

## Computer Science Sample Schedule

|   | Total        | Term:     |           |           |           |           |           |           |           |
|---|--------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
|   | Credit Hours | 1         | 2         | 3         | 4         | 5         | 6         | 7         | 8         |
| <b>Subjects Required by all Programs (55 hours)</b>                         |              |           |           |           |           |           |           |           |           |
| Mathematics 115, 116, and 214 <sup>1</sup>                                  | 12           | 4         | 4         | -         | -         | 4         | -         | -         | -         |
| Mathematics 215 or 216 <sup>2</sup>   | 4            | -         | -         | -         | 4         | -         | -         | -         | -         |
| Engineering 100, Introduction to Engineering                                | 4            | -         | 4         | -         | -         | -         | -         | -         | -         |
| Engineering 101, Introduction to Computers                                  | 4            | 4         | -         | -         | -         | -         | -         | -         | -         |
| Chemistry 125/126 and 130 or Chemistry 210 and 211                          | 5            | 5         | -         | -         | -         | -         | -         | -         | -         |
| Physics 140 with Lab 141; Physics 240 with Lab 241                          | 10           | -         | 5         | 5         | -         | -         | -         | -         | -         |
| Intellectual Breadth  | 16           | 3         | 3         | -         | 4         | 4         | -         | -         | 2         |
| <b>Program Subjects (26 hours)</b>  |              |           |           |           |           |           |           |           |           |
| EECS 203 Discrete Mathematics or MATH 465 or MATH 565                       | 4            | -         | -         | 4         | -         | -         | -         | -         | -         |
| EECS 280, Programming and Elementary Data Structures                        | 4            | -         | -         | 4         | -         | -         | -         | -         | -         |
| EECS 281, Data Structures and Algorithms                                    | 4            | -         | -         | -         | 4         | -         | -         | -         | -         |
| EECS 370, Introduction to Computer Architecture                             | 4            | -         | -         | -         | -         | 4         | -         | -         | -         |
| STATS 250 or STATS 412 or STATS 426 or EECS 301/401 or IOE 265 <sup>3</sup> | 3            | -         | -         | -         | 3         | -         | -         | -         | -         |
| EECS 376, Foundations of Computer Science                                   | 4            | -         | -         | -         | -         | -         | 4         | -         | -         |
| TCHNCLCM 300  | 1            | -         | -         | -         | 1         | -         | -         | -         | -         |
| EECS 496, Major Design Experience Professionalism                           | 2            | -         | -         | -         | -         | -         | -         | 2         | -         |
| <b>Major Design Experience (6 hours)</b>                                    |              |           |           |           |           |           |           |           |           |
| Approved CS MDE course <sup>4</sup>   | 4            | -         | -         | -         | -         | -         | -         | 4         | -         |
| TCHNCLCM 497 or TCHNCLCM 496  | 2            | -         | -         | -         | -         | -         | -         | 2         | -         |
| <b>Technical Electives (26 hours)</b>                                       |              |           |           |           |           |           |           |           |           |
| Upper Level CS Technical Electives <sup>5</sup>                             | 16           | -         | -         | -         | -         | 4         | 4         | 4         | 4         |
| Flexible Technical Electives <sup>6,7</sup>                                 | 10           | -         | -         | -         | -         | -         | 4         | -         | 6         |
| General Electives (15 hours)  | 15           | -         | -         | 3         | -         | -         | 4         | 4         | 4         |
| <b>Total</b>  | <b>128</b>   | <b>16</b> | <b>16</b> | <b>16</b> | <b>16</b> | <b>16</b> | <b>16</b> | <b>16</b> | <b>16</b> |

Revised: July 2021

Candidates for the Bachelor of Science in Engineering in Computer Science - B.S.E. in C.S. - must complete the program listed above. This sample schedule is an

### Notes:

C- Rule: Among all requirements listed above (with the exception of general electives and Intellectual Breadth), a grade of

C- or below is considered unsatisfactory. C or higher is required.

Credits from a course may only be used to fulfill a single requirement (no double counting).

<sup>1</sup>The requirements for MATH 214 can alternatively be satisfied by MATH 217, 296, 417, or 419 or ROB 101.

<sup>2</sup>If both MATH 215 and MATH 216 are taken, MATH 216 can count as a Flexible Technical Elective.

<sup>3</sup>STATS 250, STATS 280, EECS 301, and IOE 265 are 4-hour courses; if one of these is elected, the extra hour is counted toward General Electives.

<sup>4</sup>An approved Computer Science (CS) Major Design Experience (MDE) course; see the appropriate CS Program Guide for the current list. TCHNCLCM 497 or 496 must be taken in the same term as the MDE (or after the MDE).

<sup>5</sup>Upper Level CS Technical Electives (ULCS): approved Computer Science courses at the 300-level or higher. See the appropriate CS Program Guide for the current list.

<sup>6</sup>Flexible Technical Electives (FTEs): Approved courses at the 200- or higher level. See the CS-Eng website for more information and current list.

<sup>7</sup>A maximum of 4 hours of EECS 499/399 (or other upper-level directed/independent study) may be applied to Flexible Technical Electives; additional will count as general electives. Advisors can verify adherence to this policy in your record.

## Computer Science Sample Schedule

|   | Total<br>Credit Hours | Term:     |           |           |           |           |           |           |           |
|---|-----------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
|   |                       | 1         | 2         | 3         | 4         | 5         | 6         | 7         | 8         |
| <b>Subjects Required by all Programs (55 hours)</b>             |                       |           |           |           |           |           |           |           |           |
| Mathematics 115, 116, and 2141                                  | 12                    | 4         | 4         | -         | -         | 4         | -         | -         | -         |
| Mathematics 215 or 2162   | 4                     | -         | -         | -         | 4         | -         | -         | -         | -         |
| Engineering 100, Introduction to Engineering                    | 4                     | -         | 4         | -         | -         | -         | -         | -         | -         |
| Engineering 101, Introduction to Computers                      | 4                     | 4         | -         | -         | -         | -         | -         | -         | -         |
| Chemistry 125/126 and 130 or Chemistry 210 and 211              | 5                     | 5         | -         | -         | -         | -         | -         | -         | -         |
| Physics 140 with Lab 141; Physics 240 with Lab 241              | 10                    | -         | 5         | 5         | -         | -         | -         | -         | -         |
| Intellectual Breadth  | 16                    | 3         | 3         | -         | 4         | 4         | -         | -         | 2         |
| <b>Program Subjects (26 hours)</b>                              |                       |           |           |           |           |           |           |           |           |
| EECS 203 Discrete Mathematics or MATH 465 or MATH 565           | 4                     | -         | -         | 4         | -         | -         | -         | -         | -         |
| EECS 280, Programming and Elementary Data Structures            | 4                     | -         | -         | 4         | -         | -         | -         | -         | -         |
| EECS 281, Data Structures and Algorithms                        | 4                     | -         | -         | -         | 4         | -         | -         | -         | -         |
| EECS 370, Introduction to Computer Architecture                 | 4                     | -         | -         | -         | -         | 4         | -         | -         | -         |
| STATS 250 or STATS 412 or STATS 426 or EECS 301/401 or IOE 2653 | 3                     | -         | -         | -         | 3         | -         | -         | -         | -         |
| EECS 376, Foundations of Computer Science                       | 4                     | -         | -         | -         | -         | -         | 4         | -         | -         |
| TCHNCLCM 300  | 1                     | -         | -         | -         | 1         | -         | -         | -         | -         |
| EECS 496, Major Design Experience Professionalism               | 2                     | -         | -         | -         | -         | -         | -         | 2         | -         |
| <b>Major Design Experience (6 hours)</b>                        |                       |           |           |           |           |           |           |           |           |
| Approved CS MDE course <sup>4</sup>                             | 4                     | -         | -         | -         | -         | -         | -         | 4         | -         |
| TCHNCLCM 497 or TCHNCLCM 496                                    | 2                     | -         | -         | -         | -         | -         | -         | 2         | -         |
| <b>Technical Electives (26 hours)</b>                           |                       |           |           |           |           |           |           |           |           |
| Upper Level CS Technical Electives <sup>5</sup>                 | 16                    | -         | -         | -         | -         | 4         | 4         | 4         | 4         |
| Flexible Technical Electives <sup>6,7</sup>                     | 10                    | -         | -         | -         | -         | -         | 4         | -         | 6         |
| General Electives (15 hours)                                    | 15                    | -         | -         | 3         | -         | -         | 4         | 4         | 4         |
| <b>Total</b>  | <b>128</b>            | <b>16</b> | <b>16</b> | <b>16</b> | <b>16</b> | <b>16</b> | <b>16</b> | <b>16</b> | <b>16</b> |

Revised: March 2020

Candidates for the Bachelor of Science in Engineering in Computer Science - B.S.E. in C.S. - must complete the program listed above. This sample schedule is an

### Notes:

C- Rule: Among all requirements listed above (with the exception of general electives and Intellectual Breadth), a grade of C- or below is considered unsatisfactory. C or higher is required.

Credits from a course may only be used to fulfill a single requirement (no double counting).

<sup>1</sup>The requirements for Math 214 can alternatively be satisfied by Math 217, 417, or 419.

<sup>2</sup>If both Math 215 and Math 216 are taken, Math 216 can count as a Flexible Technical Elective.

<sup>3</sup>Stats 250, STATS 280, EECS 301, and IOE 265 are 4-hour courses; if one of these is elected, the extra hour is counted toward General Electives.

<sup>4</sup>An approved Computer Science (CS) Major Design Experience (MDE) course; see the appropriate CS Program Guide for the current list. TCHNCLCM 497 or 496 must be taken in the same term as the MDE (or after the MDE).

<sup>5</sup>Upper Level CS Technical Electives (ULCS): approved Computer Science courses at the 300-level or higher. See the appropriate CS Program Guide for the current list.

<sup>6</sup>Flexible Technical Electives (FTEs): Approved courses at the 200- or higher level. See the CS-Eng website for more information and current list.

<sup>7</sup>A maximum of 4 hours of EECS 499/399 (or other upper-level directed/independent study) may be applied to Flexible Technical Electives; additional will count as general electives. Advisors can verify adherence to this policy in your record.