

## CUNY PATHWAYS – Chemical Engineering (AS)

| <b>REQUIRED COMMON CORE</b>                                                                                                                                                                                                                                                                                                                                    |                                                     | <b>CREDITS</b> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|----------------|
| <b>English Composition</b>                                                                                                                                                                                                                                                                                                                                     |                                                     | 6              |
| <b>Mathematical and Quantitative Reasoning</b>                                                                                                                                                                                                                                                                                                                 |                                                     | 4              |
| MAT 210 Required                                                                                                                                                                                                                                                                                                                                               |                                                     |                |
| <b>Life and Physical Sciences</b>                                                                                                                                                                                                                                                                                                                              |                                                     | 4              |
| CHE 210 Required                                                                                                                                                                                                                                                                                                                                               |                                                     |                |
|                                                                                                                                                                                                                                                                                                                                                                |                                                     |                |
| <b>FLEXIBLE COMMON CORE</b>                                                                                                                                                                                                                                                                                                                                    |                                                     |                |
| <b>World Cultures and Global Issues</b>                                                                                                                                                                                                                                                                                                                        |                                                     | 3              |
| <b>U.S. Experience in Its Diversity</b>                                                                                                                                                                                                                                                                                                                        |                                                     | 3              |
| <b>Creative Expression</b>                                                                                                                                                                                                                                                                                                                                     |                                                     | 3              |
| <b>Individual and Society</b>                                                                                                                                                                                                                                                                                                                                  |                                                     | 3              |
| <b>Scientific World</b>                                                                                                                                                                                                                                                                                                                                        |                                                     | 4              |
| CHE 220 Required                                                                                                                                                                                                                                                                                                                                               |                                                     |                |
| <b>One (1) additional course from the Scientific World</b>                                                                                                                                                                                                                                                                                                     |                                                     | 3              |
| CHE 310 Required                                                                                                                                                                                                                                                                                                                                               |                                                     |                |
|                                                                                                                                                                                                                                                                                                                                                                |                                                     |                |
| <b>MAJOR REQUIREMENTS</b>                                                                                                                                                                                                                                                                                                                                      |                                                     |                |
| ENG 202                                                                                                                                                                                                                                                                                                                                                        | Technical Writing                                   | 3              |
| MAT 220                                                                                                                                                                                                                                                                                                                                                        | Calculus II                                         | 4              |
| MAT 310                                                                                                                                                                                                                                                                                                                                                        | Calculus III                                        | 4              |
| MAT 320                                                                                                                                                                                                                                                                                                                                                        | Linear Algebra & Vector Analysis                    | 3              |
| MAT 360                                                                                                                                                                                                                                                                                                                                                        | Differential Equations                              | 3              |
| CHE 228                                                                                                                                                                                                                                                                                                                                                        | Intro to Chemical Engineering Principles & Practice | 5              |
| CHE 312                                                                                                                                                                                                                                                                                                                                                        | Organic Chemistry Lab I                             | 2              |
| CHE 320                                                                                                                                                                                                                                                                                                                                                        | Organic Chemistry II                                | 3              |
| PHY 210                                                                                                                                                                                                                                                                                                                                                        | Physics I                                           | 4              |
| PHY 220                                                                                                                                                                                                                                                                                                                                                        | Physics II                                          | 4              |
| <b>Total Credits for Degree</b>                                                                                                                                                                                                                                                                                                                                |                                                     | <b>68</b>      |
| <p>Note: The program has received a waiver to specify particular courses students must take in STEM areas of the Common Core. If students take different courses in these areas, they will be certified as having completed the Common Core area, but it may not be possible for them to finish their degree program within the regular number of credits.</p> |                                                     |                |

[Click here for a list of all Common Core Courses](#)