1

## Fast-Track Bachelors + Masters Chemistry Non-Thesis

The Fast-Track Bachelors + Masters degree program allows undergraduate students in the Chemistry to begin coursework towards the non-thesis option of the Master of Science in Chemistry during their senior year at East Texas A&M University. Students can earn a B.S. and M.S. degree in five years upon completion of degree requirements for both degrees. For this Fast-Track Bachelors + Masters program, 6 credits of graduate courses can be applied to the undergraduate degree. Students must apply to the Fast-Track Bachelors to Masters program by the end of their junior year after having completed at least 90 hours of undergraduate courses and a cumulative undergraduate GPA of 3.0 or higher. Successful completion of the comprehensive exams is required of all students to receive the Master of Science degree in Chemistry-Option II Non-Thesis.

| Core Curriculum Courses            |  | 42 |
|------------------------------------|--|----|
| Required courses in the major      |  |    |
| CHEM 101                           | General Chemistry Tutorial I   | 1  |
| CHEM 102                           | General Chemistry Tutorial II  | 1  |
| CHEM 1111                          | General and Quantitative Chemistry Laboratory I <sup>*</sup>   |    |
| CHEM 1112                          | General and Quantitative Chemistry Laboratory II   |    |
| CHEM 1311                          | General and Quantitative Chemistry I <sup>*</sup>  |    |
| CHEM 1312                          | General and Quantitative Chemistry II  |    |
| CHEM 201                           | Organic Chemistry Tutorial I   | 1  |
| CHEM 202                           | Organic Chemistry Tutorial II  | 1  |
| CHEM 2123                          | Organic Chemistry Laboratory I   | 1  |
| CHEM 2125                          | Organic Chemistry Laboratory II  | 1  |
| CHEM 2323                          | Organic Chemistry I  | 3  |
| CHEM 2325                          | Organic Chemistry II   | 3  |
| CHEM 340                           | Quantitative & Instrumental Analysis   | 4  |
| CHEM 351                           | Physical Chemistry   | 4  |
| CHEM 401                           | Chemical Sci & Profession  | 1  |
| CHEM 418                           | Undergraduate Research   | 3  |
| Advanced CHEM Courses              |  | 22 |
| Electives                          |  | 12 |
| Required support courses           |  |    |
| MATH 2413                          | Calculus I <sup>*</sup>  |    |
| MATH 2414                          | Calculus II  | 4  |
| PHYS 2425                          | University Physics I   | 4  |
| PHYS 2426                          | University Physics II  | 4  |
| Graduate Core Courses              |  |    |
| CHEM 521A                          | Chemical Thermodynamics  | 3  |
| CHEM 531A                          | Advanced Inorganic Chem  | 3  |
| *This course will satisfy the Core | Curriculum Requirements (https://coursecatalog.tamuc.edu/undergrad/core-curriculum-requirements/) in |    |

Natural Sciences and Mathematics. A grade of "C" or higher must be earned in all courses in this Major.

**Total Hours** 

## Master of Science in Chemistry Accelerated (BS-MS) Option II Non-Thesis

The BS-MS accelerated degree program allows undergraduate students in the Chemistry program to begin coursework towards the non-thesis option of the Master of Science in Chemistry program during their senior year at Texas A&M University-Commerce. Students can earn a B.S. and M.S. degree in five years upon completion of degree requirements for both degrees. For this accelerated program, 6 credits of graduate coursework can be applied to both the BS and MS degrees. Once admitted, the BS/MS candidate must maintain a 3.25 Undergraduate GPA. In the final semester of the student's undergraduate program, a new online Apply Texas Application for the master's Accelerated program must be submitted to gain admission and continue taking classes to complete the master's program.

| Research (3 semester hours)   |                           |  |  |
|---|---------------------------|--|--|
| CHEM 595  | Research Lit & Techniques |  |  |
| Core courses completed as part of undergraduate Chemistry BS degree plan (6 semester hours) |                           |  |  |

118

3

| CHEM 521A   | Chemical Thermodynamics *                            | 3   |  |  |
|---|--|-----|--|--|
| CHEM 531A   | Advanced Inorganic Chem <sup>*</sup>                 | 3   |  |  |
| Remaining core courses (9 semester hours)               |  |     |  |  |
| CHEM 513  | Organic Mechanisms & Structure                       | 3   |  |  |
| CHEM 514  | Biochemistry   | 3   |  |  |
| CHEM 541  | Advanced Analytical Chemistry                        | 3   |  |  |
| Prescribed Chemistry Elective Courses (18 credit hours) |  |     |  |  |
| CHEM 502  | Safety in the Chemical Laboratory                    | 1-3 |  |  |
| CHEM 515  | Synthetic Organic Transformations                    | 3   |  |  |
| CHEM 517  | Applied Biochemistry & Biotechnology                 | 3   |  |  |
| CHEM 522  | Quantum Chemistry                                    | 3   |  |  |
| CHEM 527  | Chemical and Biochemical Characterization Methods I  | 3   |  |  |
| CHEM 528  | Chemical and Biochemical Characterization Methods II | 3   |  |  |
| CHEM 529  | Workshop in Chemistry                                | 3-6 |  |  |
| CHEM 533  | Kinetics and Mechanism                               | 3   |  |  |
| CHEM 536  | Organometallic Chemistry                             | 3   |  |  |
| CHEM 547  | Advanced Instrumental Analysis I                     | 3   |  |  |
| CHEM 548  | Advanced Instrumental Analysis II                    | 3   |  |  |
| CHEM 589  | Independent Studies                                  | 1-4 |  |  |
| CHEM 597  | Special Topics                                       | 1-4 |  |  |
| Total Hours   |  | 36  |  |  |
| * Courses shared with BS                                |  |     |  |  |

| First Year       |       |
|------------------|-------|
| Fall             | Hours |
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**Total Hours: 0**