The Challenge

Perhaps the most organic of all structural forms, examples of cantilevers surround us in a myriad of structural wonders as exemplified in the diversity of trees and plant life that inhabit our planet. The range of solutions that have been incorporated by nature to solve the requirements for plants to sustain life have provided inspiration for architectural solutions to as applied to a range of purposes throughout the millennia. Ranging from utilitarian to exquisite in their execution, the range of responses have all, nonetheless, had to come to terms with one simple problem: the reduction of a load path to a single pathway through the application of tension and balance to achieve a harmonious solution. The cantilever cannot hide its structural requirement; it must, instead, be celebrated and exploited, both architecturally and structurally.

Students are challenged to design a cantilever structure on a site of the designers' choosing. While the purpose, span and scale of the cantilever are left to the discretion of the designer, it is important to focus on what it means for us to engage and experience structure as 'cantilever.' The structure must be primarily steel, but otherwise, the material palette is open.

Competition Statement

The intention of this design competition is primarily to provide students of architecture in Canada with a unique opportunity: to enter into a design process that brings together, of necessity, concept and reality. It is important for students of architecture to grasp the fact that structural design lies not just in the realm of the engineer, but can be a means for architects of arriving at a meaningful realization of architectural ideas. It is when theory meets physical necessity that architecture can become really interesting.

To that end, this competition calls upon students to conceptualize, and realize in detail, a cantilever structure of simple program. The exploration will, of course, include issues related to program and site, but the emphasis in this competition is upon the architectural exploration through form and material, on the essential relationship between architecture and structure.

The reality of this competition comes in two forms: through the requirement for buildable details, primarily utilizing structural steel; and through the collaboration with the steel fabrication industry on those details. This collaboration is an important component of this competition, as a secondary objective is to expose students to both the opportunities and restraints inherent in realizing conceptual design.

The conceptual component of this competition will come through the recommendation that this competition be run through either a studio, or a lecture based course, most probably within a structures course. Under the guidance of faculty sponsors, students will conduct the design process as an academic exercise, within the guidelines set out in this brief. As an academic project, the design process will adhere to the standards set forth by the students' school of architecture.

7th Annual **SSEF Architectural Student Design Competition 2007/2008**

Schedule

September, 2007	Competition announced
January 31, 2008	Deadline for registration
May 1, 2008	Deadline for receipt of entries
May, 2008	Adjudication and announcement of winners
June, 2008	Awards presented at SSEF Annual General Meeting Exhibition of winning entries
October, 2008	Publication of winning entries

Technical Requirements

The ultimate goal for a team's submission should combine good architectural design with sound structural considerations and material choices. The presentation of the design should provide easy access to all components of the project clearly and creatively.

Entries in this competition should predominantly use structural steel in the design. By specifying structural steel as both architectural and structural elements, the designers demonstrate an understanding of the building properties of the material, and the architectural possibilities. Entries that include specifications of steel sizes, shapes and/or product specifications will be given stronger consideration by the jury.

Teams should also consider the practical application of their design. The potential for buildability will be given strong consideration, as the potential exists to build the winning entry. While theoretical studio projects are strongly encouraged, submissions should reflect a clear vision of the project's place and purpose.

Collaborative Process

Collaboration between designer(s) and fabricator is encouraged as a means of obtaining architectural excellence combined with practical potential. This collaboration reflects the reality of architectural practice, and will enhance the students' ability to realize conceptual design within the framework of real construction.

Students and faculty sponsors are encouraged to draw upon the experience and expertise of their local steel fabricators as part of the design process. The Steel Structures Education Foundation will forward a list of local fabricators interested in participating once an entrant's registration form is received.

Eligibility

This competition is open to all full-time students registered in an accredited program of architecture in Canada. Students may work individually or in teams. Entries that include students in Engineering are encouraged. Each entry must have at least one faculty sponsor from the architecture program.

Awards

Award of Excellence	
student team	$3,000
faculty sponsor	$1,500
Award(s) of Merit	
student team	$2,000
faculty sponsor	$1,000

(Up to two Awards of Merit will be awarded)

Cantilever

The Seventh Annual Steel Structures Education Foundation (SSEF) Architectural Student Design Competition 2007/2008

University

Faculty Sponsor

Student Names

Mailing Address

Telephone

E-mail

Please send all registration forms to:

Donna McQuillen
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