

## Certificate in Mathematics for Professionals and Educators at Bowling Green State University

**Description:** This 18-hour graduate-level certificate program is designed for professionals working in a field aligned with mathematics, especially professional educators who need to deepen and broaden their knowledge and skills in mathematics to remain competitive in their current positions and/or expand their career horizons. In recent semesters, we have been offering enough online courses to make it possible to complete the certificate by taking courses online. The courses listed below will count for CCP credentialing in high schools that partner with BGSU. Contact Benjamin Ward, graduate coordinator in Mathematics and Statistics, by email, [benward@bgsu.edu](mailto:benward@bgsu.edu), for more information.

**Checksheet**

**Name:** \_\_\_\_\_

**Your Advisor's Name:** \_\_\_\_\_

*18 hour certificate program*

Semester	Year	<b>Electives (Choose at least 6, with <u>at least THREE</u> from the first 9 courses listed below)*</b>	
		MATH 6020	Geometric Problems and Misconceptions (3 hours, face-to-face)
		MATH 6030	Algebraic Problems and Misconceptions (3 hours, occasionally online)
		MATH 6280	Topics in Mathematics Education (3 hours, face-to-face)
		MATH 5010	Number Theory (3 hours, face-to-face)
		MATH 5340	Advanced Calculus (3 hours, face-to-face) ♣
		MATH 5410	Probability and Statistics I (3 hours, face-to-face, summer, fall) ♦
		MATH 5650	Introduction to Real Analysis I (3 hours, face-to-face course) ♣
		MATH 5820	Topics in Mathematics (3 hours, occasionally online)
		MATH 6820	Topics in Mathematics (3 hours, occasionally online)
		MATH 5020	Modern Geometry (3 hours, face-to-face)
		MATH 5030	Modern Algebra I (3 hours, face-to-face)
		MATH 5040	Modern Algebra II (3 hours, face-to-face)
		MATH 5110	History of Mathematics (3 hours, usually online)
		MATH 5170	Advanced Mathematics Topics and the Early Adulthood Context (3 hours, occasionally online)
		MATH 5250	Theory of Interest (3 hours, face-to-face)
		MATH 5320	Linear Algebra with Applications (3 hours, face-to-face)
		MATH 5420	Probability and Statistics II (3 hours, face-to-face) ♦
		MATH 5450	Applied Probability (3 hours, face-to-face) ♦
		MATH 5470	Exploratory Data Analysis (3 hours, usually online) ♦
		MATH 5510	Numerical Analysis (3 hours, face-to-face)
		MATH 5610	Introduction to Complex Analysis (3 hours, face-to-face) ♣

**Other electives (must be approved by advisor & Graduate Coordinator)**


Note: Students who attended BGSU as an undergraduate cannot get credit for both the 4000- and 5000-level version of cross-listed courses; this applies in particular to Math 4020/5020, 4110/5110, and 4170/5170.

Some recommendations for CCP teachers depend on the courses one intends to teach:

- ♦ These courses are recommended for CCP teachers interested in teaching elementary statistics
- ♣ These courses are recommended for CCP teachers interested in teaching Calculus