

**Transfer Pathway**

**Claflin University to MCEC USC Columbia**

**B.S. Chemistry and B.S.E. in Chemical Engineering**

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| **FIRST YEAR (Take at Claflin)** |
| **Fall Semester** |
| **Claflin University Course** | **USC Chemical Engineering Course**  |
| ENGL 101 Composition I | ENGL 101 Critical Reading and Composition |
| CHEM 121 General Chemistry I | CHEM 111 General Chemistry + CHEM 111 General Chemistry Lab  |
| BIOL 121 General Biology I | Technical Elective |
| MATH 201 Calculus I  | MATH 141 Calculus I  |
| UNIV 101 Orientation |  |
| **Spring Semester** |
| **Claflin University Course** | **USC Chemical Engineering Course**  |
| ENGL 102 Composition II | ENGL 102 Rhetoric & Composition |
| BIOL 122 General Biology II | Technical Elective |
| CHEM 122 General Chemistry II | CHEM 112 General Chemistry + CHEM 112 General Chemistry Lab |
| MATH 202 Calculus II | MATH 142 Calculus II |
| ENGR 102 Introduction to Engineering | ENCP 101 Introduction to Engineering  |
| UNIV 102 Orientation  |  |
| **SECOND YEAR (Take at Claflin)** |
| **Fall Semester** |
| **Claflin University Course** | **USC Chemical Engineering Course**  |
| CHEM 201 Analytical Chemistry | Chemistry Elective CHEM 322 Analytical Chemistry |
| CHEM 231 Organic Chemistry I | CHEM 333 Organic Chemistry + Chemistry Lab Elective CHEM 333L |
| PHYS 203 Principles of Physics I | PHYS 211 Essentials of Physics I + PHYS 211 Essentials of Physics I Lab |
| MATH 301 Calculus III |  |
| ASMB 201 Assembly |  |
| CHEM 291 Soph. Seminar I |  |
| General Ed (e.g. Culture) |  |
| **Spring Semester** |
| **Claflin University Course** | **USC Chemical Engineering Course**  |
| MATH 212 Linear Algebra |  |
| CHEM 232 Organic Chemistry II | CHEM 334 + Chemistry Lab Elective CHEM 334L |
| PHYS 204 Principles of Physics II | PHYS 212 Essentials of Physics II + PHYS 212L Essentials of Physics II Lab |
| CSCI 206 Fundamentals of Program. | Computer Programming Elective CSCE 206 Scientific Applic. Prog. |
| ASMB 202 Assembly |  |
| CHEM 292 Sophomore Seminar II |  |
| Gen. Ed (e.g. AAAS 101) | Carolina Core GSS elective |
| ++HNTH 391 Honors Thesis I |  |
| **THIRD YEAR (Take at Claflin)** |
| **Fall Semester** |
| **Claflin University Course** | **USC Chemical Engineering Course**  |
| CHEM 401 Biochemistry I | Career Elective |
| CHEM 305 Physical Chemistry I |  |
| Gen. Ed (e.g. Culture) | Carolina Core AIU Elective |
| CHEM 491 Senior Seminar I |  |
| ENGR 215 Statics | Engineering Elective ENCP 200 |
| HNTH 392 Honors Thesis II |  |
| **Spring Semester** |
| **Claflin University Course** | **USC Chemical Engineering Course**  |
| CHEM 304 Inorganic Chemistry |  |
| CHEM 404 Instr. Methods | CHEM 621 Inst. Analysis + CHEM 621L Instr. Analysis Technical Elective and Chem Lab Elective |
| MATH 302 Differential Equations | MATH 242 Elementary Differential Equations |
| CHEM 306 Physical Chemistry II | Technical Elective |
| CHEM 492 Senior Seminar II |  |
| ENGR 216 Dynamics  | Engineering Elective ENCP 210 |
| HNTH 491 Honors Thesis III |  |
| **FOURTH YEAR (Take at USC)** |
| **Fall Semester** |
| **Claflin University Course** | **USC Chemical Engineering Course**  |
|  | MATH 241 Vector Calculus |
|  | Professional Development Elective |
|  | ECHE 300 Chemical Process Principles |
| Chemistry Elective (Biophysical) | ECHE 310 Intro. To. Chem. Engr. Thermodynamics |
| Chemistry Elective (e.g. Polymer) | ECHE 320 Chem. Engr. Fluid Mechanics |
| Gen Ed (e.g. Global Studies) | Carolina Core GFL or placement test |
| **Spring Semester** |
| **Claflin University Course** | **USC Chemical Engineering Course**  |
|  | ECHE 311 Chem. Engr. Thermodynamics |
|  | ECHE 321 Heat Flow Analysis |
| CHEM 391 + CHEM 392 Jr Seminar I & II | ECHE 460 Chemical Engineering Lab I (Spring only) |
|  | ECHE 456 Compt. Methods for Engr. Applic. |
|  | Technical Elective |
| **FIFTH YEAR (Take at USC)** |
| **Fall Semester** |
| **Claflin University Course** | **USC Chemical Engineering Course**  |
|  | ECHE 430 Chemical Engineering Kinetics |
|  | ECHE 440 Separation Process Design (Fall only) |
|  | ECHE 461 Chemical Engineering Lab II (Fall only) |
| CHEM 420 Research | ECHE 465 Chem. Proc. Analysis & Design I (Fall only) |
|  | ECHE 550 Chem. Proc. Dynamics & Control (Fall only) |
| **Spring Semester** |
| **Claflin University Course** | **USC Chemical Engineering Course**  |
|  | ECHE 322 Mass Transfer (Spring only) |
|  | ECHE 466 Chem. Process Analysis & Design II (Spring only) |
|  | ECHE 567 Process Safety, Health, & Loss Prev. (Spring only) |
|  | PHIL 325 Engineering Ethics |
| Gen Ed (e.g. Cultural Humanities) | Carolina Core GHS Elective |

This Addendum displays Claflin University courses completed with a “C” or higher that USC MCEC accepts as transfer credit in this transfer pathway.

Revised August 2025.