

A Collaboration Led by NWGA RESA



COMPUTER SCIENCE ENDORSEMENT

Begins April 23, 2024

Tuesday Classes 5:30 PM to 8:00 PM

Courses:

Computing and Networking Basics (\$450) Micro

- 4/23 - 6/11/24

Computational Thinking (\$350) Micro

- 9/3 - 11/5/24

Intro to Programming (\$350)

- 11/12/24 - 2/25/25

Data Visualization and Instructional Strategies (\$350)

- 3/11/25 - 4/29/25



Total Cost

Micro-Credential - \$800

Endorsement - \$1,500

About the Endorsement

Metro RESA is partnering with NWGA RESA to offer the Computer Science Micro-Credential and Computer Science Endorsement.

Please complete the interest form if you would like information on registering with NWGA RESA to participate in either program. We will need a minimum of 20 participants to offer the program. See next page for more information on each course.

INTEREST FORM



Wendy.Grey@mresa.org



www.mresa.org

Course 1: Computing and Networking Basics

This endorsement course is the first of four courses as an introduction to the discipline and pathways of computer science. It is also the first of two courses in the CS micro-credential. In the 8-week course we will study computer basics and components, network basics, cybersecurity, and digital citizenship. The course is designed with 3 synchronous sessions and 5 asynchronous modules. There is a key assessment utilizing the concepts learned throughout the course

SYNCHRONOUS ONLINE MEETING DATES: April 23, May 14, June 11 (2024)

Attendance at synchronous meetings are a requirement of the Computer Science Endorsement.

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Course 2: Computational Thinking

This endorsement course is the second of four courses as an introduction to Computational Thinking. It is also the last of two courses in the CS micro-credential. We will study an overview of pattern recognition, algorithm design, decomposition, and abstraction. Candidates will also problem-solve in programming concepts by using block coding and start an examination of the python programming language.

SYNCHRONOUS ONLINE MEETING DATES:

September 3, 24; October 1, 15, 22, 29; November 5 (2024)

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Course 3: Intro to Programming

Required textbook: Python Crash Course, 2nd Edition ([purchase here](#))

This endorsement course is the third of four courses and delves into the world of programming. Candidates will learn the core concepts of computer programming in a hands-on, project-based environment using the Python programming language. We will discuss data types, variables, functions, conditional statements, loops, lists, dictionaries, objects, and files.

Candidates must be available and have reliable internet accessibility for the entire synchronous virtual meeting. Candidates must have Broadband Internet access and a microphone and webcam to participate in virtual meetings.

SYNCHRONOUS ONLINE MEETING DATES:

November 12, 19; December 3, 10 (2024); January 7, 14, 21, 28; February 4, 11, 18, 25 (2025)

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Course 4: Data Visualizations and Instructional Strategies

This endorsement course is the 4th and final course and investigates data visualizations and instructional strategies. We will investigate industry partners, CTSOs, and professional organizations. We will discuss lesson planning resources, gathering and analyzing data, and use Looker Studio to visualize data. The course concludes with a key assessment covering concepts from the course.

SYNCHRONOUS ONLINE MEETING DATES: March 18; April 8, 29 (2025)