## COMPUTER SCIENCE MINOR (B.ENG.) (25 CREDITS)

Offered by: Computer Science (Faculty of Science)

**Degree:** Bachelor of Engineering **Program credit weight:** 25

## **Program Description**

24-26 credits

This program gives students in Engineering an introduction to core computer science concepts. The Minor is open to B.Eng. and B.Sc. (Arch.) students in Engineering who have already taken ECSE 202 Introduction to Software Development., COMP 202 Foundations of Programming., or COMP 208 Computer Programming for Physical Sciences and Engineering .. This program is not open to students in the B.Eng.; Co-op in Software Engineering program. All courses in the Minor must be passed with a grade of C or better. The Minor program may be completed in 24-26 credits, of which no more than 6 credits may overlap with the primary program. Students who are interested in this Minor should consult with the Undergraduate Program CooThis program gives students in Engineering an introduction to core computer science concepts. The Minor is open to B.Eng. and B.Sc. (Arch.) students in Engineering who have already taken ECSE 202 Introduction to Software Development., COMP 202 Foundations of Programming., or COMP 208 Computer Programming for Physical Sciences and Engineering .. This program is not open to students in the B.Eng.; Co-op in Software Engineering program. All courses in the Minor must be passed with a grade of C or better. The Minor program may be completed in 24-26 credits, of which no more than 6 credits may overlap with the primary program. Students who are interested in this Minor should consult with the Undergraduate Program Coordinator in the School of Computer Science for administrative matters, and should consult with both the Minor Adviser in Computer Science and with their department adviser for approval of their course selection. Forms must be submitted and approved before the end of the drop/add period of the student's final term

**Note**: For information about Fall 2025 and Winter 2026 course offerings, please check back on May 8, 2025. Until then, the "Terms offered" field will appear blank for most courses while the class schedule is being finalized.

## Required Courses (3 credits)

Expand allContract all

CourseTitleCreditsCOMP 206Introduction to Software Systems.3

## Complementary Courses (21-23 credits)

3 credits from the following:

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| Course   | Title                                 | Credits |
|----------|---------------------------------------|---------|
| COMP 250 | Introduction to Computer Science.     | 3       |
| ECSE 250 | Fundamentals of Software Development. | 3       |

3 credits from the following:

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| Course   | Title                                | Credits |
|----------|--------------------------------------|---------|
| COMP 302 | Programming Languages and Paradigms. | 3       |
| COMP 303 | Software Design.                     | 3       |

3-4 credits from the following:

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| Course   | Title                             | Credits |
|----------|-----------------------------------|---------|
| COMP 273 | Introduction to Computer Systems. | 3       |
| ECSE 324 | Computer Organization.            | 4       |

3-4 credits from the following:

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|---------------------------|--|---------|--|--|
| Course                    | Title  | Credits |  |  |
| CHEE 390                  | Computational Methods in Chemical Engineering. | 3       |  |  |
| CIVE 320                  | Numerical Methods.                             | 4       |  |  |
| COMP 350                  | Numerical Computing.                           | 3       |  |  |
| ECSE 343                  | Numerical Methods in Engineering.              | 3       |  |  |
| MATH 317                  | Numerical Analysis.                            | 3       |  |  |
| MECH 309                  | Numerical Methods in Mechanical Engineerin     | ng. 3   |  |  |
|                           |  |         |  |  |

9 credits from:

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| Course   | Title                           | Credits |
|----------|---------------------------------|---------|
| COMP 251 | Algorithms and Data Structures. | 3       |
| MATH 240 | Discrete Structures.            | 3       |

COMP courses at the 300 level or above except COMP 396 Undergraduate Research Project., COMP 400 Project in Computer Science.

It is strongly recommended that students take COMP 251 Algorithms and Data Structures., as it is a prerequisite of many later computer science courses.