

# PA State Education Standards

## Business, Computer and Information Technology

| Description   | Number         |
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| <b>Business, Computer and Information Technology</b>  | <b>15</b>      |
| <b>Accounting</b>   | <b>15.1</b>    |
| <b>GRADES 9 - 12</b>  | <b>15.1.12</b> |
| Summarize professional designations, careers, and organizations within the field of accounting, including education and certification requirements.   | 15.1.12.A      |
| Analyze the roles of policy-setting bodies in the accounting profession, e.g., American Institute of Certified Public Accountants (AICPA), Pennsylvania Institute of Certified Public Accountants (PICPA), Generally Accepted Accounting Principles (GAAP), and Securities and Exchange Commission (SEC). | 15.1.12.B      |
| Analyze business transactions using T-accounts to determine their impact on a business.   | 15.1.12.C      |
| Analyze, journalize, and post transactions to general & subsidiary ledgers.   | 15.1.12.D      |
| Perform accounting functions using technology as a tool.  | 15.1.12.E      |
| Analyze and journalize transactions for short- and long-term assets.  | 15.1.12.F      |
| Analyze and journalize transactions involving short- and long-term liabilities.   | 15.1.12.G      |
| Identify, calculate, and record depreciation, depletion and amortization; explain their effect on the financial statements.   | 15.1.12.H      |
| Differentiate between and journalize entries for issuance or repurchase of stock and the declaration and payment of dividends.  | 15.1.12.I      |
| Analyze the various methods for maintaining and valuing inventory (FIFO, LIFO, etc.) and describe their effect on financial statements.   | 15.1.12.J      |
| Describe, calculate, and journalize the sales and cost of sales including purchases, transportation costs, sales taxes, and trade discounts.  | 15.1.12.K      |
| Describe and explain the criteria used to determine expenses and journalize the expense transactions.   | 15.1.12.L      |
| Analyze and calculate gross pay and net pay, including regular and overtime wages, commission, and piece rate.  | 15.1.12.M      |
| Explain how the different forms of business ownership and business operations are reported on financial statements.   | 15.1.12.N      |
| Compare and contrast the accrual basis and the cash basis of accounting; assess the impact of each on the financial statements.   | 15.1.12.O      |
| Analyze and perform the reconciliation of accounts.   | 15.1.12.P      |
| Prepare financial statements (including a Balance Sheet, Profit & Loss and Owner's Equity) and understand their relevance.  | 15.1.12.Q      |
| Explain the primary areas of analysis (trend analysis, profitability, liquidity, capital structure) and the information that can be obtained from each.   | 15.1.12.R      |
| Analyze and perform a horizontal and vertical analysis of the income statement and balance sheet.   | 15.1.12.S      |
| Assess profitability, liquidity, and solvency by calculating and interpreting financial ratios.   | 15.1.12.T      |
| Assess capital structure by calculating and interpreting financial ratios.  | 15.1.12.U      |
| Analyze and explain the use of industry averages in assessing the financial condition, operating results, profitability, liquidity, and capital structure.  | 15.1.12.V      |
| Analyze business activities using cash flow statements.   | 15.1.12.W      |
| Analyze and perform breakeven and cost benefit analyses to support financial decisions.   | 15.1.12.X      |
| Determine and calculate taxable income and tax liability for both personal and business taxes.  | 15.1.12.Y      |
| Demonstrate an auditing procedure that provides assurance that financial records are accurate.  | 15.1.12.Z      |
| <b>Career Management</b>  | <b>15.2</b>    |
| <b>GRADES 9 - 12</b>  | <b>15.2.12</b> |
| Analyze personal characteristics, talents, skills, abilities and career assessment results as related to career pathways, clusters, or occupations. Reference Career Education and Work 13.1.11.A - B   | 15.2.12.A      |
| Analyze a specific occupation within a career cluster.  | 15.2.12.B      |

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| Analyze and compare global employment opportunities relative to career interests, including but not limited to, the country's culture, legitimacy of a global business, prospective employers, and social network/virtual identity.         | 15.2.12.C      |
| Analyze job tasks and responsibilities when working in a virtual versus a traditional work environment.   | 15.2.12.D      |
| Compare and contrast career interests with post-secondary opportunities. Reference Career Education and Work 13.1.12.D  | 15.2.12.E      |
| Evaluate various methods for financing a post-secondary education.  | 15.2.12.F      |
| Analyze and complete an application (e.g., job, scholarship, financial aid, post-secondary) in a focused and effective manner.  | 15.2.12.G      |
| Demonstrate appropriate behavior for an interview.  | 15.2.12.H      |
| Compare and contrast employment laws including, but not limited to, American with Disabilities Act (ADA), Child Labor Laws, Civil Rights Act of 1964, Consolidated Omnibus Reconciliation Act (COBRA), and Family Medical Leave Act (FMLA). | 15.2.12.I      |
| Analyze career goals based on, but not limited to, interest, lifestyle, skills, and values in order to transition from high school. Reference Career Education and Work 13.1.11.G, 13.1.11.H  | 15.2.12.J      |
| Apply networking skills as a resource for further career portfolio development and career opportunities.  | 15.2.12.K      |
| Analyze how personal qualities and behavior apply in the workplace.   | 15.2.12.L      |
| Evaluate the impact of workplace expectations on job performance. Reference Career Education and Work 13.3.12.A - B   | 15.2.12.M      |
| Reference Business, Computer and Information Technology 15.3.12.X   | 15.2.12.N      |
| Formulate and demonstrate strategies for working with diverse populations.  | 15.2.12.O      |
| Evaluate conflicts within the workplace and demonstrate procedures to acquire a positive resolution. Reference Career Education and Work 13.3.12.C  | 15.2.12.P      |
| Evaluate the impact of change, work/life balance, and lifelong learning on one's life. Reference Career Education and Work 13.3.12.F  | 15.2.12.Q      |
| <b>Communication</b>  | <b>15.3</b>    |
| <b>GRADES 9 - 12</b>  | <b>15.3.12</b> |
| Evaluate work product and make recommendations based on content. Reference English Language Arts CC.1.4.11-12.T   | 15.3.12.A      |
| Analyze business documents for content and effectiveness.   | 15.3.12.B      |
| Create a research project based upon defined parameters. Reference English Language Arts CC.1.4.11-12.V   | 15.3.12.C      |
| Evaluate business materials (including web based resources) for value related to purpose, quality, and appropriateness.   | 15.3.12.D      |
| Evaluate chosen print and electronic resources for advanced research. Reference English Language Arts CC.1.4.11-12.U  | 15.3.12.E      |
| Evaluate a speaker's reasoning and intent; ask questions to deepen understanding. (individual, team, employment, and business). Reference English Language Arts CC.1.5.11-12.G, CC.1.5.11-12.C  | 15.3.12.F      |
| Employ appropriate presentation skills to lead discussions and team activities. Reference English Language Arts CC.1.5.11-12.A  | 15.3.12.G      |
| Evaluate presentations for language, proper techniques and media choices. Reference English Language Arts CC.1.5.11-12.C, CC.1.11-12.E  | 15.3.12.H      |
| Synthesize information gathered from multiple sources (e.g., digital, print, face to face).   | 15.3.12.I      |
| Apply strategies to overcome barriers to active listening.  | 15.3.12.J      |
| Apply cultural mores to evaluate intent of verbal and non-verbal behaviors.   | 15.3.12.K      |
| Evaluate characteristics of positive role models and their contribution to the development of a professional image.   | 15.3.12.L      |
| Critique etiquette skills for building and maintaining a professional image.  | 15.3.12.M      |
| Demonstrate appropriate work ethic in the workplace, community, and classroom.  | 15.3.12.N      |
| Identify the diverse communication skills necessary within an organization (e.g., customer relations, sales, management).   | 15.3.12.O      |
| Demonstrate leadership communication skills through delegating, negotiating, goal setting, and generating ideas.  | 15.3.12.P      |
| Analyze communication channels and their effectiveness within the corporate culture.  | 15.3.12.Q      |

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| Evaluate best practices of communication based on culture, practice, and laws related to supervising others in a corporate entity.  | 15.3.12.R      |
| Evaluate electronic communication options based on need.  | 15.3.12.S      |
| Demonstrate application of digital citizenship in work and personal situations. Reference Business, Computer and Information Technologies 15.4.12.B                                 | 15.3.12.T      |
| Critique the effectiveness of various electronic communication options related to desired outcomes.   | 15.3.12.U      |
| Evaluate how mobile communication impacts businesses or organizations.  | 15.3.12.V      |
| Collaborate via electronic communication with peers, educators, and/or professionals to meet organizational goals.  | 15.3.12.W      |
| Identify the diversity within a work group and the strategies for effective communication.  | 15.3.12.X      |
| <b>Computer and Information Technologies</b>  | <b>15.4</b>    |
| <b>GRADES 9 - 12</b>  | <b>15.4.12</b> |
| Apply the creative and productive use of emerging technologies for educational and personal success.  | 15.4.12.A      |
| Evaluate the impact of social, legal, ethical, and safe behaviors on digital citizenship.   | 15.4.12.B      |
| Develop criteria for analyzing hardware options to meet defined needs.  | 15.4.12.C      |
| Evaluate emerging input technologies.   | 15.4.12.D      |
| Analyze the different operating systems and recommend the appropriate system for specific user needs.   | 15.4.12.E      |
| Compare and contrast network environments, including the function of network devices and connectivity issues.   | 15.4.12.F      |
| Create an advanced digital project using sophisticated design and appropriate software/applications.  | 15.4.12.G      |
| Use programming languages to develop logical thinking and problem solving skills.   | 15.4.12.H      |
| Compare and contrast programming languages; select most appropriate one to complete a specific task.  | 15.4.12.I      |
| Create a complex computer program to solve a problem.   | 15.4.12.J      |
| Evaluate advanced multimedia work products and make recommendations based on the evaluation.  | 15.4.12.K      |
| Find and use primary documentation; employ an accepted protocol for citation  | 15.4.12.L      |
| Evaluate the impact of emerging technologies on various career paths and provide examples of industry certifications within the field.  | 15.4.12.M      |
| <b>Entrepreneurship</b>   | <b>15.5</b>    |
| <b>GRADES 9 - 12</b>  | <b>15.5.12</b> |
| Analyze personal choices in preparation for entrepreneurship.   | 15.5.12.A      |
| Evaluate personal management and organizational abilities to succeed in entrepreneurship. Reference Career Education and Work 13.4.12 A - B   | 15.5.12.B      |
| Analyze the impact of entrepreneurship in the domestic economy.   | 15.5.12.C      |
| Create a business plan using appropriate data to support the business concept.  | 15.5.12.D      |
| Evaluate legal forms of business entities when considering entrepreneurship (e.g., existing business, franchise, new business, corporation, LLC, partnership, sole proprietorship). | 15.5.12.E      |
| Research the opportunities for local entrepreneurship in the global economy and discuss the impact of government regulations.   | 15.5.12.F      |
| Analyze factors affecting global pricing including international currency fluctuations, tariffs, price controls, and anti-dumping laws.   | 15.5.12.G      |
| Assess advantages and disadvantages for entrepreneurial business in foreign markets; including language and trade barriers, marketing, and regulations.                             | 15.5.12.H      |
| Evaluate the functions of operations management as influenced by the business parameters.   | 15.5.12.I      |
| Evaluate strategies for incorporating emerging technologies into specific business operations.  | 15.5.12.J      |
| Analyze issues and cases associated with government regulation.   | 15.5.12.K      |
| Analyze an innovation/ business concept and develop a comprehensive business plan. Reference Career Education and Work 13.4.12 A - B  | 15.5.12.L      |
| Analyze funding sources for an entrepreneurship including, IPO, venture capital, loans, and owner capital.  | 15.5.12.M      |
| <b>Finance and Economics</b>  | <b>15.6</b>    |
| <b>GRADES 9 - 12</b>  | <b>15.6.12</b> |
| Evaluate the impact of internal and external influences on financial decisions.   | 15.6.12.A      |

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| Analyze financial decisions for major purchasing events occurring at different stages in life, systematically considering alternatives and consequences.  | 15.6.12.B      |
| Reference Career Education and Work 13.3.11.D   | 15.6.12.C      |
| Develop criteria to evaluate employment options.  | 15.6.12.D      |
| Assess the purpose, source, and impact of various taxes.  | 15.6.12.E      |
| Evaluate criteria for personal spending in relation to the economic climate.  | 15.6.12.F      |
| Identify strategies for personal financial management.  | 15.6.12.G      |
| Evaluate payment methods for major purchases.   | 15.6.12.H      |
| Analyze the functions of the Federal Reserve and other financial institutions.  | 15.6.12.I      |
| Analyze the total cost of a major purchase loan agreement using fixed and variable interest rates, calculated over time.  | 15.6.12.J      |
| Analyze the impact of a positive or negative credit history.  | 15.6.12.K      |
| Research major consumer credit laws and their impact on individuals in debt.  | 15.6.12.L      |
| Assess the impact of identity theft; develop a plan for correcting a negative credit report.  | 15.6.12.M      |
| Compare and contrast various suppliers of insurance products and develop criteria to evaluate individual insurance needs.   | 15.6.12.N      |
| Develop criteria for a disaster management plan that includes provisions for secure storage of digital and paper documents, inventory of household items, cash reserves, and medical records.     | 15.6.12.O      |
| Develop financial investment plans to accommodate various economic and personal scenarios.  | 15.6.12.P      |
| Apply the "Rule of 72" to estimate the number of periods required to double an investment.  | 15.6.12.Q      |
| Compare and contrast various investment plans to achieve goals of liquidity, income, and growth.  | 15.6.12.R      |
| Analyze the role of government in investment planning and retirement planning.  | 15.6.12.S      |
| <b>Global Business</b>  | <b>15.7</b>    |
| <b>GRADES 9 - 12</b>  | <b>15.7.12</b> |
| Assess the impact of political and economic changes on global business.   | 15.7.12.A      |
| Evaluate logistical considerations of operating an international business (e.g., integration of information, transportation, inventory, warehousing, material handling, packaging, and security). | 15.7.12.B      |
| Examine business protocol of several countries as related to social customs, business customs, and political environment.   | 15.7.12.C      |
| Analyze how political environments affect international business.   | 15.7.12.D      |
| Examine the legal requirements (foreign and domestic) of operating a business.  | 15.7.12.E      |
| Examine economic issues in a country that engages in international business activities.   | 15.7.12.F      |
| Analyze global businesses and the impact on the countries where they operate.   | 15.7.12.G      |
| Analyze the effect of efficiencies in natural and human resources as it relates to global business relationships.   | 15.7.12.H      |
| Identify and examine effective global business communications strategies.   | 15.7.12.I      |
| Compare and contrast various nonverbal behaviors and their impact on business in a global environment.  | 15.7.12.J      |
| Analyze how economic and environmental factors may conflict; explain how responsible behavior can help sustain natural and human communities at local, regional, national, and global levels.     | 15.7.12.K      |
| Identify worldviews and their impact on global business.  | 15.7.12.L      |
| Identify strategies employed to promote global business opportunities.  | 15.7.12.M      |
| Identify business strategies related to international marketing.  | 15.7.12.N      |
| Reference Economics 6.3.9.D, 6.3.12.D, 6.4.9.B, 6.4.9.C., 6.4.12 B, 6.4.12.C, 6.4.12.D  | 15.7.12.O      |
| <b>Management</b>   | <b>15.8</b>    |
| <b>GRADES 9 - 12</b>  | <b>15.8.12</b> |
| Predict and chart trends that show how future economic growth/decline impacts business.   | 15.8.12.A      |
| Analyze the costs and benefits of organizing a business as a sole proprietorship, partnership, or corporation.  | 15.8.12.B      |
| Critique major social and ethical decisions made by business and organizations throughout history. Reference Economics 6.5.12.C   | 15.8.12.C      |
| Analyze the effectiveness of a business plan for setting and achieving objectives. Reference Career Education and Work 13.4.11.C  | 15.8.12.D      |
| Evaluate how businesses are organized to achieve desired goals.   | 15.8.12.E      |

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| Critique business strategies designed to balance the needs of the business with the work force.  | 15.8.12.F      |
| Analyze leadership skills necessary for leading at various management levels.  | 15.8.12.G      |
| Analyze motivational theories and their application in a business or organization.   | 15.8.12.H      |
| Analyze and select appropriate managerial communication skills based upon context. Reference Economics 6.5.9.D; Health, Safety, and Physical Education 10.3.9.C; Career Education and Work 13.3.11.C; Student Interpersonal Skills SIS 2.D | 15.8.12.I      |
| Analyze the use and purpose of various technology tools used by management.  | 15.8.12.J      |
| Design a career plan that incorporates personal interests, education, and societal trends, as related to lifelong learning in the changing global environment.   | 15.8.12.K      |
| Explain the purpose and activities of a human resource department in a business or organization.   | 15.8.12.L      |
| Evaluate selection criteria for a position in a business or organization.  | 15.8.12.M      |
| Analyze existing federal, state and local legislation (such as harassment, employee rights, privacy, discrimination, substance abuse) as related to recruitment, selection, retention of employees within a business or organization.      | 15.8.12.N      |
| Explain the collective bargaining process and its impact on the legal requirements of management.  | 15.8.12.O      |
| Design appropriate orientation, training, and evaluation activities to meet established skill development requirements.  | 15.8.12.P      |
| Assess compensation, benefit plans, incentive packages, and possible career paths in businesses.   | 15.8.12.Q      |
| Compare a firm's financial position against industry standards. Reference Business, Computer and Information Technology 15.1.12.W  | 15.8.12.R      |
| Compare and contrast the processes used for the design, redesign, supply, and/or production of a current industry product.   | 15.8.12.S      |
| Analyze the impact of different management strategies used by global businesses. Reference Business, Computer and Information Technology 15.7.12.L   | 15.8.12.T      |
| <b>Marketing</b>   | <b>15.9</b>    |
| <b>GRADES 9 - 12</b>   | <b>15.9.12</b> |
| Analyze and summarize professional designations, careers, and organizations within the field of marketing, including the educational and certification requirements for each.  | 15.9.12.A      |
| Analyze how marketing influences today's households, businesses, and society; including but not limited to business-to-consumer, business-to-business, and consumer-to-consumer.   | 15.9.12.B      |
| Evaluate the influence of members of a marketing channel, including company, intermediaries, retailer, and consumer.   | 15.9.12.C      |
| Reference Business, Computer and Information Technologies 15.3.12.D  | 15.9.12.D      |
| Research and analyze consumer behavior patterns and the effect of those patterns on business and the economy.  | 15.9.12.E      |
| Evaluate processes needed to obtain, develop, maintain, and improve products or services; including product development, packaging, branding, product mix, product life cycle, and product positioning.                                    | 15.9.12.F      |
| Assess the distribution process of various companies and industries.   | 15.9.12.G      |
| Evaluate the impacts of various pricing strategies on the consumer and businesses at the local, domestic, and global level; including penetration, skimming, supply/demand, and exchange rates.  | 15.9.12.H      |
| Design a comprehensive promotion plan for a product or service.  | 15.9.12.I      |
| Analyze data collection methods when entering into or expanding a market.  | 15.9.12.J      |
| Create a comprehensive marketing plan.   | 15.9.12.K      |
| Analyze the costs and benefits of using technology in marketing to gain a competitive advantage.   | 15.9.12.L      |
| Evaluate laws and regulations impacting marketing.   | 15.9.12.M      |