Evaluation Report for Program Review Face to Face Meeting University of Wisconsin-Whitewater: Computer Science (MS), 2022-2023

Date: 2/14/2023

Invited: Interim Provost Robin Fox; Dean Matt Vick (Graduate Studies); Dean Frank Goza (Letters and Sciences); Department Chair/Program Coordinator Jiazhen Zhou; faculty and staff in the Computer Science (MS) program Hien Nguyen, Zach Oster, Athula Gunawardena, Arnal Ganguly, Sue Roberts; Audit & Review Team Chair Carrie Merino; Audit & Review team members Rhea Vichot, Christine Neddenriep; Assessment Representative Katy Casey

Overview of review team evaluation, program comments:

Overview of review team evaluation process and comments welcomed from M.S. faculty present. Dr. Jiazhen Zhou, department chair and other faculty agree that A&R was a good opportunity to reflect on program in today's market, versus 6 years ago when program was created. Faculty identified several strengths of the current MS program, including:

- Department is strong and works as a team, and has a shared vision for program
- Faculty research productivity is high, including awarded grants
- Faculty maintain collaborative relationships with industry
- Excellent advising and mentorship from faculty for students in the program
- Student-centered focus, particularly for career-changing students enrolled in the program
- High quality program with rigor emphasized

Other strengths also identified by the A&R Review Team (see end of report for additional items):

- 4+1 Model is a unique strategy for recruitment from within UW-Whitewater

Discussion of Review Team's evaluation:

1 – A primary concern for the Review Team is the need for the program to address recruitment numbers.

The program has grown and made attempts to specialize and recruit diverse students. Recruitment is primarily occurring in the department. The program has realistic goals for new enrollment and would like to have more advertising and help marketing the program from the University.

2 – Enrollment

Several factors affecting enrollment were presented by faculty. These include catering to career-changing students, which brings some additional challenges. Faculty feel that smaller cohort is necessary to help these students catch-up or get up to speed- "merging previous life with this new life."

3 – The program being largely campus-based with some hybrid course options was also discussed.

The presence of strong MS Computer Science programs in Madison and Milwaukee was highlighted. The need to consider online modality to market to broader audience – outside of region with less competition was emphasized by the Review team and campus leadership present in the meeting. Faculty recognize that, at this point, recruitment is very time and labor intensive for the faculty member assigned to this role. Marketing program based on strengths, e.g., small class sizes, distinguished faculty was also suggested.

4 – Another primary concern for the Review Team is a lack of a coherent sense of program identity and difficulties distinguishing the program from others in the area. This appears to be a fundamental piece that contributes to all areas of program challenges at this time, including recruitment, retention, assessment, and long-term program viability.

- To begin this discussion, the Review Team asked about Program Identity and history. Program faculty provided additional context: First designed the program for students who were interested in doing research and advance technical work who already had some background knowledge and training/course work, and what has been seen over time is more growth in the career and 4 plus 1 students- they typically have a BS is a different discipline area and want to develop additional skills, so more work needs to be done to help develop experiences for these students while maintaining interests of "traditional" cohort.

- Program faculty agree that there is a need to find an identity to help the program grow. Suggestions they have recently considered include offering courses in emerging new areas, e.g., data mining and cybersecurity. Faculty recognize that there is a need to evolve the program from the original design.

- Review Team Chair suggests completing a rigorous Strategic Planning process, revisiting the mission, vision, and values of the program. Setting goals based on a more coherent sense of what sets the program apart from competitors with more resources was emphasized. Involving a consultant or mentor to complete this process was also suggested to help provide additional objectivity and accountability.

5 – As part of the Strategic Planning process, goals that highlight the need for a more fine-tuned assessment plan for the program was discussed. The need to diversify the types of data collected as well as implement a strategic way that data is reviewed and utilized was highlighted. Program faculty recognize that this is a need for their program at this time. Faculty also shared that their advisory board recently suggested an increased focus on data for their program. Several additional suggestions were made, including:

- Suggestion for program to attend Assessment Institute to support the growth of the program
- Refine Student Learning Outcomes (SLO's) that highlight the uniqueness of the program. The Assessment Institute can help with this. If not feasible, consider utilizing another program/faculty member on campus as a mentor in this process.
- Create an Assessment plan for each SLO that demonstrates how and when they are assessed and how that data is then used to inform the program
- Faculty from the program also highlight that they have been considering instituting an Employer Survey for those who are employing graduates of the program. This was encouraged as part of the larger assessment and strategic plans.

Recommended Actions:

Recommended Action #1

Launch increased online course options – consider using LTC and Instructional Design resources to deliver a high-quality user experience.

Recommended Action #2

Complete the assessment plan by reporting findings and analysis by program learning outcome, and not by course and instructor.

Recommended Action #3

Create a consistent schedule for managing program goals and discussion of student learning. For example, designate one department meeting per semester where this occurs.

Recommended Action #4

Create a plan to determine student success, and post-graduate outcomes, upon completion of the degree.

Recommended Result:

Continuation with minor concerns

Next Self-Study and/or Progress Report Due Dates:

1 - Next FULL self-study will be due to the Dean on May 1, 2027 and to the Assessment Office on August 1, 2027

For a copy of the full evaluation report and detailed comments, please reach out to the assessment office: assessment@uww.edu.