# Lakehead University Corporate Identity, 955 Oliver Raod, Thunder Bay, ON, P7B 5E1, lakeheadu.ca

**Department of Computer Science**

**COMP4431, 4432, 4434\_WAO 2024 Course Portfolio**

**Instructor: Ruizhong Wei**

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**Course Description:**

Students will be required to work in teams to design and implement a significant software system. Design decision making will include the application of basic sciences, mathematics, computer science, and business fundamentals. Written and oral presentations will be an integral part of the course. Modern programming and design methodology will be stressed throughout.

**Learning Outcomes:**

1. Software engineering methodology will be stressed throughout.
2. Practice requirement analysis, software design, software implementation, software management including agile development and software testing strategies in this course.
3. Team members have an opportunity to delve deeply in an area of their choosing with faculty guidance.
4. Malpractice critical thinking, the ethical and legal implications of computing.

**Course Contents:**

1. Form team and decide the problem for the project.
2. Project requirement analysis, make stories.
3. Presentation of proposal
4. Architecture design.
5. Presentation of designs
6. Combining agile method to develop the software.
7. Testing and finish first version.
8. Second circle of the software development.
9. Project report writing.
10. Final team presentation.

**Text Book (s):**

R. Wei, Agile software development, Lecture notes.

**Marking Scheme:**

To determine the final grade of the course, the following weights will be

applied:

* Team project (including team presentations, software developed, final report): 80 %
* Individual report (including weekly active records and final report): 20 %.

**Relevant ACM/IEEE Body Knowledge:**

Software development fundamentals (SDF)

**Similar Courses in Ontario (O), Canada (CA) and USA (US):**

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| Course Number and Title | University ( O,CA, US) | Link |
| CSC494H1 Computer science project | University of Toronto | <https://artsci.calendar.utoronto.ca/section/>  Computer-Science |
| CS493 Team project 1 | University of Waterloo | <https://cs.uwaterloo.ca/current/courses/>  course\_descriptions/ |
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**Student Feedback on Teaching COMPXXXX Term\_Year**

From your annual report based on the institutional student satisfaction survey:

https://www.lakeheadu.ca/sites/default/files/uploads/66/SFT%202015-16%20Results%20Update.pdf

Or from Open Testimonies or both.