



# BS in Computer Science and Master of Software Engineering

## Five -Year Dual Degree Program



New

### Explanation of Program

Students with a computer science major who are also interested in software engineering are able to receive both a Bachelor of Science (BS) in Computer Science and a Master of Software Engineering (MSE) from UW-La Crosse.

Students may be accepted into the dual degree program anytime before they have completed seventy-five undergraduate credits hours. Applicants for undergraduate admission to UWL may request admission into the dual degree program. In order to remain in the program students must maintain a 3.00 GPA. Award of the BS degree will occur upon completion of 120 credits, the C-S major requirements, the SAH college requirements, and the general university requirements. Students must have graduate student status prior to registering for their fourth graduate course (normally in the second semester of their 4th year.) Award of the MSE degree will occur after the completion of the BS and MSE requirements.

Students in this dual degree program should complete C-S 120, 220, 270, 340, 370, 421, 441, 442, MTH 207, 208, 225, and 9 credits of 300 or 400 level C-S electives (excluding C-S 341) by the end of their 3rd year. During the senior year students should complete C-S 741, 743, 742, 546 and 3 graduate level MSE credits. In the fifth year students should complete C-S 744, 3 graduate level MSE electives, and the capstone project. C-S 546 and C-S 741 will count toward the 40 credit hours of computer science required for the B.S. degree. C-S 742, 743, 744, 12 credits of 798 (capstone project), and 9 credits of MSE electives will fulfill the MSE requirements.

Students should consult with the Department Chair or their CS faculty advisor for specific course advising for this agreement.

(See sample schedule on reverse side)

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## Sample Schedule

	Semester 1	Semester 2
<b>Year 1</b>	CS 120 Software Design I(4) MTH 207 Calculus I (5) Gen Ed Elective (3) Gen Ed Elective (2) Gen Ed Elective (3) <p style="text-align: right;"><b>(17 credits)</b></p>	CS 220 Software Design II (3) CS 270 Assembler Programming & Intro to Computer Organization (3) MTH 208 Calculus II (4) Gen Ed Science Elective (4) Elective (3) <p style="text-align: right;"><b>(17 credits)</b></p>
<b>Year 2</b>	CS 340 Software Design III: Abstract Data Types (3) CS 370 Computer Architecture (3) MTH 225 Mathematical Logic (4) Gen Ed Elective (3) Elective (3) <p style="text-align: right;"><b>(16 credits)</b></p>	CS Elective (3) CS Elective (3) Gen Ed Elective (3) Gen Ed Elective (3) Gen Ed Science Elective (4) <p style="text-align: right;"><b>(16 credits)</b></p>
<b>Year 3</b>	CS 421 Programming Languages (3) CS 441 Operating System Concepts (3) Gen Ed Elective (3) Gen Ed Elective (3) Elective (3) Internship or Elective (2) <p style="text-align: right;"><b>(17 credits)</b></p>	CS 442 Structure of Compilers (3) CS Elective (3) Gen Ed Elective (3) Gen Ed Elective (3) Gen Ed Elective (3) Internship or Elective (2) <p style="text-align: right;"><b>(17 credits)</b></p>
<b>Year 4</b>	CS 741 Software Engineering Principles (3) CS 743 Software Verification & Validation (3) MSE Elective (3) Gen Ed Elective (2) Elective (3) Elective (3) <p style="text-align: right;"><b>(17 credits)</b></p>	CS 742 Formal Methods in Software Dev. (3) CS 546 Object-Oriented Software Dev. (3) MSE Electives (3) Elective (3) Elective (3) <p style="text-align: right;"><b>(15 credits)</b></p>
<b>Year 5</b>	CS 798 Software Development Project (6) MSE Electives (3) <p style="text-align: right;"><b>(9 credits)</b></p>	CS 744 Managerial Issues in Software Dev. (3) CS 798 Software Development Project (6) <p style="text-align: right;"><b>(9 credits)</b></p>

\* You also have the option of taking general education courses during J-term (January between the semesters) and summer to reduce the load during regular semesters.