

## Engineering Physics - Chemical Engineering Option (BS)

Suggested Plan of Study

2022-2023 Catalog

| Fall - Semester 1                                                                                                                                |           | Spring - Semester 2                                                                                                                                                |           |
|--------------------------------------------------------------------------------------------------------------------------------------------------|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| ENGL 1113 Composition I                                                                                                                          | 3         | ENGL 1123 Composition II                                                                                                                                           | 3         |
| MATH 1525 Calculus I                                                                                                                             | 5         | MATH 1545 Calculus II                                                                                                                                              | 5         |
| ENGR 1023/1021 Introduction to Engineering/Lab                                                                                                   | 4         | ENGR 1213 Engineering Graphics                                                                                                                                     | 3         |
| PHYS 2203/2201 University Physics I/Lab                                                                                                          | 4         | PHYS 2213/2211 University Physics II/Lab                                                                                                                           | 4         |
| GSTD 1002 Freshman Seminar                                                                                                                       | 2         | ENGR 2020 Engineering Exams                                                                                                                                        | 0         |
| <b>Total Semester Hours</b>                                                                                                                      | <b>18</b> | <b>Total Semester Hours</b>                                                                                                                                        | <b>15</b> |
| Fall - Semester 3                                                                                                                                |           | Spring - Semester 4                                                                                                                                                |           |
| CHEM 1023/1021 University Chemistry I/Lab                                                                                                        | 4         | CSCI 2103 Computer Science I/Lab                                                                                                                                   | 4         |
| ENGR 2143 Statics                                                                                                                                | 3         | CHEM 1123/1121 University Chemistry II/Lab                                                                                                                         | 4         |
| MATH 2563 Calculus III                                                                                                                           | 3         | ENGR 2043 Properties of Materials                                                                                                                                  | 3         |
| *HIST 2013 or 2023 U.S. History I or II or PSCI 2003 American Government: National                                                               | 3         | CHEG 2053 Chemical Engineering Fundamentals                                                                                                                        | 3         |
| ENGR 2020 Engineering Exams                                                                                                                      | 0         | MATH 3033 Differential Equations                                                                                                                                   | 3         |
| Fine Arts/Humanities (ART 1103 or ART 2013, HUM 2003, HUM 2103, ENGL 2213, ENGL 2223, MUS 2003 or MUS 2013 or MUS 2023, PHIL 2403, or THEA 2003) | 3         | ENGR 2020 Engineering Exams                                                                                                                                        | 0         |
| <b>Total Semester Hours</b>                                                                                                                      | <b>16</b> | <b>Total Semester Hours</b>                                                                                                                                        | <b>17</b> |
| Fall - Semester 5                                                                                                                                |           | Spring - Semester 6                                                                                                                                                |           |
| CHEM 3003/3001 Organic Chemistry I/Lab                                                                                                           | 4         | ENGL 3023 Advanced Professional Writing                                                                                                                            | 3         |
| ENGR 3013 Thermodynamics                                                                                                                         | 3         | ENGR 3023 Heat Transfer                                                                                                                                            | 3         |
| ENGR 3003 Fluid Mechanics                                                                                                                        | 3         | ENGR 3073 Engineering Economics                                                                                                                                    | 3         |
| Social Science choice (ECON 2103, FIN 2003, GEOG 2003, HIST 1003, HIST 1013, PSCI 2003, PSYC 2003, SOC 1003, SOC 1013, or SOC 2003)              | 3         | ENGR 3083 Numerical Methods in Engineering                                                                                                                         | 3         |
| ENGR 2020 Engineering Exams                                                                                                                      | 0         | ENGR 3111 Thermal Fluid Science Lab                                                                                                                                | 1         |
|                                                                                                                                                  |           | CHEG 3213 Thermodynamics II                                                                                                                                        | 3         |
|                                                                                                                                                  |           | ENGR 2020 Engineering Exams                                                                                                                                        | 0         |
| <b>Total Semester Hours</b>                                                                                                                      | <b>13</b> | <b>Total Semester Hours</b>                                                                                                                                        | <b>16</b> |
| Fall - Semester 7                                                                                                                                |           | Spring - Semester 8                                                                                                                                                |           |
| CHEG 4023 Senior Design Project I                                                                                                                | 3         | UL physics or engineering electives (ENGR 4123 Senior Design Project II recommended)                                                                               | 4         |
| CHEG 3063 Mass Transfer                                                                                                                          | 3         | CHEG 4173 Chemical Engineering Processes                                                                                                                           | 3         |
| CHEG 3352 Chemical Engineering Lab                                                                                                               | 2         | ENGR 4701 Work Experience Learning I                                                                                                                               | 1         |
| ENGR 4033 Instrumentation and Control Systems                                                                                                    | 3         | CHEG 4123 Senior Design Project II                                                                                                                                 | 3         |
| CHEG 4043 Chemical Engineering Reactor Design                                                                                                    | 3         | ENGR 2020 Engineering Exams                                                                                                                                        | 0         |
| ENGR 2020 Engineering Exams                                                                                                                      | 0         | Fine Arts/Humanities (ART 1103 or ART 2013, HUM 2003, HUM 2103, ENGL 2213, ENGL 2223, MUS 2003 or MUS 2013 or MUS 2023, PHIL 2403, THEA 2003, or Foreign Language) | 3         |
| <b>Total Semester Hours</b>                                                                                                                      | <b>14</b> | <b>Total Semester Hours</b>                                                                                                                                        | <b>14</b> |

Total hours required for major – 120

\*Note: Must have three hours of US history/government.