## ASSESSMENT REPORT TEMPLATE  
\*\*PHD in Computer Science and Software Engineering (CSSE)\*\*  
  
\*\*Student Learning Outcomes\*\*  
\*\*Specificity of Outcomes\*\*   
[Please provide a list of program level student learning outcomes. Student learning outcomes articulate the knowledge, skills, and abilities that students are expected to achieve as a result of completing the academic   
degree program.]  
\*\*Comprehensive Outcomes\*\*  
[Please provide a brief narrative stating whether or not the list of student learning outcomes is comprehensive (i.e., the student learning outcomes accurately reflect the current scope of the program). Consider also providing a rationale for the degree/nature of comprehensiveness (e.g., student learning outcomes are aligned with disciplinary standards).]   
\*\*Communicating Student Learning Outcomes\*\*  
[Please provide a brief statement describing if and how the list of student learning outcomes is shared with   
others (e.g., paper copies are shared with program faculty at a meeting, the outcomes are posted to the departmental website).]  
  
\*\*Curriculum Map\*\*  
A curriculum map should include the student learning outcomes and required courses/experiences within a visual matrix. Briefly, think about which courses in your   
curriculum touch on the outcomes you listed. Then think about how deeply they are developed in each of those courses.   
  
\* A score of mature will be assigned to maps that simply indicate that there is alignment between the student learning outcomes and required courses/experiences   
and each student learning outcome is aligned (read: developed ) in at leas t one required course or experience. Also, indicate if the relevant course is required   
or an elective in the curriculum.   
\* A score of exemplary will be assigned to curriculum maps that convey the extent to which each outcome is developed in particu lar course s. Even though this   
example uses 1, 2, 3 to indicate development and A to indicate the intended placement of programmatic assessment(s) , a program could use any symbol (i.e.   
numbers, letters, descriptions).   
  
| Courses | SLO1 | SLO2 | SLO3 | SLO4 |  
|---|---|---|---|---|  
| 6000 Web Application Development | 0.00 | 1.00 | 0.00 | 1.00 |  
| 6120 Database Systems I (Fall/Spring) | 1.00 | 1.00 | 0.33 | 0.66 |  
| 6130 Data Mining | 1.00 | 0.33 | 0.66 | 1.00 |  
| 6210 Compiler Construction | 0.66 | 1.00 | 0.33 | 0.66 |   
| 6320 Design and Analysis of Computer Networks | 0.66 | 0.66 | 1.00 | 0.00 |  
| ... | ... | ... | ... | ... |  
  
  
\*\*Measurement\*\*  
\*\*Outcome-Measure Alignment\*\*   
[Please provide a description of the assessment measures, noting how they were chosen/developed to align   
with the student learning outcomes.]  
\*\*Direct Measures\*\*  
[Please consider indicating which assessments are direct measures of student learning (e.g., exams, rubric scores).]  
\*\*Data Collection Methods\*\*  
[Please provide a description of the assessment data collection process (i.e., information on how data were collected, who provided data, and the pertinent methodological details such as rating/scoring design).]  
  
\*\*Results\*\*  
\*\*Reporting Results\*\*   
  
| Course Name | Professor | A | B | C | D | F | Score | Total Students |  
|---|---|---|---|---|---|---|---|---|   
| COMP 6000 | Marghitu | 4 | 0 | 0 | 0 | 0 | 100.0 | 4 |  
| COMP 6120 | Ku (Spring/Fall) | 5 | 0 | 0 | 0 | 0 | 100.0 | 5 |   
| COMP 6210 | Mulder | 1 | 0 | 0 | 0 | 0 | 100.0 | 1 |   
| ... | ... | ... | ... | ... | ... | ... | ... | ... |  
| COMP 7990/8990 | Qualtrics Measure 1 | 45 | 13 | 4 | 0 | 0 | 91.5 | 62 |  
| COMP 7990/8990 | Qualtrics Measure 2 | 39 | 18 | 4 | 0 | 0 | 89.3 | 61 |  
| COMP 7990/8990 | Qualtrics Measure 3 | 30 | 28 | 4 | 0 | 0 | 85.5 | 62 |  
| ... | ... | ... | ... | ... | ... | ... | ... | ... |  
  
The overall performance in core CSSE PhD courses for the year 2026 remains strong. However, specific areas require attention.   
  
\*\*Communicating Results\*\*  
  
| SLOs | Score | Ratings |  
|---|---|---|  
| SLO1 | 91.9 | Exemplary |  
| SLO2 | 93.4 | Exemplary |  
| SLO3 | 87.5 | Proficient |  
| SLO4 | 54.0 | Insatisfactory |  
  
  
SLO1 and SLO2 continue to demonstrate exemplary performance, indicating a high level of competency in these areas among our students. SLO3 maintains a proficient rating, demonstrating consistent quality but leaving room for further enhancement. However, SLO4's 'Insatisfactory' rating signals a significant concern requiring immediate and focused intervention. This result likely stems from the observed low performance in courses directly contributing to this SLO, indicating potential curriculum gaps or instructional areas needing improvement.   
  
\*\*Use of Results\*\*  
  
\*\*Interpretation\*\*  
[Please provide an interpretation of the results aligned with the student learning outcomes. The interpretation should reflect consideration of factors (e.g., capabilities of a particular cohort, innovative curricular change) that may have affected the results.]  
  
\*\*Purposeful Reflection\*\*   
[Please provide a narrative describing the process by which faculty discuss assessment results and implementation of the discussion.]  
  
\*\*Action Plan for 2026\*\*   
To address the 'Insatisfactory' rating for SLO4 and implement continuous improvement across all SLOs, the following action plan will be implemented:   
  
\*\*SLO4 Improvement:\*\*  
  
\* \*\*Analysis:\*\* A thorough review of courses significantly contributing to SLO4 (refer to \*\*Analysis of Underperforming Areas\*\*) will be conducted. This review will involve faculty teaching these courses and potentially external reviewers to identify potential curriculum gaps, outdated materials, or instructional delivery concerns.   
\* \*\*Curriculum Revision:\*\* Based on the review, necessary curriculum modifications will be implemented. This may include incorporating additional supporting materials, integrating real-world case studies, or restructuring the course content for improved clarity and practical relevance.   
\* \*\*Faculty Development:\*\* Workshops or training sessions focused on innovative teaching methodologies and tools, particularly relevant to the identified areas needing improvement in SLO4, will be organized for faculty teaching courses related to this SLO.   
  
\*\*Re-assessment Plan for 2026:\*\*  
  
\* \*\*SLO4:\*\* A revised assessment method directly measuring SLO4, potentially incorporating a combination of project-based assessments, presentations, or case study analyses, will be implemented across relevant courses.   
\* \*\*All SLOs:\*\* Continuous data collection and analysis will persist for all SLOs. A comprehensive review of assessment methods for all SLOs will be undertaken to ensure continued alignment with learning objectives and evolving industry needs.   
  
\*\*Continuous Improvement for Other SLOs:\*\*  
  
\* \*\*SLO1 and SLO2 (Exemplary):\*\* Maintain the current rigorous standards for these SLOs. Explore incorporating advanced topics or emerging trends within these areas to further challenge students and ensure their skills remain cutting-edge.  
\* \*\*SLO3 (Proficient):\*\* Investigate potential modifications to instructional materials or teaching methodologies based on best practices and student feedback to elevate the level of competency and potentially reach an exemplary rating in subsequent years.   
  
By implementing this action plan, we aim to directly address the concerns highlighted by SLO4's performance and create a cyclical process of continuous improvement, ensuring our PhD program in CSSE remains relevant, rigorous, and prepares our graduates for successful careers in their chosen fields.

# Curriculum Map (from SLO Computed - Year 2026)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Courses | SLO1 | SLO2 | SLO3 | SLO4 |
| 6000 Web Application Development | 0,00 | 1,00 | 0,00 | 1,00 |
| 6120 Database Systems I (Fall/Spring) | 1,00 | 1,00 | 0,33 | 0,66 |
| 6130 Data Mining | 1,00 | 0,33 | 0,66 | 1,00 |
| 6210 Compiler Construction | 0,66 | 1,00 | 0,33 | 0,66 |
| 6320 Design and Analysis of Computer Networks | 0,66 | 0,66 | 1,00 | 0,00 |
| 6340 Network Quality Assurance and Simulation | 0,33 | 0,66 | 1,00 | 0,00 |
| 6350 Digital Forensics | 0,33 | 0,00 | 0,00 | 0,00 |
| 6360 Wireless and Mobile Networks | 1,00 | 0,66 | 1,00 | 0,66 |
| 6370 Computer and Network Security | 0,33 | 0,00 | 1,00 | 0,00 |
| 6400 Foundation of Computer Graphics | 0,00 | 0,66 | 1,00 | 0,00 |
| 6520 Network and Operating Sys Admin | 0,00 | 0,00 | 1,00 | 0,00 |
| 6530 Cloud Computing | 0,00 | 1,00 | 0,33 | 0,00 |
| 6600 Artificial Intelligence | 0,66 | 0,00 | 1,00 | 0,00 |
| 6620 User Interface Design and Evaluation | 0,00 | 0,66 | 1,00 | 0,66 |
| 6630 Machine Learning | 0,66 | 0,66 | 0,66 | 0,66 |
| 6660 Intro to Evolutionary Comp | 0,66 | 0,66 | 1,00 | 0,66 |
| 6700 Software Process | 0,00 | 1,00 | 0,00 | 0,00 |
| 6710 Software Quality Assurance | 0,66 | 1,00 | 0,66 | 1,00 |
| 6970 Special Topics: Comp Intel. & Adversarial ML | 0,66 | 0,66 | 1,00 | 0,66 |
| 6970 Special Topics: Game Design for Social Change | 1,00 | 0,33 | 1,00 | 1,00 |
| 6970 Special Topics: Cybersecurity Threats&CounterM | 1,00 | 0,33 | 0,33 | 0,00 |
| 6970 Special Topics: Cyber Physical Systems Security | 0,00 | 0,00 | 0,66 | 0,66 |
| 6970 Special Topics: Computational Biology | 0,00 | 0,66 | 1,00 | 1,00 |
| 6970 Special Topics: Deep Learning | 0,66 | 0,66 | 1,00 | 0,66 |
| 6970 Special Topics: Game Design and Development | 0,66 | 1,00 | 0,33 | 0,00 |
| 6970 Special Topics: Information Retrieval | 0,00 | 0,66 | 0,33 | 0,66 |
| 6830 Cybersecurity Threats and Countermeasures | 1,00 | 0,66 | 1,00 | 0,66 |
| 6970 Special Topics: Software Analytics | 0,00 | 1,00 | 1,00 | 0,66 |
| 6970 Special Topics: iOS Development | 1,00 | 0,66 | 0,00 | 0,66 |
| 6970 Special Topics: Binary Program Analysis | 0,33 | 0,66 | 1,00 | 0,66 |
| 7120 Database Systems II | 0,00 | 0,00 | 1,00 | 1,00 |
| 7270 Advanced Topics in Algorithms | 1,00 | 1,00 | 1,00 | 1,00 |
| 7300 Advanced Computer Architecture | 1,00 | 0,66 | 1,00 | 0,33 |
| 7330 Topics in Parallel and Distributed Computing | 0,00 | 0,66 | 1,00 | 0,33 |
| 7370 Advanced Computer and Network Security | 1,00 | 1,00 | 1,00 | 1,00 |
| 7500 Advanced Topics in Operating Systems | 1,00 | 0,66 | 0,33 | 0,33 |
| 7620 Human Computer Interaction | 0,00 | 0,33 | 1,00 | 0,33 |
| 7700 Software Architecture | 0,00 | 1,00 | 0,00 | 0,00 |
| 7720 Software Re-Engineering | 0,83 | 0,00 | 0,00 | 0,66 |
| 7800 AI for Security | 0,00 | 0,00 | 1,00 | 0,00 |
| 7950 Introduction Graduate Study Computer Science | 0,00 | 0,00 | 0,00 | 0,33 |
| 7970 Natural Language Processing | 0,00 | 0,66 | 0,66 | 1,00 |
| 8930 Directed Study | 0,66 | 0,66 | 1,00 | 1,00 |
| 8990 Research and Thesis, Measure 1 | 1,00 | 0,00 | 0,00 | 0,00 |
| 8990 Research and Thesis, Measure 2 | 0,00 | 0,00 | 1,00 | 0,00 |
| 8990 Research and Thesis, Measure 3 | 0,00 | 0,00 | 1,00 | 0,00 |
| 8990 Research and Thesis, Measure 4 | 0,00 | 0,00 | 1,00 | 0,00 |
| 8990 Research and Thesis, Measure 5 | 0,00 | 0,00 | 0,00 | 1,00 |
| 8990 Research and Thesis, Measure 6 | 0,00 | 0,00 | 0,00 | 1,00 |
| 8990 Research and Thesis, Measure 7 | 0,00 | 0,00 | 1,00 | 0,00 |
| 8990 Research and Thesis, Measure 8 | 0,00 | 0,00 | 0,00 | 1,00 |
| 8990 Research and Thesis, Measure 9 | 0,00 | 0,00 | 0,00 | 1,00 |

# Reporting Results (from Grades - Year 2026)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Course\_name | Professor | A | B | C | D | F | Score | Total\_students |
| COMP 6000 | Marghitu | 4 | 0 | 0 | 0 | 0 | 100,0 | 4 |
| COMP 6120 | Ku (Spring/Fall) | 5 | 0 | 0 | 0 | 0 | 100,0 | 5 |
| COMP 6210 | Mulder | 1 | 0 | 0 | 0 | 0 | 100,0 | 1 |
| COMP 6130 | Zhou | 3 | 0 | 0 | 0 | 0 | 100,0 | 3 |
| COMP 6320 | Shu | 3 | 2 | 0 | 0 | 0 | 90,0 | 5 |
| COMP 6350 | Cuneo | 0 | 0 | 0 | 0 | 0 | 0,0 | 0 |
| COMP 6360 | Lim | 0 | 0 | 0 | 0 | 0 | 0,0 | 0 |
| COMP 6370 | Springall | 0 | 0 | 0 | 0 | 0 | 0,0 | 0 |
| COMP 6520 | Umphress (Summer) | 0 | 0 | 0 | 0 | 0 | 0,0 | 0 |
| COMP 6530 | Sardinas | 0 | 0 | 0 | 0 | 0 | 0,0 | 0 |
| COMP 6600 | Liu | 0 | 0 | 0 | 0 | 0 | 0,0 | 0 |
| COMP 6620 | Seals | 0 | 0 | 0 | 0 | 0 | 0,0 | 0 |
| COMP 6630 | A. Nguyen/Karmaker | 4 | 1 | 0 | 0 | 0 | 95,0 | 5 |
| COMP 6660 | Tauritz | 2 | 1 | 0 | 0 | 0 | 91,7 | 3 |
| COMP 6700 | Umphress | 0 | 0 | 0 | 0 | 0 | 0,0 | 0 |
| COMP 6710 | Rahman | 0 | 0 | 0 | 1 | 0 | 25,0 | 1 |
| COMP 6970-CTCM | Cuneo | 0 | 0 | 0 | 0 | 0 | 0,0 | 0 |
| COMP 6970-CPS | Yampolskiy | 3 | 0 | 0 | 0 | 0 | 100,0 | 3 |
| COMP 6970-BPA | Mulder | 1 | 0 | 0 | 0 | 0 | 100,0 | 1 |
| COMP 6970-GDSC | Thomas | 0 | 0 | 0 | 0 | 0 | 0,0 | 0 |
| COMP 7970-Research EC | Tauritz | 0 | 0 | 0 | 0 | 0 | 0,0 | 0 |
| COMP 6970 | Heaton | 1 | 0 | 0 | 0 | 0 | 100,0 | 1 |
| COMP 6970 | A Nguyen | 0 | 0 | 0 | 0 | 0 | 0,0 | 0 |
| COMP 6970 | Seals | 0 | 0 | 0 | 0 | 0 | 0,0 | 0 |
| COMP 6970-IR | Karmaker | 3 | 0 | 0 | 0 | 0 | 100,0 | 3 |
| COMP 6830 | Springall | 0 | 0 | 0 | 0 | 0 | 0,0 | 0 |
| COMP 6970 | Sardinas | 0 | 0 | 0 | 0 | 0 | 0,0 | 0 |
| COMP 6970 iOS | Chapman | 0 | 0 | 0 | 0 | 0 | 0,0 | 0 |
| COMP 7270 | Zhou | 17 | 1 | 0 | 0 | 0 | 98,6 | 18 |
| COMP 7300 | Baskiyar | 13 | 10 | 2 | 1 | 0 | 83,7 | 26 |
| COMP 7370 | Shu | 2 | 0 | 0 | 0 | 0 | 100,0 | 2 |
| COMP 7500 | Qin | 13 | 4 | 0 | 0 | 0 | 94,1 | 17 |
| COMP 7620 | Seals | 0 | 0 | 0 | 0 | 0 | 0,0 | 0 |
| COMP 7720 | Yamposkiy | 1 | 1 | 0 | 0 | 0 | 87,5 | 2 |
| COMP 7930/7980/8930 | Qin | 6 | 0 | 0 | 0 | 0 | 100,0 | 6 |
| COMP 7970-NLP | Karmaker | 3 | 0 | 0 | 0 | 0 | 100,0 | 3 |
| COMP 7990/8990 | Qualtrics Measure 1 | 45 | 13 | 4 | 0 | 0 | 91,5 | 62 |
| COMP 7990/8990 | Qualtrics Measure 2 | 39 | 18 | 4 | 0 | 0 | 89,3 | 61 |
| COMP 7990/8990 | Qualtrics Measure 3 | 30 | 28 | 4 | 0 | 0 | 85,5 | 62 |
| COMP 7990/8990 | Qualtrics Measure 4 | 30 | 29 | 3 | 0 | 0 | 85,9 | 62 |
| COMP 7990/8990 | Qualtrics Measure 5 | 33 | 28 | 1 | 0 | 0 | 87,9 | 62 |
| COMP 7990/8990 | Qualtrics Measure 6 | 27 | 33 | 2 | 0 | 0 | 85,1 | 62 |
| COMP 7990/8990 | Qualtrics Measure 7 | 27 | 31 | 4 | 0 | 0 | 84,3 | 62 |
| COMP 7990/8990 | Qualtrics Measure 8 | 30 | 32 | 0 | 0 | 0 | 87,1 | 62 |
| COMP 7990/8990 | Qualtrics Measure 9 | 29 | 29 | 4 | 0 | 0 | 85,1 | 62 |

# Communication Results (from SLO Scores and Ratings - Year 2026)

|  |  |  |
| --- | --- | --- |
| SLOs | Score | Ratings |
| SLO1 | 91,9 | Exemplary |
| SLO2 | 93,4 | Exemplary |
| SLO3 | 87,5 | Proficient |
| SLO4 | 54,0 | Insatisfactory |