



UMSL | Advanced Workforce Center





Welcome to the UMSL Advanced Workforce Center

Thank you for choosing the University of Missouri–St. Louis as your partner in professional growth. Whether you're an employer looking to invest in your workforce, a working professional seeking to enhance your skills, or an individual eager to advance your career, we are here to support your journey.

The **Advanced Workforce Center (AWC)** is dedicated to helping businesses develop a stronger, more skilled workforce by offering accessible education and training solutions. Through strategic partnerships with employers, we provide Fee assistance programs that allow employees to upskill at little to no cost. By investing in employee education, companies can enhance talent development, increase engagement, and improve long-term retention—building a workforce that is both highly skilled and deeply committed to organizational success.

As part of the AWC, the **Skills Lab** offers fast, targeted training designed to support immediate skill development. With one-day workshops, bootcamps and multi-week courses in high-demand areas such as project management, data analytics, and digital marketing, the Skills Lab provides practical, hands-on learning for professionals looking to enhance their expertise. These short-term training opportunities help employees and job seekers stay competitive in today's evolving job market while giving businesses a flexible solution for workforce development.

At the Advanced Workforce Center, we are committed to providing high-quality, adaptable learning experiences that benefit both individuals and organizations. Whether you're looking to take the next step in your career, strengthen your workforce, or explore new professional opportunities, our programs are designed to help you succeed.

We invite you to explore our catalog and discover how the Advanced Workforce Center and Skills Lab can support your professional development and organizational growth. Let's build a stronger workforce together!

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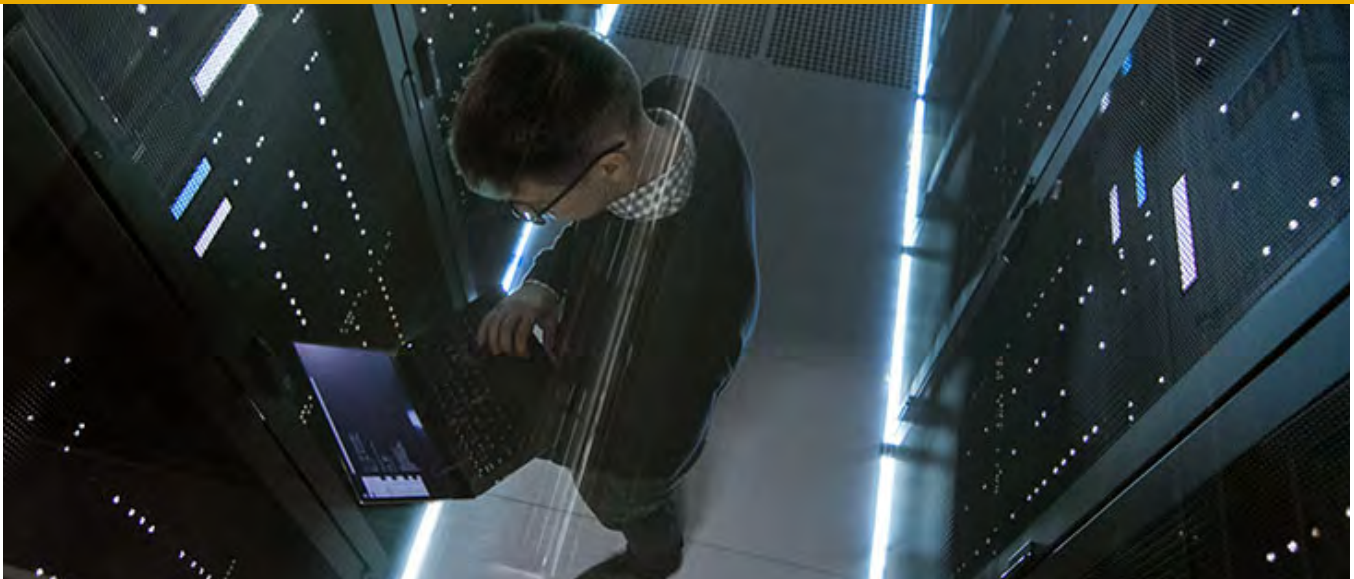
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Data Analytics

Description: Data analysis is a critical and highly sought workforce skill. You may have data from multiple sources across time and are looking to make decisions. In the UMSL Data Analytics Certification program, you will become an expert in using modern software tools that will help you make sense of your data.

Our certification focuses on three core areas:

- SQL is the standard language for working with databases. From administrators to data analysts, anyone working with data benefits from understanding SQL.
- Data Analysis is the process of understanding the meaning of data. Data analysis skills help you tell data-informed stories with others.
- Data Visualization is how you take your data and show it to others. Creative charts, graphs, and dashboards help others look at your data and make sense of it.

Some of the skills you will learn include:

- A fundamental understanding of database programming. SQL is a great first language to learn.
- How to write, compile, debug, and execute programs using SQL.
- SQL Querying: How to ask your database for relevant data.
- Visuals and Dashboards: Build interactive charts, graphs, and reports that allow others to explore the set of data they need to make decisions.
- Choose your preferred data visualization tool!

The UMSL Data Analytics Certificate includes three smaller course series that come with their own certification: SQL Fundamental Database Querying Skills, SQL Query Optimization Specialist, and one Data Analysis specialization in R programming, Power BI, or Tableau.

Business Analytics Certificate

The demand for professionals skilled in business analytics is rapidly increasing. The U.S. Bureau of Labor Statistics projects an 11% growth in employment for management analysts from 2023 to 2033, which is much faster than the average for all occupations. To meet this growing need, UMSL offers a 10-week online Business Analytics Certificate Program designed to equip professionals with essential data analysis and decision-making skills.

This program provides a flexible learning experience with self-paced modules and optional mentor-led sessions, allowing participants to gain hands-on experience with real-world applications.

Duration: 10 weeks

Fee: \$2,450 (discounted from \$2,950)

- [Full Course Details and Schedule](#)

In this course, you will learn:

- Introduction to Business Analytics – Understand the importance of business analytics in organizations and differentiate it from data science, data engineering, and AI/machine learning.
- Data Modeling – Identify and organize data needed to answer key research questions and apply Unified Modeling Language (UML) diagrams.
- SQL Basics – Learn to query data using SQL and solve business problems effectively.
- Data Visualization – Utilize Microsoft Excel and Tableau to explore, organize, and visualize data; includes one year of free access to Tableau eLearning content.
- AI and Machine Learning in Business Analytics – Gain insights into AI and machine learning applications within business analytics.

Industry certifications included:

- UMSL Digital Marketing Certificate
- Google Analytics Certification
- Google Ads Search Certification
- HubSpot Email Marketing Certification

Power BI: Data Visualization and Analytics Certificate

Power BI is a leading business intelligence and data visualization tool. Starting with the fundamentals of data integration and visualization, you will learn to connect, import, and transform datasets to create tables, charts, graphs, and other visual aids for your audience. By the end of the program, you will be proficient at creating interactive dashboards and visual reports to support strategic business decisions. This entry-level series sets the foundation for more advanced Power BI training, ensuring you develop a comprehensive understanding of Power BI's capabilities for effectively analyzing and presenting data.

Courses may be taken individually. Each course includes 0.65 CEUs. Those who complete all four of our Power BI trainings receive the UMSL Power BI: Data Visualization and Analytics Certificate and an UMSL Digital Badge.

REQUIRED COURSES

DA571 Introduction to Power BI

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$279

You will learn: Connecting to a data source involves previewing data in the Navigator, understanding the Power BI interface, exploring different data views, and discovering the Ribbon. It also includes managing report pages, creating various visualizations like tables, matrices, cards, charts, and maps, modifying visualization properties, and applying filters to enhance data presentation.

- [Full Course Details and Schedule](#)

DA572 Intermediate Power BI

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$279

You will learn: Loading data into the Power BI Query Editor involves managing and editing data in columns and rows, creating custom columns, eliminating unnecessary data, sorting and filtering, transforming data types, grouping, and establishing data relationships. Additionally, it includes drilling down within data hierarchies, creating visualizations, and importing an existing data mode.

- [Full Course Details and Schedule](#)

DA573 Advanced Power BI: Level 1

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$279

You will learn: Creating calculated columns, measures, and Quick Measures enables advanced data analysis and ranking values effectively. Additionally, it involves performing joins in data queries and utilizing advanced applications of tooltips for enhanced data visualization.

- [Full Course Details and Schedule](#)

DA574 Advanced Power BI: Level 2

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$279

You will learn: Creating a Calendar table facilitates date intelligence manipulation, including Fiscal Year and Quarter patterns, and supports calculations through measures. Additionally, it involves reshaping data formats, importing data from web sources, using data groups, importing custom visualizations, and leveraging the R data language for advanced visualizations.

- [Full Course Details and Schedule](#)

Power BI: Advanced Business Intelligence Certificate

Elevate your proficiency with Power BI! In this certificate program, you will dive deeper into Power BI's data analysis and visualization capabilities. Building on the skills taught in the UMSL Power BI: Data Visualization and Analytics certificate, this series focuses on advanced data integration techniques, complex DAX expressions, and more sophisticated dashboard and report designs. You will learn to manipulate more extensive data sets, integrate a more comprehensive array of data sources, and enhance Power BI's integration with other Microsoft services. By the end of this certification, you will have the skills and experience to design advanced interactive dashboards and produce in-depth visual reports.

Courses may be taken individually. Each course includes 0.65 CEUs. Those who complete all three Power BI trainings receive an UMSL Power BI: Advanced Business Intelligence Certificate and an UMSL Digital Badge.

REQUIRED COURSES

DA575 Advanced Power BI: Level 3

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$279

You will learn: Data modeling by transforming a large single-source fact table into structured dimension/lookup tables. Learn to apply time intelligence functions to analyze data over different time periods, including week-over-week and parallel period comparisons. Develop cumulative totals and compare results against previous years. Explore advanced custom visualizations like word clouds. Utilize DAX Set functions—Union, Intersect, and Except—to combine results.

- [Full Course Details and Schedule](#)

DA576 Advanced Power BI: Level 4

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$279

You will learn: Apply descriptive statistics, advanced DAX formulas, and Unicode characters in Power BI. Utilize bookmarks, moving averages, running totals, and period-to-date measures for data analysis. Enhance report navigation, display last refresh timestamps, and create custom Pareto charts.

- [Full Course Details and Schedule](#)

DA585 - Power BI: Power Automate Integration

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$279

You will learn: Automate workflows by integrating Power BI with Power Automate. Create interactive buttons to trigger actions, streamline report distribution, and transfer data to Excel and SharePoint while managing data flows for seamless integration.

[Full Course Details and Schedule](#)

DA577 - Advanced Power BI: Level 5

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$279

You will learn: To modify a string filter using CALCULATE. You will also discover alternate ways to use Unicode characters to customize visualization. Making variables more dynamic is covered in this class, allowing you to modify measure formulas "on the fly." Year Over Year and Week Over Week calculations is covered. Control Charts are also included in this class to focus on trends over time. The course also introduces one of the AI visuals for Power BI, the Decomposition Tree.

[Full Course Details and Schedule](#)

R Programming for Data Analysis Certificate

R is a popular statistical analysis and data science language. Beginning with the essentials of R syntax and progressing through data manipulation, visualization, and advanced statistical techniques, the R Programming for Data Analysis program will help you develop proficiency using R. you will learn how to handle complex datasets, perform statistical analyses, and create visualizations to communicate your findings. By the end of this program, you will be able to use R to conduct robust data analysis for real-world applications.

Courses may be taken individually. Each course includes 0.65 CEUs. Those who complete all four R Programming trainings receive an UMSL R Programming for Data Analysis Certificate and an UMSL Digital Badge.

REQUIRED COURSES

DA541 Introduction to R

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$279

You will learn: Gain a strong foundation in R by mastering its syntax, data structures, and the power of vectors. Learn to manipulate data frames, import CSV files, apply conditionals and logic, use vectorized functions, and create basic visualizations.

- [Full Course Details and Schedule](#)

DA542 Intermediate Applications of R

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$279

You will learn: Enhance your R skills with advanced syntax, managing rows and columns, and using powerful libraries like dplyr and SQL. Learn data aggregation, summarization, merging, transposing, combining data, and importing Excel files directly.

- [Full Course Details and Schedule](#)

DA543 Advanced Applications of R: Level 1

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$279

You will learn: Master data transformation by reshaping tables, working with factors, and inspecting with the Table() function. Learn date arithmetic, time handling, arrays, string manipulation, and data cleaning, including type coercion.

- [Full Course Details and Schedule](#)

DA544 Advanced Applications of R: Level 2

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$279

You will learn: Develop reproducible scripts, create reusable functions, and utilize conditional logic and Regular Expressions for text processing. Work with diverse data formats, perform statistical analyses, generate various graphs, and save visualizations directly from your script.

- [Full Course Details and Schedule](#)

Tableau Data Visualization Certificate

Learn Tableau, one of the leading data visualization tools used for business intelligence. The UMSL Tableau Visualization program starts with the fundamentals of data visualization and advances through sophisticated analytical techniques.

From connecting to different data sources to developing complex interactive dashboards, this course equips you with the skills to turn raw data into powerful dashboards.

Courses may be taken individually. Each course includes 0.65 CEUs. Those who complete all four Tableau trainings receive an UMSL Tableau Data Visualization Certificate and an UMSL Digital Badge.

REQUIRED COURSES

DA501 Introduction to Tableau

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$279

You will learn: Connect Excel data sources, navigate Tableau's interface, and understand dimensions, measures, and data types. Master sorting, filtering, calculated fields, dashboards, and visualizing geographical and date-based data.

- [Full Course Details and Schedule](#)

DA502 Intermediate Applications of Tableau

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$279

You will learn: Combine tables, blend data, and create diverse chart types like dual-axis and small multiples. Utilize the Analysis menu, craft data stories, and export or publish dashboards and worksheets.

- [Full Course Details and Schedule](#)

DA503 Advanced Tableau: Level 1

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$279

You will learn: Organize and enhance your data by creating hierarchies, groups, sets, and bins while switching between dimensions and measures. Utilize Boolean fields, context filters, parameters, and logical calculations to create advanced visualizations like KPIs and manipulate table calculations effectively.

- [Full Course Details and Schedule](#)

DA504 Advanced Tableau: Level 2

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$279

You will learn: Explore diverse visualizations, including Box Plots, Word Clouds, and Histograms, to analyze and present data effectively. Dive into advanced charts like Control, Pareto, Market Basket Analysis, Bump, Waterfall, and Gantt for specialized insights.

- [Full Course Details and Schedule](#)

Foundational Skills Using Excel Certificate

Microsoft Excel is a powerful business tool. Our Foundational Skills Using Excel program is an introductory course series that provides you with a strong foundation in Excel. The program begins with the essentials of navigating the Excel interface, progresses through fundamental functions and formulas, and advances to data organization and analysis techniques. By the conclusion of this certification, you'll be equipped with the core skills to efficiently utilize Excel for various data-related tasks at work and home.

Courses may be taken individually. Each course includes 0.65 CEUs. Those who complete all three Excel trainings receive an UMSL Foundational Skills Using Excel Certificate and an UMSL Digital Badge.

By completing this course series, you will be prepared for the Microsoft Excel Expert (Microsoft 365 Apps) exam, which UMSL can proctor for you. Contact 314-516-6396 to begin the process of scheduling your exam.

REQUIRED COURSES

SP901 Introduction to Excel

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$199

You will learn: Master Excel basics, including navigating the Ribbon, managing files in Backstage View, and understanding spreadsheet terminology. Learn to enter, edit, and format data, perform calculations, use references, and set up spreadsheets for printing.

- [Full Course Details and Schedule](#)

SP903 Advanced Applications of Excel

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$199

You will learn: Manage data with Excel tables by sorting, filtering, removing duplicates, and using calculated columns. Perform advanced tasks like using LOOKUP functions, linking data across worksheets, and analyzing data with Goal Seek and scenarios.

- [Full Course Details and Schedule](#)

SP902 Intermediate Applications of Excel

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$199

You will learn: Manage multiple worksheets, name cells and ranges for formulas, and use advanced functions like ROUND, IF, and conditional functions. Apply good spreadsheet design, create templates, protect cells, and format data efficiently across noncontiguous areas.

- [Full Course Details and Schedule](#)

Excel Power User Certificate

Grow your data analysis skills by becoming a Microsoft Excel Power User! This certificate program focuses on advanced functions, automation features, and analytical tools. The program covers a comprehensive range of topics such as advanced formulas and data visualization. you will learn to leverage Excel's full suite of tools to streamline workflows, perform complex analyses, and create impactful data presentations.

Courses may be taken individually. Each course includes 0.65 CEUs. Those who complete all three of our Excel trainings receive an UMSL certificate in Excel Power User and an UMSL Digital Badge.

REQUIRED COURSES

SP905 Excel Formulas and Functions

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$199

You will learn: Master advanced Excel techniques, including creating mega formulas, text, date/time, and information functions. Explore statistical, lookup, and reference functions, utilize Form Controls for dynamic lookups, and work with array formulas and constants.

- [Full Course Details and Schedule](#)

SP925 Excel Data Analysis

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$199

You will learn: Analyze data effectively by generating descriptive statistics, building histograms with Pareto analysis, and charting moving averages. Explore advanced techniques like data correlation, exponential smoothing, and visualizing data with Waterfall, Sunburst, Treemap, and Radar charts.

- [Full Course Details and Schedule](#)

SP921 Excel Data Manipulation

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$199

You will learn: Enhance spreadsheet efficiency by creating comments, freezing panes, using Go To, and correcting formula errors. Master advanced tools like custom lists, Paste Special, Data Validation, hyperlinks, and organize data with Group, Outline, and consolidation techniques.

- [Full Course Details and Schedule](#)

Excel Pivot Tables and Power Pivot Expert Certificate

Expand your data analysis skills within Excel by leveraging Pivot Tables and Power Pivot for powerful data modeling and analysis! In this program, you will develop the ability to organize and perform detailed analyses of large datasets using PivotTables. This program equips you with skills to dynamically interact with data such as: expanding, collapsing, and switching data views; creating relationships between diverse datasets; and developing custom calculations and formulas. By the end of this program, you will be able to harness the advanced capabilities of Pivot Tables and Power Pivot to analyze large datasets, create complex models, and perform sophisticated data analysis—all directly within Excel.

Courses may be taken individually. Each course includes 0.65 CEUs. Those who complete all four Excel trainings receive an UMSL certificate Excel Pivot Tables and Power Pivot Expert Certificate and an UMSL Digital Badge.

REQUIRED COURSES

SP915 Introduction to Excel PivotTables

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$199

You will learn: Master PivotTables in Excel to analyze and summarize large datasets efficiently. Learn to organize, filter, and customize data visualizations, create calculated fields, and generate insightful reports to enhance decision-making.

- [Full Course Details and Schedule](#)

SP916 Intermediate Excel PivotTables

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$199

You will learn: Apply advanced summary methods, create custom calculated fields, and organize data with custom groups. Use conditional formatting, KPI icons, and timeline slicers to enhance data insights while managing grand totals and subtotals effectively.

- [Full Course Details and Schedule](#)

SP917 Advanced Excel PivotTables

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$199

You will learn: Customize PivotTables with advanced features, including multi-level subtotals, calculated items, and fiscal year structures. Learn to replace empty values, use indexes to analyze impact, apply advanced filtering techniques, and automate tasks with macros and VBA. Enhance data visualization with custom PivotTable and slicer styles.

- [Full Course Details and Schedule](#)

SP918 Introduction to PowerPivot

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$199

You will learn: Create PivotTables and PivotCharts from large data sets, import and query data, and relate multiple tables using key fields. Use DAX to add calculated columns, build hierarchies, generate KPIs, and apply date intelligence for data-driven insights.

- [Full Course Details and Schedule](#)

Independent Excel Courses

Continue your professional development journey at UMSL with workshops and training in data analytics! The below courses can be taken on their own, or you can use them as substitutes toward a Chancellor's Certificate to specialize your learning journey.

We provide CEUs for each course, as well as certify your attendance for your employer or career advisor/job coach.

SP926 Advanced Excel Data Prep with Power Query

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$199

You will learn: Navigate the Power Query interface, load and transform data from various sources, and apply key transformations like filtering, pivoting, and unpivoting. Create calculated and conditional fields, aggregate data, and combine queries using merge and append for seamless data analysis.

- [Full Course Details and Schedule](#)

SP922 Creating Charts with Excel

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$199

You will learn: Create and customize various chart types, including column, pie, line, scatter, and combination charts. Modify chart data, adjust formatting, and enhance visuals with pictographs to effectively represent data.

- [Full Course Details and Schedule](#)

SP931 Excel Macros Using VBA

Duration: Two-Day Class, 8:30am-4:00pm

Fee: \$399

You will learn: Record, run, and edit macros using absolute and relative references. Create shortcuts, use VBA's Object Model, and apply logic with If-Then statements and loops. Work with message boxes, buttons, variables, and dialog boxes to automate tasks and build interactive tools like an order form.

- [Full Course Details and Schedule](#)



Cloud-Based Collaboration

Description: Whether you work in-person or online, you will work smarter by collaborating with colleagues and clients live. Online collaboration tools aid you with the process of communicating with others. These tools help you creatively work with others as well as automate your routine work.

We offer our UMSL SharePoint Certificate as a robust training program to build dashboards that bring all your moving parts together in one central digital hub. We focus both on SharePoint and Power Automate as it is equally important to organize your work as it is to develop the “flows” that allow your applications (email, Excel, etc.) to talk to one another. Our Power Apps course will teach you how to build your own app!

Our SharePoint Collaborator Specialist and Power Automate certificates build up to the UMSL SharePoint Certificate.

In the UMSL Power Automate course series, you will learn:

- The art and science of flows: the process by which your SharePoint lists and libraries exchange and update information.
- How to streamline data collection and reporting tasks.
- Identify and automate repetitive tasks and processes to increase your efficiency.
- How to monitor and troubleshoot your automated workflows.
- How to create your own app with Power Apps.

In the UMSL SharePoint Collaborator program, you will learn:

- How to configure and manage your own SharePoint Intranet.
- Setting up workflows, version control, and permissions to allow team members to collaborate.
- How to protect sensitive information while providing appropriate access.
- Build your own SharePoint lists and libraries to allow users to find information they need.

Product Management Certificate

The role of product managers is increasingly vital in today's business landscape. As of 2023, there are approximately 2.4 million individuals globally holding product manager positions, reflecting the growing importance of this role. To meet this demand, UMSL offers a 10-week online Product Management Certificate Course designed to equip professionals with practical and strategic skills essential for success in product management.

This program provides a flexible learning experience, combining self-paced modules with optional mentor-led sessions, allowing participants to gain hands-on experience with real-world applications.

Duration: 10 weeks

Fee: \$2,450 (discounted from \$2,950)

- [Full Course Details and Schedule](#)

In this course, you will learn:

- Product Management Fundamentals – Understand the product manager's role and the product development lifecycle.
- Customer Insights and Data Analysis – Conduct research, analyze data, and develop user personas.
- Product Roadmapping and Prototyping – Build structured roadmaps and design prototypes using Figma.
- Agile Development and Go-to-Market Strategies – Apply Agile/Scrum methodologies, develop MVPs, and create launch strategies.
- Performance Measurement and Optimization – Use analytics tools, conduct A/B testing, and refine products based on user feedback.

Industry certifications included:

- UMSL Product Management Certificate of Completion
- Productboard Build Outcome-Driven Roadmaps Certification
- Getting Started with Amplitude Analytics Credential
- (Optional) Jira Software Essentials Certification

Project Management Certificate

The project management industry is witnessing unprecedented growth, with a 33% increase in job opportunities projected through 2027, accounting for nearly 22 million new jobs. To meet this rising demand, UMSL offers a 10-week online Project Management Certificate Course designed to equip professionals with practical and strategic skills essential for modern project management.

This program provides a flexible learning experience, combining self-paced modules with optional mentor-led sessions, allowing participants to gain hands-on experience with real-world applications.

Duration: 5 weeks

Fee: \$1,700 (discounted from \$1,950)

- [Full Course Details and Schedule](#)

In this course, you will learn:

- Project Management Fundamentals – Understand the significance of project management in driving business success, define the six critical stages and ten key areas of project management, and differentiate between Waterfall, Agile, and Hybrid approaches.
- Project Planning and Execution – Define objectives, scope, and stakeholders; build strategies using established frameworks; design real-world project plans; and lead successful project kick-off meetings.
- Stakeholder Management and Leadership – Identify and effectively manage key stakeholders, leverage leadership techniques for team motivation, and navigate challenging stakeholder conversations.
- Agile Project Management Methodologies – Understand key principles of Agile, including Kanban and Scrum basics; recognize use cases for technical project management; and initiate Agile project plans using Jira.
- Hands-On Tools and Certifications – Gain hands-on experience with tools like Jira, Microsoft Project, Google Sheets, and Excel; learn about AI and technological innovations in project management; and earn a Jira Software Essentials Associate Certification.

Industry certifications included:

- UMSL Project Management Certificate of Completion
- 23 Hours Toward PMI CAPM Certification
- Jira Software Essentials Associate Certification



Power Automate Efficiency Certificate

Power Automate is a key component of Microsoft's Power Platform that enables users to automate routine business tasks and processes. Each course teaches you how to design, test, and implement automated workflows between your favorite apps and services to synchronize files, get notifications, collect data, and more without needing code. You'll learn to use both cloud-based and desktop flows, understanding how to automate tasks across the most common business applications and services.

Courses may be taken individually. Each course includes 0.65 CEUs. Those who complete all four trainings receive an UMSL Power Automate Certificate and an UMSL Digital Badge.

REQUIRED COURSES

WG885 Introduction to Power Automate

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$279

You will learn: Learn Power Automate fundamentals, including connectors, triggers, actions, and templates, while mastering built-in flow templates. Share flows, manage document libraries, write to lists, use conditions and loops, and send emails with options.

- [Full Course Details and Schedule](#)

WG886 Intermediate Power Automate

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$279

You will learn: Set up and manage approval flows for single or multiple users, including serial approvals and customization. Utilize the Approval Center, integrate forms with approvals, and streamline workflows by copying and renaming actions and flows.

- [Full Course Details and Schedule](#)

WG887 Advanced of Power Automate

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$279

You will learn: Master advanced Power Automate features like variables, the Compose action, and retrieving data with Get items, Get files, and OData queries. Work with dates, convert documents to PDFs, document your flows, use the Scope action for organization, and leverage the Excel connector effectively.

- [Full Course Details and Schedule](#)

WG891 Introduction to Power Apps

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$279

You will learn: Design and deploy Canvas-based apps, customize SharePoint forms, and add interactive controls like sliders and toggles. Enhance app appearance, embed apps on SharePoint pages, validate inputs, and create apps using Excel as a data source.

- [Full Course Details and Schedule](#)

SharePoint Collaboration Specialist Certificate

Build your own Intranet with SharePoint! The UMSL SharePoint Collaboration Specialist program focuses on SharePoint as a platform for effective collaboration and efficient site management. SharePoint sites are interactive dashboards that connect files and information together; they allow users to navigate through content libraries with easy-to-understand visual displays. Participants learn how to create, configure, and manage SharePoint sites, facilitating collaboration through shared content, resources, and applications. The program covers essential topics such as document management, customizing lists and libraries, and managing site permissions.

Courses may be taken individually. Each course includes 0.65 CEUs. Those who complete all four SharePoint trainings will also receive an UMSL SharePoint Collaboration Specialist Certificate and an UMSL Digital Badge.

REQUIRED COURSES

WG821 Introduction to SharePoint Online

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$279

You will learn: Navigate and utilize SharePoint sites by managing document libraries, uploading and creating documents, and using versioning and alerts. Add content to lists, create custom lists and sites, and manage settings while understanding features like the Recycle Bin.

- [Full Course Details and Schedule](#)

WG822 Intermediate SharePoint Online

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$279

You will learn: Enhance SharePoint productivity by customizing and leveraging metadata to sort, filter, and group content in lists and libraries. Create views for better presentation, apply list and conditional formatting to highlight important information, and improve navigation by modifying the Quick Launch. Utilize Choice and Lookup columns for data quality, and master advanced features like calculated columns, column validation, list validation, and generating totals.

- [Full Course Details and Schedule](#)

WG823 Advanced SharePoint: Level 1

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$279

You will learn: Create team sites and associate them with hubs, set up hub navigation, and adjust site appearances. Build Communication sites, use the News web part, manage permissions, differentiate between Microsoft 365 and SharePoint security groups, and create simple flows.

- [Full Course Details and Schedule](#)

WG824 Advanced SharePoint: Level 2

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$279

You will learn: Design modern SharePoint pages with sections, lists, libraries, and multimedia like videos and galleries. Share dynamic content, add navigation links, filter and compile content, edit home pages, utilize hub sites, and connect web parts for a cohesive experience.

- [Full Course Details and Schedule](#)

Independent Online Collaboration Courses

Continue your professional development journey with workshops and training on Microsoft 365 programs and apps! The below courses can be taken on their own, or you can use them as substitutes toward a Chancellor's Certificate to specialize your learning journey.

We provide CEUs for each course, as well as certify your attendance for your employer or career advisor/job coach.

WG970 Time Management Using Outlook

Duration: Half-Day Class, 8:30am-12:00pm

Fee: \$129

You will learn: Learn to streamline your Outlook experience by converting emails to calendar entries, contacts, and To-Do list items, and by creating tasks, delegating them, and tracking their progress. Organize and manage your inbox efficiently with categories, folders, rules, and automatic replies, while mastering scheduling, contact creation, and reducing email overload.

- [Full Course Details and Schedule](#)

WP901 Introduction to Word

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$199

You will learn: Master the essentials of Microsoft Word by creating, opening, editing, and saving documents, as well as formatting text with different fonts, styles, sizes, and alignments. Enhance productivity by organizing text with tabs, lists, and the Clipboard, while utilizing tools like Find and Replace, spell check, margin adjustments, and print preview.

- [Full Course Details and Schedule](#)

WP902 Intermediate Applications of Word

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$199

You will learn: Enhance your Microsoft Word skills by using templates for specialized documents, creating and modifying tables, and setting up mail merges for form letters. Streamline document formatting with paragraph spacing, headers, footers, section breaks, and themes to ensure a polished, professional appearance.

- [Full Course Details and Schedule](#)

WG841 Introduction to OneDrive

Duration: Half-Day Class, 8:30am-12:00pm

Fee: \$129

You will learn: Learn to navigate the OneDrive interface, create and manage files and folders, and sync content across devices. Enhance efficiency by sorting, filtering, sharing files, and recovering deleted items using OneDrive and File Explorer.

- [Full Course Details and Schedule](#)

WG840 Introduction to Office 365

Duration: Half-Day Class, 8:30am-12:00pm

Fee: \$129

You will learn: Explore the Office 365 start page, its available options, and how to customize the App Launcher. Gain proficiency in using Planner for project management, creating forms, surveys, and quizzes, while understanding how Office 365 apps integrate seamlessly.

- [Full Course Details and Schedule](#)

GR901 Introduction to PowerPoint

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$199

You will learn: How to navigate its interface, working with various views, and managing slides with text, graphics, and consistent formatting. Enhance presentations with themes, transitions, and graphic elements, and prepare for delivery by setting up and printing slides, notes, and handouts.

- [Full Course Details and Schedule](#)

GR902 Intermediate Applications of PowerPoint

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$199

You will learn: Enhance your PowerPoint presentations by creating charts, tables, organization charts, and SmartArt graphics. Customize slides with unique layouts, templates, and themes, while seamlessly importing and exporting Word documents.

- [Full Course Details and Schedule](#)

GR903 Advanced Applications of PowerPoint

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$199

You will learn: Streamline your PowerPoint workflow by substituting fonts, using layout tools, and reusing slides or creating custom shows. Enhance presentations with multimedia, hyperlinks, narration, animations, and review tools, while ensuring compatibility and privacy before sharing.

- [Full Course Details and Schedule](#)

WG875 Introduction to OneNote

Duration: Half-Day Class, 8:30am-12:00pm

Fee: \$129

You will learn: To add, format, and organize notes in OneNote while creating sections, pages, and using templates for better structure. Enhance productivity by tagging notes, integrating with Outlook, protecting sections with passwords, sharing notebooks, and exporting content to Word.

- [Full Course Details and Schedule](#)

Independent Project Management Courses

Continue your professional development journey with workshops and training in project management with UMSL! The below courses can be taken on their own, or you can use them as substitutes toward a Chancellor's Certificate to specialize your learning journey.

We provide CEUs for each course, as well as certify your attendance for your employer or career advisor/job coach.

PM901 Introduction to Project

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$279

You will learn: Organize project tasks, create Gantt charts, and set dependencies. Modify calendars, track project status, and understand baselines. View schedules, print reports, and analyze the critical path for effective project management.

- [Full Course Details and Schedule](#)

GR850 Introduction to Visio

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$279

You will learn: Master Visio basics, use discipline-specific tools, and work with SmartShapes. Customize diagrams with backgrounds, colors, and text. Create flowcharts, manipulate connections, and design custom shapes.

- [Full Course Details and Schedule](#)

PM902 Intermediate Applications of Project

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$279

You will learn: Create custom calendars, set up resource pools, and assign resources. Master Microsoft Project scheduling, templates, and project consolidation. Optimize workflows by resolving resource over-allocations, prioritizing tasks, and accelerating project completion.

- [Full Course Details and Schedule](#)



Database and CRM Administration

Description: Data is the backbone on which organizations run and make decisions. Behind every successful work organization is an accurate, useful database—and a Database Administrator who ensures that everyone has access to the data they need to do their work. The UMSL Database Technology Certificate helps build leaders in database management.

In our Database Technology program, you will learn to:

- Use proven design techniques to develop relational, or connected, databases
- Design queries that surface the datasets you need for work tasks and decisions
- Develop reports to make sense of your data
- Optimize the functionality of your database for everyday operations
- Become an expert in SQL commands and client-server systems

Our program starts with a robust foundation in SQL, a computer language for communicating and making sense of data. Our students first complete courses in SQL Database Querying, with both introductory and advanced courses available for students at all levels. The SQL Querying Optimization program builds on SQL database queries by teaching how to make queries run smoother and faster.

Depending on your interest, you complete one of two elective tracks to round out the certificate. The Foundations of Microsoft Access Database Management provides a robust foundation in using Access as the interface for SQL commands as well as how to create forms and reports, and our SQL Security and Procedures program is designed for database administrators who oversee permissions for accessing and modifying organizational data.

If you are interested in both data analysis and database administration, you may earn an additional UMSL Certificate in Data Analysis by also completing the four-course series in Power BI, R Programming, or Tableau.

Salesforce Administration Certificate

The demand for Salesforce Administrators has experienced significant growth, with a 148% increase in job opportunities over the past five years and a median U.S. salary of \$86,000. To meet this rising demand, UMSL offers a 14-week online Salesforce Administration Certificate Course designed to equip professionals with the practical and strategic skills needed to excel as Salesforce administrators.

This program provides a flexible learning experience, combining self-paced modules with optional mentor-led sessions, allowing participants to gain hands-on experience with real-world applications.

Duration: 14 weeks

Fee: \$2,650 (discounted from \$3,200)

- [Full Course Details and Schedule](#)

In this course, you will learn:

- The fundamentals of Salesforce Administration: user management, data modeling, security, and problem-solving skills
- How to use Einstein AI and ChatGPT to automate routine tasks
- How to gather and analyze customer data
- To create reports and dashboards within Salesforce
- To design and implement flows
- Collaboration with your colleagues using Salesforce

Industry certifications included:

- UMSL Certificate of Completion
- Salesforce Trailhead Badges
- Salesforce Associate Certification (optional)
- Preparation for Salesforce Administrator Certification (optional)



Foundations of Microsoft Access Database Management Certificate

The UMSL Foundations of Microsoft Access certificate program covers the basics of database concepts, including creating and managing databases, designing tables, and understanding relationships between data. you will learn how to efficiently organize, search, and manage data in Access, enabling you to build and maintain robust databases. By the end of this certification, you'll have the skills necessary to utilize Access for data entry, queries, forms, and reports, providing practical tools for data management in business environments.

Courses may be taken individually. Each course includes 1.3 CEUs. Those who complete both of our Microsoft Access trainings earn an UMSL Microsoft Access Database Management Certificate and an UMSL Digital Badge.

REQUIRED COURSES

DB901 Introduction to Access

Duration: Two-Day Class, 8:30am-4:00pm

Fee: \$399

You will learn: Navigate Access databases to work with objects, tables, and tools efficiently. Create and manage tables, queries, forms, and reports, perform calculations, and import, export, or link data while maintaining and organizing database objects.

- [Full Course Details and Schedule](#)

DB902 Intermediate Applications of Access

Duration: Two-Day Class, 8:30am-4:00pm

Fee: \$399

You will learn: Customize table design with field properties, indexes, and primary keys to improve functionality. Create parameter queries, design interactive forms, generate organized reports with summaries, and use data to create mailing labels and form letters.

- [Full Course Details and Schedule](#)

SQL Fundamental Database Querying Skills Certificate

SQL (Structured Query Language) is the standard language for database interaction. In the UMSL SQL Fundamental Database Querying Skills program, you will start with the basics of database theory, SQL syntax, and the construction of simple queries to select data. As you progress through the course series, you will learn to sort and filter data, use aggregate functions and group results, and understand the basics of joining tables. By the end of this program, you will know how to write SQL queries that can be used to extract and manipulate data across various database systems.

Courses may be taken individually. Each course includes 0.65 CEUs. Those who complete all four of our SQL trainings receive the UMSL SQL Fundamental Database Querying Skills Certificate and an UMSL Digital Badge.

REQUIRED COURSES

CS301 Introduction to SQL

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$279

You will learn: Develop a foundational understanding of SQL features, standards, and database terminology. Create and refine queries with SELECT, WHERE, and ORDER BY, combine criteria with AND/OR, use aggregate functions, and work with character, numeric, and date data effectively.

- [Full Course Details and Schedule](#)

CS302 Intermediate Applications of SQL

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$279

You will learn: Write advanced SELECT statements with clauses and logical operators, and perform inner and outer joins on multiple tables. Create and modify views, combine queries with UNION, compare data using EXCEPT and INTERSECT, and generate summaries with ROLLUP and CUBE commands.

- [Full Course Details and Schedule](#)

CS319 Advanced SQL Queries: Level 2

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$279

You will learn: Utilize date and string functions to handle irregular data patterns and display output based on conditions. Create custom queries for top-value results, calculate running totals, search database metadata, work with pivot table data, and perform self-joins.

- [Full Course Details and Schedule](#)

CS318 Advanced SQL Queries: Level 1

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$279

You will learn: Master complex joins to link multiple tables and understand their relationships. Use aggregate data with ORDER, GROUP BY, and HAVING clauses, extract top results, rank data with Rank() and Dense_Rank, execute subqueries, and work with date queries using Datename and Datepart functions. Prerequisites include foundational SQL knowledge.

- [Full Course Details and Schedule](#)

SQL Query Optimization Specialist Certificate

As a popular database language, SQL is a great entry point for anyone interested in analyzing data. This certification will help you be more competent in data management AND confident in data accuracy and validity. The SQL Query Optimization Specialist certificate builds on your SQL expertise. As you continue your learning journey with the SQL programming language, you will learn how to optimize SQL queries to make your database run smoother and faster.

Courses may be taken individually. Each course includes 0.65 CEUs. Those who complete all three trainings receive an UMSL certificate in SQL Query Optimization Specialist and an UMSL Digital Badge.

REQUIRED COURSES

CS303 Advanced Applications of SQL

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$279

You will learn: Learn the fundamentals of relational database design, including creating and modifying tables to improve functionality and maintain data integrity. Establish relationships with primary and foreign keys, enforce referential integrity, and explore data normalization and Transact-SQL programming.

- [Full Course Details and Schedule](#)

CS320 Advanced SQL: Level 3

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$279

You will learn: Analyze customer survival and predict future revenues by examining factors affecting customer tenure and calculating retention probabilities. Identify customers, track sales trends, analyze order frequency and purchasing patterns, and perform market basket analysis.

- [Full Course Details and Schedule](#)

CS325 SQL Query Optimization

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$279

You will learn: Master SQL order of operations and analyze query execution plans to optimize performance. Improve query readability with formatting, filtering, and aliasing, reduce duplication using DISTINCT, and enhance efficiency with stored procedures, joins, CTEs, and unions. Learn when to use views or tables, leverage indices to boost speed, and create or update statistics for accurate results.

- [Full Course Details and Schedule](#)

SQL Security and Procedures Certificate

The UMSL SQL Security and Procedures Certificate equips you with expert-level knowledge and skills in querying, database management, and database security. This program focuses on advanced querying techniques, creating and using Stored Procedures, using loops and cursors, and Cybersecurity. You'll learn about advanced data manipulation, optimizing queries for performance, and constructing intricate data solutions. Enhance database security by learning how to lock down your database and queries to secure your data from hacking both from outside and inside your company. By the end of this program, you will be ready to utilize the full potential of SQL to solve complex data challenges, make strategic data-driven decisions, and prevent your data from getting into the wrong hands.

Courses may be taken individually. Each course includes 0.65 CEUs. Those who complete all three trainings receive an UMSL certificate in SQL Security and Procedures and an UMSL Digital Badge.

REQUIRED COURSES

CS351 Introduction to SQL Stored Procedures

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$279

You will learn: Discover the advantages of stored procedures and learn to create, alter, and reference them for selecting and manipulating data. Utilize local variables, parameters, conditional logic with IF statements and CASE functions, test for data existence, and explore stored procedures using the GUI and system procedures.

- [Full Course Details and Schedule](#)

CS352 Intermediate SQL Stored Procedures

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$279

You will learn: Control data processing with WHILE loops and cursors to handle individual rows from queries. Manage exceptions using TRY-CATCH and RAISERROR, write procedures with OUTPUT parameters, use the OUTPUT clause for data manipulation feedback, and construct dynamic SQL for flexible execution.

- [Full Course Details and Schedule](#)

CS341 Introduction to SQL Security

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$279

You will learn: Understand key security terms and SQL Server authentication modes, including Windows Authentication. Learn to encrypt communication, use schemas for security, manage logins and database access, and assign roles and permissions effectively. Explore securable hierarchies, automate login and permission creation with scripts, implement Ownership Chaining, and encrypt columns for enhanced data protection.

- [Full Course Details and Schedule](#)

SQL Server Reporting Services (SSRS) Professional Certificate

SQL Server Reporting Services (SSRS) is a server-based report-generating software system from Microsoft. This certificate provides the tools and knowledge needed to create dynamic, data-driven reports with SSRS. You'll learn to author, manage, and deliver a variety of reports using SSRS. The program covers creating interactive reports, using different data visualization components, managing report security, and automating report delivery.

Courses may be taken individually. Each course includes 0.65 CEUs. Those who complete all three trainings receive an UMSL SQL Server Reporting Services (SSRS) Professional Certificate and an UMSL Digital Badge.

REQUIRED COURSES

CS521 Introduction to SQL Server Reporting Services

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$279

You will learn: Design report definitions in Visual Studio and deploy them for browser execution via the reporting web service. Utilize Report Manager for viewing and printing, create reports in Report Builder, and efficiently export and distribute reports.

- [Full Course Details and Schedule](#)

CS523 Advanced SQL Server Reporting Services

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$279

You will learn: Enhance report flexibility with linked and unlinked lists for free-form data arrangement. Create drill-down reports to navigate from summaries to detailed data and utilize subreports to reuse code, integrate multiple data sources, and pass data efficiently with parameters.

- [Full Course Details and Schedule](#)

CS522 Intermediate SQL Server Reporting Services

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$279

You will learn: Create reports with multiple datasets, integrating data and graphics seamlessly. Use advanced features like multi-value and drill-down parameters, and design dynamic matrix reports for enhanced data presentation.

- [Full Course Details and Schedule](#)



Programming and AI Tools

Description: Coders and programmers are always in demand. Whether you work in code already and would like to study a new language, or are interested in learning your first language, we gladly welcome you to our course series. We offer two certificates in Python Programming/Development and one each in both Java Programming and Visual C# Programming.

Don't have several weeks to dedicate to a coding bootcamp? We offer the same level of rigor at a more manageable pace. Courses for each language meet for two days per week, allowing you ample time to practice your learning at home, work, or in a computer lab.

Newcomers to the world of computer programming are welcome to first take our Introduction to Programming Concepts course. We have designed this course for anyone exploring the field.

In our programming and coding course series, you will learn:

- In Python, you will develop your skills in standard coding techniques and programming logic. Toward the end of the certificate pathway, you will create programs incorporating AI.
- In Java, you will explore web application development and practice object-oriented programming, or OOP. In the advanced course series, you will create GUIs: rich, interactive desktop applications using Swing and AWT.
- In Visual C#, you will gain a deep understanding of object-oriented programming while implementing unit testing and working with databases.
- All of our certifications include training on error handling and debugging.

The Python Programming Chancellor's Certificate also requires that you take four days of SQL training to learn database design and querying.

Artificial Intelligence Certificate

As artificial intelligence (AI) continues to transform industries, proficiency in AI prompting has become a sought-after skill. A recent survey indicates that 76% of workers recognize the necessity of AI skills to remain competitive in today's labor market. To meet this growing demand, UMSL offers a 5-week online AI Prompting Certificate Course designed to equip professionals with practical and strategic AI prompting capabilities.

This program provides a flexible learning experience with self-paced modules and optional mentor-led sessions, allowing participants to gain hands-on experience with real-world applications.

Duration: 5 weeks

Fee: \$1,700 (discounted from \$1,950)

- [Full Course Details and Schedule](#)

In this course, you will learn:

- AI Prompting Fundamentals – Adopt an AI-first approach to work by creating, evaluating, and refining AI prompts for high-value output.
- AI Content Creation – Expedite content creation using data-driven approaches, crafting AI-driven marketing campaigns, personalized emails, blog posts, social media content, and more.
- Data Analysis & Visualization – Utilize AI for effective data analysis, visualize quantitative datasets, summarize qualitative data, and customize presentations for diverse audiences.
- AI Tools for Productivity – Leverage ChatGPT to enhance productivity, create personalized upskilling plans, and integrate AI into existing workflows.
- Scaling with Prompt Libraries and Custom GPTs – Develop strategies for integrating AI into business processes, create prompt libraries, and design custom GPTs to enhance team efficiency.



Certified Visual C# Developer Certificate

This certification provides a thorough grounding in C#, a versatile and widely used programming language in the .NET framework. The program covers everything from basic syntax and data types to advanced concepts such as object-oriented programming. By the end of the program, you will be capable of building professional-level desktop, web, and mobile applications using C# and related technologies in the .NET ecosystem.

Courses may be taken individually. Each course includes 1.3 CEUs. Those who complete all three C# Developer trainings receive an UMSL Visual C# Developer Certificate and an UMSL Digital Badge.

REQUIRED COURSES

PG451 Introduction to Visual C# .NET Programming

Duration: Two-Day Class, 8:30am-4:00pm

Fee: \$399

You will learn: Design Windows forms with various controls like buttons, labels, and text boxes, and manipulate their properties at design and runtime. Respond to user events with code, use variables and conditional logic, interact via message boxes, implement loops, and work with arrays to manage data efficiently.

- [Full Course Details and Schedule](#)

PG452 Intermediate Visual C# .NET Programming

Duration: Two-Day Class, 8:30am-4:00pm

Fee: \$399

You will learn: Master object-oriented programming in C# by creating and using classes, defining static members, and writing constructors and methods. Utilize collections for dynamic lists, apply inheritance to extend functionality, and focus on good object-oriented design principles.

- [Full Course Details and Schedule](#)

PG453 Advanced Topics in Visual C# .NET: Data Access

Duration: Two-Day Class, 8:30am-4:00pm

Fee: \$399

You will learn: Create data-driven Windows forms using Visual C# and Visual Studio, leveraging tools like the Data Source Configuration Wizard and Dataset Designer. Bind data with drag-and-drop capabilities, set up datasets with relationships and foreign keys, validate and update data, generate reports, and navigate, sort, and filter data with the BindingSource component.

- [Full Course Details and Schedule](#)

Java Developer, Specialist Certificate

Dive into web development with Java, one of the world's most popular and widely used programming languages. Designed for robustness, portability, and high performance, Java is a staple in enterprise environments, web applications, and mobile development. The program starts with Java basics, such as syntax, operators, and data types. It progresses through more advanced topics, including object-oriented programming, exception handling, file I/O, and developing GUI applications. Participants will also explore the integration of databases using JDBC.

Courses may be taken individually. Each course includes 0.65 CEUs. Those who complete all three courses receive an UMSL Java Developer, Specialist Certificate and an UMSL Digital Badge.

REQUIRED COURSES

PG531 Introduction to Java Programming

Duration: Two-Day Class, 8:30am-4:00pm

Fee: \$399

You will learn: Explore the history, features, and applications of Java while mastering its input/output functions and object-oriented principles. Use the Eclipse IDE to write, compile, and run programs, declare variables, apply operators, work with conditional statements, loops, arrays, and utilize Java's API and built-in methods for data manipulation.

- [Full Course Details and Schedule](#)

PG532 Intermediate Java Programming

Duration: Two-Day Class, 8:30am-4:00pm

Fee: \$399

You will learn: Master object-oriented programming in Java by creating and using custom classes, constructors, and methods while leveraging Java class libraries. Utilize JUnit for testing, Maven for project management, collections with generics, and inheritance to extend functionality, ensuring well-organized programs with good design principles.

- [Full Course Details and Schedule](#)

PG533 Advanced Java Programming

Duration: Two-Day Class, 8:30am-4:00pm

Fee: \$399

You will learn: Learn to connect to databases using JDBC for executing selects, inserts, updates, and deletes. Design GUI applications with Swing and AWT, using event handling, layout managers, and components like buttons, text fields, and menus, while customizing interfaces with Color and Font objects. Additionally, master file input and output operations.

- [Full Course Details and Schedule](#)

Python Development, Entry-Level Certificate

This certification provides a comprehensive introduction to Python, one of today's most popular and versatile programming languages in the tech industry. Python is known for its readability, simplicity, and wide range of applications in data analysis, web development, machine learning, and more. The course covers Python basics, including syntax, data types, control structures, functions, and modules, and an introduction to object-oriented programming concepts. Participants will learn practical skills to start Python programming and develop small-scale applications.

Courses may be taken individually. Each course includes 1.3 CEUs. Those who complete all three trainings receive an UMSL Python Development, Entry-Level Certificate and an UMSL Digital Badge.

REQUIRED COURSES

PG541 Introduction to Python Programming

Duration: Two-Day Class, 8:30am-4:00pm

Fee: \$399

You will learn: Learn to work with variables, operators, and control structures like IF statements, loops, and nested conditions. Generate random numbers, apply numeric and string functions, and create or manipulate lists, dictionaries, and custom functions. Explore modules and their functions for efficient programming.

- [Full Course Details and Schedule](#)

PG542 Intermediate Python Programming

Duration: Two-Day Class, 8:30am-4:00pm

Fee: \$399

You will learn: Master object-oriented programming and work with regular expressions, file I/O, and database operations. Learn error handling with exceptions, utilize lambda functions, map, filter, and list comprehensions, and explore advanced topics like the datetime module, iterators, and generators for efficient programming.

- [Full Course Details and Schedule](#)

Python Development Specialist Certificate

This program focuses on more complex topics and applications with Python. Topics include advanced data structures, and libraries such as Matplotlib for data visualization and Flask for web development. The course introduces participants to database management, file operations, and the basics of data science with Python. By the end of this certification, you will have the skills necessary to build more sophisticated Python applications in areas like automation, data analysis, and web development.

Courses may be taken individually. Each course includes 1.3 CEUs. Those who complete all three Python trainings receive an UMSL Python Development Specialist Certificate and an UMSL Digital Badge.

REQUIRED COURSES

PG543 Advanced Python Programming: Level 1 Data Analysis

Duration: Two-Day Class, 8:30am-4:00pm

Fee: \$399

You will learn: Learn basic data analysis techniques, including building and manipulating NumPy arrays, Pandas series, and dataframes. Plot datasets with Matplotlib, filter, group, and aggregate data, and perform data munging to clean and prepare datasets for analysis.

- [Full Course Details and Schedule](#)

PG544 Advanced Python Programming: Level 2

Duration: Two-Day Class, 8:30am-4:00pm

Fee: \$399

you will learn: Master JSON parsing, serialization, and deserialization for data transmission, including handling non-serializable information. Learn to store Pandas DataFrames as JSON, read/write XML files, create HTML web pages with Python, and perform web scraping with BeautifulSoup. Additionally, build GUIs using Tkinter with widgets, event-driven programming, and create and use web APIs.

- [Full Course Details and Schedule](#)

PG545 Advanced Python Programming: Level 3

Duration: Two-Day Class, 8:30am-4:00pm

Fee: \$399

You will learn: Learn to import data, train machine learning estimators, and make predictions while understanding decision trees, overfitting prevention, and data enhancement through random selection and folding. Utilize SVC, linear and polynomial regression, unsupervised learning with K-means, pre-processing techniques, and principal component analysis. Build pipelines for streamlined workflows and experiment with hyper-parameter optimization to improve model performance.

- [Full Course Details and Schedule](#)



Web Management and Digital Marketing

Description: Jumpstart your web development career with UMSL! Whether you have a website of your own or have ideas for how to improve the user experience on the Internet, learning web development skills will help you achieve your goals. JavaScript is the cornerstone language for web development. By studying JavaScript with UMSL, you will be proficient in using JavaScript to create responsive, interactive web applications.

In our Full Stack JavaScript program, you will learn web development and software engineering skills such as:

- How to implement JavaScript to add interactive content to webpages.
- How to modify page content and structure using the Document Object Model (DOM).
- Using AJAX to fetch web data without refreshing the webpage.
- Debugging and responsive design principles.

For those building their own website, we offer courses in HTML, CSS, and WordPress. With a solid foundation of CSS and JavaScript, you will be able to develop dynamic and interactive websites.

The JavaScript program includes four courses, culminating in learning how to create interactive user interfaces with React, a JavaScript library.

Digital Marketing Certificate

The demand for skilled digital marketing professionals is rapidly increasing, with the U.S. Bureau of Labor Statistics projecting an 8% job growth for marketing managers by 2033—outpacing the average for all occupations. Additionally, LinkedIn ranks Digital Marketing Specialist among the top 10 most in-demand jobs, with over 860,000 openings requiring expertise in SEO, social media, content strategy, and analytics. The UMSL Digital Marketing Certificate is designed to help professionals develop these critical skills and stay competitive in today's evolving job market.

This 10-week online program provides a flexible learning experience with self-paced modules and optional mentor-led sessions. Participants gain hands-on experience with real-world applications while earning industry-recognized certifications.

Duration: 10 weeks

Fee: \$2,450 (discounted from \$2,950)

- [Full Course Details and Schedule](#)

In this course, you will learn:

- Digital Marketing Strategy – Develop customer personas, set objectives, and align marketing channels.
- Search Engine Optimization (SEO) and Search Engine Marketing (SEM) – Optimize websites for search engines and implement Google Ads campaigns.
- Social Media and Content Marketing – Build effective content strategies and manage multi-platform campaigns.
- Email Marketing and Analytics – Create high-performing email campaigns and analyze key metrics.
- Artificial Intelligence in Marketing – Leverage AI tools, including ChatGPT, for digital strategy enhancement.

Industry certifications included:

- UMSL Digital Marketing Certificate
- Google Analytics Certification
- Google Ads Search Certification
- HubSpot Email Marketing Certification



Full Stack JavaScript Professional Certificate

This certification establishes a solid foundation in JavaScript, the cornerstone language for web development, enabling interactive and dynamic user experiences on web pages. The course covers JavaScript fundamentals, including variables, data types, functions, control structures, and DOM manipulation. By the end of this certification, you will be proficient in using JavaScript to create responsive and interactive web applications.

REQUIRED COURSES

WW521 Introduction to JavaScript

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$279

You will learn: Learn to modify HTML programmatically using getElementById and innerHTML, and manipulate data with variables, string, and arithmetic functions. Work with dates, handle user interactions via events, process user input, and debug web pages effectively to enhance functionality.

- [Full Course Details and Schedule](#)

WW522 Intermediate JavaScript

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$279

You will learn: Learn to create conditional statements and loops for dynamic functionality, validate form input with regular expressions, and ensure user accuracy before submission. Utilize arrays to manage multiple items and understand the capabilities of the JavaScript window object for enhanced interactivity.

- [Full Course Details and Schedule](#)

WW523 Advanced JavaScript

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$279

You will learn: Learn to create dynamic features like image slideshows and clocks, and manage cookies for storing session information. Incorporate the jQuery library to select page elements, apply CSS, show/hide elements, and trigger actions on user interaction. Use AJAX with jQuery to update pages dynamically, including fetching data from XML files for features like search suggestions and dropdowns.

- [Full Course Details and Schedule](#)

WW524 Advanced JavaScript: React.js

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$279

You will learn: Build a React program using a Content Delivery Network and modern JavaScript features like arrow functions, const, and let. Write JSX for seamless integration of HTML/XML in JavaScript, use the render function for updates, and explore the benefits of toolchains like Create-React-App over CDNs. Create custom components, props, states, and actions, pass information between parent and child components, utilize React's lifecycle methods, and prepare your website for release.

- [Full Course Details and Schedule](#)

Independent Web Management Courses

Continue your professional development journey with workshops and training in web management and design with UMSL! The below courses can be taken on their own, or you can use them as substitutes toward a Chancellor's Certificate to specialize your learning journey. We provide CEUs for each course, as well as certify your attendance for your employer or career advisor/job coach.

WW501 Introduction to HTML

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$199

You will learn: Structure web pages effectively, understand document type declarations, and optimize title and heading tags for readability and SEO. Learn best practices for using heading tags and block elements to enhance web content.

- [Full Course Details and Schedule](#)

WW502 Intermediate Applications of HTML

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$199

You will learn: Set up navigation menus, work with images, and create links using absolute and relative paths. Learn to use meta tags, validate documents, design web pages, and enhance layouts with tables and image maps.

- [Full Course Details and Schedule](#)

WW510 Introduction to CSS

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$199

You will learn: Control text size, margins, and object placement with precision using absolute positioning. Customize backgrounds, borders, and spacing while creating distinct styles for individual or multiple web pages.

- [Full Course Details and Schedule](#)

WW511 Intermediate Applications of CSS

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$199

You will learn: Format tables with CSS, design sidebars, and create fixed, liquid, and hybrid page layouts. Build horizontal and vertical navigation bars, develop columnar layouts with equal heights, and enhance pages with graphics.

- [Full Course Details and Schedule](#)

WW571 Introduction to WordPress

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$239

You will learn: Create and manage posts, incorporate multimedia, and organize content with categories and tags. Customize comments, edit static pages, configure blog settings, and enhance your site's functionality with themes and plugins.

- [Full Course Details and Schedule](#)

DP441 Introduction to Desktop Publishing Using InDesign

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$249

You will learn: Format text, set tabs and indents, and apply colors to text and shapes. Learn to create and manage columns, thread text frames, manipulate shapes, and use master pages for automatic page numbering.

- [Full Course Details and Schedule](#)

DP442 Intermediate Applications of InDesign

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$249

You will learn: Import, crop, resize, and manipulate graphics in InDesign. Apply color and gradient blends, wrap text around images, and convert text to paths. Create templates, master pages, sections, and dynamic page numbering for seamless layouts.

- [Full Course Details and Schedule](#)

DP443 Advanced Applications of InDesign

Duration: One-Day Class, 8:30am-4:00pm

Fee: \$249

You will learn: Enhance text formatting with optical margin alignment, decorative initials, and baseline grids. Improve efficiency using styles, libraries, and snippets, create tables of contents, prepare documents for printing, and automate layout adjustments with layers.

- [Full Course Details and Schedule](#)

DP450 Design Principles for Desktop Publishing

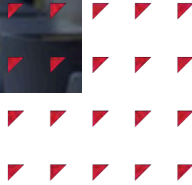
Duration: One-Day Class, 8:30am-4:00pm

Fee: \$249

You will learn: Apply best practices for managing whitespace, formatting fonts, and creating reader-friendly text. Learn when and how to use images, design documents for print, and maintain a consistent style throughout your work.

- [Full Course Details and Schedule](#)

**WE LOOK FORWARD TO HELPING YOU THRIVE
AS A TRITON AND GROW ALONGSIDE OUR
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YOUR TRAINING TEAM

We're here to help you succeed! If you have any questions about programs, scheduling, or exclusive discounts for employer partners, don't hesitate to reach out.

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