

# MEDAL FOR DISTINCTION IN ENGINEERING EDUCATION

## AWARD CRITERIA & NOMINATION GUIDELINES

### PURPOSE

Engineers Canada's Medal for Distinction in Engineering Education recognizes an exemplary contribution to the teaching and learning of the engineering profession at Canadian universities. The award has the objective of encouraging excellence in the current teaching of engineering.

### ELIGIBILITY CRITERIA

The nominee must meet the following requirements:

- Be a full-time or part-time faculty member at a Canadian university.
- Be registered in good standing as a professional engineer (P.Eng./ing.) in any province or territory of Canada.
- Have not previously received this award.
- Have not been a member of Engineers Canada's Board of Directors and an ex-staff member of Engineers Canada for a period of at least four years prior to the date of this award nomination.

### CRITERIA

The criteria for the award are weighted heavily toward personal teaching effectiveness. They invite evidence of distinguished contributions by the nominee to the learning environment for engineering students. The criteria also invite evidence of a leadership role by the nominee in the improvement of engineering education beyond the nominee's own courses, including the improvement of pedagogy and service to students and peers. Finally, they invite evidence of outreach and continuing education activity directed toward the improvement of engineering education.

### NOMINATION PROCEDURE AND GUIDELINES

#### Procedure

- Nomination forms are available from Engineers Canada's website at [www.engineerscanada.ca](http://www.engineerscanada.ca)
- Nominations for the award may be proposed by any group of three persons or more (with at least one person being a professional engineer and one being a current engineering student) having direct knowledge of the nominee's contribution, including but not limited to: members or administrators of the Faculty of Engineering; engineering students; alumni; and colleagues.
- All nominations must be accompanied by confirmation of registration from the President of the provincial/territorial engineering licensing body in which the university is situated. Each engineering licensing body is entitled to submit a maximum of three nominations in either English or French. Engineers Canada will arrange for translation as required.

- To ensure that all parties are aware of the nomination, that the nominee is eligible as set out above, and that the information presented is accurate, all nomination forms must be signed by the nominee and the nominators. The original nomination document must be forwarded to the engineering licensing body for appraisal and, concurrently, a copy forwarded directly to Engineers Canada. To be considered by the Awards Committee of Engineers Canada, the original nomination document must be forwarded by engineering licensing body to Engineers Canada along with confirmation of registration from that licensing body.

### **Guidelines**

A completed nomination document consists of:

1. A nomination form.
2. A summary of qualifications and experience not exceeding one 8½ x 11 page (12 Arial pt font).
3. Independent evidence of Impact of Teaching (worth 40 points) not exceeding four 8½ x 11 pages (12 Arial pt. font).

#### **EXAMPLES OF TEACHING EFFECTIVENESS (worth 40 points)**

- communication skills (especially effective styles, mastery of English/French language, humour, etc.)
- innovative teaching methods including innovation in lab design and application;
- effective use of technology for teaching;
- effective & engaging teaching strategies;
- innovative assessment methods;
- sustained development of excellence in exemplary students;
- mentorship and special assistance for troubled students;
- support for physically challenged students with alternative teaching methods;
- special course development efforts;
- special classroom, laboratory and field location instruction;
- mastery by students of content, ideas or sophisticated processes beyond the normal program expectations;
- outstanding evaluations of teaching by students over several years (preferably with normative data);
- student, faculty and alumni testimonials;
- peer references.

Any other evidence that might be useful to the Awards Committee.

4. Independent evidence of Contributions to Education (worth 10 points) not exceeding two 8½ x 11 pages (12 Arial pt. font) demonstrating that the nominee has played a leadership role in the development of university teaching and learning beyond the nominee's own courses.

#### **EXAMPLES OF CONTRIBUTIONS TO EDUCATION (worth 10 points)**

##### **Improvement of Pedagogy**

- innovative or new teaching methods;
- adaptation and effective use of new or evolving technology for teaching;
- continuous improvement in instructional techniques;
- assistance in developing new techniques for student evaluation and testing;
- publication and sharing of research on teaching methods (only the most recent five years will be considered);
- conduct of seminars, workshops, conferences or other events for colleagues on teaching/learning topics;
- work with teaching/learning committees or centres;
- research on teaching/learning problems that goes beyond the normal discipline-focused research conducted by the faculty member;
- curriculum development at the program, Faculty and university levels.

5. Independent evidence of Contributions to Outreach (worth 10 points) not exceeding two 8½ x 11 pages (12 pt. Arial font) demonstrating that the nominee has played a leadership role in their commitment to the development and growth of the Canadian engineering profession and engineering education programs.

**EXAMPLES OF OUTREACH (worth 10 points)**

- writing of textbooks, codes of practice or guidelines for use of practitioners;
- assistance in development or delivery of continuing education programs for practicing engineers;
- assistance in developing interdisciplinary programs;
- assistance to engineering associations in managing or assessing continuing education requirements;
- assistance to other organizations in interpreting technical or engineering matters;
- participation in boards of review or similar bodies;
- assistance in accreditation and engineering qualification activities.

Any other evidence that might be useful to the Awards Committee.

6. Independent evidence of Service to Students (worth 40 points) not exceeding two 8½ x 11 pages (12 pt. Arial font) demonstrating that the nominee has played a leadership role in their commitment to the development and growth of the Canadian undergraduate student.

**Service to Students (worth 40 points)**

- leadership and special assistance to enhance academic and personal development of students both within and out of the classroom;

**EXAMPLES OF LEADERSHIP**

- development of mentorship and other programs outside of the classroom setting to support the undergraduate student;
- assistance in development & delivery of value added co-operative education programs, internship programs, and professional mentorship programs;
- promote awareness of engineering licensing bodies (OIQ, APEGBC, Engineers Nova Scotia, etc...) to students;

**EXAMPLES OF SPECIAL ASSISTANCE**

- support for local engineering student chapters (Engineering Student Societies, IEEE student chapters, CSME student chapters, IEEE, Women in Engineering (WIE), etc)
- support for participation in design competitions (Canadian Engineering Competition, SAE, electric vehicles, etc...);
- support for student events & outreach initiatives including summer engineering camps, women in engineering programs, National Engineering Month, and charity events;
- support for student engineering conferences and competitions through conduct of seminars, workshops, fundraising & organization;
- support for independent interest projects.

Any other evidence that might be useful to the Awards Committee.

7. Confirmation of registration from the President of the provincial/territorial engineering licensing body in which the university is situated.
8. A letter of reference not exceeding two 8½ x 11 pages (12 pt. Arial font) prepared by the group of nominators, addressing the nominee's special qualifications for this award.

Engineers Canada insists upon strict adherence to the limitations with respect to content set out in 2, 3, 4, 5, 6, and 8 above.

## **SELECTION PROCESS**

- Recipients are selected by the Awards Committee of Engineers Canada.
- The Awards Committee has the authority after reviewing all applications for the various awards, to determine whether or not an award is to be given. The Committee may select more than one recipient in any year.
- Recipients will be notified by telephone and in writing.

## **ANNOUNCEMENT**

The Medal for Distinction in Engineering Education is presented by Engineers Canada during its annual Awards Gala to be held in Vancouver in May 2010.

Award recipients agree to standard publicity notification arranged by Engineers Canada.

## **NOMINATION DEADLINE**

- **Fall:** Engineers Canada's chief executive officer sends the call for nominations to the Deans of Engineering, the Engineering Students Societies, and the provincial/territorial engineering licensing bodies requesting their cooperation in the nomination of candidates and the preparation of support files.
- **By December 1, 2009:** Original nomination document must be submitted to the licensing body requesting confirmation of registration by its president.
- **By January 8, 2010 (4 p.m. EST):** The president of the engineering licensing body must submit the complete nomination package to Engineers Canada. **The document must be received by Engineers Canada by January 8, 2010 (4 p.m. EST).**
- Should Engineers Canada receive, from a province or territory, more than three nominations, the licensing body is contacted by Engineers Canada with a request to review the nominations and to submit a maximum of three nominations.

*August 15, 1995: Revised by the Awards Committee  
August 24-26, 1995: Approved by the Executive Committee  
October 8, 1997: Revised by the Awards Committee  
August 21, 1998: Revised by the Awards Committee  
February 26, 1999: Revised by the Awards Committee  
February 25, 2000: Revised by the Awards Committee  
May 27, 2000: Approved by the Board of Directors  
October 16, 2006: Revised by the Awards Committee  
May 22, 2008: Revised by the Awards Committee  
October 7, 2009: Revised by the Board of Directors*