consider the options to solve the problem. Once a solution is agreed upon, they follow through to ensure the problem is solved, whether through their own actions or the actions of others.

CRP9. Model integrity, ethical leadership and effective management.

Career-ready individuals consistently act in ways that align personal and community-held ideals and principles while employing

Career Ready Practices

strategies to positively influence others in the workplace. They have a clear understanding of integrity and act on this understanding in every decision. They use a variety of means to positively impact the directions and actions of a team or organization, and they apply insights into human behavior to change others' action, attitudes and/or beliefs. They recognize the near-term and long-term effects that management's actions and attitudes can have on productivity, morals and organizational culture.

CRP10. Plan education and career paths aligned to personal goals.

Career-ready individuals take personal ownership of their own education and career goals, and they regularly act on a plan to attain these goals. They understand their own career interests, preferences, goals, and requirements. They have perspective regarding the pathways available to them and the time, effort, experience and other requirements to pursue each, including a path of entrepreneurship. They recognize the value of each step in the education and experiential process, and they recognize that nearly all career paths require ongoing education and experience. They seek counselors, mentors, and other experts to assist in the planning and execution of career and personal goals.

CRP11. Use technology to enhance productivity.

Career-ready individuals find and maximize the productive value of existing and new technology to accomplish workplace tasks and solve workplace problems. They are flexible and adaptive in acquiring new technology. They are proficient with ubiquitous technology applications. They understand the inherent risks-personal and organizational-of technology applications, and they take actions to prevent or mitigate these risks.

CRP12. Work productively in teams while using cultural global competence.

Career-ready individuals positively contribute to every team, whether formal or informal. They apply an awareness of cultural difference to avoid barriers to productive and positive interaction. They find ways to increase the engagement and contribution of all team members. They plan and facilitate effective team meetings.

Differentiated Instruction

Strategies to Accommodate Students Based on Individual Needs

<u>Time/General</u>	<u>Processing</u>	<u>Comprehension</u>	<u>Recall</u>
<ul style="list-style-type: none"> Extra time for assigned tasks Adjust length of assignment Timeline with due dates for reports and projects Communication system between home and school Provide lecture notes/outline/copies of slides 	<ul style="list-style-type: none"> Extra Response time Have students verbalize steps Repeat, clarify or reword directions Mini-breaks between tasks Provide a warning for transitions Reading partners 	<ul style="list-style-type: none"> Precise step-by-step directions Short manageable tasks Brief and concrete directions Provide immediate feedback Small group instruction Emphasize multi-sensory learning 	<ul style="list-style-type: none"> Teacher-made checklist Use visual graphic organizers Reference resources to promote independence Visual and verbal reminders Online or hardcopy study cards for practice
<u>Assistive Technology</u>	<u>Tests/Quizzes/Grading</u>	<u>Behavior/Attention</u>	<u>Organization</u>
<ul style="list-style-type: none"> Computer/whiteboard iPad/Kindle Spell-checker Online videos 	<ul style="list-style-type: none"> Extended time Study guides Shortened tests Read directions aloud 	<ul style="list-style-type: none"> Consistent daily structured routine Simple and clear classroom rules Frequent feedback 	<ul style="list-style-type: none"> Individual daily planner Display a written agenda Note-taking assistance Color code materials

Enrichment

Strategies Used to Accommodate Based on Students Individual Needs:

- Adaption of Material and Requirements
- Evaluate Vocabulary
- Elevated Text Complexity
- Additional Projects
- Independent Student Options
- Projects completed individual or with Partners
- Self Selection of Research
- Tiered/Multilevel Activities
- Learning Centers
- Individual Response Board
- Independent Book Studies
- Open-ended activities
- Community/Subject expert mentorships

Assessments

Suggested Formative/Summative Classroom Assessments

- Timelines, Charts, Graphic Organizers
- Teacher-created Unit Assessments, Chapter Assessments, Quizzes
- Teacher-created DBQs, Essays, Short Answer
- Accountable Talk, Debate, Oral Report, Role Playing, Think Pair, and Share
- Projects, Portfolio, Presentations, Prezi, Gallery Walks
- Homework
- Concept Mapping
- Primary and Secondary Source analysis
- Instruct team members on building a desktop PC
- Do a clean install of Windows
- Connect an Ethernet printer
- Install a wireless router

Interdisciplinary Connections

English Language Arts

- Question the accuracy and relevance of information
- Incorporate a variety of visual aids in publication
- Build vocabulary by reading a variety of grade-level texts and apply new vocabulary
- Keep a running word wall of industry vocabulary

Social Studies

- Research the history of a given industry/profession
- Research prominent historical individuals in a given industry/profession
- Understand how key events, people and ideas contributed to United States History

World Language

- Translate industry-content
- Create a translated index of industry vocabulary
- Generate a translated list of words and phrases related to workplace safety
- Learn the language of technology as the universal language

Math

- Interpret a graphical representation of a real-world situation
- Convert from binary to digital
- Track and track various data, such as industry's impact on the GDP, career opportunities or among of individuals currently occupying careers

Fine & Performing Arts

- Create a poster recruiting young people to focus their studies on a specific career or industry
- Design a flag or logo to represent a given career field

Science

- Identify ways in which technology has influenced the course of history and improved the quality of life
- Research latest developments in industry technology
- Explain how designing and implementing technology requires weighing trade-offs between positive and negative impacts on humans and the environment
- Investigate applicable-careers in STEM fields

New Jersey Student Learning Standards 9-12

8.1–Educational Technology

Career Cluster: Applied Technology-1

- 8.1.12.A.3: Collaborate in online courses, learning communities, social networks or virtual worlds to discuss a resolution to a problem or issue.
- 8.1.12.B.2: Apply previous content knowledge by creating and piloting a digital learning game or tutorial
- 8.1.12.C.1: Develop an innovative solution to a real world problem or issue in collaboration with peers and experts, and present ideas for feedback through social media or in an online community.
- 8.1.12.D.1: Demonstrate appropriate application of copyright, fair use and/or Creative Commons to an original work.
- 8.1.12.D.2: Evaluate consequences of unauthorized electronic access (e.g., hacking)
- 8.1.12.E.1: Produce a position statement about a real world problem by developing a systematic plan of investigation with peers and experts synthesizing information from multiple sources.
- 8.1.12.F.1: Evaluate the strengths and limitations of emerging technologies and their impact on educational, career, personal and or social needs.

8.2–Technology Education, Engineering, Design, and Computational Thinking-Programming

Career Cluster: Applied Technology-1

- 8.2.12.A.2 Analyze a current technology and the resources used, to identify the trade-offs in terms of availability, cost, desirability and waste.
- 8.2.12.B.3 Analyze ethical and unethical practices around intellectual property rights as influenced by human wants and/or needs.
- 8.2.12.C.4: Explain and identify interdependent systems and their functions
- 8.2.12.E.1: Demonstrate an understanding of problem-solving capacity of computers in our world.
- 8.2.12.E.4 Use appropriate terms in conversation.

Common Core State Standards (CCSS)

CCSS - English-Language Arts

Key Ideas and Details:

- CCSS.ELA-LITERACY.RL.11-12.1 Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain.

Integration of Knowledge and Ideas:

- CCSS.ELA-LITERACY.RL.11-12.7 Integrate and evaluate multiple sources of information presented in different media or formats (e.g. visually, quantitatively) as well as in words in order to address a question or solve a problem.

Text Types and Purposes:

- CCSS.ELA-LITERACY.W.11-12.1.B Develop claims and counterclaims fairly and thoroughly, supplying the most relevant evidence for each while pointing out the strengths and limitations of both in a manner that anticipates the audience's knowledge level, concerns, values, and possible biases.
- CCSS.ELA-LITERACY.W.11-12.2.B Develop the topic thoroughly by selecting the most significant and relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic.
- CCSS.ELA-LITERACY.W.11-12.2.E Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing.
- CCSS.ELA-LITERACY.W.11-12.6 Use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments or information.

Production and Distribution of Writing:

- CCSS.ELA-LITERACY.W.11-12.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

Comprehension and Collaboration:

- CCSS.ELA-LITERACY.SL 11-12.1 Initiate and participate effectively in a range of collaborative discussions with diverse partners on grades 11-12 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively.
- CCSS.ELA-LITERACY.SL 11-12.2 Integrate multiple sources of information presented in diverse formats and media in order to make informed decisions and solve problems, evaluating the credibility and accuracy of each source and noting any discrepancies among the data.

Common Core State Standards (CCSS)

CCSS - Mathematics

Reason quantitatively and use units to solve problems:

- CCSS.MATH.CONTENT.HSN.Q.A.1 Use units as a way to understand problems and to guide the solution of a multi-step problems: choose and interpret units consistently in formulas; choose and interpret the scale and the origin in graphs and data displays.

Make inferences and justify conclusions from sample surveys, experiments, and observational studies:

- CCSS.MATH.CONTENT.HSS.IC.B.6 Evaluate reports based on data.

Create equations that describe numbers or relationships:

- CCSS.MATH.CONTENT.HSA.CED.A.4 Rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations.

<p>Course: Applied Technology I</p> <p>Unit: 4- System Implementation and Maintenance</p> <p>Grade Level: 9-12</p>	<p>Unit Overview:</p> <p>Careers in technology require criteria to show competence and ability to perform at a certain level. This unit will introduce students to the final levels of setup including loading / updating versions of Windows as well as other system software, setting up file folders and cloud storage . Students will be able to coordinate all aspects of the computer "system" and assure all devices work and work together as a secure networked system.</p>
<p>New Jersey Student Learning Standards (NJSLS): 8.1.12.A.3, 8.1.12.B.2, 8.1.12.C.1, ,8.1.12.D.1, 8.1.12.D.2, ,8.1.12.E.1, ,8.1.12.F.1 8.2.12.A.2, 8.2.12.B.3, 8.2.12.C.4, 8.2.12.E.1, 8.2.12.E.4,</p>	
<p>Common Core State Standards (CCSS): RL.11-12.1; RL.11-12.7, W.11-12.1.B, W.11-12.2.B, W.11-12.2.E., WL.11-12.4, W11-12.6, SL.11-12.1, SI.11-12.2, HSN.Q.A.1, HSS.IC.B.6, HAS,CED.A.4</p>	

Student Learning Objectives (SLOs)	Essential Questions	Skills & Indicators	Sample Activities	Resources
<p>Students will learn to do a systems requirement evaluation from single user systems to multiuser sophisticated multi-site systems.</p> <p>NJSLS: 8.1.12.C.1, 8.2.12.A.2, 8.2.12.C.4, 8.2.12.E.1, 8.2.12.E.4</p>	<ul style="list-style-type: none"> ▪ How do computer professionals present themselves as competent to handle complicated installations? ▪ What are some problems and solutions for trouble shooting Windows? ▪ Who should determine who has 	<ul style="list-style-type: none"> ▪ Build a desktop computer from scratch ▪ Install Windows from scratch ▪ Backup and restore a computer ▪ Personalize Windows for different user needs ▪ Use the 6 steps of troubleshooting to 	<p>Writing Skills</p> <p>Create a professional proposal for a client for a computer system based on your interview of their computer needs and budget.</p> <p>Practice skills</p> <p>Have each student teach their classmates about the correct methods for installing a</p>	<p>Mike Meyers All In One for CompTIA A+ - The Right PC for you and The Complete PC Tech-McGraw Hill</p> <p>CompTIA A+ Essentials- The Complete PC Technician-McGraw</p>

Student Learning Objectives (SLOs)	Essential Questions	Skills & Indicators	Sample Activities	Resources
<p>CCSS: RL.11-12.7, W.11-12.1, W.11-12.1.B, W.11-12.1.E, W.11-12.2.D, W.11-12.4, W.11-12.6, SL.11-12.1.A, SL.11-12.2, SL.11-12.4</p>	<p>access to different levels of system security?</p> <ul style="list-style-type: none"> ▪ What is the purpose of setting up remote access? ▪ How do you know if you are "ready" to take the ComTIA A+ exams? ▪ What should you do if you do not pass the exam? 	<p>diagnose a non-functional computer.</p>	<p>different aspect of a computer networked system.</p> <p><u>Communicating Effectively</u></p> <p>Have students interview principals as well as members of the school IT system regarding school needs.</p> <p><u>Presentation Skills</u></p> <p>Have student work in groups to create a presentation to the school board about the school systems technology needs.</p>	<p>Hill. Preparing Your Presentation- Technical Specifications- https://www.iadms.org/?page=169</p> <p>A guide to Troubleshooting http://certmag.com/guide-troubleshooting-theory-comptia-perspective/</p>
<p>Students will study the newly emerging cloud technology for</p>	<ul style="list-style-type: none"> • What is Cloud Technology? • Is cloud computing 	<ul style="list-style-type: none"> ▪ Configure a virtual machine ▪ Identify and apply 	<ul style="list-style-type: none"> ▪ Write a short essay summarizing the problem, discussion, and solution for a 	<p>Mike Meyers CompTIA A+ Installing & Upgrading Windows/ Maintaining & Optimizing</p>

Student Learning Objectives (SLOs)	Essential Questions	Skills & Indicators	Sample Activities	Resources
<p>implementing into a networked system.</p> <p>NJSLS: 8.1.12.A.3, 8.1.12.B.2, 8.2.12.D.1, 8.2.12.F.1, 8.2.12.B.3, 8.2.12.E.4</p> <p>CCSS: RL.11-12.1, RL.11-12.1.B, RL.11-12.2.B, RL.11-12.2.E, W.11-12.4, W.11-12.6, SL.11.12.2</p>	<p>safer than data kept on the hard disk?</p> <ul style="list-style-type: none"> • Do you know the technical requirements and interdependencies of your machines and the applications that drive them? • Why would a business implement the Six Sigma program? 	<p>multiple ways to transfer information and resources between software programs and systems.</p> <ul style="list-style-type: none"> ▪ Identify and describe the layered nature of computing and networking such as the Open Systems Interconnect (OSI) model. ▪ Recognize where processes are running in a networked environment. 	<p>broken laptop screen.</p> <ul style="list-style-type: none"> ▪ Create a portfolio or similar collection of work that offers evidence through assessment and evaluation of knowledge competency. ▪ Use security software and hardware to protect systems from attack and alert of potential threats, anti-malware software, and firewalls. ▪ Create a PowerPoint/Prizi presentation about the benefits of Six Sigma. 	<p>Windows-McGraw Hill</p> <p>How to install a new operating system: http://windows.microsoft.com/en-us/windows/installing-reinstalling-windows#1TC=windows-7</p> <p>How to Build a Computer from Scratch: http://lifehacker.com/5827928/how-to-build-a-computer-from-scratch-lesson-4-installing-your-operating-system</p> <p>Online Simulation videos such as https://www.youtube.com/watch?v=QYzJI0Zrc4M</p> <p>Introduction to Cloud Computing https://cloudacademy.com/cloud-</p>

Student Learning Objectives (SLOs)	Essential Questions	Skills & Indicators	Sample Activities	Resources
				<p>computing/introduction-to-cloud-computing-course/</p> <p>Introduction to Cloud Computing https://www.youtube.com/watch?v=QYzJI0Zrc4M</p> <p>What is Six Sigma Certification? https://www.isixsigma.com/training/certification-articles/what-six-sigma-certification/</p>
<p>Students will be able to explain the threats to computers and data describe key security concepts and technologies and explain how to protect computers from network threats.</p> <p>NJSLS: 8.1.12.A.3, 8.1.12.B.2, 8.2.12.D.1, 8.2.12.D.2, 8.1.12.E.1,</p>	<ul style="list-style-type: none"> • Where do computer viruses and Malware come from? • Is there a definite way to protect your computer? • Which sites are most likely to have viruses or malware? • Should malware creators go to jail? 	<ul style="list-style-type: none"> • Remove malware from a Windows system • Configure Internet security software • Enable Windows Firewall • Identify various protocols and associated service ports 	<ul style="list-style-type: none"> • Use online resources to examine licensing, certification, and credentialing requirements at the local, state, and national levels to maintain compliance with industry requirements in area of career interest. • Create a cost benefit 	<p>Why do People Make Viruses? http://anti-virus-software-review.toptenreviews.com/why-do-people-make-computer-viruses-.html</p> <p>Mike Meyers CompTIA A+ Securing Windows- McGraw Hill</p>

Student Learning Objectives (SLOs)	Essential Questions	Skills & Indicators	Sample Activities	Resources
<p>8.2.12.B.3, 8.2.12.E.4</p> <p>CCSS: RL.11-12.7, W.11-12.1, W.11-12.2.E, W.11-12.4, W.11-12.9 SL.11.12.4</p>			<p>analysis of various virus protection software products</p> <ul style="list-style-type: none"> • Take sample CompTIA tests to prepare for actual exam 	<p>Best Practices for Malware Removal http://www.professormesser.com/free-a-plus-training/220-802/best-practices-for-malware-removal/</p> <p>Tools for Security Troubleshooting http://www.professormesser.com/free-a-plus-training/220-802/tools-for-security-troubleshooting/</p> <p>Tips on Getting an A+ on the CompTIA A+ https://www.pluralsight.com/blog/career/comp-tia-a-plus-exam-tips</p>

Unit 4 Vocabulary

Network Access
 Managed
 Software as a Service (SaaS)
 Platform as a Service (PaaS)
 Infrastructure as a Service (IaaS)
 Private Cloud
 Community Cloud
 Public Cloud
 Hybrid Cloud
 Cost
 Scalability/Reliability
 Mobile Accessible
 account name
 BYOD
 client-server
 co-location
 command
 connect up
 database server
 EDI
 end system
 Ethernet
 extranet
 file server
 file-sharing

gateway
 host
 intranet
 LAN
 Li-Fi
 LLC
 local area network
 net
 network
 network administrator
 networking
 node
 peer-to-peer
 server
 the darknet
 superserver
 telecomputing
 timesharing
 unicast
 VPN
 workflow
 Shared Infrastructure
 Dynamic Provisioning

Suggested Unit Projects

Choose At Least One

<p>Set up a crisis scenario for a large corporation or school system and then explain what you, as head of technology will do if the network crashes.</p>	<p>Your client is ready to start all over.... They would like to know if they should consider a free business system such as Linux, pay for a similar system with support; Linux, choose Windows or perhaps the Mac OS. Create a presentation giving the strengths and weaknesses of each as well as your recommendation and why.</p>
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Suggested Structured Learning Experiences

<p>Attend a local Security Systems Trade Show https://www.concise-courses.com/security/conferences-of-2016/</p> <p>Take a sample compTIA A+ exam to gauge readiness for the actual exam.</p>	<p>Visit RedHat Technologies or another Unix company based in NY area.</p> <p>Spend a day shadowing a Computer Technician to see “a day in the life” scenario.</p>
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