

Experiential Learning in the Bachelor of Science degree in Computer Science

This document provides students a description of the Department of Computer Science's September 18th 2018 implementation revision of the Missouri S&T Undergraduate Experiential Learning Standard & Operating Procedure approved by Faculty Senate on April 17th 2014

(http://faculty senate.mst.edu/media/campussupport/facultysenate/documents/academicfreedomstandards/2013-2014/AFS_Experiential_Learning_document.pdf).

All BS in CS students must complete one of the following options to meet their experiential learning degree requirement:

- Any on campus course, not required for the BS in CS degree, listed on the CS department website as designated by the CS undergraduate committee as an experiential learning course (e.g., COMP SCI 4097, COMP SCI 5001 – Experiential Entrepreneurship for Computer Scientists, COMP SCI 6400, COMP SCI 6401, any courses approved for the minor in entrepreneurship); these courses must require that students write a reflection on the learning experience and count the grade received for it towards the course GPA.
- COMP SCI 2002 – Cooperative Work Training; must require that students write a satisfactory reflection on the learning experience.
- Undergraduate Research, including but not limited to OURE projects, NSF REU, Honors Academy Senior Research Project, CRA-W CREU/DREU, etc.; the faculty research advisor will have to complete a standardized assessment (similar to our GRA assessment) provided by the CS department and the student will need to rate at least acceptable on said assessment as well as provide a reflection on the learning experience which must be deemed acceptable by said faculty advisor.
- Member of a SDLEC recognized Student Design team for at least one semester; a faculty advisor of the Student Design team will have to complete a standardized assessment (similar to our GRA assessment) provided by the CS department and the student will need to rate at least acceptable on said assessment as well as provide a reflection on the learning experience which must be deemed acceptable by the student's advisor.
- Member of a student team listed on the CS department website as recognized by the CS undergraduate committee (e.g., ACM Programming Competition Team, ACM Cyber Defense Team) for at least a semester; a faculty advisor of the student team will have to complete a standardized assessment (similar to our GRA assessment) provided by the CS department and the student will need to rate at least acceptable on said assessment as well as provide a reflection on the learning experience which must be deemed acceptable by said faculty advisor.
- Officer in a student organization (e.g., ACM, ACM-W, IEEE-CS, TIES, or UPE) listed on the CS department website as recognized by the CS undergraduate committee, for at least an academic year; a faculty advisor of the student organization will have to complete a standardized assessment (similar to our GRA assessment) provided by the CS department and the student will need to rate at least acceptable on said assessment as well as provide a reflection on the learning experience which must be deemed acceptable by the aforementioned faculty advisor.

- Internship/co-op/externship not done in combination with COMP SCI 2002; supervisor will have to complete a standardized assessment (similar to our GRA assessment) provided by the CS department and the student will need to rate at least acceptable on said assessment as well as provide a reflection on the learning experience which must be deemed acceptable by the student's advisor.
- Complete an approved S&T Study Abroad program; student will need to provide a reflection on the learning experience which must be deemed acceptable by the student's academic advisor.
- Complete 100 hours as a student employee of S&T's IT Research Support Services (ITRSS); supervisor will have to complete a standardized assessment (similar to our GRA assessment) provided by the CS department and the student will need to rate at least acceptable on said assessment as well as provide a reflection on the learning experience which must be deemed acceptable by the student's academic advisor.
- CS Ambassador for at least an academic year, including a training session by experienced faculty, a minimum of two times shadowing campus visits handled by experienced faculty, and a minimum of forty campus visits spread over a minimum of two semesters; student will need to provide a reflection on the learning experience which must be deemed acceptable by the student's academic advisor.
- Service Learning: member of any service learning team/organization listed on the CS department website as designated by the CS undergraduate committee as meeting the criteria for experiential learning (e.g., Engineers without Borders, Habitat for Humanity) for at least a semester; the team/organization's advisor will have to complete a standardized assessment (similar to our GRA assessment) provided by the CS department and the student will need to rate at least acceptable on said assessment as well as provide a reflection on the learning experience which must be deemed acceptable by the student's advisor.
- Mentor/coach/tutor for at least an academic year in an S&T sponsored mentoring program (Student Success Coaches, Peer Learning Assistant, On-Track Mentor, Opening Week Mentor - which continues through the academic year with programming such as ReConnect1 and 2); the student's supervisor will have to complete a standardized assessment (similar to our GRA assessment) provided by the CS department and the student will need to rate at least acceptable on said assessment as well as provide a reflection on the learning experience which must be deemed acceptable by the student's advisor.
- Paraprofessional, mentoring, peer teaching positions (Resident Assistants, Programming Resident Assistants, Chancellors Leadership Academy Advisors, Peer Involvement Advisors, Miner Mentors, Joe's P.E.E.R.S., Health Related Careers Mentoring Program, Admissions Ambassadors, PRO Leaders) for at least an academic year; the student's supervisor will have to complete a standardized assessment (similar to our GRA assessment) provided by the CS department and the student will need to rate at least acceptable on said assessment as well as provide a reflection on the learning experience which must be deemed acceptable by the student's advisor.
- Year-long leadership involvement experiences (Global Leaders Institute, Chancellor's Leadership Academy, Student Leadership Conference Chair, University Innovation Fellow); a faculty or staff

member supervising the experience will have to complete a standardized assessment (similar to our GRA assessment) provided by the CS department and the student will need to rate at least acceptable on said assessment as well as provide a reflection on the learning experience which must be deemed acceptable by the student's advisor.

- Custom: if a student wants experiential learning credit for something not on above pre-approved list, then with the student's advisor's endorsement, they can submit via their advisor a proposal to the CS undergraduate committee describing the proposed experiential learning experience and justifying that it meets the elective experiential learning requirement.

The above referenced instructors/advisors/supervisors must submit their assessments electronically to the CS undergraduate secretary in order for the student's experiential learning requirement to be checked off on their degree audit.