## Computer Science - Computer Systems <br> September Entry

| Year | Term | Course | Title | Credit | Prerequisite | Co-requisite |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year 1 | Fall | COMP 232 | Mathematics for Computer Science | 3.00 | MATH 203, 204 |  |
|  |  | COMP 248 | Object-Oriented Programming I | 3.50 |  | MATH 204 |
|  |  |  | Elective* |  |  |  |
|  | Winter | COMP 228 | System Hardware | 3.00 | COMP 248 | $\begin{aligned} & \text { MATH 203, } \\ & 204 \end{aligned}$ |
|  |  | COMP 233 | Probability and Statistics for Computer Science | 3.00 | MATH 205 |  |
|  |  | COMP 249 | Object-Oriented Programming II | 3.50 | COMP 248; MATH 203 | MATH 205 |
|  |  | ENCS 282 | Technical Writing and Communication | 3.00 | Students must pass the Engineering Writing Test (EWT), or pass ENCS 272 with a grade of C - or higher |  |
|  |  |  | Elective* |  |  |  |
| Year 2 | Fall | COMP 345 | Advanced Program Design with C++ | 4.00 |  | COMP 352 |
|  |  | COMP 348 | Principles of Programming Languages | 3.00 | COMP 249 |  |
|  |  | COMP 352 | Data Structures and Algorithms | 3.00 | COMP 249 | COMP 232 |
|  |  |  | Elective* |  |  |  |
|  | Winter | COMP 335 | Introduction to Theoretical Computer Science | 3.00 | COMP 232 or COEN 231; COMP 249 or COEN 244 |  |
|  |  | COMP 346 | Operating Systems | 4.00 | COMP 228 or SOEN 228; COMP 352 |  |
|  |  |  | Elective* |  |  |  |
| Year 3 | Fall | COMP 326 | Computer Architecture | 3.00 | COMP 346 |  |
|  |  | COMP 354 | Introduction to Software Engineering | 4.00 | COMP 352; ENCS 282 |  |
|  |  | SOEN 422 | Embedded Systems and Software | 4.00 | COMP 346 |  |
|  |  |  | Elective* |  |  |  |
|  | Winter | ENCS 393 | Social and Ethical Dimensions of Information and Communication Technologies | 3.00 | ENCS 282; 40 credits in BCompSc program |  |
|  |  |  | Elective* |  |  |  |
|  |  |  |  |  |  |  |

* For the list of electives which students must complete, please consult section 71.70.2 of the Undergraduate Calendar.

Students in a Bachelor of Computer Science should follow the academic calendar for the year to which they have been admitted /readmitted.
Please note, only core courses are listed and not all electives are assigned a row in the above sequence.
Full-time status: minimum 12 credits required per term

## Computer Science - Computer Systems

## January Entry

| Year | Term | Course | Title | Credit | Prerequisite | Co-requisite |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year 1 | Winter | COMP 232 | Mathematics for Computer Science | 3.00 | MATH 203, 204 |  |
|  |  | COMP 248 | Object-Oriented Programming I | 3.50 |  | MATH 204 |
|  |  |  | Elective* |  |  |  |
|  | Summer | COMP 228 | System Hardware | 3.00 | COMP 248 | $\begin{aligned} & \text { MATH 203, } \\ & 204 \end{aligned}$ |
|  |  | COMP 233 | Probability and Statistics for Computer Science | 3.00 | MATH 205 |  |
|  |  | COMP 249 | Object-Oriented Programming II | 3.50 | COMP 248; MATH 203 | MATH 205 |
|  |  | ENCS 282 | Technical Writing and Communication | 3.00 | Students must pass the Engineering Writing Test (EWT), or pass ENCS 272 with a grade of C- or higher |  |
|  |  |  | Elective* |  |  |  |
| Year 2 | Fall | COMP 345 | Advanced Program Design with C++ | 4.00 |  | COMP 352 |
|  |  | COMP 348 | Principles of Programming Languages | 3.00 | COMP 249 |  |
|  |  | COMP 352 | Data Structures and Algorithms | 3.00 | COMP 249 | COMP 232 |
|  |  |  | Elective* |  |  |  |
|  | Winter | COMP 335 | Introduction to Theoretical Computer Science | 3.00 | COMP 232 or COEN 231; COMP 249 or COEN 244 |  |
|  |  | COMP 346 | Operating Systems | 4.00 | COMP 228 or SOEN 228; COMP 352 |  |
|  |  |  | Elective* |  |  |  |
| Year 3 | Fall | COMP 326 | Computer Architecture | 3.00 | COMP 346 |  |
|  |  | COMP 354 | Introduction to Software Engineering | 4.00 | COMP 352; ENCS 282 |  |
|  |  | SOEN 422 | Embedded Systems and Software | 4.00 | COMP 346 |  |
|  |  |  | Elective* |  |  |  |
|  | Winter | ENCS 393 | Social and Ethical Dimensions of Information and Communication Technologies | 3.00 | ENCS 282; 40 credits in BCompSc program |  |
|  |  |  | Elective* |  |  |  |
|  |  |  |  |  |  |  |

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## Computer Science - Computer Systems

Co-op Entry

| Year | Term | Course | Title | Credit | Prerequisite | Co-requisite |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year 1 | Fall | COMP 232 | Mathematics for Computer Science | 3.00 | MATH 203, 204 |  |
|  |  | COMP 248 | Object-Oriented Programming I | 3.50 |  | MATH 204 |
|  |  |  | Elective* |  |  |  |
|  | Winter | COMP 228 | System Hardware | 3.00 | COMP 248 | $\begin{aligned} & \text { MATH 203, } \\ & 204 \end{aligned}$ |
|  |  | COMP 233 | Probability and Statistics for Computer Science | 3.00 | MATH 205 |  |
|  |  | COMP 249 | Object-Oriented Programming II | 3.50 | COMP 248; MATH 203 | MATH 205 |
|  |  | ENCS 282 | Technical Writing and Communication | 3.00 | Students must pass the Engineering Writing Test (EWT), or pass ENCS 272 with a grade of C- or higher |  |
|  |  |  | Elective* |  |  |  |
|  |  |  |  |  |  |  |
|  | Summer | Work Term 1 |  |  |  |  |
|  |  |  |  |  |  |  |
| Year 2 | Fall | COMP 345 | Advanced Program Design with C++ | 4.00 |  | COMP 352 |
|  |  | COMP 348 | Principles of Programming Languages | 3.00 | COMP 249 |  |
|  |  | COMP 352 | Data Structures and Algorithms | 3.00 | COMP 249 | COMP 232 |
|  |  |  | Elective* |  |  |  |
|  |  |  |  |  |  |  |
|  | Winter | Work Term 2 |  |  |  |  |
|  |  |  |  |  |  |  |
|  | Summer | COMP 335 | Introduction to Theoretical Computer Science | 3.00 | COMP 232 or COEN 231; COMP 249 or COEN 244 |  |
|  |  | COMP 346 | Operating Systems | 4.00 | COMP 228 or SOEN 228; COMP 352 |  |
|  |  |  | Elective* |  |  |  |
|  |  |  |  |  |  |  |
| Year 3 | Fall | COMP 326 | Computer Architecture | 3.00 | COMP 346 |  |
|  |  | SOEN 422 | Embedded Systems and Software | 4.00 | COMP 346 |  |
|  |  |  | Elective* |  |  |  |
|  |  |  |  |  |  |  |
|  | Winter | Work Term 3 |  |  |  |  |
|  |  |  |  |  |  |  |
|  | Summer | COMP 354 | Introduction to Software Engineering | 4.00 | COMP 352; ENCS 282 |  |
|  |  | ENCS 393 | Social and Ethical Dimensions of Information and Communication Technologies | 3.00 | ENCS 282; 40 credits in BCompSc program |  |
|  |  |  | Elective* |  |  |  |
|  |  |  |  |  |  |  |

* For the list of electives which students must complete, please consult section 71.70 .2 of the Undergraduate Calendar.

Students in a Bachelor of Computer Science should follow the academic calendar for the year to which they have been admitted/readmitted.
Please note, only core courses are listed and not all electives are assigned a row in the above sequence.
Full-time status: minimum $\mathbf{1 2}$ credits required per term.


[^0]:    * For the list of electives which students must complete, please consult section 71.70 .2 of the Undergraduate Calendar.

    Students in a Bachelor of Computer Science should follow the academic calendar for the year to which they have been admitted /readmitted.
    Please note, only core courses are listed and not all electives are assigned a row in the above sequence.
    Full-time status: minimum $\mathbf{1 2}$ credits required per term.

