



Management Information Systems and Business Data Processing, Classification of Instructional Program (CIP) 52.1201

Units of Instruction and Task Grid Linked to Pennsylvania Core Standards

100 Safety

Secondary Competency Task Grid with Unit and Task Numbers	Common Career Technical Core Standards	Pennsylvania Core Standards for Reading for Technical Subjects Standard 3.5	Pennsylvania Core Standards for Writing for Technical Subjects Standard 3.6	Pennsylvania Core Standards for Mathematics Standard 2.1
<p>101 Follow current ergonomic best practices for health, safety and productivity.</p> <p>102 Organize and maintain a workstation.</p> <p>103 Describe and demonstrate ways to dissipate electrostatic discharge and related risks.</p>	<p>Refer to the end of this document for an explanation of the following standards and sample indicators:</p> <p><u>STANDARDS:</u> INFORMATION TECHNOLOGY IT 01 IT 11</p> <p>INFORMATION SUPPORT SERVICES IT-SUP 01 IT-SUP 02 IT-SUP 03 IT-SUP 04 IT-SUP 05 IT-SUP 06 IT-SUP 07 IT-SUP 08 IT-SUP 09 IT-SUP 10</p>	<p style="text-align: center;">KEY IDEAS/DETAILS</p> <p>GRADES 9-10 Standard PCS.3.5.9-10.A Standard PCS.3.5.9-10.B Standard PCS.3.5.9-10.C</p> <p>GRADES 11-12 Standard PCS.3.5.11-12.A Standard PCS.3.5.11-12.B Standard PCS.3.5.11-12.C</p> <p style="text-align: center;">CRAFT AND STRUCTURE</p> <p>GRADES 9-10 Standard PCS.3.5.9-10.D Standard PCS.3.5.9-10.E Standard PCS.3.5.9-10.F</p> <p>GRADES 11-12 Standard PCS.3.5.11-12.D Standard PCS.3.5.11-12.E Standard PCS.3.5.11-12.F</p> <p style="text-align: center;">INTEGRATE KNOWLEDGE/ IDEAS</p> <p>GRADES 9-10 Standard PCS.3.5.9-10.G Standard PCS.3.5.9-10.H</p>	<p style="text-align: center;">TEXT TYPES/ PURPOSE</p> <p>GRADES 9-10 Standard PCS.3.6.9-10.A Standard PCS.3.6.9-10.B</p> <p>GRADES 11-12 Standard PCS.3.6.11-12.A Standard PCS.3.6.11-12.B</p> <p style="text-align: center;">PRODUCTION AND DISTRIBUTION OF WRITING</p> <p>GRADES 9-10 Standard PCS.3.6.9-10.C Standard PCS.3.6.9-10 D Standard PCS.3.6.9-10.E</p> <p>GRADES 11-12 Standard PCS.3.6.11-12 C Standard.PCS.3.6.11-12.D Standard PCS.3.6.11- 12 E</p> <p style="text-align: center;">RESEARCH</p> <p>GRADES 9-10 Standard PCS.3.6.9-10.F Standard PCS.3.6.9-10.G Standard PCS.3.6.9-10.H</p> <p>GRADES 11-12</p>	

Secondary Competency Task Grid with Unit and Task Numbers	Common Career Technical Core Standards	Pennsylvania Core Standards for Reading for Technical Subjects Standard 3.5	Pennsylvania Core Standards for Writing for Technical Subjects Standard 3.6	Pennsylvania Core Standards for Mathematics Standard 2.1
		Standard PCS.3.5.9-10.I GRADES 9-12 Standard PCS.3.5.11-12.G Standard PCS.3.5.11-12.H Standard PCS.3.5.11-12.I	Standard PCS.3.6.11-12.F Standard PCS.3.6.11-12.G Standard PCS.3.6.11-12.H RANGE OF WRITING GRADES 9-10 Standard PCS.3.5.9-10.I GRADES 11-12 Standard CC.3.5.11-12.I	

200 Professional Business Procedures

Secondary Competency Task Grid with Unit and Task Numbers	Common Career Technical Core Standards	Pennsylvania Core Standards for Reading for Technical Subjects Standard 3.5	Pennsylvania Core Standards for Writing for Technical Subjects Standard 3.6	Pennsylvania Core Standards for Mathematics Standard 2.1
<p>201 Practice multimedia and telecommunications etiquette.</p> <p>202 Identify, proofread, and correct grammar errors in all documents.</p> <p>203 Practice professional interpersonal communication skills.</p> <p>204 Use time management skills.</p> <p>205 Prepare business correspondence and technical documents.</p> <p>206 Reserve.</p> <p>207 Identify needs and build rapport with end users.</p> <p>208 Develop and perform conflict resolution practices.</p> <p>209 Reserve.</p> <p>210 Reserve.</p> <p>211 Reserve.</p>	<p>Refer to the end of this document for an explanation of the following standards and sample indicators:</p> <p><u>STANDARDS</u></p> <p>INFORMATION TECHNOLOGY</p> <p>IT 01 IT 02 IT 03 IT 04 IT 06 IT 07 IT 10 IT 11</p> <p>INFORMATION SUPPORT SERVICES</p> <p>IT-SUP 01 IT-SUP 02 IT-SUP 03 IT-SUP 04 IT-SUP 05 IT-SUP 06 IT-SUP 07 IT-SUP 08 IT-SUP 09 IT-SUP 10</p> <p>NETWORK SYSTEMS</p> <p>IT-NET 1 IT-NET 02 IT-NET 03 IT-NET 04</p> <p>IT-PRG 01 IT-PRG 02 IT-PRG 03 IT-PRG 04 IT-PRG 05 IT-PRG 06 IT-PRG 07 IT-PRG 08 IT-PRG 09 IT-PRG 10</p> <p>WEB AND DIGITAL</p>	<p>KEY IDEAS/DETAILS</p> <p>GRADES 9-10</p> <p>Standard PCS.3.5.9-10.A Standard PCS.3.5.9-10.B Standard PCS.3.5.9-10.C</p> <p>GRADES 11-12</p> <p>Standard PCS.3.5.11-12.A Standard PCS.3.5.11-12.B Standard PCS.3.5.11-12.C</p> <p>CRAFT AND STRUCTURE</p> <p>GRADES 9-10</p> <p>Standard PCS.3.5.9-10.D Standard PCS.3.5.9-10.E Standard PCS.3.5.9-10.F</p> <p>GRADES 11-12</p> <p>Standard PCS.3.5.11-12.D Standard PCS.3.5.11-12.E Standard PCS.3.5.11-12.F</p> <p>INTEGRATE KNOWLEDGE/ IDEAS</p> <p>GRADES 9-10</p> <p>Standard PCS.3.5.9-10.G Standard PCS.3.5.9-10.H Standard PCS.3.5.9-10.I</p> <p>GRADES 9-12</p> <p>Standard PCS.3.5.11-12.G Standard PCS.3.5.11-12.H Standard PCS.3.5.11-12.I</p>	<p>TEXT TYPES/ PURPOSE</p> <p>GRADES 9-10</p> <p>Standard PCS.3.6.9-10.A Standard PCS.3.6.9-10.B</p> <p>GRADES 11-12</p> <p>Standard PCS.3.6.11-12.A Standard PCS.3.6.11-12.B</p> <p>PRODUCTION AND DISTRIBUTION OF WRITING</p> <p>GRADES 9-10</p> <p>Standard PCS.3.6.9-10.C Standard PCS.3.6.9-10.D Standard PCS.3.6.9-10.E</p> <p>GRADES 11-12</p> <p>Standard PCS.3.6.11-12.C Standard PCS.3.6.11-12.D Standard PCS.3.6.11-12.E</p> <p>RESEARCH</p> <p>GRADES 9-10</p> <p>Standard PCS.3.6.9-10.F Standard PCS.3.6.9-10.G Standard PCS.3.6.9-10.H</p> <p>GRADES 11-12</p> <p>Standard PCS.3.6.11-12.F Standard PCS.3.6.11-12.G Standard PCS.3.6.11-12.H</p> <p>RANGE OF WRITING</p> <p>GRADES 9-10</p> <p>Standard PCS.3.5.9-10.I</p> <p>GRADES 11-12</p> <p>Standard CC.3.5.11-12.I</p>	

Secondary Competency Task Grid with Unit and Task Numbers	Common Career Technical Core Standards	Pennsylvania Core Standards for Reading for Technical Subjects Standard 3.5	Pennsylvania Core Standards for Writing for Technical Subjects Standard 3.6	Pennsylvania Core Standards for Mathematics Standard 2.1
	IT-WD 01 IT-WD 02 IT-WD 03 IT-WD 04 IT-WD 05 IT-WD 06 IT-WD 07 IT-WD 08 IT-WD 09 IT-WD 10			

300 Business Law and Ethics

Secondary Competency Task Grid with Unit and Task Numbers	Common Career Technical Core Standards	Pennsylvania Core Standards for Reading for Technical Subjects Standard 3.5	Pennsylvania Core Standards for Writing for Technical Subjects Standard 3.6	Pennsylvania Core Standards for Mathematics Standard 2.1
<p>301 Identify the principles of business law and ethics and explain how they relate to business policies such as intellectual property.</p> <p>302 Reserve.</p> <p>303 Explain crimes often associated with businesses and organizations (e.g., embezzlement, extortion, and computer crimes).</p> <p>304 Reserve.</p> <p>305 Identify improper use of business technology and property (e.g., computers, mobile devices, and telephones).</p> <p>306 Identify legal safeguards to protect sensitive data and preserve confidentiality.</p> <p>307 Reserve.</p> <p>308 Reserve.</p> <p>309 Reserve.</p> <p>310 Reserve.</p>	<p>Refer to the end of this document for an explanation of the following standards and sample indicators:</p> <p><u>STANDARDS:</u> INFORMATION TECHNOLOGY IT 04 IT 05 IT 08 IT 09 IT 10</p>	<p>KEY IDEAS/DETAILS</p> <p>GRADES 9-10 Standard PCS.3.5.9-10.A Standard PCS.3.5.9-10.B Standard PCS.3.5.9-10.C</p> <p>GRADES 11-12 Standard PCS.3.5.11-12.A Standard PCS.3.5.11-12.B Standard PCS.3.5.11-12.C</p> <p>CRAFT AND STRUCTURE</p> <p>GRADES 9-10 Standard PCS.3.5.9-10.D Standard PCS.3.5.9-10.E Standard PCS.3.5.9-10.F</p> <p>GRADES 11-12 Standard PCS.3.5.11-12.D Standard PCS.3.5.11-12.E Standard PCS.3.5.11-12.F</p> <p>INTEGRATE KNOWLEDGE/ IDEAS</p> <p>GRADES 9-10 Standard PCS.3.5.9-10.G Standard PCS.3.5.9-10.H Standard PCS.3.5.9-10.I</p> <p>GRADES 9-12 Standard PCS.3.5.11-12.G Standard PCS.3.5.11-12.H Standard PCS.3.5.11-12.I</p>	<p>TEXT TYPES/ PURPOSE</p> <p>GRADES 9-10 Standard PCS.3.6.9-10.A Standard PCS.3.6.9-10.B</p> <p>GRADES 11-12 Standard PCS.3.6.11-12.A Standard PCS.3.6.11-12.B</p> <p>PRODUCTION AND DISTRIBUTION OF WRITING</p> <p>GRADES 9-10 Standard PCS.3.6.9-10.C Standard PCS.3.6.9-10.D Standard PCS.3.6.9-10.E</p> <p>GRADES 11-12 Standard PCS.3.6.11-12.C Standard PCS.3.6.11-12.D Standard PCS.3.6.11-12.E</p> <p>RESEARCH</p> <p>GRADES 9-10 Standard PCS.3.6.9-10.F Standard PCS.3.6.9-10.G Standard PCS.3.6.9-10.H</p> <p>GRADES 11-12 Standard PCS.3.6.11-12.F Standard PCS.3.6.11-12.G Standard PCS.3.6.11-12.H</p> <p>RANGE OF WRITING</p> <p>GRADES 9-10 Standard PCS.3.5.9-10.I</p> <p>GRADES 11-12 Standard CC.3.5.11-12.I</p>	<p>NUMBERS AND OPERATIONS Standard PCS.2.1.HS.F.1 Standard PCS.2.1.HS.F.2 Standard PCS.2.1.HS.F.3 Standard PCS.2.1.HS.F.4 Standard PCS.2.1.HS.F.5 Standard PCS.2.1.HS.F.6 Standard PCS.2.1.HS.F.7</p>

400 Computer and Internet Fundamentals

Secondary Competency Task Grid with Unit and Task Numbers	Common Career Technical Core Standards	Pennsylvania Core Standards for Reading for Technical Subjects Standard 3.5	Pennsylvania Core Standards for Writing for Technical Subjects Standard 3.6	Pennsylvania Core Standards for Mathematics Standard 2.1
<p>401 Use terminology associated with online technologies.</p> <p>402 Stay current with new and emerging technologies and certifications.</p> <p>403 Use advanced search engine techniques to locate resources.</p> <p>404 Identify components of a computer system and related peripherals.</p> <p>405 Navigate and manage operating systems and utility programs.</p> <p>406 Identify the types of telecommunication devices and networks.</p> <p>407 Use proper file management techniques.</p> <p>408 Use a variety of cloud computing services.</p> <p>409 Reserve.</p> <p>410 Utilize multimedia presentation software for professional communication.</p> <p>411 Design, edit, and publish documents, using appropriate software.</p> <p>412 Identify and explain the variety of E-commerce models (i.e., B2B, C2B, B2C, C2C).</p>	<p>Refer to the end of this document for an explanation of the following standards and sample indicators:</p> <p><u>STANDARDS</u> INFORMATION TECHNOLOGY IT 01 IT 02 IT 03 IT 04 IT 06 IT 07 IT 10 IT 11</p> <p><u>INFORMATION SUPPORT SERVICES</u> IT-SUP 01 IT-SUP 02 IT-SUP 03 IT-SUP 04 IT-SUP 05 IT-SUP 06 IT-SUP 07 IT-SUP 08 IT-SUP 09 IT-SUP 10</p> <p><u>NETWORK SYSTEMS</u> IT-NET 1 IT-NET 02 IT-NET 03 IT-NET 04</p> <p><u>PROGRAMMING AND SOFTWARE</u> IT-PRG 01 IT-PRG 02 IT-PRG 03 IT-PRG 04 IT-PRG 05 IT-PRG 06 IT-PRG 07 IT-PRG 08 IT-PRG 09 IT-PRG 10</p>	<p>KEY IDEAS/DETAILS</p> <p>GRADES 9-10 Standard PCS.3.5.9-10.A Standard PCS.3.5.9-10.B Standard PCS.3.5.9-10.C</p> <p>GRADES 11-12 Standard PCS.3.5.11-12A Standard PCS.3.5.11-12.B Standard PCS.3.5.11-12.C</p> <p>CRAFT AND STRUCTURE</p> <p>GRADES 9-10 Standard PCS.3.5.9-10.D Standard PCS.3.5.9-10.E Standard PCS.3.5.9-10.F</p> <p>GRADES 11-12 Standard PCS.3.5.11-12.D Standard PCS.3.5.11-12.E Standard PCS.3.5.11-12.F</p> <p>INTEGRATE KNOWLEDGE/ IDEAS</p> <p>GRADES 9-10 Standard PCS.3.5.9-10.G Standard PCS.3.5.9-10.H Standard PCS.3.5.9-10.I</p> <p>GRADES 9-12 Standard PCS.3.5.11-12.G Standard PCS.3.5.11-12.H Standard PCS.3.5.11-12.I</p>	<p>TEXT TYPES/ PURPOSE</p> <p>GRADES 9-10 Standard PCS.3.6.9-10.A Standard PCS.3.6.9-10.B</p> <p>GRADES 11-12 Standard PCS.3.6.11-12.A Standard PCS.3.6.11-12.B</p> <p>PRODUCTION AND DISTRIBUTION OF WRITING</p> <p>GRADES 9-10 Standard PCS.3.6.9-10.C Standard PCS.3.6.9-10 D Standard PCS.3.6.9-10.E</p> <p>GRADES 11-12 Standard PCS.3.6.11-12 C Standard.PCS.3.6.11-12.D Standard PCS.3.6.11- 12 E</p> <p>RESEARCH</p> <p>GRADES 9-10 Standard PCS.3.6.9-10.F Standard PCS.3.6.9-10.G Standard PCS.3.6.9-10.H</p> <p>GRADES 11-12 Standard PCS.3.6.11-12.F Standard PCS.3.6.11-12.G Standard PCS.3.6.11-12.H</p> <p>RANGE OF WRITING</p> <p>GRADES 9-10 Standard PCS.3.5.9-10.I</p> <p>GRADES 11-12 Standard CC.3.5.11-12.I</p>	

Secondary Competency Task Grid with Unit and Task Numbers	Common Career Technical Core Standards	Pennsylvania Core Standards for Reading for Technical Subjects Standard 3.5	Pennsylvania Core Standards for Writing for Technical Subjects Standard 3.6	Pennsylvania Core Standards for Mathematics Standard 2.1
	WEB AND DIGITAL IT-WD 01 IT-WD 02 IT-WD 03 IT-WD 04 IT-WD 05 IT-WD 06 IT-WD 07 IT-WD 08 IT-WD 09 IT-WD 10			

500 Data Analysis Software

Secondary Competency Task Grid with Unit and Task Numbers	Common Career Technical Core Standards	Pennsylvania Core Standards for Reading for Technical Subjects Standard 3.5	Pennsylvania Core Standards for Writing for Technical Subjects Standard 3.6	Pennsylvania Core Standards for Mathematics Standard 2.1
<p>501 Manage and manipulate data using spreadsheets.</p> <p>502 Generate and analyze graphs and associated data using spreadsheet software.</p> <p>503 Create and edit spreadsheet macros.</p> <p>504 Integrate data (e.g., payroll or inventory data) using spreadsheet software.</p> <p>505 Create formulas and use built in functions using spreadsheet software.</p>	<p>Refer to the end of this document for an explanation of the following standards and sample indicators:</p> <p><u>STANDARDS:</u> PROGRAMMING AND SOFTWARE IT-PRG 01 IT-PRG 02 IT-PRG 03 IT-PRG 04 IT-PRG 05 IT-PRG 06 IT-PRG 07 IT-PRG 08 IT-PRG 09 IT-PRG 10</p>	<p>KEY IDEAS/DETAILS</p> <p>GRADES 9-10 Standard PCS.3.5.9-10.A Standard PCS.3.5.9-10.B Standard PCS.3.5.9-10.C</p> <p>GRADES 11-12 Standard PCS.3.5.11-12A Standard PCS.3.5.11-12.B Standard PCS.3.5.11-12.C</p> <p>CRAFT AND STRUCTURE</p> <p>GRADES 9-10 Standard PCS.3.5.9-10.D Standard PCS.3.5.9-10.E Standard PCS.3.5.9-10.F</p> <p>GRADES 11-12 Standard PCS.3.5.11-12.D Standard PCS.3.5.11-12.E Standard PCS.3.5.11-12.F</p> <p>INTEGRATE KNOWLEDGE/ IDEAS</p> <p>GRADES 9-10 Standard PCS.3.5.9-10.G Standard PCS.3.5.9-10.H Standard PCS.3.5.9-10.I</p> <p>GRADES 9-12 Standard PCS.3.5.11-12.G Standard PCS.3.5.11-12.H Standard PCS.3.5.11-12.I</p>	<p>TEXT TYPES/ PURPOSE</p> <p>GRADES 9-10 Standard PCS.3.6.9-10.A Standard PCS.3.6.9-10.B</p> <p>GRADES 11-12 Standard PCS.3.6.11-12.A Standard PCS.3.6.11-12.B</p> <p>PRODUCTION AND DISTRIBUTION OF WRITING</p> <p>GRADES 9-10 Standard PCS.3.6.9-10.C Standard PCS.3.6.9-10 D Standard PCS.3.6.9-10.E</p> <p>GRADES 11-12 Standard PCS.3.6.11-12 C Standard.PCS.3.6.11-12.D Standard PCS.3.6.11- 12 E</p> <p>RESEARCH</p> <p>GRADES 9-10 Standard PCS.3.6.9-10.F Standard PCS.3.6.9-10.G Standard PCS.3.6.9-10.H</p> <p>GRADES 11-12 Standard PCS.3.6.11-12.F Standard PCS.3.6.11-12.G Standard PCS.3.6.11-12.H</p> <p>RANGE OF WRITING</p> <p>GRADES 9-10 Standard PCS.3.5.9-10.I</p> <p>GRADES 11-12 Standard CC.3.5.11-12.I</p>	<p>NUMBERS AND OPERATIONS Standard PCS.2.1.HS.F.1 Standard PCS.2.1.HS.F.2 Standard PCS.2.1.HS.F.3 Standard PCS.2.1.HS.F.4 Standard PCS.2.1.HS.F.5 Standard PCS.2.1.HS.F.6 Standard PCS.2.1.HS.F.7</p> <p>OPERATIONS AND ALGEBRAIC THINKING Algebra Standard PCS.2.2.HS.D.1 Standard PCS.2.2.HS.D.2 Standard PCS.2.2.HS.D.3 Standard PCS.2.2.HS.D.4 Standard PCS.2.2.HS.D.5 Standard PCS.2.2.HS.D.6 Standard PCS.2.2.HS.D.7 Standard PCS.2.2.HS.D.8 Standard PCS.2.2.HS.D.9 Standard PCS.2.2.HS.D.10</p> <p>OPERATIONS AND ALGEBRAIC THINKING Functions Standard PCS.2.2.HS.C.1 Standard PCS.2.2.HS.C.2 Standard PCS.2.2.HS.C.3 Standard PCS.2.2.HS.C.4 Standard PCS.2.2.HS.C.5 Standard PCS.2.2.HS.C.6 Standard PCS.2.2.HS.C.7 Standard PCS.2.2.HS.C.8 Standard PCS.2.2.HS.C.9</p> <p>MEASUREMENT, DATA AND PROBABILITY Standard PCS.2.4.HS.B.1 Standard PCS.2.4.HS.B.2 Standard PCS.2.4.HS.B.3 Standard PCS.2.4.HS.B.4 Standard PCS.2.4.HS.B.5 Standard PCS.2.4.HS.B.6 Standard PCS.2.4.HS.B.7</p>

600 Database Administration

Secondary Competency Task Grid with Unit and Task Numbers	Common Career Technical Core Standards	Pennsylvania Core Standards for Reading for Technical Subjects Standard 3.5	Pennsylvania Core Standards for Writing for Technical Subjects Standard 3.6	Pennsylvania Core Standards for Mathematics Standard 2.1
<p>601 Design a database structure.</p> <p>602 Create entity relationship diagram.</p> <p>603 Create tables and modify fields.</p> <p>604 Build forms to capture, manipulate, and display data.</p> <p>605 Construct and manage queries using one or more tables.</p> <p>606 Design and arrange reports, using filters.</p> <p>607 Apply normalization to relational databases.</p> <p>608 Reserve.</p> <p>609 Implement security, backup, and recovery procedures.</p> <p>610 Import and export data into other applications.</p>	<p>Refer to the end of this document for an explanation of the following standards and sample indicators:</p> <p><u>STANDARDS:</u> INFORMATION TECHNOLOGY IT 04 IT 07 IT 08 IT 09</p> <p>PROGRAMMING AND SOFTWARE IT-PRG 01 IT-PRG 02 IT-PRG 03 IT-PRG 04 IT-PRG 05 IT-PRG 06 IT-PRG 07 IT-PRG 08 IT-PRG 09 IT-PRG 10</p>	<p>KEY IDEAS/DETAILS</p> <p>GRADES 9-10 Standard PCS.3.5.9-10.A Standard PCS.3.5.9-10.B Standard PCS.3.5.9-10.C</p> <p>GRADES 11-12 Standard PCS.3.5.11-12A Standard PCS.3.5.11-12.B Standard PCS.3.5.11-12.C</p> <p>CRAFT AND STRUCTURE</p> <p>GRADES 9-10 Standard PCS.3.5.9-10.D Standard PCS.3.5.9-10.E Standard PCS.3.5.9-10.F</p> <p>GRADES 11-12 Standard PCS.3.5.11-12.D Standard PCS.3.5.11-12.E Standard PCS.3.5.11-12.F</p> <p>INTEGRATE KNOWLEDGE/ IDEAS</p> <p>GRADES 9-10 Standard PCS.3.5.9-10.G Standard PCS.3.5.9-10.H Standard PCS.3.5.9-10.I</p> <p>GRADES 9-12 Standard PCS.3.5.11-12.G Standard PCS.3.5.11-12.H Standard PCS.3.5.11-12.I</p>	<p>TEXT TYPES/ PURPOSE</p> <p>GRADES 9-10 Standard PCS.3.6.9-10.A Standard PCS.3.6.9-10.B</p> <p>GRADES 11-12 Standard PCS.3.6.11-12.A Standard PCS.3.6.11-12.B</p> <p>PRODUCTION AND DISTRIBUTION OF WRITING</p> <p>GRADES 9-10 Standard PCS.3.6.9-10.C Standard PCS.3.6.9-10 D Standard PCS.3.6.9-10.E</p> <p>GRADES 11-12 Standard PCS.3.6.11-12 C Standard.PCS.3.6.11-12.D Standard PCS.3.6.11- 12 E</p> <p>RESEARCH</p> <p>GRADES 9-10 Standard PCS.3.6.9-10.F Standard PCS.3.6.9-10.G Standard PCS.3.6.9-10.H</p> <p>GRADES 11-12 Standard PCS.3.6.11-12.F Standard PCS.3.6.11-12.G Standard PCS.3.6.11-12.H</p> <p>RANGE OF WRITING</p> <p>GRADES 9-10 Standard PCS.3.5.9-10.I</p> <p>GRADES 11-12 Standard CC.3.5.11-12.I</p>	<p>NUMBERS AND OPERATIONS Standard PCS.2.1.HS.F.1 Standard PCS.2.1.HS.F.2 Standard PCS.2.1.HS.F.3 Standard PCS.2.1.HS.F.4 Standard PCS.2.1.HS.F.5 Standard PCS.2.1.HS.F.6 Standard PCS.2.1.HS.F.7</p> <p>OPERATIONS AND ALGEBRAIC THINKING Algebra Standard PCS.2.2.HS.D.1 Standard PCS.2.2.HS.D.2 Standard PCS.2.2.HS.D.3 Standard PCS.2.2.HS.D.4 Standard PCS.2.2.HS.D.5 Standard PCS.2.2.HS.D.6 Standard PCS.2.2.HS.D.7 Standard PCS.2.2.HS.D.8 Standard PCS.2.2.HS.D.9 Standard PCS.2.2.HS.D.10</p> <p>OPERATIONS AND ALGEBRAIC THINKING Functions Standard PCS.2.2.HS.C.1 Standard PCS.2.2.HS.C.2 Standard PCS.2.2.HS.C. Standard PCS.2.2.HS.C.4 Standard PCS.2.2.HS.C.5 Standard PCS.2.2.HS.C.6 Standard PCS2.2.HS.C.7 Standard PCS.2.2.HS.C.8 Standard PCS.2.2.HS.C.9</p> <p>MEASUREMENT, DATA AND PROBABILITY Standard PCS.2.4.HS.B.1 Standard PCS.2.4.HS.B.2 Standard PCS.2.4.HS.B.3 Standard PCS.2.4.HS.B.4 Standard PCS.2.4.HS.B.5 Standard PCS.2.4.HS.B.6 Standard PCS.2.4.HS.B.7</p>

700 Programming and System Development

Secondary Competency Task Grid with Unit and Task Numbers	Common Career Technical Core Standards	Pennsylvania Core Standards for Reading for Technical Subjects Standard 3.5	Pennsylvania Core Standards for Writing for Technical Subjects Standard 3.6	Pennsylvania Core Standards for Mathematics Standard 2.1
<p>701 Apply working knowledge of the system development lifecycle (system investigation/project proposal, analysis, design, code/test, implementation, and maintenance).</p> <p>702 Differentiate programming fundamentals (e.g., system processing, integration, generations of languages, binary code, object code, and source code).</p> <p>703 Declare and manipulate various data type variables.</p> <p>704 Utilize program control structures (e.g., decisions, loops, functions/subroutines, arithmetic, and logical operations, etc.)</p> <p>705 Create working graphical user interfaces (GUI).</p> <p>706 Create, test, and debug successful computer programs.</p> <p>707 Create clear and thorough program documentation</p>	<p>Refer to the end of this document for an explanation of the following standards and sample indicators:</p> <p><u>STANDARDS:</u> INFORMATION TECHNOLOGY IT 02 IT 04 IT 06 IT 11 IT 12</p> <p>PROGRAMMING AND SOFTWARE IT-PRG 01 IT-PRG 02 IT-PRG 03 IT-PRG 04 IT-PRG 05 IT-PRG 06 IT-PRG 07 IT-PRG 08 IT-PRG 09 IT-PRG 10</p>	<p>KEY IDEAS/DETAILS</p> <p>GRADES 9-10 Standard PCS.3.5.9-10.A Standard PCS.3.5.9-10.B Standard PCS.3.5.9-10.C</p> <p>GRADES 11-12 Standard PCS.3.5.11-12.A Standard PCS.3.5.11-12.B Standard PCS.3.5.11-12.C</p> <p>CRAFT AND STRUCTURE</p> <p>GRADES 9-10 Standard PCS.3.5.9-10.D Standard PCS.3.5.9-10.E Standard PCS.3.5.9-10.F</p> <p>GRADES 11-12 Standard PCS.3.5.11-12.D Standard PCS.3.5.11-12.E Standard PCS.3.5.11-12.F</p> <p>INTEGRATE KNOWLEDGE/ IDEAS</p> <p>GRADES 9-10 Standard PCS.3.5.9-10.G Standard PCS.3.5.9-10.H Standard PCS.3.5.9-10.I</p> <p>GRADES 9-12 Standard PCS.3.5.11-12.G Standard PCS.3.5.11-12.H Standard PCS.3.5.11-12.I</p>	<p>TEXT TYPES/ PURPOSE</p> <p>GRADES 9-10 Standard PCS.3.6.9-10.A Standard PCS.3.6.9-10.B</p> <p>GRADES 11-12 Standard PCS.3.6.11-12.A Standard PCS.3.6.11-12.B</p> <p>PRODUCTION AND DISTRIBUTION OF WRITING</p> <p>GRADES 9-10 Standard PCS.3.6.9-10.C Standard PCS.3.6.9-10 D Standard PCS.3.6.9-10.E</p> <p>GRADES 11-12 Standard PCS.3.6.11-12 C Standard.PCS.3.6.11-12.D Standard PCS.3.6.11- 12 E</p> <p>RESEARCH</p> <p>GRADES 9-10 Standard PCS.3.6.9-10.F Standard PCS.3.6.9-10.G Standard PCS.3.6.9-10.H</p> <p>GRADES 11-12 Standard PCS.3.6.11-12.F Standard PCS.3.6.11-12.G Standard PCS.3.6.11-12.H</p> <p>RANGE OF WRITING</p> <p>GRADES 9-10 Standard PCS.3.5.9-10.I</p> <p>GRADES 11-12 Standard CC.3.5.11-12.I</p>	<p>NUMBERS AND OPERATIONS Standard PCS.2.1.HS.F.1 Standard PCS.2.1.HS.F.2 Standard PCS.2.1.HS.F.3 Standard PCS.2.1.HS.F.4 Standard PCS.2.1.HS.F.5 Standard PCS.2.1.HS.F.6 Standard PCS.2.1.HS.F.7</p>

800 Reserve

Secondary Competency Task Grid with Unit and Task Numbers	Common Career Technical Core Standards	Pennsylvania Core Standards for Reading for Technical Subjects Standard 3.5	Pennsylvania Core Standards for Writing for Technical Subjects Standard 3.6	Pennsylvania Core Standards for Mathematics Standard 2.1
801 Reserve. 802 Reserve. 803 Reserve.				

900 Computer Maintenance/Troubleshooting

Secondary Competency Task Grid with Unit and Task Numbers	Common Career Technical Core Standards	Pennsylvania Core Standards for Reading for Technical Subjects Standard 3.5	Pennsylvania Core Standards for Writing for Technical Subjects Standard 3.6	Pennsylvania Core Standards for Mathematics Standard 2.1
<p>901 Apply the troubleshooting theory.</p> <p>902 Analyze and correct common hardware problems and performance issues.</p> <p>903 Analyze and correct common software problems and performance issues.</p> <p>904 Integrate common preventative maintenance techniques.</p> <p>905 Analyze and correct basic network problems and performance issues.</p>	<p>Refer to the end of this document for an explanation of the following standards and sample indicators:</p> <p><u>STANDARDS:</u> INFORMATION TECHNOLOGY IT 02 IT 07 IT 08 IT 11 IT 12</p> <p>NETWORK SYSTEMS IT-NET 1 IT-NET 02 IT-NET 03 IT-NET 04</p> <p>INFORMATION SUPPORT SERVICES IT-SUP 01 IT-SUP 02 IT-SUP 03 IT-SUP 04 IT-SUP 05 IT-SUP 06 IT-SUP 07 IT-SUP 08 IT-SUP 09 IT-SUP 10</p>	<p>KEY IDEAS/DETAILS</p> <p>GRADES 9-10 Standard PCS.3.5.9-10.A Standard PCS.3.5.9-10.B Standard PCS.3.5.9-10.C</p> <p>GRADES 11-12 Standard PCS.3.5.11-12.A Standard PCS.3.5.11-12.B Standard PCS.3.5.11-12.C</p> <p>CRAFT AND STRUCTURE</p> <p>GRADES 9-10 Standard PCS.3.5.9-10.D Standard PCS.3.5.9-10.E Standard PCS.3.5.9-10.F</p> <p>GRADES 11-12 Standard PCS.3.5.11-12.D Standard PCS.3.5.11-12.E Standard PCS.3.5.11-12.F</p> <p>INTEGRATE KNOWLEDGE/ IDEAS</p> <p>GRADES 9-10 Standard PCS.3.5.9-10.G Standard PCS.3.5.9-10.H Standard PCS.3.5.9-10.I</p> <p>GRADES 9-12 Standard PCS.3.5.11-12.G Standard PCS.3.5.11-12.H Standard PCS.3.5.11-12.I</p>	<p>TEXT TYPES/ PURPOSE</p> <p>GRADES 9-10 Standard PCS.3.6.9-10.A Standard PCS.3.6.9-10.B</p> <p>GRADES 11-12 Standard PCS.3.6.11-12.A Standard PCS.3.6.11-12.B</p> <p>PRODUCTION AND DISTRIBUTION OF WRITING</p> <p>GRADES 9-10 Standard PCS.3.6.9-10.C Standard PCS.3.6.9-10 D Standard PCS.3.6.9-10.E</p> <p>GRADES 11-12 Standard PCS.3.6.11-12 C Standard.PCS.3.6.11-12.D Standard PCS.3.6.11- 12 E</p> <p>RESEARCH</p> <p>GRADES 9-10 Standard PCS.3.6.9-10.F Standard PCS.3.6.9-10.G Standard PCS.3.6.9-10.H</p> <p>GRADES 11-12 Standard PCS.3.6.11-12.F Standard PCS.3.6.11-12.G Standard PCS.3.6.11-12.H</p> <p>RANGE OF WRITING</p> <p>GRADES 9-10 Standard PCS.3.5.9-10.I</p> <p>GRADES 11-12 Standard CC.3.5.11-12.I</p>	<p>NUMBERS AND OPERATIONS Standard PCS.2.1.HS.F.1 Standard PCS.2.1.HS.F.2 Standard PCS.2.1.HS.F.3 Standard PCS.2.1.HS.F.4 Standard PCS.2.1.HS.F.5 Standard PCS.2.1.HS.F.6 Standard PCS.2.1.HS.F.7</p>