

# MATHEMATICS - ASSOCIATE OF ARTS OREGON TRANSFER (AAOT)

## Description

The study of mathematics develops analytic and quantitative skills, which are valuable in today's data-driven economy. The Associate of Arts Oregon Transfer with a focus in mathematics includes courses commonly required for a math major and meets lower-division general education requirements at all Oregon public universities.

A bachelor's degree with a major in math is great preparation for graduate school (such as schools of law, medicine, education, or business) and direct employment in industry, government, research, and business.

## Statewide General Education Student Learning Outcomes

Please see the [General Education page](#) for statewide general education student learning outcomes.

## Entrance Requirements

While this degree has no formal entrance requirements, individual courses may have prerequisites which must be met before enrollment.

## Course Requirements

Course	Title	Credits
<b>General Education/Foundational</b>		
<u>Health:</u>		
Choose three credits <sup>1</sup>		3
<u>Mathematics:</u>		
Choose one course		4
Recommend: MTH 251Z		
<u>Oral Communication:</u>		
Choose one course		3-4
<u>Writing:</u>		
WR 121Z	Composition I	4
WR 122Z	Composition II	4
or WR 227Z	Technical Writing	
<b>General Education/Discipline studies</b>		
<u>Cultural Literacy:</u>		
One course from the following categories must be designated as cultural literacy on the Discipline Studies list (credits count once).		
<u>Arts and Letters:</u>		
Choose three courses from at least two prefixes		9-12
<u>Social Science:</u>		
Choose four courses from at least two prefixes		12-16
<u>Science/Math/Computer Science:</u>		
Choose four courses from at least two prefixes including at least three laboratory courses in biological and/or physical science		12-20
Recommend: STAT 243Z, PH 211, PH 212, PH 213		
<b>Electives</b>		

Choose any course numbered 100 or above that brings the total credits to 90 quarter hours. This may include up to 12 credits of Career and Technical Education courses designated by COCC as acceptable.

Recommend: MTH 231, MTH 232, MTH 252Z, MTH 253Z, MTH 254, MTH 255, MTH 256, MTH 261A <sup>2</sup>

**Total Credits** **90-106**

<sup>1</sup> HHPA activity courses (1 credit each) are not to be duplicated

<sup>2</sup> Related courses to consider: CIS 120 Computer Concepts, CIS 122

Introduction to Programming

Note: Some four year colleges require CIS 122 Introduction to Programming for math majors. See an advisor for details.

## Advising Notes

- MTH 256 Applied Differential Equations is only offered Fall term and MTH 261A Introduction to Linear Algebra and MTH 253Z Calculus III are only offered Spring term.
- MTH 254 Vector Calculus I and MTH 231 Discrete Mathematics are only offered Winter term, and MTH 255 Vector Calculus II and MTH 232 Discrete Mathematics II are only offered Spring term.
- PH 211 General Physics I is only offered winter term, PH 212 General Physics II is only offered Spring term, and PH 213 General Physics III is only offered Fall term.

## Performance Standards

- Academic Requirements:
  - Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
  - All courses in the program must be completed with a grade of C or higher.

## Sample Plan

<b>First Term</b>		<b>Credits</b>
Discipline Studies Arts & Letters		3-4
Mathematics (recommend MTH 251Z)		4
<u>Oral Communication:</u>		3-4
WR 121Z	Composition I	4
<b>Credits</b>		<b>14-16</b>
<b>Second Term</b>		
Discipline Studies Lab Science (recommend PH 211)		5
Discipline Studies Science/Math/Computer Science (recommend STAT 243Z)		4
Elective (recommend MTH 252Z)		4
WR 122Z	Composition II	4
or WR 227Z	or Technical Writing	
<b>Credits</b>		<b>17</b>
<b>Third Term</b>		
Discipline Studies Lab Science (recommend PH 212)		5
Discipline Studies Social Science		3-4
Elective (recommend MTH 253Z)		4

Elective (recommend MTH 261A)	2
Health (3 credits with HHP or HHPA prefix)	3

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<b>Credits</b>	<b>17-18</b>
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**Fourth Term**

Discipline Studies Arts & Letters	3-4
Discipline Studies Lab Science (recommend PH 213)	5
Discipline Studies Social Science	3-4
Elective (recommend MTH 256)	4

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<b>Credits</b>	<b>15-17</b>
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**Fifth Term**

Discipline Studies Arts & Letters	3-4
Discipline Studies Social Science	3-4
Elective (recommend MTH 231)	4
Elective (recommend MTH 254)	4

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<b>Credits</b>	<b>14-16</b>
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**Sixth Term**

Discipline Studies Social Science	3-4
Elective (consider CIS 120 or CIS 122)	4
Elective (recommend MTH 232)	4
Elective (recommend MTH 255)	4

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<b>Credits</b>	<b>15-16</b>
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<b>Total Credits</b>	<b>92-100</b>
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