

Scholarship Guidelines

Department of Civil and Environmental Engineering

The Department of Civil and Environmental Engineering (CEE) prepared this document to provide guidance in applying College standards for evaluating scholarship. For the purposes of this document the term “civil engineering” encompasses all of the subdisciplines of civil engineering including environmental engineering.

CEE values research in the sub-disciplines of civil engineering, research related to civil engineering practice and education, community-based research (CBR), the scholarship of teaching and learning (SoTL), and interdisciplinary research. The department defines scholarly activities as those activities that:

- expand or revise fundamental knowledge;
- develop new or emerging technology; and/or
- integrate existing knowledge and/or technology in a way that is innovative and useful.

The department weighs the value of a scholarly product using the following two dimensions:

- The impact the product has on the field of civil engineering and related disciplines;
- The amount of peer review required prior to completion and acceptance of the product.

Furthermore, in keeping with our mission statement, the department places high value on the meaningful involvement of undergraduate students in faculty research. Evidence of this involvement includes involving students in faculty scholarship as 1) paid research scholars/assistants, 2) through thesis, independent study, or similar activities, and/or 3) the contributions of students recognized through co-authorship and/or co-presentation of scholarly products.

Levels of Scholarship

The department has identified three levels of scholarship (I, II, and III) based on characterizing a scholarly product according to both the level of peer review and the product’s impact on civil engineering and related disciplines. Figure 1 shows the conceptual boundaries for the three levels. A candidate for tenure and/or promotion is asked to map their scholarly products using the characterizations shown on Figure 1 and to indicate the level of student involvement for each product by using one of the three symbol types shown.

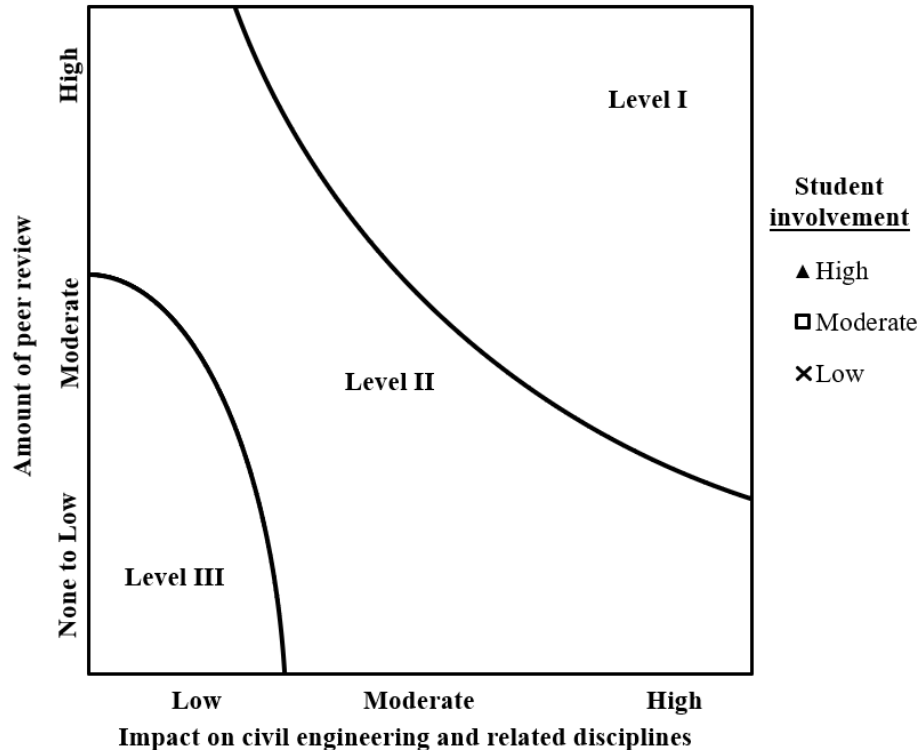


Figure 1. Conceptual characterization of scholarly products within CEE

There is an intentional degree of subjectivity in the classification of scholarly products to account for diverse forms of scholarship. Therefore, for each scholarship product where the DRC or PTR might reasonably question its location on Figure 1, faculty members are asked to provide a short narrative statement that describes the rationale for the location on the figure selected for the product. Guidance regarding levels of peer review and impact on civil engineering and related disciplines is provided below.

Level of Peer Review

The level of peer review is defined by the amount and quality of scrutiny a scholarly product undergoes prior to its completion and acceptance by an organization. Examples of scholarly products at each level of peer review are provided below:

High amount of peer review

- Papers published in high-level journals or conference proceedings that undergo a review process involving multiple expert reviewers and where acceptance rates for publication are documented to be moderate to low.
- Highly competitive external research proposals or contracts that either received funding or, if unfunded, have documented strong reviews.
- Technical reports or standards for state, national, or international organizations that are publicly available and that undergo high levels of review by multiple external expert reviewers prior to final acceptance by the organization.

Moderate amount of peer review

- Chapters in edited volumes
- Editing of conference proceedings
- Papers published in journals or conference proceedings that undergo peer review and where acceptance rates for publication are high
- Patents
- Technical reports or standards for organizations that are publicly available and that undergo internal review by experts prior to final acceptance by the organization.
- Publications in trade journals and magazines
- Textbooks

Low amount of peer review or no peer review

- Digital engineering data archives
- Expert witness testimony
- Internal research grants awarded
- Invited lectures
- Technical reports for organizations with limited or no peer review¹
- Professional society conference presentations and workshops

Impact on Civil Engineering and Related Disciplines

The impact that a scholarly product has on civil engineering and related disciplines is best described by example. Non-exhaustive examples of scholarly products for each level of impact (high, moderate, and low or no impact) are described below:

High impact: scholarship with a high impact on civil engineering and/or related disciplines includes:

- Publications that are particularly impactful on the scholarly literature or professional practice (e.g. frequently cited and/or downloaded and/or receive awards)
- Engineering design guidance or standards of practice that are broadly adopted in professional practice
- Textbooks or other curricular material that are widely adopted by engineering educators
- Patents or equipment designs that are widely adopted by engineering professionals
- A high visibility presentation (e.g. keynote or plenary) at a regional, national, or international conference
- A national or international workshop with attendance by a significant number of civil engineering practitioners and/or educators and/or practitioners and/or educators from fields related to civil engineering
- Activities that are directly connected to prominent regional or national events, or state and/or federal policy

¹ If a report is not publicly available, a redacted abstract of the document should be provided and the abstract should be accompanied by a letter confirming that the report was accepted by the organization and that the document contains confidential information and cannot be shared.

Moderate impact: this category includes scholarship in civil engineering and related disciplines where the scholarship product itself does not rise to the level of “high impact” described by the examples above.

Low or no impact: scholarship with no or only a weak relationship to civil engineering and related disciplines includes any scholarly products that can’t be shown to be related to civil engineering or a related discipline (e.g., scholarship on the history of the manufacture of chocolate).

Expectations at Time of Review

At the time of tenure review, the department expects faculty members to have a record of scholarship that is in alignment with their primary field of expertise at the time of hiring and to show evidence of a coherent and established research program in this field of expertise that extends beyond work done during the dissertation research or previous employment. The faculty member should also provide evidence of a range of scholarly activity including several works in the Level I category, evidence of scholarship from one or both of the other levels, and scholarship that involves students as contributors and/or co-authors.

At the time of post-tenure review for promotion, the department expects faculty members to show continued evidence of scholarly activity in the Level I category, evidence of scholarship from one or both of the other levels, and scholarship that involves students; however, it is recognized that service commitments generally increase after tenure and therefore the amount of scholarship over a similar time frame may be reduced in comparison to the pre-tenure period. It is also understood that faculty members may branch into new research areas after tenure; however, the values applied to scholarship described above are still applicable.

Manuscripts that are accepted or in-press at the time of the review are counted as published scholarship. In the field of civil engineering, first authorship is typically considered more important than second author, and second more important than third and so on. Co-authored papers with undergraduates are encouraged, and it is understood that in such cases even though the faculty candidate may be listed as second or third author, they have made a significant contribution to such research. It is also recognized that interdisciplinary work may involve multiple co-authors and that order of authorship may not directly reflect the relative importance of contributions to the work.

The candidate for tenure and/or promotion must explicitly discuss their role in any co-authored publications or research proposals, and in particular, those publications and proposals in which a previous research mentor is a co-author or was otherwise involved in the project.

It is the responsibility of the faculty member under review to provide evidence to show how their scholarship package meets these guidelines, both in regard to the extent of peer-review and the impact of the scholarship to civil engineering and related disciplines.

Appendix: COVID-19 Disruption

Endorsed by unanimous vote of the CEE Department, May 22, 2024

Appendix: COVID-19 Disruption

The Department of Civil and Environmental Engineering acknowledges that the COVID-19 Public Health Emergency (PHE) impacted faculty activities in teaching, scholarship, and service. Faculty members under review are encouraged to follow the guidance provided in Section 4.2 of the Faculty Handbook regarding how the COVID-19 PHE may be considered in the evidence for meeting the faculty standards.