COURSE TITLE: Business Software Applications II

Course Description:
Business Software Applications II focuses on advanced word processing and spreadsheet and database management skills using current and emerging integrated technology. These skills include a variety of input technologies in the production of professional quality business documents and reports. Performance and production skills for the co-curricular student organizations, DECA and Future Business Leaders of America (FBLA-PBL), are embedded in this course. Students will also have the opportunity to gain industry-recognized credentials to document advanced computer skills needed for future education or employment plans.

Potential Certifications/Credentials:
Adobe Certified Associate (ACA) – Photoshop / Dreamweaver / Premier Pro / InDesign / Illustrator, ASK Institute – Concepts of Entrepreneurship and Management / Fundamental Business Concepts, Certiport- Entrepreneurship and Small Business (must hold concentrator status), IC3 Global Standard 6 (or higher), Microsoft Office Expert 2019/365 - Access / Excel / Word, Microsoft Office Specialist 2019/365 (MOS) (Two of the following areas REQUIRED: Excel Associate / Outlook Associate / PowerPoint Associate / Word Associate)
Course Scope and Sequence

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<th>Unit #</th>
<th>Unit Title</th>
<th>Estimated Hours</th>
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<td>1</td>
<td>Foundational Standards</td>
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<td>Database Management</td>
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<td>5</td>
<td>Productivity</td>
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</table>

Unit Plans of Instruction

Foundational Standards

Supporting—will be taught throughout the course as needed for the unit.

F1. Incorporate safety procedures in handling, operating, and maintaining tools and machinery; handling materials; utilizing personal protective equipment; maintaining a safe work area; and handling hazardous materials and forces.

F2. Demonstrate effective workplace and employability skills, including communication, awareness of diversity, positive work ethic, problem-solving, time management, and teamwork.

F3. Explore the range of careers available in the field and investigate their educational requirements, and demonstrate job-seeking skills including resume-writing and interviewing.

F4. Advocate and practice safe, legal, responsible, and ethical use of information and technology tools specific to the industry pathway.

F5. Participate in a Career and Technical Student Organization (CTSO) to increase knowledge and skills and to enhance leadership and teamwork.

F6. Discuss and demonstrate ways to value diversity.
Unit 2 Title: Word Processing

Content Standards

1. Manage advanced word processing document options and settings.
   1a. Manage templates, macros, and multiple documents using word processing software.
   1b. Prepare documents for collaboration using editing functions and protecting documents using passwords.
   1c. Use language-specific features, configure editing, and display languages to set language options.

2. Utilize advanced word processing editing and formatting features.
   2a. Perform advanced editing and formatting with word processing software.
   2b. Configure paragraph layout options.
   2c. Create and modify paragraph and character styles using word processing software.

3. Create custom document elements using advanced word processing software.
   3a. Mark, create, and update index entries software, including tables of contents, captions, and tables of figures.
   3b. Create and manage document building blocks.
   3c. Create custom design elements.
   3d. Create and manage tables of figures using captions and configuring caption properties.

4. Create and modify advanced word processing features.
   4a. Manage forms by adding custom fields, modifying field properties, and inserting and configuring standard content controls.
   4b. Create and modify macros.
   4c. Create mail merged documents, labels, and envelopes using recipient lists and merged fields.

Unpacked Learning Objectives

Students know:
- How to create a variety of business documents
- How to utilize advanced word processing features in commonly used word processing applications.
- How to create documents that demonstrate the ability to manage templates
- How to create documents that demonstrate the ability to manage macros
- How to create, modify and format documents that utilize collaborative/sharing features
- How to create, modify and format documents that utilize passwords
- How to access and set language-specific preferences
- How to set default options for editing and autocorrect features
- How to design and create word processing documents that utilize editing and formatting features.
● How to operate advanced editing and formatting features available in word processing software.
● How to apply word processing features to configure paragraph layout options.
● How to apply word processing features to modify paragraphs.
● How to apply word processing features to modify character/font styles using word processing software.
● How to use advanced word processing software features to create custom document elements
● How to mark, create and update index entries.
● How to add a table of contents to a multi-page document.
● How to insert captions to generate a table or figure within a document.
● How to create and manage documents using the word processing building blocks feature.
● How to design custom documents that employ word processing design elements.
● How to create a table of figures using captions.
● How to manage captions within a document.
● How to create and modify documents by utilizing advanced word processing features.
● How to create and manage forms
● How to modify forms and add custom fields
● How to change field properties using content controls
● How to create macros.
● How to modify macros.
● How to create a mail merge document by joining a data source document with a main document.

**Students are able to:**

● Manage advanced word processing features to create a variety of business and personal documents
● Create documents from existing templates
● Create documents from self-developed templates
● Create macros
● Use and manage existing macros
● Prepare documents that are protected using passwords.
● Demonstrate the ability to access and manage specific word processing features to: default options, editing and auto correct features, and language-specific features.
● Demonstrate the ability to access and manage word processing features to edit and format documents.
● Demonstrate the ability to operate advanced editing and formatting features available in word processing software.
● Select word processing features to adjust paragraph layout options.
● Select word processing features to modify a paragraph within a word processed document.
● Select word processing features to modify character styles within a word processed document.
● Utilize advanced word processing features to create professional documents.
● Produce documents that contain tables, captions and figures.
● Prepare documents that contain building blocks.
● Prepare custom design elements to be used in word processing documents.
- Prepare documents which feature tables of figures that include captions.
- Manage documents which feature tables of figures that include captions.
- Create and modify documents which contain advanced word processing features.
- Create customized forms using word processing software.
- Create and modify macros using word processing software.
- Prepare mail merged documents including letters, labels and envelopes using the mail merge function.

**Students understand that:**
- Knowledge of how to efficiently manage word processing options and settings leads to efficiency and effectiveness in businesses.
- The management of advanced word processing features such as templates help to identify and solve problems by creating efficient and useful solutions.
- The use of collaborative features can aid in efficiently sharing information.
- The benefits of applying password protection features for shared documents and templates.
- The word processing features can be changed to specific languages based on the user’s preference.
- Language and editing options can be configured to aid in efficiency for the user.
- There are a variety of word processing features available to promote the efficient editing and formatting of documents.
- The benefits of knowing how to effectively use advanced word processing features to edit and format documents.
- The effective use of word processing features will aid in efficiency.
- The application of word processing tools to manage documents leads to effectiveness and efficiency.
- Using advanced word processing features can accomplish workplace tasks and solve problems and allow for the creation of customized documents for business use.
- Using the index entry and tables of contents features can define particular areas in a document to make them easier to find in a table of contents.
- The use of captions and tables of figures will aid the reader in understanding concepts covered in a document by providing additional context or information.
- Building blocks are used to minimize the time needed to create repetitive tasks.
- Developing custom document elements can make business documents more personalized.
- Creating and managing captioning elements will allow additional information to be provided for content within a document.
- The ability to apply advanced word processing skills allows businesses to create publications and documents in house thus saving time and money.
- Content controls, field properties are tools used to manage form content, customize forms and arrange form content.
- These tools can be useful for creating customized content such as forms that can be used to collect data.
- Planning and creating macros can increase efficiency and accuracy for repetitive tasks.
- Mail merge is a feature that can incorporate data from two sources to save time and effort in rekeying data for multiple recipients.
<table>
<thead>
<tr>
<th>Unit Driving/Essential Question</th>
<th>How do you create and develop business documents for professional settings?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exemplar High Quality Unit Task</td>
<td>Students are able to create documents for usage within the school and community events.</td>
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</table>
## Map of Student Learning by Learning Objective

<table>
<thead>
<tr>
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<tbody>
<tr>
<td><strong>Produce</strong> documents that demonstrate advanced word processing skills.</td>
<td>Formative: Lecture Demonstration Guided practice</td>
<td>Hands on Practice- students complete tasks with file examples</td>
<td>SS: Business organization</td>
<td>Digital Presentation Document Presenter Textbook/E-Book Computer Internet Access</td>
</tr>
<tr>
<td>Manage templates, macros, and multiple documents using word processing software.</td>
<td>Formative: Formative: Lecture Demonstration Guided practice</td>
<td>Hands on-manage templates and adjust templates for given tasks</td>
<td>APA/MLA Styles in English SS: Business organization</td>
<td>Computer Textbook Printer Internet Access</td>
</tr>
<tr>
<td>Prepare documents for collaboration using editing functions</td>
<td>Formative: Lecture Demonstration Guided practice</td>
<td>Hands on-group setting Student group will divide the assignment up and work together in real-time utilizing word processing features</td>
<td>SS: Business organization MATH: Project: Students will work in groups on a spreadsheet to record business expenses collaboratively.</td>
<td>Computer Word Processing Textbook Printer Internet Access</td>
</tr>
<tr>
<td>Prepare documents that utilize word processing features that secure information through the use of passwords.</td>
<td>Summative: Research</td>
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<tr>
<td><strong>Identify</strong> language-specific features</td>
<td>Formative: Lecture Demonstration</td>
<td>Hands on using word processing features</td>
<td>SS: Business organization</td>
<td>Computer Word Processing Projector</td>
</tr>
<tr>
<td><strong>Utilize</strong> advanced word processing features.</td>
<td><strong>Utilize</strong> commonly used word processing formatting features</td>
<td><strong>Navigating the language features</strong></td>
<td>Internet Access</td>
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<tr>
<th>Perform advanced editing and formatting with word processing software.</th>
<th><strong>Internet Access</strong></th>
<th><strong>Navigating the language features</strong></th>
<th>Internet Access</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formative: Lecture Demonstration Guided Practice Project Based Learning</td>
<td>Edit APA/MLA paper of peers Group discussions</td>
<td>APA/MLA create and review</td>
<td>SS: Business organization Computer Word Processing Software Textbook Internet Access</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Create</strong> and <strong>modify</strong> paragraphs and character styles using word processing software.</th>
<th><strong>Configure paragraph layout options.</strong></th>
<th><strong>Navigating the language features</strong></th>
<th>Internet Access</th>
</tr>
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<tr>
<td>Formative: Lecture Demonstration Guided Practice</td>
<td>Modify a document making it visually appealing to a specific audience.</td>
<td>SS: Business organization</td>
<td>Computer Word Processing Software Textbook Internet Access</td>
</tr>
</tbody>
</table>

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<tr>
<th><strong>Create</strong> custom document elements using advanced word processing software.</th>
<th><strong>Mark, create and update index entries software, including tables of contents, captions, and tables of figures.</strong></th>
<th><strong>Navigating the language features</strong></th>
<th>Internet Access</th>
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<tbody>
<tr>
<td>Formative: Lecture Demonstration Guided Practice Project Based Learning</td>
<td>Project Based Learning creating or revamping an document for a real or fictional business</td>
<td>SS: Business organization</td>
<td>Computer Word Processing Software Textbook Printer Internet Access</td>
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<tr>
<td>Formative: Lecture Demonstration Guided Practice Project Based Learning</td>
<td>Project Based Learning in groups students will research a book recreating its table of content, captions, and table figures using appealing designs</td>
<td>SS: Business organization</td>
<td>Computer Word Processing Software Textbook Printer Internet Access</td>
</tr>
<tr>
<td><strong>Create</strong> documents using building blocks.</td>
<td><strong>Manage</strong> documents using building blocks.</td>
<td><strong>Create</strong> custom design elements.</td>
<td><strong>Create</strong> and <strong>manage</strong> tables of figures using captions and configuring caption properties</td>
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<td><strong>Formative:</strong> Lecture Demonstration Guided Practice Project Based Learning</td>
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</tr>
<tr>
<td><strong>Create and share documents electronically for others to place the desired information using building blocks, testing the building blocks for accuracy and adaptability to information placed in the blocks</strong></td>
<td></td>
<td><strong>Project based learning, creating custom design elements and display in a gallery walk</strong></td>
<td><strong>Create a works cited page or bibliography page</strong></td>
</tr>
<tr>
<td></td>
<td>Internet Access</td>
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</tbody>
</table>
**Create** and modify macros

| Formative: Lecture Demonstration Guided Practice Project Based Learning | Using a word processing document add macros to a previous assignment or issued document, performing two actions with the macros | SS: Business organization |

- **Create** mail merged documents, labels, and envelopes using recipient lists and merged fields.

| Formative: Lecture Demonstration Guided Practice Project Based Learning | Projects of mail merging fictional address and information in groups-merging at least 10 documents | SS: Business organization |

**Key Vocabulary**

- template, macro, password, track changes, file sharing, protect document, default, configure, language preference, translating documents, alignment, indent, hyphenate, bullets, numbering, kerning, pagination, widow orphan, character style, fonts, index, table of contents, captions, table figure, building blocks, tables, headers, textboxes, page elements, chart, stock image, illustration, word art, smart art, symbols, tables, font set, style set, theme, form, form field, field properties, control tools, macros, syntax, EO, sequence, visual basic, keyboard shortcut, function keys, main document/form letter, data source (recipient list), form letter, merge field

**Work-Based Learning, Simulated Work Experiences, and Experiential Learning:**

- Simulated work experiences by creating documents for a real or fictional business

**CTSO Connection:**

- Students prepare for competitive events: FBLA and DECA Business Plans Teams and Individual
- Students type documents for various groups within the school and community as a service

**Certification/Credential Connection:**

- Adobe Certified Associate (ACA) – Photoshop / Dreamweaver / Premier Pro / InDesign / Illustrator, ASK Institute – Concepts of Entrepreneurship and Management / Fundamental Business Concepts, Certiport- Entrepreneurship and Small Business (must hold concentrator status), IC3 Global
| Standard 6 (or higher), Microsoft Office Expert 2019/365 - Access / Excel / Word, Microsoft Office Specialist 2019/365 (MOS) (Two of the following areas REQUIRED: Excel Associate / Outlook Associate / PowerPoint Associate / Word Associate) |
**Unit 3 Title: Spreadsheets**

**Content Standards**

5. Manage workbook options and settings.
   - 5a. Manage workbooks using advanced features including save as template, copy macros, and reference data from other spreadsheets.
   - 5b. Manage workbook review in word processing software, including restrict editing, protect, encrypt with password, configure formula calculation options, manage workbook versions, and protect workbook structure features.

6. Apply custom data formats, layouts, and validation to workbooks.
   - 6a. Apply advanced conditional formatting and filtering to workbooks using spreadsheet software.
   - 6b. Create and modify custom workbook elements using spreadsheet software.
   - 6c. Prepare a workbook for internationalization, modifying currency, text, and other elements as needed, using spreadsheet software.

7. Create advanced workbook formulas using spreadsheet software.
   - 7a. Apply functions in formulas by performing logical operations including AND, OR, NOT, and nested functions and statistical operations including SUMIFS, AVERAGEIFS, and COUNTIFS functions in spreadsheet software.
   - 7b. Look up data by using functions VLOOKUP, HLOOKUP, MATCH, and INDEX with spreadsheet software.
   - 7c. Apply advanced date and time functions including NOW and TODAY functions and serializing numbers using spreadsheet software.
   - 7d. Use financial functions of spreadsheet software to perform data analysis and business intelligence including import, transform, combine, display, connect, and consolidate data; perform what-if analysis; use cube functions; and calculate data.
   - 7e. Troubleshoot formulas by utilizing trace precedence and dependence, monitor cells and formulas, validate formulas by using error checking, and evaluate formulas.
   - 7f. Define and manage named ranges and objects by name cells, data ranges, and tables.

8. Create advanced charts and tables with workbook data in spreadsheet software.
   - 8a. Add trendlines to charts and create dual-axis charts.
   - 8b. Create and modify pivot tables by changing field selections and options, creating slicers, grouping data, adding calculated fields, and formatting data.
   - 8c. Create and modify pivot charts by manipulating options in existing charts, applying styles, and drilling down into details, using spreadsheet software.

**Unpacked Learning Objectives**
Students know:
- How to select the appropriate spreadsheet options and settings to complete a task.
- How to select advanced spreadsheet features to manage workbook data obtained from other sources.
- How to manage workbook review in word processing software to utilize advanced features including: restricting editing, protecting sheet/cells, password encryption, configuring formula calculation, and managing versions.
- How to create custom data formats, layouts and validation to workbooks apply custom formats in worksheets to improve the quality of source data.
- How to create spreadsheets that contain data that is conditional formatted and filtered.
- How to use software features to create and modify work elements to customize workbooks for business use.
- How to format spreadsheets in a way that they can be used internationally.
- How to create and use spreadsheet formulas to track business accounts, to store information and to perform calculations on statistical and financial data used for business.
- How to apply functions in formulas to perform logical and statistical operations.
- How to extract data from a spreadsheet by using logical functions including the VLOOKUP, HLOOKUP, MATCH, and INDEX.
- How to apply the NOW and TODAY functions.
- How to use a function to automatically return date and time information.
- How to use financial functions to perform data analysis.
- How to import and export data into/out of a spreadsheet.
- How to use tools to consolidate data.
- How to use spreadsheets to perform what-if analysis.
- How to use the cube function to connect external SQL data sources.
- How to use spreadsheets to calculate data.
- How to utilize trace precedents and dependents to troubleshoot formulas for accuracy.
- How to utilize validation tools to evaluate and check formulas for errors.
- How to define named ranges and objects.
- How to manage named ranges and objects.
- How to create advanced charts and tables that utilize spreadsheet data.
- How to prepare charts and dual axis charts that contain trendlines.
- How to create and modify pivot tables by using spreadsheet tools to change field selection and other
- How to create and modify pivot charts to analyze data.
- How to use spreadsheet tools to modify pivot charts and to answer questions about data presented.

Students are able to:
- Apply the features to manage workbook options and settings for a spreadsheet.
- Evaluate options of spreadsheets to apply the appropriate feature to perform steps needed to create templates, macros, and reference data from other spreadsheets.
- Demonstrate an understanding of workbook tools used to manage and review spreadsheet content.
● Demonstrate an ability to develop spreadsheets that incorporate a variety of features used to protect, encrypt and restrict editing to worksheet content.

● Demonstrate the ability to apply custom data formats, layouts and data validation to workbooks to check for accuracy and quality of source data before using, importing and protecting data.

● Use features of spreadsheet software to conditionally format and filter data that meets a specific criteria.

● Prepare custom worksheets to manage information, save time and create a consistent look.

● Design custom spreadsheets so that they can be easily modified for users who are sharing/using spreadsheets internationally.

● Create advanced workbook formulas to perform mathematical calculations such as: forecasting future performance, calculating tax, completing basic payroll producing charts and calculating revenue.

● Produce spreadsheet content that utilize logical and statistical functions to forecast future performance and e

● Create formulas using VLOOKUP, HLOOKUP, MATCH and INDEX.

● Determine applicable uses for date and time functions available in spreadsheets.

● Use financial functions to perform data analysis.

● Use tools to correct and validate formulas.

● Use tools to check formulas for errors.

    Demonstrate the ability to define and create named ranges and objects.

● Demonstrate the ability to create advanced charts and tables from spreadsheet data.

● Demonstrate the ability to add trend lines to existing charts and to create dual-axis charts.

● Demonstrate the ability to create and modify pivot tables by using spreadsheet tools.

● Analyze data extracted using a pivot table.

● Demonstrate the ability to create and modify pivot charts by using spreadsheet tools.

● Analyze data extracted using a pivot chart.

Students understand that:

● Mastering the ability to manage workbook options and settings will lead to the efficient use of spreadsheet software to perform tasks.

● Mastering the ability to link data from other applications such as spreadsheets to create templates and macros.

● The ability to reference data from spreadsheets

● Selecting tools to edit and protect documents will manage risks to data used by businesses.

● Evaluating data for accuracy and formatting is an essential part of handling data tasks when collecting, analyzing data, or preparing to present data to stakeholders.

● Using opportunities to identify and apply filters and conditional formatting to spreadsheet data makes it easier to emphasize values, trends, and data needed for decision making.

● Having the ability to create and modify custom spreadsheets allows businesses to model and manipulate data to create visualizations (charts, tables, etc). Students will understand that customization of spreadsheets provides information valuable for future planning and making decisions essential to business functions.

● Internalization of spreadsheets describes the process of designing spreadsheets to meet the needs of users in many countries. This process includes designing spreadsheets so that they can be utilized internationally.

● Spreadsheet formulas are tools that can be used to set up formulas which can calculate information based on the contents of other cells.
- Formulas enable businesses to instantly calculate and modify mathematical information.
- Producing spreadsheets using logical functions will aid in quickly providing logical evaluations to determine whether a situation is true/false or meets a specific criteria.
- How to apply mathematical calculations using statistical functions.
- Using logical functions allows for the efficient comparison and extraction of data that meets specific conditions.
- The date and time functions available in spreadsheets are useful tools for efficiently providing time sensitive information within a spreadsheet.
- Utilizing financial functions spreadsheets available in spreadsheets can save time.
- Evaluating formulas using trace precedents and trace dependents indicates the cells that affect a formula for an active cell.
- Data validation is a feature that allows control over the type of data entered into a cell/worksheet.
- Named ranges are used to refer to cell references, formula results or values.
- Naming ranges makes workbook formulas easier to read and to update.
- The use of charts and tables can communicate data graphically.
- Creating charts allows others to see the meaning behind numbers and makes comparison and trends much easier.
- Adding trendlines to a chart shows general patterns of data over time.
- A pivot table is an efficient interactive way to quickly summarize and analyze large amounts of data.
- A pivot table is used to summarize, sort, reorganize, group, count, total or average data stored in a table.
- Like a pivot table, a pivot chart chart is used to summarize, sort, reorganize, group, count, total or average data stored in a table.
- Pivot charts are visual representations of a pivot table and help to summarize and analyze datasets, patterns and trends.

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<thead>
<tr>
<th>Unit Driving/Essential Question</th>
<th>How do spreadsheet applications simplify data commonly used in business settings?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exemplar High Quality Unit Task</td>
<td>Ability to create and evaluate fluid spreadsheets that will update when married with compatible software, generating new ways to view content.</td>
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# Map of Student Learning by Learning Objective

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<tbody>
<tr>
<td>Manage workbook options and settings.</td>
<td>Formative: Lecture Demonstration Guided Practice</td>
<td>Create spreadsheet, noting the functions and feasibility of the ribbon</td>
<td>SS: Business organization</td>
<td>Computer Spreadsheet Application Textbook Internet Access</td>
</tr>
<tr>
<td>Manage workbooks using advanced features including save as template, copy macros and reference data from other spreadsheets.</td>
<td>Formative: Lecture Demonstration Guided Practice Independent Practice</td>
<td>Transferring information from one spreadsheet to another using a template save spreadsheet to computer and link spreadsheets</td>
<td>SS: Business organization MATH: Students will be able to transfer numerical data from one spreadsheet to another using a template and save the spreadsheet to a computer and link spreadsheets.</td>
<td>Computer Spreadsheet application application Internet Access Textbook</td>
</tr>
<tr>
<td>Manage workbook review in word processing software including restrict editing, document protection, password encryption,</td>
<td>Formative: Lecture Demonstration Guided Practice</td>
<td>Manage a spreadsheet backstage view using a template to make changes, save the new template within the spreadsheet application</td>
<td>SS: Business organization</td>
<td>Computer Spreadsheet Application Textbook Internet Access</td>
</tr>
<tr>
<td>Apply custom data formats, layouts, and</td>
<td>Formative: Lecture Demonstration</td>
<td>In groups, create, manage and apply custom data to a</td>
<td>SS: Business organization</td>
<td>Computer Spreadsheet Application</td>
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## Equipment List by CTE Cluster
- Computer Spreadsheet Application
- Textbook
- Internet Access

## Link to Helpful Tech Tools
- Computer Spreadsheet application Internet Access Textbook

## Related Academic Content
- ELA, Math, Science, and/or Social Studies Concepts & Activities

## Examples
- Link to Differentiation Examples

## Learning Activity Checklist
- Formative:  Lecture
- Demonstration
- Guided Practice
- Independent Practice
- Guided Practice
- Independent Practice
- In groups, create, manage and apply custom data to a spreadsheet.
<table>
<thead>
<tr>
<th>Activity</th>
<th>Formative</th>
<th>Guided Practice</th>
<th>Independent Practice</th>
<th>Project Based Learning</th>
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</thead>
<tbody>
<tr>
<td><strong>Apply</strong> advanced conditional formatting and filtering to workbooks using spreadsheet software.</td>
<td><strong>Formative:</strong> Lecture Demonstration Guided Practice Group Work</td>
<td>Utilizing a spreadsheet template with data on it, apply conditional formatting and filter the workbook. Check assignment in groups using a link.</td>
<td><strong>SS:</strong> Business organization Computer Spreadsheet Application Textbook Internet Access</td>
<td><strong>SS:</strong> Business organization Computer Spreadsheet Application Textbook Internet Access</td>
</tr>
<tr>
<td><strong>Create</strong> and modify custom workbook elements using spreadsheet software.</td>
<td><strong>Formative:</strong> Lecture Demonstration Guided Practice</td>
<td>Using a spreadsheet and the backstage view, add custom elements to the ribbon, test for validity by sharing link with peers.</td>
<td><strong>SS:</strong> Business organization Computer Spreadsheet Application Textbook Internet Access</td>
<td><strong>SS:</strong> Business organization Computer Spreadsheet Application Textbook Internet Access</td>
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<td><strong>Prepare</strong> a workbook for internationalization, modifying currency, text and other elements</td>
<td><strong>Formative:</strong> Lecture Demonstration Guided Practice Project Based Learning</td>
<td>In groups, assign a country, students will create a workbook, showing currency conversion, display currency using various styles, and text elements.</td>
<td><strong>SS:</strong> Business organization Computer Spreadsheet Application Textbook Internet Access</td>
<td><strong>SS:</strong> Business organization Computer Spreadsheet Application Textbook Internet Access</td>
</tr>
<tr>
<td><strong>Create</strong> advanced workbook formulas using spreadsheet software.</td>
<td><strong>Formative:</strong> Lecture Demonstration Guided Practice Independent Practice</td>
<td>Create a workbook using a fictional monthly payroll stub creating a spreadsheet for the year with formulas to calculate the desired outcome.</td>
<td><strong>SS:</strong> Business organization Computer Spreadsheet Application Textbook Internet Access</td>
<td><strong>SS:</strong> Business organization Computer Spreadsheet Application Textbook Internet Access</td>
</tr>
<tr>
<td><strong>Apply</strong> functions in formals to perform logical operations.</td>
<td><strong>Formative:</strong> Lecture Demonstration Guided Practice</td>
<td>Using a template apply functions to the template to perform logical operations. MATH: Create spreadsheets that contain functions that will help perform logical operations, such as payroll, taxation,</td>
<td><strong>SS:</strong> Business organization Computer Spreadsheet Application Textbook Internet Access</td>
<td><strong>SS:</strong> Business organization Computer Spreadsheet Application Textbook Internet Access</td>
</tr>
<tr>
<td><strong>Look</strong> up data using functions with spreadsheet software.</td>
<td>Formative: Lecture Demonstration Guided Practice</td>
<td>Using a template students are to look up data within the workbook to find the needed functions</td>
<td>SS: Business organization MATH: Project: In a given spreadsheet, students are to locate various numerical data using functions.</td>
<td>Computer Spreadsheet Application Textbook Internet Access</td>
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</tr>
<tr>
<td><strong>Apply</strong> advance date and time functions using spreadsheet software.</td>
<td>Formative: Lecture Demonstration Guided Practice</td>
<td>Using a template to apply date and time function to the workbook and check the validity of the placement</td>
<td>SS: Business organization</td>
<td>Computer Spreadsheet Application Textbook Internet Access</td>
</tr>
<tr>
<td><strong>Use</strong> financial functions to perform data analysis.</td>
<td>Formative: Lecture Demonstration Guided Practice</td>
<td>Using an organization financial report, create a spreadsheet to perform a data analysis of the company payroll</td>
<td>SS: Business organization MATH: Students will be able to use financial functions to perform data analysis, such as mean, median, mode, and etc..</td>
<td>Computer Spreadsheet Application Textbook Internet Access</td>
</tr>
<tr>
<td><strong>Utilize</strong> trace precedents and dependents to troubleshoot formulas. <strong>Demonstrate</strong> the ability to validate and evaluate formulas.</td>
<td>Formative: Lecture Demonstration Guided Practice Collaboration</td>
<td>Case Studies/Examples Group Work</td>
<td>SS: Business organization MATH: Project: In a given spreadsheet, students are to identify and troubleshoot formulas in order to apply correct formulas and functions for the given data.</td>
<td>Computer Spreadsheet Application Textbook Internet Access</td>
</tr>
<tr>
<td><strong>Define</strong> and manage named ranges and objects.</td>
<td>Formative: Lecture Demonstration Guided Practice Independent Practice</td>
<td>Case Studies/Examples</td>
<td>SS: Business organization</td>
<td>Computer Spreadsheet Application Textbook Internet Access</td>
</tr>
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</tr>
<tr>
<td><strong>Create</strong> advanced charts and tables with workbook data.</td>
<td>Formative: Lecture Demonstration Guided Practice Independent Practice</td>
<td>Case Studies/Examples</td>
<td>ELA: Create an assignment worksheet, creating tables with class assignments, charting how many were submitted or not. Will allow for trends of assignments submission to be displayed on chart MATH: Students will be able to create advanced charts and tables with workbook data to help organize business related information. SS: Business organization</td>
<td>Computer Spreadsheet Application Textbook Printers Internet Access</td>
</tr>
<tr>
<td><strong>Prepare</strong> charts and dual axis charts that contain trendlines.</td>
<td>Formative: Lecture Demonstration Guided Practice Independent Practice</td>
<td>Case Studies/Examples</td>
<td></td>
<td>Computer Spreadsheet Application Textbook Printers Internet Access</td>
</tr>
<tr>
<td><strong>Create</strong> and modify pivot tables.</td>
<td>Formative: Lecture Demonstration Guided Practice</td>
<td>Case Studies/Examples</td>
<td>SS: Business organization</td>
<td>Computer Spreadsheet Application Textbook Printers Internet Access</td>
</tr>
<tr>
<td><strong>Create</strong> and make changes to pivot charts. <strong>Use</strong> pivot charts tools to further analyze data presented in a pivot chart.</td>
<td>Formative: Lecture Demonstration Guided Practice</td>
<td>Case Studies/Examples</td>
<td>ELA: Create a worksheet for grades, to analyze data for estimated final grade or what students need to make to achieve grade desired SS: Business organization</td>
<td>Computer Spreadsheet Application Textbook Internet Access</td>
</tr>
</tbody>
</table>
Key Vocabulary

workbook, spreadsheet, cell, restrict editing, protect document, encrypt, manage workbook version, data validation, conditional formatting, filtering, sorting, internalization, currency exchange, relative formula, absolute formula, operators, cell range, order of operations, formula, functions, INDEX Function, IF Function, range, array, argument, LOOKUP Function, MATCH Function, NOW Function, TODAY Function, what-if analysis, importing data, exporting data, combining data, cube functions, trace precedence, trace dependence, validate formula, error checking, named range, trendlines, dual-axis chart, pivot table, slicer, calculated field, pivot chart

Work-Based Learning, Simulated Work Experiences, and Experiential Learning:

Students will maintain Excel workbooks, by recording financial statements, creating formulas, and creating a spreadsheet where the information from the workbook is compiled for easier viewing. The information is from a simulated work experience i.e. a fictional company.

CTSO Connection:

Students will use skills and information obtained to prepare for competitive events

Certification/Credential Connection:

Adobe Certified Associate (ACA) – Photoshop / Dreamweaver / Premier Pro / InDesign / Illustrator, ASK Institute – Concepts of Entrepreneurship and Management / Fundamental Business Concepts, Certiport- Entrepreneurship and Small Business (must hold concentrator status), IC3 Global Standard 6 (or higher), Microsoft Office Expert 2019/365 - Access / Excel / Word, Microsoft Office Specialist 2019/365 (MOS) (Two of the following areas REQUIRED: Excel Associate / Outlook Associate / PowerPoint Associate / Word Associate)
Unit 4 Title: Database Management

Content Standards
   9a. Import data into tables and from other databases, create linked tables from external sources, and create a table from a template with application parts.
   9b. Customize tables by hiding fields, adding total rows and descriptions, and renaming tables.
   9c. Manage records in tables by updating, adding, deleting, sorting, and filtering records, appending records from external data, and finding and replacing data.
   9d. Create and modify fields using add and delete fields; add validation rules; change field captions, sizes, and data types; configure fields to auto increment; set default values; and use input masks.

10. Create and manage database forms.
   10a. Create and save forms and create a form from a template with application parts.
   10b. Configure form controls by moving, adding, and removing form controls; modifying data sources; setting form control properties; managing labels; and adding subforms.
   10c. Format forms using modify tab order; configure print settings; sort records by form field; apply a theme; control form positioning; and insert backgrounds, headers, footers, and images.

11. Create database reports.
   11a. Create reports based on query or table, in design view, and using a wizard.
   11b. Configure report controls by group and sort fields, modify data sources, add report controls, and add and modify labels.
   11c. Format reports using multiple columns, add calculated fields, control report positioning, format report elements, change report orientation, insert header and footer information, insert images, and apply a theme.

Unpacked Learning Objectives

Students know:
- How to create tables using database software.
- How to create database tables using templates, external sources and linked tables.
- How to customize tables
- How to use database tools to hide fields, add total rows and descriptions.
- How to use database tools to rename tables.
- How to perform management tasks to update and modify database content.
- How to create and modify fields by adding validation rules and changing field options.
- How to create and modify fields by changing sizes and data types.
- How to configure fields by setting auto increments, default values and setting input masks.
- How to create a database form
- How to manage the properties of a database form.
- How to create a database form using a template.
- How to configure and remove form controls.
- How to modify data sources.
- How to manage labels.
- How to add subforms.
- How to modify forms by using database tools.
- How to print a form.
- How to sort and organize records contained in a form.
- How to use tools to customize form fields and other form elements.
- How to create a database report.
- How to use a variety of methods to create a database report.
- How to configure report controls.
- How to sort fields.
- How to add and modify labels.
- How to create reports with additional elements that enhance the report, the look, and readability of the report.
- How to create calculated fields within a report that summarize numerical data.

**Students are able to:**
- Demonstrate the ability to build tables using database software.
- Develop databases by importing data into tables and from other databases.
- Create linked tables from external data sources.
- Use templates to create database tables.
- Customize database tables by hiding fields, adding tows, adding descriptions and renaming tables.
- Conduct file management activities to create, maintain and delete records from a database.
- Create and modify database fields by using database options to manage field content.
- Utilize database tools to configure fields and field settings.
- Create a database form.
- Modify a database form.
- Create a database form using a template.
- Utilize database tools to modify data sources.
- Utilize database tools to control form properties.
- Utilize database tools to manage labels and add subforms.
- Develop customized forms.
- Demonstrate the ability to print forms that contain headers, footers and images.
- Utilize database tools to generate a report.
● Utilize database tools to create a database from a query,
● Create a database by using a wizard
● Create a database by using the design view.
● Configure database report controls by group and sort fields.
● Demonstrate how to modify data sources
● Demonstrate how to modify and add labels.
● Configure a database report to include additional elements and calculated fields.
● Demonstrate the ability to use a variety of methods to create a database.
● Demonstrate the ability to customize database tables and rename tables.
● Demonstrate the ability to customize forms.

Students understand that:
● Databases collect data to organize the data for rapid search and retrieval.
● There are a variety of ways to create databases.
● When the data requirements of an organization change, the databases used to store the data must change also.
● Records management consists of the efficient control of the creation, maintenance and destruction of database content.
● The goal of managing database records is to help organizations keep necessary information accessible for business operations and reporting.
● Database fields types and sizes should be set to organize information efficiently.
● The properties of a field describe the characteristics and behavior of the data added to the field.
● A field’s data type determines what kind of data the field can store.
● A database form is an object used to input information into a database.
● The process of creating and managing database forms.
● Templates are quick ways to create a database form.
● Form controls are objects that display data or make it easier for users to enter or edit data, perform an action or make a selection.
● Controls make forms easier to use.
● Forms can be modified, configured, and printed to display customized elements.
● Database reports produce useful data for decision making and analysis.
● There are a variety of methods that can be implemented to create database reports.
● Tools like report controls, data sources, fields and labels can be configured and modified to customize database reports.
● Reports can be formatted to include numeric fields with calculations.
● Additional elements may be added to reports to improve the look and readability.
<table>
<thead>
<tr>
<th>Unit Driving/Essential Question</th>
<th>How do database applications organize and manage data commonly used in business settings?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exemplar High Quality Unit Task</td>
<td>Create and maintain a database with current classes, teachers, grades, and assignments. Database will include due dates of assignments and grades made. Students will share information with teachers and parents/guardians.</td>
</tr>
</tbody>
</table>
## Map of Student Learning by Learning Objective

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td><strong>Import</strong> data into tables and other databases.</td>
<td><strong>Create</strong> linked tables from external sources <strong>Create</strong> database tables from templates.</td>
<td>Formative: Lecture Demonstration Guided Practice Project Based Learning</td>
<td>Case Studies/Example Group assignment-display learned skill Videos on database usage Watch videos-teacher selection on database</td>
<td>ELA: Create a table using literary authors, including chapters, main ideas, characters etc. SS: Business organization MATH: Students will be able to build tables for the numerical data of a selected business to help analyze and develop an effective business plan.</td>
</tr>
<tr>
<td><strong>Utilize</strong> database tools to customize tables.</td>
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</tr>
<tr>
<td><strong>Manage</strong> records in tables to modify and update database content.</td>
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</tr>
<tr>
<td><strong>Create</strong> and modify fields within a database by using database options and tools.</td>
<td>Formative: Lecture Demonstration Guided Practice Independent Practice</td>
<td>Case Studies/Examples Skill practice Demonstration of learned skill</td>
<td>SS: Business organization</td>
<td>Computer Word Processing Software Textbook Case Studies/Examples</td>
</tr>
<tr>
<td><strong>Create and manage</strong> database forms</td>
<td>Formative: Lecture Demonstration Guided Practice Independent Practice</td>
<td>Case studies/examples Skill Practice Demonstration of learned skill</td>
<td>SS: Business organization</td>
<td>Computer Word Processing Software Textbook Internet Access</td>
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</tr>
<tr>
<td><strong>Create and save</strong> database forms using a template.</td>
<td>Formative: Lecture Demonstration Guided Practice Independent Practice</td>
<td>Case studies/examples Skill Practice Demonstration of learned skill</td>
<td>SS: Business organization</td>
<td>Computer Word Processing Software Textbook Internet Access</td>
</tr>
<tr>
<td><strong>Configure</strong> form controls. <strong>Set and manage</strong> form control properties.</td>
<td>Formative: Lecture Demonstration Guided Practice Independent Practice</td>
<td>Case studies/examples Skill Practice Demonstration of learned skill</td>
<td>SS: Business organization</td>
<td>Computer Word Processing Software Textbook Internet Access</td>
</tr>
<tr>
<td><strong>Utilize</strong> database tools to create and format customized forms.</td>
<td>Formative: Lecture Demonstration Guided Practice Independent Practice</td>
<td>Case studies/examples Skill Practice Demonstration of learned skill</td>
<td>SS: Business organization</td>
<td>Computer Word Processing Software Textbook Internet Access</td>
</tr>
<tr>
<td><strong>Create</strong> database reports.</td>
<td>Formative: Lecture Demonstration Guided Practice Independent Practice</td>
<td>Case studies/examples Skill Practice Demonstration of learned skill</td>
<td>SS: Business organization</td>
<td>Computer Word Processing Software Textbook Internet Access</td>
</tr>
<tr>
<td><strong>Create</strong> database reports using queries, design view and wizards.</td>
<td>Formative: Lecture Demonstration Guided Practice Independent Practice</td>
<td>Case studies/examples Skill Practice Demonstration of learned skill</td>
<td>SS: Business organization</td>
<td>Computer Word Processing Software Textbook Internet Access</td>
</tr>
<tr>
<td><strong>Configure</strong> report controls <strong>Set and manage</strong> report control properties.</td>
<td>Formative: Lecture Demonstration Guided Practice Independent Practice</td>
<td>Case studies/examples Skill Practice Demonstration of learned skill</td>
<td>SS: Business organization</td>
<td>Computer Word Processing Software Textbook Internet Access</td>
</tr>
<tr>
<td>Create reports using a variety of formats and report elements. Create calculated fields within a report. Apply themes and images to enhance a report.</td>
<td>Formative: Lecture Demonstration Guided Practice Independent Practice</td>
<td>Case studies/examples Skill Practice Demonstration of learned skill</td>
<td>SS: Business organization</td>
<td>Computer Word Processing Software Textbook Internet Access</td>
</tr>
</tbody>
</table>
Key Vocabulary

database, field, record, data type, table, field caption, form, report, linked table, external data, append, filtering, data validation, database form, template, form control properties, subform, labels, form header, form footers, database report, design view, wizard, calculated fields, report, orientation

Work-Based Learning, Simulated Work Experiences, and Experiential Learning:

Experiential learning, students will display work with an electronic gallery walk.

CTSO Connection:

Students will use skills and information learned to prepare for competitive events.

Certification/Credential Connection:

Adobe Certified Associate (ACA) – Photoshop / Dreamweaver / Premier Pro / InDesign / Illustrator, ASK Institute – Concepts of Entrepreneurship and Management / Fundamental Business Concepts, Certiport- Entrepreneurship and Small Business (must hold concentrator status), IC3 Global Standard 6 (or higher), Microsoft Office Expert 2019/365 - Access / Excel / Word, Microsoft Office Specialist 2019/365 (MOS) (Two of the following areas REQUIRED: Excel Associate / Outlook Associate / PowerPoint Associate / Word Associate)
Unit 5 Title: Productivity

Content Standards
12. Utilize digital technology applications on the Internet for business, personal, and educational uses.
   12a. Present a digital portfolio encompassing all programs used during the course.
   12b. Collaborate using cloud computing by designing, saving, uploading, and sharing documents, presentations, and calendars in an online account.
   12c. Utilize social networking as a business tool to create professional portfolios and blogs.

13. Devise and apply methods of modifying documents to be more accessible to people with disabilities.

Unpacked Learning Objectives

Students know:
- How to determine the necessary digital and online programs to use to address business, personal and educational requirements.
- How to use word processing, spreadsheet, databases and online tools to create a digital portfolio.
- How to access cloud computing resources.
- How to utilize cloud computing tools to share resources.
- How to create professional portfolios and blogs using social networking tools.
- How to plan ways of making documents more accessible to people with disabilities.
- How to utilize tools to prepare documents which will be accessible to people with disabilities.

Students are able to:
- Solve uses of digital technology applications needed in business, personal, and educational settings.
- Utilize digital tools to create a digital portfolio that demonstrates the mastery of material learned throughout the course.
- Access cloud resources to share content with others.
- Collaborate with others by using cloud computing.
- Create professional business portfolios and blogs using social networking tools.
- Develop documents that are accessible to people with disabilities.

Students understand:
- There are a wide variety of tools available for business, personal and educational use.
- The ability to utilize digital media and productivity tools will allow them to communicate clearly and express themselves creatively for a variety of purposes.
- The use of cloud computing will aid in the productivity of designing, saving, sharing and presenting information.
- The ability to integrate cloud computing tools allows data to be accessed and shared quickly and efficiently.
● Designing professional portfolios and blogs can deliver better engagement and improve a business’ access to potential and existing clients.
● Documents should be modified to make information more accessible to people with disabilities.

<table>
<thead>
<tr>
<th>Unit Driving/Essential Question</th>
<th>How can a business produce software to create a seamless flow of information?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exemplar High Quality Unit Task</td>
<td>Students will apply for employment with the school using their digital portfolio, students will have interviews and judging by the administration team and peers.</td>
</tr>
</tbody>
</table>
## Map of Student Learning by Learning Objective

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</tr>
</thead>
<tbody>
<tr>
<td><strong>Utilize</strong> digital technology applications for business, personal, and educational uses.</td>
<td>Formative: Lecture Demonstration Guided Practice Independent Practice</td>
<td>Everfi website-digital literacy review of the importance of digital literacy</td>
<td>SS: Business organization MATH: Compare the percentage of different digital technology applications used for business, personal and educational uses based on the current data and predict the trends.</td>
<td>Computer Word Processing Software Textbook Internet Access <a href="http://www.everfi.com">www.everfi.com</a></td>
</tr>
<tr>
<td><strong>Present</strong> a digital portfolio that applies all of the skills learned throughout the course.</td>
<td>Formative: Lecture Demonstration Guided Practice Independent Practice Project Based Learning</td>
<td>Independent practice-create an digital portfolio using the technology and skills learned Project Based Learning, review peers work for ideas and ways to improve digital portfolio</td>
<td>ELA: Review digital portfolio for input for flow and SS: Business organization</td>
<td>Computer Word Processing Software Textbook Portfolio examples Internet Access</td>
</tr>
<tr>
<td><strong>Use</strong> cloud computing to collaborate and share documents online with others.</td>
<td>Formative: Lecture Demonstration Guided Practice Independent Practice Project Based Learning</td>
<td>Independent practice-create an digital portfolio using the technology and skills learned</td>
<td>ELA: Review digital portfolio for input for flow and SS: Business organization</td>
<td>Computer Word Processing Software Textbook Portfolio examples Internet Access</td>
</tr>
<tr>
<td><strong>Utilize</strong> social networking as a business tool to create professional portfolios and</td>
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</tbody>
</table>

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Alabama State Department of Education, Career and Technical Education/Workforce Development, Plans of Instruction Updated as of Aug 2, 2022
blogs.

| Devise and apply methods of modifying documents to be more accessible to people with disabilities. | Formative: Lecture Demonstration Guided Practice Independent Practice | Check portfolio for accessibility by and make any necessary changes | SS: Business organization | Computer Word Processing Software Textbook Internet Access |

Key Vocabulary

document sharing, online account, collaborating, cloud-based computing, cloud-based filing repository, social network, social networking, portfolio blog, alternative text, accessibility

Work-Based Learning, Simulated Work Experiences, and Experiential Learning:

Students will complete a portfolio and submit to ELA or History teachers for review for experiential learning. After review, students' portfolios will be displayed in a digital gallery walk for peers.

CTSO Connection:

Students will use skills learned to prepare for competitive events

Certification/Credential Connection:

Adobe Certified Associate (ACA) – Photoshop / Dreamweaver / Premier Pro / InDesign / Illustrator, ASK Institute – Concepts of Entrepreneurship and Management / Fundamental Business Concepts, Certiport- Entrepreneurship and Small Business (must hold concentrator status), IC3 Global Standard 6 (or higher), Microsoft Office Expert 2019/365 - Access / Excel / Word, Microsoft Office Specialist 2019/365 (MOS) (Two of the following areas REQUIRED: Excel Associate / Outlook Associate / PowerPoint Associate / Word Associate)