|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Bachelor of Science (B.S.) Degree:**  **Chemistry** | | ***The chemistry major gives students the opportunity to study the major areas of chemistry: inorganic, organic, analytical, physical, and biochemistry. The major is designed as preparation for fields related to chemistry, such as medicine, dentistry, teaching, and law. The major will also prepare students for graduate study or careers in chemistry such as research and development, chemical engineering, organic chemistry, and toxicology.*** | | | | | | |
| **2013-2014**  **Courses in BOLD are required by this major**  **Courses in regular type are to fulfill general education requirements and DO NOT have to be taken the specific semester stated.**  ***Courses in ITALIC are strongly recommended***  **ALSO REQUIRED FOR GRADUATION**   * **124 credit hours** * **2 Winter Terms** * **39 Upper division credits** * **2.00 GPA** * **Completion of all major & gen ed requirements** |
| **First Year Fall**  ***(consider a WT)*** | **GE Goal** | | **Sem Hours** | **Date Met** | **First Year Spring** | **GE Goal** | **Sem Hours** | **Date Met** |
| **CHEM1430/1431 Prin. of Chem I w/lab** | **1a** | | **4** |  | **MATH1520 Calc II** | **3a** | **3** |  |
| ENGL1410 Modern Rhetoric OR  ENGL1440 English Honors | **3C** | | **3** |  | Speech Communication | **3b** | **3** |  |
| **CHEM1440/1441 Prin. Chem. II w/lab** | **1d** | **4** |  |
| **MATH1510 Calculus I** | **3a** | | **3** |  | HLTH1300 Lifetime Health/Fitness Lab | 3f | 2 |  |
| Humanities | 2b | **3** |  |
| Social/Behavioral Science | 1c | | **3** |  | PE Activity | 3f | 1 |  |
| INTD1100 Critical Thinking in Arts & Sciences\* |  | | **3** |  |  |  |  |  |
| **Total Hours** |  | | **16** |  | **Total Hours** |  | **16** |  |
| **Notes:** | | | | | | | | |
| **Second Year Fall**  ***(consider a WT)*** | **GE Goal** | | **Sem**  **Hours** | **Date Met** | **Second Year Spring** | **GE Goal** | **Sem Hours** | **Date Met** |
| **CHEM3410/3411 Org. Chem I /lab** |  | | **4** |  | **CHEM3420/3421 Org. Chem II w/lab** |  | **4** |  |
| **PHYS1410 Elements of Phys I w/lab** |  | | **4** |  | **PHYS1420 Elements of Phys II w/lab** |  | **4** |  |
| History/Political Science | 1b | | **3** |  | **BIOL2100 Cell Biology** |  | 3 |  |
| Arts | 2a | | **3** |  | Ethics/Values | 3e | 3 |  |
|  |  | |  |  | Human Diversity | 4 | 3 |  |
| **Total Hours** |  | | **14** |  | **Total Hours** |  | **17** |  |
| **Notes:** | | | | | | | | |
| **Third Year Fall**  ***(check your degree audit!)*** | **GE Goal** | | **Sem**  **Hours** | **Date Met** | **Third Year Spring** | **GE Goal** | **Sem Hours** | **Date Met** |
| **\* See Catalog for specific information**  **+denotes courses offered only every other year** | **CHEM3610+ Phys Chem I *(odd fall)*** |  | | **4** |  | **CHEM3620+ Phys Chem II** *(even spring)* |  | **4** |  |
| ***CHEM4310 BioChemistry*** |  | | **4** |  | **CHEM3410 Chem Seminar I**  *CSIT1030 Microsoft Excel\*\** |  | 1  1 |  |
| *ENGL3XXX Advanced Comp* | 3d | | 3 |  |
| *CSIT1020 Microsoft Word & PP\*\** |  | | 1 |  | *CSIT1050 Comp-based Acad. Research\*\** |  | 1 |  |
| Elective |  | | **3** |  | Elective |  | 3 |  |
|  | | | | | Elective |  | 3 |  |
|  |  |  |  |  |
|  | **Total Hours** |  | | **15** |  | **Total Hours** |  | **13** |  |
|  | **Notes:** | | | | | | | | |
|  |
|  | **Fourth Year Fall**  ***(apply for graduation!)*** | **GE Goal** | | **Sem**  **Hours** | **Date Met** | **Fourth Year Spring** | **GE Goal** | **Sem Hours** | **Date Met** |
|  | **CHEM4330+ Instr. Analysis** *(even fall)* |  | | **4** |  | **CHEM4130 Research II** |  | **1** |  |
|  | **CHEM4120 Research I** |  | | **1** |  | **CHEM3300+ Ana. Chem** *(odd spring)* |  | **4** |  |
|  | Elective |  | | 3 |  | **CHEM4110 Chem Seminar II** |  | **1** |  |
|  | Elective |  | | 3 |  | Elective |  | 3 |  |
|  | Elective |  | | 3 |  | Elective |  | 3 |  |
|  |  | | | | | Elective |  | 3 |  |
|  | **Total Hours** |  | | **14** |  | **Total Hours** |  | **15** |  |
|  | **Notes:** | | | | | | | | |
| **Updated:**  **6/13/13** |
| **\* Graduation requirement for all first time freshmen**  **\*\****These courses are strongly recommended for Chemistry B.S. majors. A math minor is also strongly recommended.*  **DISCLAIMER: These plans are to be used as guides only and are subject to changes in curriculum requirements. Refer to your Graceland Catalog for complete and accurate information. Some courses listed on the plans may have prerequisites that have not been stated. The student has the ultimate responsibility for scheduling and meeting the graduation requirements.** | | | | | | | | |
| **Name:**  **ID:** |
|  |

