

(For students admitted in 2022-23 under the 4-year degree)

## School of Science

In addition to the requirements of their major programs, students are required to complete the School Requirements as shown below.

Some foundation courses listed below are also requirements of SSCI majors. These courses may also be used to fulfill Major Requirements, in addition to School Requirements. Students may consult the School for details and academic advice.

Students may use no more than 6 credits earned from courses offered in self-paced online delivery mode to satisfy the graduation requirements of a degree program. This 6-credit limit does not apply to credits obtained through the credit transfer procedures of the University.

Courses counted towards the School Requirements under the School of Science are generally not included in the calculation of the major cumulative grade average (MCGA). However, those which are also used to fulfill the Major Requirements including the Major Prerequisites will be counted towards the MCGA.

Under the new 30-credit Common Core Program which is applicable to students admitted to the University in 2022-23 and thereafter, courses that have been counted towards School and/or Major Requirements are not allowed to be reused for fulfilment of the University Common Core Requirements.

## School Requirements

|      |        |   | Credit(s)<br>attained |
|------|--------|---|-----------------------|
| COMP |        | Note: COMP 1021 <u>OR</u> COMP 1022P <u>OR</u> COMP 2011  | 3-4                   |
| COMP | 1021   | Introduction to Computer Science  | 3                     |
| COMP | 1022P  | Introduction to Computing with Java   | 3                     |
| COMP | 2011   | Programming with C++  | 4                     |
| LANG | 2010   | English for Science I   | 3                     |
| SSCI |        | Science Foundation courses [8 courses from the specified elective list. Students should take (i) 7 foundation lecture courses, including at least 1 lecture course, but no more than 3 lecture courses, from each of the four disciplines in Chemistry, Life Science/Ocean Science, Mathematics/Data Analytics, and Physics; and (ii) 1 laboratory course.] |                       |
| CHEM | 1008   | Introductory Chemistry  | 3                     |
| CHEM | 1011   | General Chemistry A: Reactions, Thermodynamics, and Reaction Kinetics   | 3                     |
| CHEM | 1012   | General Chemistry B: Atomic Structure, Molecules, and Bonding Theories  | 3                     |
| CHEM | 1051   | Laboratory for General Chemistry A  | 1                     |
| CHEM | 1052   | Laboratory for General Chemistry B  | 1                     |
| DASC | 2010   | Calculus for Data Analytics in Science  | 3                     |
| LIFS | 1030** | Environmental Science   | 3                     |
| LIFS | 1901   | General Biology I   | 3                     |
| LIFS | 1902   | General Biology II  | 3                     |
| LIFS | 1903   | Laboratory for General Biology I  | 1                     |
| LIFS | 1904   | Laboratory for General Biology II   | 1                     |
| LIFS | 1930   | Nature of Life Sciences   | 3                     |
| LIFS | 2210   | Biochemistry I  | 3                     |

|      |      |  |     |
|------|------|--|-----|
| MATH | 1012 | Calculus IA  | 4   |
| MATH | 1013 | Calculus IB  | 3   |
| MATH | 1014 | Calculus II  | 3   |
| MATH | 1020 | Accelerated Calculus   | 4   |
| MATH | 1023 | Honors Calculus I  | 3   |
| MATH | 1024 | Honors Calculus II   | 3   |
| MATH | 2023 | Multivariable Calculus   | 4   |
| MATH | 2121 | Linear Algebra   | 4   |
| MATH | 2131 | Honors in Linear and Abstract Algebra I  | 4   |
| OCES | 1001 | The Earth as a Blue Planet   | 3   |
| OCES | 1010 | Principles and Applications of Environmental Science   | 3   |
| PHYS | 1101 | Introductory Physics   | 4   |
| PHYS | 1111 | General Physics I  | 3   |
| PHYS | 1112 | General Physics I with Calculus  | 3   |
| PHYS | 1113 | Laboratory for General Physics I   | 1   |
| PHYS | 1114 | General Physics II   | 3   |
| PHYS | 1115 | Laboratory for General Physics II  | 1   |
| PHYS | 1312 | Honors General Physics I   | 3   |
| PHYS | 1314 | Honors General Physics II  | 3   |
| SSCI |      | Note: Additional Required Courses for IRE Track [SCIE 1500 <u>AND</u> SCIE 2500 <u>AND</u> SCIE 3900 <u>AND</u> (UROP 1000 <u>OR</u> UROP 1100)] | 5-6 |
| SCIE | 1500 | Guided Study on Research I   | 1   |
| SCIE | 2500 | Guided Study on Research II  | 1   |
| SCIE | 3900 | International Research Experience  | 3   |
| UROP | 1000 | Undergraduate Research Opportunities   | 0   |
| UROP | 1100 | Undergraduate Research Opportunities Series 1  | 1   |
| SSCI |      | Additional Science 2000-level or above Electives for IRE Track (Any 2 courses of the subject and level as specified and approved by advisor)     | 6   |

**\*\*Remarks on course(s):**

- LIFS 1030: The course was last offered in 2020-21 and was deleted subsequently.