MATHEMATICS, ASSOCIATE IN SCIENCE

College(s): DA, HW, KK, MX, OH, TR, WR

Program Code: 0211

Pathway
Most of us are comfortable using everyday mathematics, but higher level mathematics, such as calculus, may seem mysterious, a completely unfamiliar language. As a mathematics student, you’ll study this language and learn how to use it to describe the world. You’ll explore calculus, modern algebra, and other high-level mathematics in the purest light. If you love to solve puzzles, enjoy finding patterns and discovering whether something is true or false, this could be the pathway for you. If it all adds up, you might become a computer scientist, a mathematics instructor, a financial analyst, a mathematician, a statistician and more.

This is an example course sequence for students interested in pursuing Mathematics. This does not represent a contract, nor does it guarantee course availability. If this pathway is followed as outlined, you will earn an Associate in Science (AS) degree. One course will satisfy the Human Diversity (HD) requirement, and is labeled with an (HD) in the sequence below. Following this pathway will help you get your associate degree, which will increase your chances of transfer to bachelor’s-level programs of study. Choose Illinois Articulation Initiative (IAI) courses to fulfill general education requirements whenever possible. Visit www.itransfer.org (http://www.itransfer.org) and speak with your college advisor to learn more about IAI.

Recommended electives may vary by transfer institution. Choose your courses with your College Advisor.

Semester-by-Semester Program Plan for Full-Time Students
All plans can be modified to fit the needs of part-time students by adding more semesters.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semester 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGLISH 101</td>
<td>Composition 1</td>
<td>3</td>
</tr>
<tr>
<td>MATH 207</td>
<td>Calculus &amp; Analytic Geometry I 1</td>
<td>5</td>
</tr>
<tr>
<td>Social and Behavioral Sciences course 1</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>SPEECH 101</td>
<td>Fundamentals of Speech Communication 1</td>
<td>3</td>
</tr>
<tr>
<td>Hours</td>
<td></td>
<td>14</td>
</tr>
<tr>
<td>Semester 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGLISH 102</td>
<td>Composition 1</td>
<td>3</td>
</tr>
<tr>
<td>MATH 208</td>
<td>Calculus &amp; Analytic Geometry II 1</td>
<td>5</td>
</tr>
<tr>
<td>PHYSICS 235</td>
<td>Engineering Physics I, Mechanics &amp; Wave Motion I</td>
<td>5</td>
</tr>
<tr>
<td>Social and Behavioral Sciences course (HD) 1</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Hours</td>
<td></td>
<td>16</td>
</tr>
<tr>
<td>Semester 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 209</td>
<td>Calculus &amp; Analytic Geometry III 2</td>
<td>5</td>
</tr>
<tr>
<td>Life Sciences course 1</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>MATH 210</td>
<td>Differential Equations 2</td>
<td>3</td>
</tr>
<tr>
<td>Pathway Elective (p. 2) 2</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Humanities 1</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Hours</td>
<td></td>
<td>17</td>
</tr>
<tr>
<td>Semester 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 212</td>
<td>Linear Algebra 2</td>
<td>3</td>
</tr>
<tr>
<td>Fine Arts course 1</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Elective 2</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>CHEM 201</td>
<td>General Chemistry I 1</td>
<td>5</td>
</tr>
<tr>
<td>Hours</td>
<td></td>
<td>14</td>
</tr>
</tbody>
</table>

Total Hours 61

1
General Education Requirement
2
Pathway Elective (p. 2)
### Pathway Electives

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>RELIGN 101</td>
<td>Introduction To Religion</td>
<td>3</td>
</tr>
<tr>
<td>RELIGN 108</td>
<td>Religion And Psychology</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 121</td>
<td>Basic Chemistry I ¹</td>
<td>4</td>
</tr>
<tr>
<td>MATH 209</td>
<td>Calculus &amp; Analytic Geometry III</td>
<td>5</td>
</tr>
<tr>
<td>MATH 210</td>
<td>Differential Equations</td>
<td>3</td>
</tr>
<tr>
<td>MATH 212</td>
<td>Linear Algebra</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>6-7</td>
<td></td>
</tr>
<tr>
<td>MATH 140 &amp; MATH 141</td>
<td>College Algebra and Plane Trigonometry</td>
<td></td>
</tr>
<tr>
<td>MATH 143</td>
<td>Pre Calculus ²</td>
<td></td>
</tr>
<tr>
<td>PHIL 106</td>
<td>Introduction To Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>PHIL 107</td>
<td>Ethics</td>
<td>3</td>
</tr>
<tr>
<td>PHYSICS 236</td>
<td>Engineering Physics II: Electricity &amp; Magnetism</td>
<td>5</td>
</tr>
</tbody>
</table>

Additional electives such as Comparative Religion

¹
CHEM 121 Basic Chemistry I should only be taken if the student needs it for admittance into CHEM 201 General Chemistry I.

²
MATH 143 Pre Calculus should only be taken if the student needs it for admittance into MATH 207 Calculus & Analytic Geometry I.

Choose your courses with your College Advisor.