Associate of Science 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 (GSU) 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 in Science (AS) degree from one of the CCC and a Bachelors of Arts (BA) degree in Mathematics with a concentration in Actuarial Science from GSU.

I. TRANSFERABLE GENERAL EDUCATION CORE CURRICULUM: (39-41 Hours)

Communications (9 hours)
- ENG 101 - Composition (3)
- ENG 102 - Composition (3)
- SPEECH 101 - Fundamentals of Speech Communications (3)

Humanities and Fine Arts (6 hours)
- Humanities Course (3)*
- Fine Arts Course (3)*

Mathematics (10 hours)
- MATH 207 - Calculus and Analytic Geometry I (5) (Meets MATH 2290)
- MATH 208 - Calculus and Analytic Geometry II (5) (Meets MATH 2292)

Physical and Life Sciences (8-10 hours)
- Life Science Course (3-5)* (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 (6 hours)
- ECON 201 - Principles of Economics I (3) (Meets ECON 2302)
- ECON 202 - Principles of Economics II (3) (Meets ECON 2301)

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 (19-21 Hours)

- MATH 209 - Calculus and Analytic Geometry III (5) (Meets MATH 2294)
- MATH 146 - Discrete Mathematics (4) (Meets MATH 2150)
- 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.S. DEGREE PROGRAM TOTAL: 60 Hours

* 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.
IV. TO BE COMPLETED AT CCC OR GSU (12-14 Hours)

Computer Science Selective (3-4) (CCC CIS 101 or CIS 103 or GSU CPSC 2005, 3120, 3142 or 3143)
Financial Accounting (3-4) (CCC BUSINESS 181 or GSU ACCT 2110)
Non-Western Culture Humanities Course (3)*
Social and Behavioral Science Course – Non-Economics (3)*

*Refer to CCC or GSU catalog for list of course options available in section IV.

V. TO BE COMPLETED AT GSU (45-46 Hours)

Core Courses (27 hours)

<table>
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<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Hours</th>
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<tbody>
<tr>
<td>MATH 4133</td>
<td>Number Theory</td>
<td>3</td>
</tr>
<tr>
<td>MATH 4229</td>
<td>Advanced Calculus</td>
<td>3</td>
</tr>
<tr>
<td>MATH 4241</td>
<td>Analysis I: Real Variables</td>
<td>3</td>
</tr>
<tr>
<td>MATH 4250</td>
<td>Mathematical Statistics</td>
<td>3</td>
</tr>
<tr>
<td>MATH 4451</td>
<td>Modern Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MATH 4557</td>
<td>Probability</td>
<td>3</td>
</tr>
<tr>
<td>MATH 4637</td>
<td>Mathematics Laboratory</td>
<td>3</td>
</tr>
<tr>
<td>MATH 4970</td>
<td>Capstone Internship</td>
<td>3</td>
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<tr>
<td>STAT 4219</td>
<td>Statistical Methods</td>
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Concentration Courses (15 hours)

<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Hours</th>
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<tbody>
<tr>
<td>ECON 4101</td>
<td>Econometrics I</td>
<td>3</td>
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<tr>
<td>FIN 3110</td>
<td>Principles of Financial Management</td>
<td>3</td>
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<tr>
<td>FIN 3501</td>
<td>Investments</td>
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<tr>
<td>FIN 4501</td>
<td>Financial Options and Futures</td>
<td>3</td>
</tr>
<tr>
<td>FIN 4502</td>
<td>Advanced Investments</td>
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</table>

Electives (3-4 hours)

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

For Additional Information:
Governors State University
Office of Admissions
(708) 534-4490
TransferGuide@govst.edu
College of Arts and Sciences website at www.govst.edu/cas

City Colleges of Chicago
Counseling or Transfer Center
Daley College
(773) 838-7935 or 838-7980
Harold Washington College
(312) 553-5778
Kennedy-King College
(773) 602-5285
Malcolm X College
(312) 850-7464
Olive- Harvey College
(773) 291-6251
Truman College
(773) 907-4735
Wright College
(773) 481-8227

GSU Transfer Guide 1.31.2017