

**MS Student Capstone Project Competency Evaluation Form**

**Capstone Supervisors:** Thank you for supervising this capstone project! Please evaluate student’s competencies as demonstrated throughout the project using the form below. 1 = least competent and 5 = very competent.

Please feel free to add additional comments to any of the competency areas in the space provided below the format.

**Supervisor Name: Student Name:**

**Project title: Project duration/semester:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Competencies** | **1** | **2** | **3** | **4** | **5** | **n/a** |
| C1: Computational and analytic thinking and doing: Student established the ability to exercise the four key techniques of computational thinking: decomposition, pattern recognition, abstraction, and algorithms in solving information and data challenges, in addition to analytically.  |  |  |  |  |  |  |
| C1.A: Decomposition: Student is able to break down a complex problem or system into smaller, more solvable problems.  |  |  |  |  |  |  |
| C1.B: Pattern recognition: Student is trained to look for similarities among and within problems.  |  |  |  |  |  |  |
| C1.C: Abstraction: Student has gained the ability of recognizing and focusing on the essential components of a problem/issue while ignoring distracting peripheral factors in order to develop one solution that works for a class of problems. |  |  |  |  |  |  |
| C1.D: Algorithms: Student is able to design and implement a step-by-step solution to a problem, including design and implement a computer algorithms using a computer language to solve a problem.  |  |  |  |  |  |  |
| C1.E: Student demonstrated fluency in at least one programming language.  |  |  |  |  |  |  |
| C2: Data manipulation, analysis, and interpretation: Student has obtain the skills of collecting, manipulating, and analyzing different types of data at different scales, and interpreting the results properly.      |  |  |  |  |  |  |
| C2:A: Student is able to identify specific types of data for different analytical methods  |  |  |  |  |  |  |
| C2:B: Student is able to use/develop efficient computational methods to clean, format, transfer, and store data |  |  |  |  |  |  |
| C2:C: Student is able to apply appropriate statistical, machine learning, visual analytics, and other techniques to identify patterns and make sound predictions with given data.  |  |  |  |  |  |  |
| C2:D: Student is able to develop methods to align and integrate data from multiple sources.  |  |  |  |  |  |  |
| C2:E: Student understands the ethical and legal requirements of data privacy and security.  |  |  |  |  |  |  |
| C3: Communication and teamwork: Student has acquired skills to work with others within and across disciplines and be effective communicators.  |  |  |  |  |  |  |
| C3.A: Student has acquired experience working in an interdisciplinary team, either as a productive team member or a team leader.  Students will become effective project managers.  |  |  |  |  |  |  |
| C3:B: Students is able to effectively articulate various evidence supporting a solution and to communicate the results of their work, using appropriate graphics, visualizations, multi-media vehicles, or artistic performance.  |  |  |  |  |  |  |
| C4: Creative contributions:  Through experiential learning, student knows how to conduct original and innovative work, involving computational thinking, data-intensive methodologies, and/or human-centered designs that will extend the body of knowledge in the field of Information.  |  |  |  |  |  |  |
| C5: Ethics and Values: Student has demonstrated an understanding of information/data ethics, and the values of the information fields to serve diverse user groups.  |  |  |  |  |  |  |

**Additional comments:**

**Supervisor Signature: Date:**