## CWU Department/Program Assessment Plan Preparation Form

**Department: Computer Science**  
**Program: Bachelor of Science**

<table>
<thead>
<tr>
<th>Department/Program Goals</th>
<th>Related College Goals</th>
<th>Related University Goals</th>
<th>Method(s) of Assessment (What is the assessment?)</th>
<th>Who/What Assessed (population, item)</th>
<th>When Assessed (term, dates)</th>
<th>Criterion of Achievement (Expectation of how good things should be?)</th>
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</table>
| 1. Promote the role of computer science and computer literacy in undergraduate education at Central Washington University. | Goal I: Provide for an outstanding academic and student experience in the College of the Sciences. | Goal I: Maintain and strengthen an outstanding academic and student life on the Ellensburg campus. | Student involvement in general education courses.  
Student involvement in service courses.  
Senior projects conducted for the university community and regional groups.  
Interest in major, minor and associated programs.  
Students enrolled in CS 105, 110, 111 & 367. Feedback from associated majors.  
Community participation in projects.  
Students enrolled in CS-related programs.  
Student and faculty participation in GearUp, STEP, Robotics institute. | Annual review.  
Annual review.  
Fall annually.  
Annual review.  
Reasonably enrolled service course sections. (#FTES stable) No concerns expressed by departments requiring theses classes.  
Number of annual requests high. Sufficient projects for our senior project capstone course. No complaints from project clients.  
Range from a constant to an increasing number students enrolled as majors, minors and associated programs (CompE).  
Range from a constant to an increasing number student and faculty participation in these outreach programs. |
| 2. Offer undergraduate programs that train students as computer | Goal I: Provide for an outstanding | Goal I: Maintain and strengthen an outstanding | Senior Project Results | Seniors in CS | Annual Review | # of successful projects |
| 3. Maintain an intellectually stimulating learning environment where diverse perspectives are valued and encouraged. | Goal VII: Create and sustain productive, civil, and pleasant learning environments. | Goal VI: Build inclusive and diverse campus communities that promote intellectual inquiry and encourage civility, mutual respect, and cooperation. | Scholarship program participation | Scholarship recipient diversity & achiev. | Annual Review | Continuing ability to offer scholarships to CS majors; range from a constant to an increasing number of underrepresented group recipients; > 25% participate in SOURCE or independent research. | Range from a constant to an increasing number of underrepresented group participating; > 25% participate in SOURCE or independent research. > 5 service related projects |
| 4. Sustain a productive team of faculty and staff. | Goal IV: Develop a diversified funding base to support curriculum and academic facilities, student and faculty research | Goal III: Strengthen and further diversify our funding base and strengthen infrastructure to support academic and student programs. | Faculty productivity | Faculty | Annual Peer Review | All faculty successfully completing their professional goals – scholarship, teaching & service – described and agreed to by peers and the Dean. Review includes contribution to the program and role of faculty member. | Entry classes and degree tracks that attract non-traditional students. |
and scholarships, as well as faculty development, service and applied research in college disciplines.

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<th>5. Play a leadership role in scholarship by making basic and relevant scientific contributions to our respective sub-disciplines.</th>
<th>Goal III: Provide for outstanding graduate programs that meet focused regional needs and achieve academic excellence.</th>
<th>Goal V: Achieve regional and national prominence for the university.</th>
<th>Scholarship</th>
<th>Faculty scholarship integrated with the undergraduate program.</th>
<th>Annual Review</th>
<th>A departmental average (per faculty) of one conference, journal and book publications. A departmental average (per faculty) of one submitted grant. A departmental average (per faculty) of six students participating in SOURCE, conferences, independent research.</th>
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<td>6. Build an interdisciplinary program and an associated Masters Degree program.</td>
<td>Goal III: Provide for outstanding graduate programs that meet focused regional needs and achieve academic excellence.</td>
<td>Goal III: Strengthen and further diversify our funding base and strengthen infrastructure to support academic and student programs.</td>
<td>Program foci</td>
<td>Faculty planning</td>
<td>Annual review</td>
<td>Successful program review. Range from a constant to an increasing number of interdisciplinary projects – both student and faculty. Successfully inaugurated MS program.</td>
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### CWU Student Learning Outcome Assessment Plan Preparation Form

**Department:** Computer Science  
**Program:** Bachelor of Science

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<tr>
<th>Student Learning Outcomes (performance, knowledge, attitudes)</th>
<th>Related Program/Departmental Goals</th>
<th>Related College Goals</th>
<th>Related University Goals</th>
<th>Method(s) of Assessment (What is the assessment?)*</th>
<th>Who Assessed (Students from what courses – population)**</th>
<th>When Assessed (term, dates) ***</th>
<th>Standard of Mastery/Criterion of Achievement (How good does performance have to be?)</th>
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| 1. **Basic knowledge:** Graduates will demonstrate an understanding of each of the subject areas that define the discipline as well as the interrelationships that exist among them. | Goals 1 & 2. Promote the role of computer science and computer literacy in undergraduate education at Central Washington University. Offer undergraduate programs that train students as computer specialists with a fundamental understanding of technology. | Goal I: Provide for an outstanding academic and student experience in the College of the Sciences. | Goal I: Maintain and strengthen an outstanding academic and student life on the Ellensburg campus. | MFT taken by graduating seniors  
Performance in the core courses of the major | Senior CS majors  
Majors at all levels | Reviewed annually.  
Reviewed on a three year cycle. | > 50th percentile overall and in content areas of the MFT  
All graduates have a GPA of better than 2.5 in core courses. |
| 2. **Critical Thinking Skills:** Graduates will demonstrate the ability to utilize appropriate theoretical constructs for problem solving: definitions, and axioms, theorems, proofs, and | Goal 2. Offer undergraduate programs that train students as computer specialists with a fundamental understanding of technology. | Goal I: Provide for an outstanding academic and student experience in the College of the Sciences. | Goal I: Maintain and strengthen an outstanding academic and student life on the Ellensburg campus. | MFT taken by graduating seniors  
Performance in the core courses of the major  
Performance in CS 427 | Senior CS majors  
Majors at all levels  
Students in CS | Reviewed annually.  
Reviewed on a three year cycle. | > 50th percentile overall and in content areas of the MFT  
All graduates have a GPA of better than 2.5 in core courses.  
Students meet the student learning **
Play a leadership role in scholarship by making basic and relevant scientific contributions to our respective sub-disciplines.  
Build an interdisciplinary program and an associated Masters Degree program. | Goal VII & III: Create and sustain productive, civil, and pleasant learning environment.  
Provide for outstanding graduate programs that meet focused regional needs and achieve academic excellence. | Goal VI & V: Build inclusive and diverse campus communities that promote intellectual inquiry and encourage civility, mutual respect, and cooperation.  
Achieve regional and national prominence for the university. | Performance in CS 489  
Student participation in SOURCE  
Student participation in research projects and groups. | Graduating seniors  
Students involved with SOURCE  
Students involved in undergraduate research | Reviewed annually. | All graduates will produce a successful research paper.  
Range from a constant to an increasing number presenting at SOURCE  
An annual average of two students (per faculty) involved in undergraduate research.  
> 3 external research presentations or publications annually with student participation. |
| 4. Applied Design Skills: | Goal 2. Offer undergraduate programs that train students as computer specialists with a fundamental understanding of technology.  
Goal I: Provide for an outstanding academic and student experience in the College of the Sciences. | Goal I: Maintain and strengthen an outstanding academic and student life on the Ellensburg campus. | Performance in CS 480-481 the senior capstone courses. | Graduating seniors | Reviewed annually. | >75% of project groups produce successful projects.  
All teams produce minimally successfully documents as measured by the content rubrics. |
| 5. Ethics and Society: | Goal 1. Promote the role of computer science and computer literacy in | Goal I: Provide for an outstanding academic and student | Goal I: Maintain and strengthen an outstanding academic and student life on the | Performance in CS 489 | Graduating seniors | Reviewed annually. | All graduates successfully produce a research paper studying a societal |
|----------------------------------------|--------------------------|-------------------------|
| Goals 3 & 5: Maintain an intellectually stimulating learning environment where diverse perspectives are valued and encouraged. Play a leadership role in scholarship by making basic and relevant scientific contributions to our respective sub-disciplines. | Goal 1. Promote the role of computer science and computer literacy in undergraduate education at Central Washington University. | Goal 2, 4 & 6. Offer undergraduate programs that train students as computer specialists with a |
| Goal VI & V: Create and sustain productive, civil, and pleasant learning environment. Provide for outstanding graduate programs that meet focused regional needs and achieve academic excellence. | Goal I: Provide for an outstanding academic and student experience in the College of the Sciences. | Goal I, IV & III: Provide for an outstanding academic and student experience in the College of the Sciences. |
| Goal I: Maintain and strengthen an outstanding academic and student life on the Ellensburg campus. | Goal I: Maintain and strengthen an outstanding academic and student life on the Ellensburg campus. | Goal I: Maintain and strengthen an outstanding academic and student life on the Ellensburg campus. |
| Performance in CS 311 and 312. Performance in CS 480-481 the senior capstone courses. | Performance in CS 112 | Performance in CS 427 |
| Students in CS 311 and 312. Graduating seniors. | Students in CS 112 | Students in CS 427. |
| Reviewed annually. | Reviewed annually. | Reviewed on a 3 year cycle. |
| Students meet the student learning outcomes of CS 311 and 312. All student groups will meet professional standards in generating course documents. | Students meet the student learning outcomes of CS 112. | Students meet the student learning outcomes of CS 427. |

Range from a constant
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<td>Graduates will have the ability to communicate effectively.</td>
<td>STUDENT participation in research projects and groups.</td>
<td>STUDENT involvement with undergraduate research</td>
<td>STUDENT Graduate school acceptance.</td>
<td>Survey of graduating seniors.</td>
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produce a successful research paper.

*Method(s) of assessment should include those that are both direct (tests, essays, presentations, projects) and indirect (surveys, interviews) in nature

**Data needs to be collected and differentiated by location (Ellensburg campus vs University Centers – see NWCCU standard 2.B.2)

***Timing of assessment should be identified at different transition points of program (i.e., admission, mid-point, end-of-program, post-program)