



Program of Study Guide: **Financial Services & Accounting**

Comprehensive guidelines and course standards for the
Financial Services & Accounting pathway

Office of College and Career Pathways

August 2025

MARYLAND STATE DEPARTMENT OF EDUCATION

Carey M. Wright, Ed.D.

State Superintendent of Schools

Tenette Smith, Ed.D.

Deputy State Superintendent
Office of Teaching and Leading

Richard W. Kincaid

Assistant State Superintendent
Division of College and Career Pathways

Wes Moore

Governor

MARYLAND STATE BOARD OF EDUCATION

Joshua L. Michael, Ph.D.

President, Maryland State Board of Education

Monica Goldson, Ed.D. (Vice President)

O'Marie Barnes (Student Member)

James C. Bell, Jr., Ed.D.

Chuen-Chin Bianca Chang, MSN, PNP, RN-BC

Alverne "Chet" Chesterfield

Kenny Clash

Nick Greer

Dr. Irma E. Johnson

Kim Lewis, Ed.D.

Rachel L. McCusker

Xiomara V. Medina, M.Ed.

Samir Paul, Esq.

Table of Contents

Document Control Information.....	3
Purpose.....	4
Standards Sources.....	5
Course Descriptions.....	7
Industry-Recognized Credentials and Career-Connected Learning	9
Labor Market Information: Definitions and Data	11
Course Standards: Financial Services and Accounting I	13
Course Standards: Financial Services and Accounting II.....	17
Course Standards: Financial Services and Accounting III.....	20

Document Control Information

Title:	Program of Study Guide: Financial Services and Accounting
Security Level:	Not for Distribution
File Name:	Financial Services and Accounting Guide.docx

DOCUMENT HISTORY

Document Version	Date	Summary of Change
1.0	November 2024	Initial Document
2.0	January 2025	Revisions
3.0	March 2025	Revisions
4.0	May 2025	Revisions
5.0	June 2025	Revisions
6.0	August 2025	Revisions

Purpose

The purpose of this document is to communicate the required Career and Technical Education (CTE) academic standards for the Financial Services & Accounting Program of Study. The academic standards in this document are theoretical and performance based. The standards contain content from multiple state departments of education, industry related resources and have been reviewed and vetted by members of the Maryland business and industry community.

In addition to academic standards, the Maryland State Department of Education (MSDE) has incorporated into this document Labor Market Information (LMI) definitions and explanations for the Program of Study; program aligned Industry Recognized Credentials; and Work-Based Learning resources and requirements by course level.

Standards Sources

The following sources collectively support a progression of standards from foundational to advanced Finance concepts in a high school context, preparing students for industry-aligned certifications like Excel Specialist and Excel Expert and providing them with the necessary knowledge and skills for career readiness in Financial Services fields.

Here are the key sources for Financial Services & Accounting standards:

1. **Advance CTE: Financial Services Career Cluster**
 - A. **Description:** Provides overarching knowledge and skill statements for careers managing and advising financial transactions, emphasizing economic stability and growth.
 - B. **Use:** Served as the foundational industry framework—outlining the broad career cluster focus, key competencies, and essential functions that guided the scope of each course.
 - C. **Source:** Visit the Advance CTE website at <https://careertech.org/finance> to explore Career Clusters and related resources.
2. **Certified Financial Planning (CFP)**
 - A. **Description:** Outlines the knowledge topics, ethical standards, and financial planning competencies required for CFP® certification, based on CFP Board's Practice Analysis study.
 - B. **Use:** Informs the curriculum framework for all courses, ensuring alignment with the financial planning process, risk management, investment planning, tax planning, retirement savings, estate planning, and the psychology of financial planning.
 - C. **Source:** Overview of organization and objectives for exam can be found at cfp.net.
3. **Microsoft Official Curriculum & Exam Objectives for Excel Expert 365/2019**
 - A. **Description:** Outlines the advanced Excel skills (e.g., complex formulas, PivotTables, data analysis features) required for the Excel Expert 365/2019 industry certification.
 - B. **Use:** Informed the specific spreadsheet competencies—particularly in Course II—that students must master to achieve expert-level proficiency in Excel.
 - C. **Source:** Access exam objectives and official curriculum information at <https://learn.microsoft.com/en-us/certifications/>.
4. **Intuit QuickBooks Certified User Domain Objectives**
 - A. **Description:** Details the skills and knowledge areas (e.g., company file setup, payroll, advanced reporting) evaluated in the QuickBooks Certified User exam.
 - B. **Use:** Shaped the accounting software standards in Course III, ensuring alignment with recognized proficiencies in managing business finances using QuickBooks.
 - C. **Source:** Overview and certification prep materials available through Certiport at https://www.certiport.com/portal/desktopdefault.aspx?page=common/pagelibrary/quickbooks_certification.html.

5. **Bloomberg Market Concepts (BMC)**

- A. **Description:** An e-learning course that introduces students to key concepts in Equities, Fixed Income, Currencies, and Economics, using real-world market data.
- B. **Use:** Guided the capital markets and economic analysis components in Course IV, ensuring students gain practical exposure to industry-standard tools and insights.
- C. **Source:** Program information and e-learning modules found at <https://www.bloomberg.com/professional/product/bloomberg-market-concepts/>.

Course Descriptions

Course Level	Course Information	Description
Required Core: Course 1	Financial Services and Accounting I SCED: Pending Grades: 9-12 Prerequisite: None Credit: 1	This introductory course lays the foundation for understanding the financial services industry and fundamental accounting practices. Students explore the roles of banking, lending, insurance, and real estate, learning how each sector contributes to economic stability.
Required Core: Course 2	Financial Services and Accounting II SCED: Pending Grades: 10-12 Prerequisite: Financial Services and Accounting Credit: 1	Building on the foundational concepts from Course I, this class deepens students' accounting knowledge and focuses on advanced spreadsheet skills. Students refine their use of Excel, progressing toward expert-level functions, data analysis, and pivot tables, in preparation for the Microsoft Excel Expert 365/2019 certification.
Optional Flex: Course 1:	Financial Services and Accounting III SCED: Pending Grades: 11-12 Prerequisite: Financial Services and Accounting II Credit: 1	In this advanced-level course, students further their accounting expertise and become proficient in popular accounting software to prepare for the QuickBooks Certified User exam. They learn to manage company files, process payroll, and produce financial reports that guide strategic decisions.
Optional Flex: Course 2	Career Connected Learning I SCED: Pending Grades: 11-12 Prerequisite: See Course Description Credits: 1-3	<u>Prerequisites:</u> - Alignment to the student's 6-Year Plan - Completion of: - Minimum two sequential courses in a CTE pathway, OR - Minimum two years of the same world language; OR - Minimum two sequential courses in a comprehensive arts program; OR - Inclusion in the IEP/504 transition plan with supporting documentation (as required) - Endorsement from an educator, mentor, employer, or career coach

		4. No more than one course recovery credit in core subjects is needed by the student. This flexible, work-based learning course introduces students to real-world applications of classroom knowledge and technical skills through on-the-job experiences and reflective practices. Students engage in career exploration, skill development, and professional networking by participating in youth apprenticeships, registered apprenticeships, pre-apprenticeships, internships, capstone projects, or other approved career-connected opportunities. Variable credit (1–3) accommodates the required on-the-job training hours and related instruction. By integrating industry standards, employability skills, and personalized learning goals, Career Connected Learning I equips students to make informed career decisions, develop a professional portfolio, and build a strong foundation for success in postsecondary education, training, or the workforce.
Optional Flex: Course 3	Career Connected Learning II SCED: Pending Grades: 11-12 Prerequisite: Career Connected Learning I Credits: 1-3	Building on advanced accounting, reporting, and risk management strategies, this course trains students to create and analyze financial reports using industry-standard software such as QuickBooks. Learners produce critical financial statements, calculate and interpret financial ratios, and apply Generally Accepted Accounting Principles (GAAP) to assess business health and risk factors. Through hands-on projects, students develop automated reporting systems and integrate QuickBooks with Excel to streamline financial processes.

Industry-Recognized Credentials and Career-Connected Learning

The *Blueprint for Maryland's Future* and the High School Level of a Registered Apprenticeship

The Maryland State Department of Education recognizes the high-school level of a Registered Apprenticeship (RA), defined as a State-approved Registered Apprenticeship begun during high school in which students complete at least 144 hours of related technical instruction and 250 hours of paid on-the-job training before graduation, with the remaining required apprenticeship hours completed post-graduation, as the gold standard of Career Connected Learning.

The CTE Committee of the Governor's Workforce Development Board, in alignment with federal apprenticeship standards, requires 144 hours of RTI for all high school RA participants, and the Apprenticeship Maryland Program (AMP) defines the minimum RTI as **one course credit equivalent**. This high-school-level Registered Apprenticeship is the preferred career-connected learning option for students to meet the Blueprint's goal that 45% of public high school graduates complete either the high-school level of a Registered Apprenticeship or another industry-recognized credential.

To the extent practicable, the greatest number of students should achieve this goal through participation in a high-school level Registered Apprenticeship, with schools ensuring these requirements are scheduled, completed, and documented for transcript and reporting purposes.

To the extent practicable, the greatest number of students should achieve this goal through the high-school level of a Registered Apprenticeship.

Career-Connected Learning Resources		
Course 1: Career Awareness	Course 2: Career Preparation	Flex Courses: Career-Connected Learning
- Industry Visits - Guest Speakers - Participation in Career and Technical Student Organizations - Postsecondary Visits – Program Specific Site Tours - Mock Interviews	- All of Career Awareness plus the following: - Job Shadow - Employer Mentoring	- Registered Apprenticeship - Internship - School-Based Enterprise - Employer-Directed Capstone

Industry-Recognized Credentials – The standards in this document are aligned to the following certifications:

By the end of Financial and Accounting Services I: Excel Expert 365/2019 (Not on the IRC List)

Optional Credentials (via the Flex Course options): QuickBooks Certified User

Labor Market Information: Definitions and Data

Labor market information (LMI) plays a crucial role in shaping Career and Technical Education (CTE) programs by providing insights into industry demands, employment trends, and skills gaps. This data helps education leaders assess the viability of existing programs and identify opportunities for new offerings. By aligning CTE programs with real-time labor market needs, schools can better prepare students for in-demand careers and ensure that resources are effectively utilized to support pathways that lead to high-quality, sustainable employment.

Standard Occupational Code (SOC) and Aligned Industry:

Indicator	Definition	Pathway Labor Market Data
High Wage¹	Those occupations that have a 25th percentile wage equal to or greater than the most recent MIT Living Wage Index for one adult in the state of Maryland, and/or leads to a position that pays at least the median hourly or annual wage for the DC-VA-MD-WV Metropolitan Statistical Area (MSA). <i>Note: A 25th percentile hourly wage of \$24.74 or greater is required to meet this definition.</i>	Standard Occupational Code(s): 11-3031: Financial Managers 13-2011: Accountants and Auditors 13-2052: Personal Financial Advisors Hourly Wage/Annual Salary: 25 th Percentile: \$41.46 / \$86,230 50 th Percentile: \$55.94 / \$116,357 75 th Percentile: \$73.87 / \$153,650
High Skill	Those occupations located within the DC-VA-MD-WV Metropolitan Statistical Area (MSA) with the following education or training requirements: completion of an apprenticeship program; completion of an industry-recognized certification or credential; associate's degree, bachelor's degree, or higher.	Typical Entry-Level Education: Most positions in the Financial Services industry require a related bachelor's degree or equivalent amount of work based experience.
In-Demand	Annual growth plus replacement, across all Maryland occupations, is <u>405</u> openings between 2024-2029.	Annual Openings 4,636

Lightcast Data Updated August 2025

¹ Living Wage Calculator: <https://livingwage.mit.edu/states/24>

Labor Market Information Data Source

Lightcast occupation employment data are based on final Lightcast industry data and final Lightcast staffing patterns. Wage estimates are based on Occupational Employment Statistics (QCEW and Non-QCEW Employees classes of worker) and the American Community Survey (Self-Employed and Extended Proprietors). Occupational wage estimates are also affected by county-level Lightcast earnings by industry. Foundational data for the state of Maryland is collected and reported by the Maryland Department of Labor.

Methodology for High Wage Calculations

To combine labor market data across multiple Standard Occupational Classifications (SOCs), a weighted average approach was used to ensure accurate representation of the marketplace. Median wages for each SOC were weighted based on their respective employment levels, reflecting the relative demand for each occupation. This method ensures that occupations with higher employment contribute proportionately to the overall wage calculation. Additionally, job openings from all relevant SOCs were summed to determine the total projected demand. For example, if Mechanical Engineers account for 67% of total employment and Electrical Engineers for 33%, their respective wages are weighted accordingly, and job openings are aggregated to provide a comprehensive view of labor market opportunities. This approach delivers a balanced and accurate representation of both wages and employment demand for the program.

Methodology for In-Demand Calculations

The baseline for annual job openings, taking into account new positions and replacement positions, was determined by taking the average of all annual job openings between 2024 and 2029 across all 797 career sectors at the 5-digit SOC code level. For the 2024-2029 period, average job openings (growth + replacement) is 405.

Course Standards: Financial Services and Accounting I

1. GENERAL REQUIREMENTS. This course is recommended for students in Grades 9-12.

2. INTRODUCTION

- A. Career and Technical Education (CTE) instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions.
- B. The Financial Services Career Cluster encompasses careers in managing and advising financial transactions, including banking, lending, corporate finance, debt management, accounting, insurance, and real estate. These careers contribute to economic stability and growth by supporting the financial health of individuals and organizations. This could include careers in accounting, financial services, investments and trading.
- C. The Financial Services and Accounting program offers a robust sequence of courses that integrates core accounting concepts, financial literacy, and advanced data analysis. Students gain a strong foundation in ethical practices and the essential role of finance in supporting economic growth and stability. Progressive skill-building in spreadsheet software, specialized accounting platforms, and capital markets tools equips them for recognized industry certifications. Collaborative projects and real-world simulations encourage critical thinking, effective communication, and professional accountability. With an emphasis on both personal and corporate finance perspectives, the program fosters adaptable, data-driven professionals ready to excel in the financial services sector.
- D. In Financial Services and Accounting I, students develop core accounting skills such as journalizing transactions and preparing basic financial statements. Emphasis is placed on personal finance literacy, including budgeting and credit management, and on acquiring essential digital proficiency with spreadsheet software. By the end of this course, students have a strong grasp of key financial terminology and practices that set the stage for more advanced study.
- E. Students will participate in at least two Career-Connected Education and Work-Based Learning experiences in this course, which might include informational interviews or job shadowing relevant to the program of study.
- F. Students are encouraged to participate in extended learning experiences through aligned Career and Technical Student Organizations (CTSOs). CTSOs are a cocurricular requirement in the Carl D. Perkins Act, and alignment to CTSO activities is an expectation for CTE programs in the state of Maryland.

3. KNOWLEDGE AND SKILLS

- A. The student demonstrates the necessary skills for career development, maintenance of employability, and successful completion of course outcomes. The student is expected to:**
 - 1. Identify and demonstrate positive work behaviors that enhance employability and job advancement, such as regular attendance, promptness, proper attire, maintenance of a professional and ethical work environment, and pride in work.
 - 2. Demonstrate positive personal qualities such as flexibility, open-mindedness, initiative, active listening, and a willingness to learn.
 - 3. Employ effective reading, writing, and technical documentation skills.
 - 4. Solve problems using critical thinking techniques and structured troubleshooting methodologies.

5. Demonstrate leadership skills and collaborate effectively as a team member.
6. Exhibit an understanding of legal and ethical responsibilities of a financial service provider.
7. Demonstrate time-management skills and the ability to prioritize tasks in a technical setting.

B. The student identifies various career pathways in the Financial services and Accounting fields. The student is expected to:

1. Develop a career plan that includes the necessary education, certifications, job skills, and experience for specific in the financial services and accounting field of study.
2. Create a professional resume and portfolio that reflects skills, projects, certifications, and recommendations.
3. Demonstrate effective interview skills for roles in the Finance field.

C. The student develops technology and digital literacy skills. The student is expected to:

1. Gather financial, economic, and market data from online databases.
2. Organize budgets, financial plans, or accounting tasks using spreadsheets and specialized financial software.
3. Leverage cloud-based services (e.g., Google Drive, Microsoft OneDrive) to store and share financial models, credit analyses, and reports.
4. Build robust financial models and perform data analysis using Excel or other spreadsheet tools.
5. Master financial software applications such as QuickBooks for creating financial statements, performing cost analysis, and automating workflows.
6. Employ database management systems for organizing large sets of financial or customer data, including importing CSV files, defining primary/foreign keys, writing summary queries, and exporting the results to Excel for further analysis.

D. The student demonstrates an understanding of the content within this course and the connections to societal, social, and equitable practices. The student is expected to:

1. Analyze how credit scoring systems impact different demographic groups' access to financial opportunities.
2. Evaluate the effectiveness of various banking products in serving diverse community needs.
3. Investigate the role of financial institutions in community development and economic growth.
4. Examine how investment opportunities and barriers differ across socioeconomic groups.
5. Analyze the impact of insurance practices on different demographic communities.
6. Evaluate how communication barriers affect access to advanced financial products.
7. Investigate the relationship between financial literacy and generational wealth building.
8. Analyze how different cultural perspectives influence investment and risk decisions.
9. Examine the role of technology in democratizing investment opportunities.
10. Describe the impact of financial regulations on underserved communities.

E. The student demonstrates essential personal finance knowledge and consumer awareness. The student is expected to:

1. Develop and monitor a simple budget that allocates income to saving, spending, and giving.
2. Identify and compare basic banking products and services (e.g., checking accounts, savings accounts, loans), including features, fees, and interest rates.

3. Examine simple versus compound interest and explain its impact on borrowing, saving, and investing decisions.
4. Explain how credit reports and credit scores are built and outline strategies for maintaining healthy credit.
5. Describe basic debt-management approaches (e.g., understanding minimum payments, payoff strategies) to support responsible borrowing.
6. Analyze discretionary spending choices and cost-of-living tradeoffs, evaluating their impact on debt repayment and progress toward short- and long-term financial goals (e.g., emergency fund).
7. Distinguish responsible spending habits from risky financial behaviors using real-world scenarios (e.g., evaluating budget choices, debt repayment plans).

F. The student integrates core academic skills into Financial Services and Accounting practices. The student is expected to:

1. Demonstrate understanding of basic mathematical and data-analysis techniques (e.g., interest rates, financial ratios, statistical measures) to interpret and solve financial problems.
2. Review written materials (e.g., regulatory texts, technical guides, industry reports) for clarity, accuracy, and applicability in finance and accounting.
3. Produce concise and coherent written communications (e.g., memos, reports, emails) that align with professional standards and effectively convey financial information.
4. Deliver clear and engaging oral presentations or discussions, using appropriate terminology, data visualization, and audience-centric explanations.

G. The student demonstrates foundational knowledge of the financial services and the accounting industry. The student is expected to:

1. Identify and describe the various sectors of the financial services and accounting industry (e.g., banking, lending, insurance, real estate, accounting) and the role each sector plays in supporting economic growth and financial health.
2. Understand fundamentals of U.S. Generally Accepted Accounting Principles (GAAP), Certified Financial Planning Board and other professional standards and regulations.
3. Explain the difference between different types of business entities and identify their applications.
4. Recognize common financial documents (e.g., balance sheets, income statements, cash flow statements) and discuss how these documents inform business decisions.

H. The student demonstrates proficiency in fundamental accounting principles, accounting cycle and financial procedures. The student is expected to:

1. Apply essential accounting vocabulary (e.g., debits, credits, ledger, journal, revenue, expenses) in context.
2. Practice journaling and posting simple financial transactions for a mock or real-world scenario (e.g., a school-based enterprise).
3. Prepare basic financial statements (e.g., income statement, balance sheet) using correct formatting and simple data sets.
4. Discuss the importance of accuracy, timeliness, and ethical standards in recording financial transactions.

I. The student demonstrates introductory proficiency in Microsoft Excel and technology tools relevant to finance. The student is expected to:

1. Create and organize spreadsheets using basic functions (e.g., SUM, AVERAGE, MIN, MAX, COUNT, COUNTA) to manage financial data effectively.
2. Format cells and worksheets (e.g., cell styles, alignment, number formatting, conditional formatting) to clearly present financial information.

3. Develop basic charts and tables (e.g., column charts, pie charts, line charts, bar charts) to visualize data trends and improve comprehension of financial reports.
4. Use file management best practices (e.g., saving, naming conventions, data backup) to maintain secure and organized financial records.
5. Understand different file formats including .xlsx, .csv, xlsb.
6. Apply data validation functions.

J. The student demonstrates introductory collaboration, communication, and professionalism within the financial services and accounting context. The student is expected to:

1. Engage in clear written communication (e.g., emails, memos, summaries) using appropriate financial terminology and formatting standards.
2. Deliver verbal presentations explaining basic accounting or personal finance topics, adapting vocabulary and complexity to the intended audience.
3. Collaborate in team-based scenarios (e.g., group projects, role-play exercises) to solve simple financial challenges or produce standard financial documents.
4. Exhibit professional ethics and confidentiality practices (e.g., maintaining privacy of financial data, respecting intellectual property) in classroom-based simulations.

Course Standards: Financial Services and Accounting II

1. **GENERAL REQUIREMENTS.** This course is recommended for students in Grades 10-12.
2. **INTRODUCTION**
 - A. Career and Technical Education (CTE) instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions.
 - B. The Financial Services Career Cluster encompasses careers in managing and advising financial transactions, including banking, lending, corporate finance, debt management, accounting, insurance, and real estate. These careers contribute to economic stability and growth by supporting the financial health of individuals and organizations. This could include careers in accounting, financial services, investments and trading.
 - C. The Financial Services and Accounting program offers a robust sequence of courses that integrates core accounting concepts, financial literacy, and advanced data analysis. Students gain a strong foundation in ethical practices and the essential role of finance in supporting economic growth and stability. Progressive skill-building in spreadsheet software, specialized accounting platforms, and capital markets tools equips them for recognized industry certifications. Collaborative projects and real-world simulations encourage critical thinking, effective communication, and professional accountability. With an emphasis on both personal and corporate finance perspectives, the program fosters adaptable, data-driven professionals ready to excel in the financial services sector.
 - D. Building on foundational concepts, in this course students explore intermediate accounting topics such as adjusting and closing entries, ratio analysis, and financial statement interpretation. Coursework emphasizes real-world application, challenging students to use Excel for forecasting, budgeting, and financial modeling. By course completion, students not only master advanced Excel skills but also demonstrate a more robust understanding of how accounting data informs decision-making..
 - E. Students will participate in at least two Career-Connected Education and Work-Based Learning experiences in this course, which might include informational interviews or job shadowing relevant to the program of study.
 - F. Students are encouraged to participate in extended learning experiences through aligned Career and Technical Student Organizations (CTSOs). CTSOs are a cocurricular requirement in the Carl D. Perkins Act, and alignment to CTSO activities is an expectation for CTE programs in the state of Maryland.
3. **KNOWLEDGE AND SKILLS**
 - A. **The student demonstrates the necessary skills for career development, maintenance of employability, and successful completion of course outcomes. The student is expected to:**
 1. Identify and demonstrate positive work behaviors that enhance employability and job advancement, such as regular attendance, promptness, proper attire, maintenance of a professional and ethical work environment, and pride in work.
 2. Demonstrate positive personal qualities such as flexibility, open-mindedness, initiative, active listening, and a willingness to learn.
 3. Employ effective reading, writing, and technical documentation skills.
 4. Solve problems using critical thinking techniques and structured troubleshooting methodologies.

5. Demonstrate leadership skills and collaborate effectively as a team member.
6. Exhibit an understanding of legal and ethical responsibilities of a financial service provider.
7. Demonstrate time-management skills and the ability to prioritize tasks in a technical setting.

B. The student identifies various career pathways in the Financial services and accounting field. The student is expected to:

1. Develop a career plan that includes the necessary education, certifications, job skills, and experience for specific in the financial services and accounting field of study.
2. Create a professional resume and portfolio that reflects skills, projects, certifications, and recommendations.
3. Demonstrate effective interview skills for roles in the Finance field.

C. The student develops technology and digital literacy skills. The student is expected to:

1. Gather financial, economic, and market data from online databases.
2. Organize budgets, financial plans, or accounting tasks using spreadsheets and specialized financial software.
3. Leverage cloud-based services (e.g., Google Drive, Microsoft OneDrive) to store and share financial models, credit analyses, and reports.
4. Build robust financial models and perform data analysis using Excel or other spreadsheet tools.
5. Master financial software applications such as QuickBooks for creating financial statements, performing cost analysis, and automating workflows.
6. Employ database management systems for organizing large sets of financial or customer data.

D. The student integrates core academic skills into Financial Services and Accounting practices. The student is expected to:

1. Apply intermediate time value of money concepts and calculate complex financial ratios to analyze business situations.
2. Analyze regulatory texts and financial reports to determine implications for clients.
3. Develop comprehensive financial communications addressing complex client scenarios.
4. Create effective presentations that use data visualization to communicate financial concepts.
5. Apply critical thinking to evaluate alternative solutions to financial planning problems.
6. Demonstrate ethical judgment when presented with conflicting client interests.

E. The student demonstrates advanced Excel skills aligned with the Excel Expert 365/2019 certification. The student is expected to:

1. Develop multi-sheet workbooks with linked data for financial analysis and reporting to include consolidating data from multiple sheets.
2. Utilize functions (e.g., XLOOKUP, VLOOKUP, INDEX/MATCH, IFS) and array formulas to analyze financial data.
3. Develop PivotTables and PivotCharts to summarize, group, and visualize large datasets for improved decision-making in finance including calculated fields and items, slicers for filtering, and grouping data.
4. Automate repetitive tasks using macros/VBA fundamentals, ensuring efficiency and accuracy in financial record-keeping.

F. The student applies accounting knowledge to support financial decision-making. The student is expected to:

1. Reinforce concepts of the accounting cycle (e.g., adjusting and closing entries) by integrating data into advanced Excel spreadsheets.
2. Analyze trial balances and financial statements (e.g. small business, farm, retail store) to identify discrepancies or trends.
3. Interpret financial ratios (e.g., liquidity, profitability, cash flow statement and solvency ratios) within Excel to evaluate an organization's financial health.
4. Prepare reports and data visualizations that illustrate results of financial analysis, including recommendations for corrective action or improvement.
5. Apply cost-volume-profit (break-even) analysis and basic cost-allocation methods to inform managerial decisions such as pricing and product mix.

G. The student applies personal finance and economic understanding for application in financial services and accounting. The student is expected to:

1. Analyze a credit report and identify factors impacting credit score and how to remediate.
2. Examine the broader economic environment—supply and demand, interest rates, inflation—and discuss how each impacts financial services and accounting.
3. Differentiate various consumer credit products (e.g., credit cards, lines of credit, personal loans) and model payment scenarios using Excel's financial functions (e.g., PMT).
4. Explain how risk management and insurance (e.g., property, liability, health) factor into personal and organizational financial decisions.
5. Compare common consumer-banking products (checking, savings, loans) in Excel, evaluating fees, interest costs, and suitability for different client scenarios.
6. Apply Excel-based forecasting tools (e.g., goal seek, scenario manager) to project cash flow needs and develop budgeting strategies.

H. The student demonstrates professional communication, ethical standards, and teamwork within financial services and accounting. The student is expected to:

1. Produce concise and clear financial reports, integrating advanced Excel outputs (e.g., charts, tables) with written analysis suitable for a professional audience.
2. Communicate in team settings (e.g., small groups, simulated workplace) to collaborate on data-driven financial projects, applying active listening and problem-solving techniques.
3. Uphold ethical standards by ensuring data privacy, accuracy, and integrity when handling financial information in spreadsheet environments.
4. Reflect on personal accountability and responsibility, using feedback and self-assessment to improve technical and interpersonal skills in financial contexts.

I. The student integrates certification preparation into coursework to ensure readiness for Excel Expert 365/2019. The student is expected to:

1. Review official Excel Expert 365/2019 exam objectives and map them to classroom assignments and practice exercises.
2. Complete hands-on simulation tasks and practice exams that replicate real-world data analysis scenarios under time constraints.
3. Refine test-taking strategies (e.g., speed, attention to detail, use of keyboard shortcuts) to build confidence for the certification exam.
4. Demonstrate consistent growth in Excel proficiency by tracking performance on progressively challenging financial modeling tasks.

Course Standards: Financial Services and Accounting III

1. **GENERAL REQUIREMENTS.** This course is recommended for students in Grades 11-12.
2. **INTRODUCTION**
 - A. Career and Technical Education (CTE) instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions.
 - B. The Financial Services Career Cluster encompasses careers in managing and advising financial transactions, including banking, lending, corporate finance, debt management, accounting, insurance, and real estate. These careers contribute to economic stability and growth by supporting the financial health of individuals and organizations. This could include careers in accounting, financial services, investments and trading.
 - C. The Financial Services and Accounting program offers a robust sequence of courses that integrates core accounting concepts, financial literacy, and advanced data analysis. Students gain a strong foundation in ethical practices and the essential role of finance in supporting economic growth and stability. Progressive skill-building in spreadsheet software, specialized accounting platforms, and capital markets tools equips them for recognized industry certifications. Collaborative projects and real-world simulations encourage critical thinking, effective communication, and professional accountability. With an emphasis on both personal and corporate finance perspectives, the program fosters adaptable, data-driven professionals ready to excel in the financial services sector.
 - D. In this advanced course, students continue to practice financial analysis and data interpretation, integrating their Excel skills for deep dives into performance metrics. Through case studies and simulations, they gain hands-on experience managing complex accounting scenarios, ensuring they are ready to earn an industry-recognized QuickBooks certification. Topics include cost-volume-profit analysis, budgeting, and an introduction to internal controls.
 - E. Students will participate in at least two Career-Connected Education and Work-Based Learning experiences in this course, which might include informational interviews or job shadowing relevant to the program of study.
 - F. Students are encouraged to participate in extended learning experiences through aligned Career and Technical Student Organizations (CTSOs). CTSOs are a cocurricular requirement in the Carl D. Perkins Act, and alignment to CTSO activities is an expectation for CTE programs in the state of Maryland.
3. **KNOWLEDGE AND SKILLS**
 - A. **The student demonstrates the necessary skills for career development, maintenance of employability, and successful completion of course outcomes. The student is expected to:**
 1. Identify and demonstrate positive work behaviors that enhance employability and job advancement, such as regular attendance, promptness, proper attire, maintenance of a professional and ethical work environment, and pride in work.
 2. Demonstrate positive personal qualities such as flexibility, open-mindedness, initiative, active listening, and a willingness to learn.
 3. Employ effective reading, writing, and technical documentation skills.
 4. Solve problems using critical thinking techniques and structured troubleshooting methodologies.
 5. Demonstrate leadership skills and collaborate effectively as a team member.

6. Exhibit an understanding of legal and ethical responsibilities of a financial service provider.
7. Demonstrate time-management skills and the ability to prioritize tasks in a technical setting.

B. The student identifies various career pathways in the Finance field. The student is expected to:

1. Develop a career plan that includes the necessary education, certifications, job skills, and experience for specific roles as a financial service provider or in the Finance field.
2. Create a professional resume and portfolio that reflects skills, projects, certifications, and recommendations.
3. Demonstrate effective interview skills for roles in the Finance field.

C. The student develops technology and digital literacy skills. The student is expected to:

1. Synthesize financial, economic, and market data from online databases.
2. Design and integrate implement integrated financial systems using spreadsheets and specialized financial software.
3. Leverage cloud-based services (e.g., Google Drive, Microsoft OneDrive) to store and share financial models, credit analyses, and reports.
4. Evaluate and refine financial models and perform data analysis using Excel or other spreadsheet tools.
5. Master financial software applications such as QuickBooks for creating financial statements, performing cost analysis, and automating workflows.
6. Employ database management systems for organizing large sets of financial or customer data.

D. The student applies comprehensive financial planning principles to personal and business scenarios. The student is expected to:

1. Construct complete financial plans that integrate cash flow analysis, debt management, investment strategies, and risk management solutions.
2. Calculate and analyze financial ratios beyond the basics, including debt service coverage, debt-to-income, and return on assets to evaluate financial health.
3. Apply advanced time value of money concepts to solve complex financial planning problems, including uneven cash flows and changing interest rates.
4. Develop education funding analyses that evaluate savings requirements, appropriate vehicles, and financial aid considerations.
5. Create financial plans that demonstrate understanding of client psychology, values, and biases that impact financial decision-making.

E. The student demonstrates risk management and insurance planning competencies. The student is expected to:

1. Apply the risk management process to identify, measure, and prioritize personal and business risk exposures.
2. Compare and evaluate insurance solutions for property, health, disability, long-term care, and life risks.
3. Construct appropriate insurance recommendations based on client-specific needs analysis, including premium costs and coverage options.
4. Analyze business insurance needs including key person, business continuation, and liability protection.
5. Evaluate annuity products and their role in retirement planning, distinguishing between immediate, deferred, fixed, and variable options.

F. The student applies investment planning and portfolio management principles. The student is expected to:

1. Differentiate between various investment vehicles including stocks, bonds, mutual funds, ETFs, REITs, and alternative investments, analyzing their characteristics, risks, and tax implications.
2. Apply quantitative investment measures including standard deviation, beta, alpha, Sharpe ratio, and correlation to evaluate investment performance.
3. Construct and optimize investment portfolios based on Modern Portfolio Theory, considering asset allocation, diversification, and rebalancing strategies.
4. Analyze market cycles and their impact on investment strategies, incorporating economic indicators and monetary policy considerations.
5. Apply single-period dividend-discount and basic bond-yield methods in Excel to estimate the fair value of a common stock and a plain-vanilla coupon bond. Interpret the results using simple valuation multiples (e.g., P/E, price-to-book).

G. The student applies tax planning principles to personal and business financial decisions. The student is expected to:

1. Import transaction data from QuickBooks into Excel and use PivotTables, slicers, and calculated fields to create dashboards that reveal cash-flow trends and key performance indicators.
2. Analyze how different forms of business organization (sole proprietorship, partnership, LLC, S-Corp, C-Corp) impact taxation of income and business operations.
3. Apply tax reduction and management techniques that legally minimize tax liability for individuals and businesses.
4. Calculate the tax consequences of investment decisions, including capital gains/losses, dividend income, and tax-advantaged accounts.
5. Evaluate the tax implications of major life events including higher education, retirement, and property transactions.
6. Incorporate charitable giving strategies into financial plans, calculating the tax benefits of various contribution methods.

H. The student integrates certification preparation for the QuickBooks Certified User credential. The student is expected to:

1. Identify official QuickBooks Certified User exam objectives and align classroom activities (e.g., simulations, case studies) to those objectives.
2. Complete scenario-based tasks and practice assessments that simulate real-world accounting challenges using QuickBooks.
3. Demonstrate mastery of payroll, financial reporting, bank reconciliation, and other advanced QuickBooks functions necessary for certification.
4. Reflect on areas of strength and improvement through self-assessment, refining skills to ensure readiness for the QuickBooks Certified User exam.

I. The student demonstrates advanced professional ethics and fiduciary responsibility. The student is expected to:

1. Evaluate complex ethical dilemmas using the CFP Board's Code of Ethics framework.
2. Develop client communication strategies that fulfill fiduciary obligations.
3. Create compliance protocols that address regulatory requirements for financial professionals.
4. Analyze case studies of ethical violations and formulate preventative measures.