

# ADVANCED LEVEL MATHEMATICS CERTIFICATE

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## Advanced Level Mathematics Certificate

The Advanced Level Mathematics Certificate provides students the opportunity to struggle with real world problems, develop solutions, and reflect on their accomplishments. The Certificate is for motivated students who want to demonstrate numerical literacy and mathematical competence in collaboration with their primary degree program. Students who complete the Certificate will have demonstrated an understanding that mathematics is both an active area of study as well as a set of tools utilized by their area of study. Completion of the Certificate requires a theoretical understanding of high-level mathematics as well as an understanding of how to use mathematics to model and solve relevant real-world problems.

### Program Benefits

The primary purpose of the mathematics certificate is to serve students in the CU partnership program who wish to enhance their content knowledge in mathematics but are unable to complete the requirements of a dual major. All degrees at Western can benefit from additional proficiency in mathematics. Numerical literacy, modeling capabilities, and an ability to understand and analyze data enhances Western graduates' opportunity to be hired in better positions once they graduate. The Advanced Level Mathematics Certificate may be utilized in the future (depending on asynchronous offerings) by non-degree seeking students looking to bolster their professional resume.

### Admission Requirements

The certificate is available to all students, but cannot be combined with either a mathematics minor or another mathematics certificate. Students are responsible for completing all necessary course prerequisites.

### Certificate Requirements

The attainment of an Advanced Level Mathematics Certificate necessitates a minimum of 18 credits and cannot be combined with either a mathematics minor or another mathematics certificate.

Code	Title	Credits
Mathematics Certificate Core:		
MATH 151	Calculus I (GT-MA1)	4
MATH 251	Calculus II	4
MATH Elective	300-level or above, excluding MATH 323 and MATH 390	3
Select at least 7 credits from the following:		7
MATH Elective	200-level or above, excluding MATH 221, MATH 222, MATH 323, MATH 367, and MATH 390	
<b>Total Credits</b>		<b>18</b>