

## Associate of Arts to Bachelor of Arts in Mathematics With a Concentration in Actuarial Science

The following is presented as an articulation agreement between City Colleges of Chicago (CCC) and Governors State University (GovState) for the Mathematics with a concentration in Actuarial Science degree program based on the current catalogs of both schools. The student would receive an Associate of Arts (AA) degree from one of the CCC and a Bachelors of Arts (BA) degree in Mathematics with a concentration in Actuarial Science from GovState.

### I. TRANSFERABLE GENERAL EDUCATION CORE CURRICULUM: (40-42 Hours)

#### Communications (9 hours)

- ENG 101 - Composition (3)
- ENG 102 - Composition (3)
- SPEECH 101 - Fundamentals of Speech Communications (3)

#### Humanities and Fine Arts (9 hours)

- Fine Arts Course (3)\*
- Humanities Course (3)\*
- Humanities or Fine Arts Course (3)\*

#### Mathematics (5 hours)

- MATH 207 - Calculus and Analytic Geometry I (5) (Meets MATH 2290)

#### Physical and Life Sciences (8-10 hours)

- Life Science Course (3-4)\* (BIOLOGY 121 recommended)
- PHYSICS 221 or 231 or 235 - Mechanics, Waves and Heat or General Physics I or Engineering Physics I (4-5) (Meets PHYS 2171/2172)\*\*

#### Social and Behavioral Sciences (9 hours)

- ECON 201 - Principles of Economics I (3) (Meets ECON 2302)
- ECON 202 - Principles of Economics II (3) (Meets ECON 2301)
- Social and Behavioral Science Course – Non-Economics (3)\*

### II. ADDITIONAL COLLEGE REQUIREMENTS (0)\*

Human Diversity Requirement (0) (This requirement can be fulfilled within the humanities or social behavioral sciences category by selecting a course with an IAI code ending in *N* or *D*.)

### III. AREA OF CONCENTRATION/MAJOR FIELD (20-21 Hours)

- MATH 208 - Calculus and Analytic Geometry II (5) (Meets MATH 2292)
- MATH 209 - Calculus and Analytic Geometry III (5) (Meets MATH 2294)
- MATH 210 - Differential Equations (3) (Meets MATH 2271)
- MATH 212 - Linear Algebra (3) (Meets MATH 2449)
- PHYSICS 222 or 232 or 236 - Electricity, Light and Modern Physics or General Physics II or Engineering Physics II (4-5) (Meets PHYS 2181/2182)\*\*

**REQUIRED A.A. DEGREE PROGRAM TOTAL: 60 Hours** (60-63 hours as written)

\* Refer to the CCC AA/AS guidelines for a list of course choices in Section I.

\*\*PHYSICS 235/236 sequence preferred for BA in Mathematics transfers. PHYSICS 231/232 or PHYSICS 221/222 will be accepted.

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#### IV. TO BE COMPLETED AT CCC OR GovState (6-8 Hours)

Computer Science Selective (3-4) (CCC CIS 101 or CIS 103 **or** GovState CPSC 2005, 3120, 3142 or 3143)  
Financial Accounting (3-4) (CCC BUSINES 181 **or** GovState ACCT 2110)

#### V. TO BE COMPLETED AT GovState (49-54 Hours)

##### Core Courses (30-33 hours)

MATH 3099 - Junior Seminar: Discrete Mathematics (3)  
MATH 4229 - Advanced Calculus (3)  
MATH 4241 - Analysis I: Real Variables (3)  
MATH 4250 - Mathematical Statistics (3)  
MATH 4350 - Foundations of Actuarial Science (4)  
MATH 4450 - Theory of Interest (4)  
MATH 4557 - Probability (3)  
MATH 4637 - Mathematics Laboratory (3)  
MATH 4800 - Mathematics Internship (1-4)  
STAT 4219 - Statistical Methods (3)

##### Concentration Courses (15 hours)

ECON 4101 - Econometrics I (3)  
FIN 3110 - Principles of Financial Management (3)  
FIN 3501 - Investments (3)  
FIN 4501 - Financial Options and Futures (3)  
FIN 4502 - Advanced Investments (3)

##### Electives (4-6 hours)

#### Minimum Required for the BA in Mathematics with Actuarial Science: 120 Hours

##### For more information: Governors State University

Jaguar Transfer Evaluator at  
<https://govst.transfer.degree/>

College of Arts and Sciences  
website at [www.govst.edu/cas](http://www.govst.edu/cas)

##### City Colleges of Chicago Transfer Centers

Richard J. Daley College  
(773) 838-7690  
Harold Washington College  
(312) 553-5778  
Kennedy-King College  
(773) 602-5285

Malcolm X College  
(312) 850-7088  
Olive- Harvey College  
(773) 291-6537  
Harry S Truman College  
(773) 907-4424  
Wilbur Wright College  
(773) 481-8200

GovState Transfer Guide 05/08/2024

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