**Degree Plan for B.Sc. in Chemistry (Revised Version Feb 2019)**

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| **Minimum No. of Credits for the Chemistry Degree Plan = 136** |
| **Course Title** | **No. of Credits** | **Pre-requisites** |
| **University Requirements = 24 Credits** |
| ARAB100 Arabic Language I | 3 |  |
| ARAB101 Arabic Language II | 3 | ARAB100 |
| COMP101 Computer Skills | 3 | COMP-A,COMP-B, Digital Literacy |
| ENGL150 English Language I | 3 |  |
| ENGL152 English Language II | 3 | ENGL150 |
| ENGL155 Communication Skills  | 3 | ENGL152 |
| HIST150 Islamic Civilization  | 3 |  |
| MNGT100 Entrepreneurship: Creativity and Innovation | 3 |  |
| **University Electives = 3 Credits****Student shall choose from available courses offered by all Colleges of the University** |
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| **College Requirements = 16 Credits** |
| BIOL101 General Biology I | 4 |  |
| CHEM101 General Chemistry I | 4 |  |
| MATH116 Pre-Calculus  | 4 |  |
| PHYS101 General Physics I | 4 | MATH116 |
| **College Electives = 8 Credits****Student shall choose from the following courses:** |
| COMP151 Introduction to Algorithms | 4 | COMP101 |
| ERSC101 Introduction to Geology I | 4 | CHEM101 |
| MATH211 Calculus I | 4 | MATH116 |
| STAT101 Introduction to Statistics I | 4 |  |
| **Department Requirements = 55 credits** |
| CHEM102 General Chemistry II | 4 | CHEM101 |
| CHEM211 Inorganic Chemistry I  | 4 | CHEM102 |
| CHEM241 Analytical Chemistry I\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | 4\_\_\_\_\_\_\_ | CHEM102\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| CHEM251 Inorganic Chemistry II | 4 | CHEM211 |
| CHEM255 Physical Chemistry I | 3 | CHEM102 |
| CHEM265 Organic Chemistry I | 4 | CHEM101 |
| CHEM275 Organic Chemistry II | 4 | CHEM265 |
| CHEM325 Organic Chemistry Laboratory | 3 | CHEM275 |
| CHEM327 Industrial Chemistry | 3 | CHEM241 |
| CHEM332 Physical Chemistry II | 3 | PHYS101, CHEM255 |
| CHEM334 Biochemistry | 3 | BIOL101  |
| CHEM341 Analytical Chemistry II |  3 | CHEM241 |
| CHEM342 Instrumental Chemical Analysis | 3 | CHEM341 |
| CHEM 398 Petroleum Chemistry | 3 | CHEM265 |
| CHEM488 Computers in Chemistry | 1 | COMP101 |
| CHEM499 Graduation Project | 6 | CHEM341, CHEM325 |
| **Department Electives = 30 credits****Student shall choose from available courses offered by the Department** |
| CHEM243 Special Topics | 2 | CHEM241 |
| CHEM280 Lipid Chemistry | 3 | CHEM275 |
| CHEM281 Chemistry for Teachers  | 3 | CHEM241 |
| CHEM350 Environmental Chemistry | 3 | CHEM241, CHEM251 |
| CHEM395 Food Chemistry  | 3 | CHEM275, CHEM334 |
| CHEM 396 Nuclear Chemistry | 3 | CHEM251 |
| CHEM 399 Polymer Chemistry | 3 | CHEM325 |
| CHEM 407 Organometallic Chemistry | 3 | CHEM275 |
| CHEM422 Identification of Organic Compounds | 3 | CHEM325 |
| CHEM432 Biophysical Chemistry | 3 | CHEM334 Corequisite:CHEM332 |
| CHEM400 Material Chemistry | 3 | CHEM332 |
| CHEM440 Marine Chemistry | 3 | CHEM275, CHEM334 |
| CHEM445 Chemistry of Natural Products | 3 | CHEM275, CHEM334 |
| CHEM460 Chemistry of Cosmetics  | 3 | CHEM325, CHEM334 |
| CHEM470 Clinical Chemistry  | 3 | CHEM334 |
| CHM475 Chemistry of Forensic Science | 3 | CHEM342 |
| CHEM490 Advanced Laboratory | 3 | CHEM341 |