Report No: 3373 Revised

MEMORANDUM

To: Executive Committee of Faculty Council

From: Professor David Sinton, Director, Centre for Sustainable Energy
Professor Aimy Bazylak, Associate Director, Centre for Sustainable Energy

Date: January 31, 2013 for February 14, 2013 Faculty Council Meeting

Re: **Advancing EDU Status for the Centre for Sustainable Energy to an EDU:C, and Renaming Unit as Institute for Sustainable Energy (ISE)**

REPORT CLASSIFICATION

This is a major policy matter that will be considered by the Executive Committee for endorsing and forwarding to Faculty Council for vote as a special motion (requiring a 2/3 majority of members present to carry; must be circulated to Faculty Council at least 14 days in advance).

MOTION

> That the Faculty establishes the Institute for Sustainable Energy, based on the current Centre for Sustainable Energy, as an Extra-Departmental Unit:C (EDU:C) with the mandate to engage in research and scholarly work in energy, facilitate collaborative research projects with industry, and enhance the training of energy research personnel.

1. OVERVIEW

The Centre for Sustainable Energy (CSE) was founded in 2010 as an EDU:D unit within the Department of Mechanical & Industrial Engineering [See Appendix A for EDU definitions]. The Unit is an inclusive group of researchers working with partners from industry and government, with the goals of increasing energy efficiency and reducing the environmental impact of energy use and conversion. The organization of the Centre reflects that the University of Toronto and the Faculty of Applied Science & Engineering have expressed a commitment to establishing the University as a world-leader in energy.

Over the past year the Unit has expanded on this mandate toward the goal of formalizing a research network to work collaboratively in pursuit of greater industry engagement and large-scale funding initiatives. The Unit is now playing a critical function in the University, connecting energy-researchers across disciplines, and particularly across the Faculty. It currently serves to

inform members and host speakers, meetings, and events of strategic interest. The Unit now draws membership from a broad array of departments and disciplines, currently standing at 53 faculty members. In 2012, graduate- and postdoctoral-level members were invited to join the Unit. With an all-level membership now totalling over 100 researchers across the campus, the Unit has established itself as a focal point for energy research, collaboration, news, and events. An increasingly important role for the Unit is readying teams of researchers for large funding initiatives, and connecting researchers to energy companies. While research interests within the Unit show a breadth of research interests, there exists a concentration of research in solar photonics, reactor engineering, fuel cells, photochemistry, and biofuel processing that is unique among universities worldwide. The Unit is at an exciting stage with tremendous opportunities for impact in forwarding research efforts and forging new directions to the benefit of our collective energy future.

The EDU:D designation no longer accurately describes the Unit. The Unit functions as an EDU:C and is generally considered to be a Faculty-level entity. Recent growth of the Unit has also motivated the proposed name change to the Institute for Sustainable Energy (ISE). This name reflects the growing role of the Centre in the Faculty and University. Please refer to Appendix A for the Guidelines for Administrative Functions and Protocols of Extra-Departmental Units (EDU) published by the Office of the Vice President and Provost.

We propose that the Unit be formally recognized as an EDU:C, and be renamed the Institute for Sustainable Energy (ISE).

2. HISTORY

The Centre for Sustainable Energy was founded in 2010 with the support of Professor Jean Zu, Chair, in the Department of Mechanical & Industrial Engineering (MIE) and under the direction of Professor Olivera Kesler. Although established as an EDU:D within MIE, the Unit has, from its outset, looked beyond the scope of the department. The Unit has recruited members from diverse departments including MIE, Chemical Engineering & Applied Chemistry, Electrical & Computer Engineering, Materials Science & Engineering, Cell & Systems Biology, Chemistry, Civil Engineering, Physics, and Geography. The range of research areas covered by the Unit is equally broad, including solar, biofuels, fuel cells, wind turbines, smart grids, energy storage, carbon sequestration and many others.

In its first year of operation the Unit aimed to catalogue as much of the energy-related research and educational opportunities at the University as possible. This led to recruitment efforts for membership, a listing of all energy-related courses at the University, and information on seminars and workshops on and off campus. The Unit established multiple mailing lists for undergraduates, graduates, postdocs, and faculty to notify them of energy-related news, events, and opportunities for collaboration. One of the first events organized by the Unit was an Energy Showcase, in May of 2011. This event brought together researchers with industry and non-

governmental agency stakeholders, concluding with a poster session for graduate students to share their research with the wider community.

In July of 2012, Professor David Sinton was announced as the new director for a three-year term, with Professor Aimy Bazylak in the role of Associate Director. Under their direction, the Unit has broadened activities with distinct objectives at both the faculty-member and personnel-member levels, as detailed below.

3. GOALS & OBJECTIVES

The Unit has major priorities targeted to both personnel-level members and faculty-level members. For personnel-level members (undergraduate students, graduate students, postdoctoral fellows, research associates), the focus is on engagement, introduction to industry, broadening their energy education, and providing a network of energy researchers. For faculty-level members, the focus is on connecting them to industrial partners and coordinating proposals for large research funding initiatives.

With regard to this first personnel-focused priority, an ongoing and essential goal for the Unit is to establish itself as *the* source for all energy-related information on campus. Through communication and outreach the Unit has sufficiently established itself as a resource for events and opportunities that information is now routinely forwarded to us for distribution to our membership and mailing lists. Approximately three to four times a month the Unit sends out e-mails with upcoming seminars, news, and collaborative opportunities. While the Unit has had some success in cementing this role, the goal is to become the definitive source for energy-research related information on campus. In order to increase engagement and build community, the Unit has undertaken some personnel-targeted social activities in the past year, including two energy focused documentary film nights and a book club. Personnel engagement will be an ongoing objective over the coming years. To broaden the energy education of members, the Unit has sponsored a number of seminars on energy-related topics. This includes speakers from institutions such as the University of British Columbia, University of Alberta, Carnegie Mellon University, and Zhejiang University. Additionally, the Unit organized talks in collaboration with the NSERC CREATE Program in Distributed Generation for Remote Communities to highlight U of T faculty research endeavours. Lastly, the Unit is working to coordinate energy graduate courses and energy-themed programs, as well as create new courses. An example of a new course aimed at providing a foundation for graduate energy education is Dr. Sinton's course "Current Energy Infrastructure and Resources". The course is designed to be accessible to M.Eng., M.A.Sc., and Ph.D. students from across the Faculty and will be first offered in January 2013.

With regard to the second, faculty-focused priority, the Unit has had much recent success in engaging faculty members, industry and funding organizations. Feedback from both industry and faculty members provide a clear indication of the value of this role for the Unit. Specifically, the Unit hosted the Ontario researchers meeting of the funding organization, Carbon Management Canada, and the Unit continues to engage Ontario Centres of Excellence representatives. The Unit recently sponsored a series of lunch-time seminars with industry representatives working in the area of algae-based biofuels (Pond Biofuels Inc., Algenol Inc., Prodal-G Inc.). Although the final session has been postponed, the series has been a real success, and will be used as a template for further industry-researcher engagement (**Figure 1**). Most recently, the Unit organized an Energy Symposium at the Hatch Global Corporate Office in Mississauga. Representation from both sides was remarkable, with 13 faculty, 15 personnel, as well as advancement staff connecting with over 20 Hatch professionals from all levels and all energy-related divisions including John Bianchini (CEO), Jim Sarvinis (Global Director), and Burt Wasmund (Executive Director). This event (**Figure 2**) was so successful that the Unit has set the goals of establishing (1) an umbrella agreement that will facilitate collaboration between researchers and Hatch, and (2) a portfolio of short proposals from members that target Hatch initiatives.

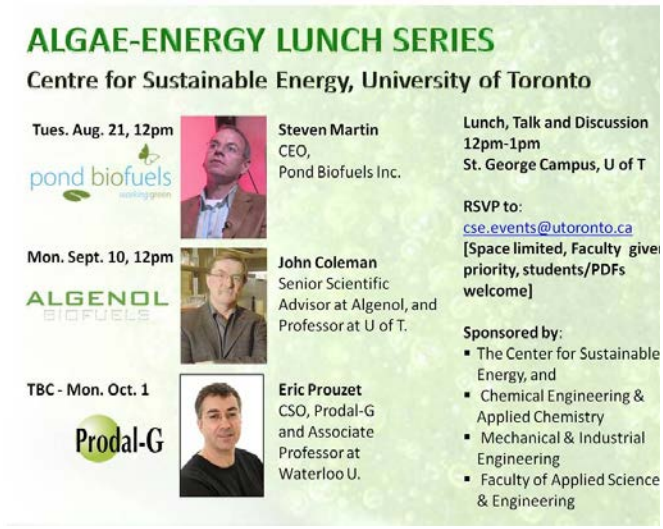

Figure 1. Algae-Energy Industry Lunch Series.

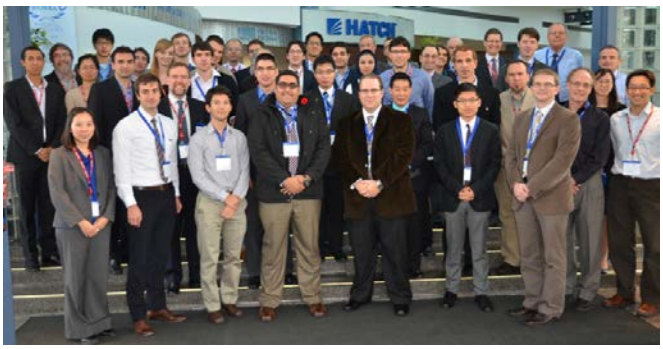

Figure 2. CSE Energy Symposium at Hatch Inc.

In addition to graduate- and post-graduate- and faculty-level members, the Unit also provides the resource of energy-related research activities in the Faculty for undergraduate students. With the introduction and growth of new undergraduate programs such as Engineering Science's Energy Systems Engineering Option, and Mechanical and Industrial Engineering's Energy & Environment Stream, more and more undergraduate students are looking to participate in cutting-edge energy technology research.

Through the Unit's website and planned outreach activities, undergraduate students will be informed of summer research opportunities, such as those for the NSERC CREATE Program in Distributed Generation for Remote Communities. Recently, in collaboration with Hatch Inc., an undergraduate and master's student call for applications was widely advertised, resulting in over student 50 applications to Hatch for internship and full-time employment. In addition to research- and industry-related employment, the Unit will provide advisory support to undergraduate teams, such as David Sinton's current supervision of the Supermileage Team, and Aimy Bazylak's supervision of the 2010 Eco-Marathon team. The Unit will also assist undergraduate students interested in energy-related topics (such as the Environmental Students' Union and the Sustainable Engineer Association (SEA)) engage in competitions and community-building events such as the International Hydrogen Students Association, TransCanada solar Tour, and Unit film events.

Increasing the external profile of the Unit serves all members and the Faculty. Efforts in this area have included frequent website news updates (via twitter), as well as personnel and faculty researcher profile spotlights. Three such spotlights are shown in **Figure 3**, highlighting the research work of three stars members, as well as the diversity and cross-faculty nature of the Unit. The goal going forward is to increase the coverage of these promotional efforts, and improve the web content delivery to reach and impress a broader audience.

Figure 3. Examples of three research spotlight profiles highlighting research excellence and the diversity of work within the Unit. Such profiles rotate on the main webpage.

Lastly, an additional priority for the Unit going forward is connecting and collaborating with other Centres and Institutes where beneficial for both units. For instance, collaboration with the Centre for Global Engineering (CGEN) or the new Water Innovation Centre may enable new research initiatives, and/or donor opportunities. Towards these goals, Dr. Sinton leads the Faculty of Applied Science & Engineering Working Group for Multidisciplinary Centres and Institutes, which is a means for Directors to (1) share best practices, (2) find efficiencies in sharing resources, and (3) leverage collective strengths to attract donors and grants. Both Drs. Sinton and Bazylak also work closely with the Advancement office in pursuing opportunities, including a

November 2012 trip to visit Calgary-based alumni and individual meetings at six energy companies.

4. NAME CHANGE TO INSTITUTE FOR SUSTAINABLE ENERGY (ISE)

In discussion with the Dean, it was suggested that a new name be considered and that 'Centre' be changed to 'Institute' as part of that change. Several names were considered, and feedback was sought from members and the Steering Committee. The name to emerge was 'Institute for Sustainable Energy' – a relatively minor change from the current name, but a positive one.

It is also noteworthy that the Unit is actively seeking donors who may contribute at the level appropriate for naming rights. If successful, the name may be augmented or changed at that time. If not, the name 'Institute for Sustainable Energy' accurately reflects the broad activities of members, and is expected to serve the interests of the Unit over the long term.

5. ALIGNMENT WITH UNIVERSITY AND FACULTY STRATEGIC PLANS

The University of Toronto's Strategic Research Plan identifies Sustainable Energy as the first priority within the SUSTAIN Theme (page 16 - http://www.research.utoronto.ca/uploads/SRP-2012-web.pdf). The topic area also has a firm place in the Faculty's 2011-2016 Academic Plan. Energy is recognized as an area of focus, with research strengths including solar, fuel cells, hydrogen production, biofuels, wind, and energy distribution systems. Sustainable Energy or Energy Systems are listed as a research focus within the following departments: Chemical Engineering & Applied Chemistry, Electrical & Computer Engineering, Materials Science & Engineering, and Mechanical & Industrial Engineering. Sustainable Energy (under 'Energy, Environment and Sustainability') is furthermore identified in the 2009 Catalogue of Advancement Priorities as one of the six areas of emphasis.

Beyond the topic being highlighted as an important area of research focus in both the University and Faculty strategic plans, the Unit is aligned with these plans in more general ways. The activities enhance the educational experience of U of T students (particularly graduate students), which further enhances the University's ability to attract top talent at all levels. The Unit's website generates interest and correspondence from students looking to pursue studies at the University of Toronto. The Unit thus shows a demonstrable outreach role in student enrolment.

The strategic and academic plans highlight the need to foster an environment of interdisciplinary collaboration, which is a key objective of the Unit. As the research area is inherently multi-disciplinary, the Unit can be effective at helping the University pursue commercialization and engage with industry.

6. STRUCTURE OF ISE

6.1 Director & Associate Director

Under its EDU:D designation, the Unit has been under the direction of a Director and Associate Director, appointed by Professor Jean Zu, Chair of Mechanical & Industrial Engineering. Professor David Sinton and Professor Aimy Bazylak were recently named Director and Associate Director for a three-year term beginning July 1, 2012. With this proposal for an EDU:C designation, the Unit would maintain these positions with future appointments being made at the Faculty rather than Departmental level. The Director and Associate Director are responsible for all Unit policies, as well as administrative and financial decision-making. The focus of the Director will be to promote the goals of the Unit to broader industry and academic communities external to the University of Toronto and to liaise with senior university administration. The role of the Associate Director will be to support the Director in these goals, with an emphasis on working with Unit staff to manage Unit activities for existing members, including the recruitment of new student and faculty members.

More specifically, the role of the Director is to:

- Coordinate with the Dean and Vice-Dean, Research on Faculty-level strategic vision
- Invite Steering Committee and Advisory Board members
- Chair Steering Committee and Advisory Board meetings
- Manage the input of the Steering Committee and Advisory Board in shaping the strategic vision of the Unit
- Liaise with Undergraduate and Graduate Coordinators regarding energy-related minors and certificates, including new course proposals, to provide insight on complementarities across the Faculty
- Maintain and attract new industrial partnerships
- Seek funding from donors, venture capitalists, and industrial partnership
- Coordinate with the University of Toronto Major Gifts Office to attract funds from alumni and donors

The role of the Associate Director is to:

- Provide administrative support to the Director
- Provide acting leadership for the Unit as needed
- Maintain and attract new industrial partnerships
- Organize industry-academic workshops to facilitate new research collaborations
- Coordinate undergraduate outreach activities
- Coordinate and co-locate Unit resources to maximize benefit to co-existing programs, such as the NSERC CREATE Program in DGRC

- Coordinate with the Faculty of Applied Science & Engineering's Office of Advancement, Alumni Relations to attract funds from alumni and donors
- Maintain and grow Unit membership, including new faculty and student involvement
- Develop educational programs that increase student training in sustainable energy, such as collaborative programs, new courses, and increased student recruitment

6.2 Steering Committee

The Director and Associate Director work with a Steering Committee to help inform the Unit's direction. The inaugural Steering Committee consisted of faculty representatives, with industry representation including three Hatch executives. This proposal would establish a rotating steering committee with two-year terms, consisting of Unit members (both faculty and graduate student level), and senior University of Toronto administrators. While this Steering Committee will be largely internal and made up of academics, the Advisory Board will be largely external and made up of industry executives.

Members will be invited from the University of Toronto Institute for Aerospace Studies and all five departments in the Faculty of Applied Science & Engineering to sit on the Steering Committee. Two graduate student members will be invited – if possible, both a Master's and a Doctoral student. The Director and Associate Director will also sit on the Steering Committee, as will the Vice-Dean Research, and invitations will be made to other senior administrators from the Faculty.

6.3 Advisory Board

The Unit will establish an Advisory Board consisting of senior industry representatives from across the Canadian energy industry. These board members will be drawn from sectors such as wind and solar power generation, electricity distribution, fuel cells, conventional extractive energy companies, and venture capitalists working with energy technology developers

Board members will fill one or more of three primary roles – (1) providing strategic connections between researchers and industry/government leaders in their sector; (2) funding research within the Unit through industry research contracts and partnership programs; and (3) raising philanthropic funds for the Unit. Continued service on the Board will require tangible contributions in one or more of these three areas.

The value proposition for Board Members will include access to leading edge research within the Unit and, importantly, access to personnel for recruitment. The latter is increasingly important to energy industry leaders, and the opportunity to connect with top graduates cannot be provided through other (competing) involvements in companies and governmental organizations. In short, connecting industry leaders to top HQP is a strategic advantage for the Unit, and is in the best interest of all parties.

The Unit is identifying Advisory Board candidates in consultation with the Vice-Dean Research and the Advancement Office. Formal invitations will be sent pending EDU:C status.

6.4 Faculty & Student Membership

The Unit's major asset is its membership. While members were initially added via an open invitation, faculty membership has more recently been recruited via recommendation of the Directors as well as department chairs. The aim continues to be to represent all U of T Faculty of Applied Science & Engineering members with research interests in sustainable energy, as well as to select high-profile energy researchers from the broader University community.

Graduate student and postdoctoral membership is comprised primarily from the recommendation of our faculty members. This student membership will experience ongoing renewal, but the Unit will engage with its alumni members as they become potential industry or academic partners.

6.5 Administrative Staff

In September 2011, the Unit began employing an administrator (Kristian Galberg) at 50% FTE, with support from the Dean's Strategic Fund. The Administrator splits time with the NSERC CREATE Program in Distributed Generation for Remote Communities (DGRC), where he serves as program coordinator, also at 50% FTE. The DGRC program and the Unit share a number of objectives, with overlapping membership. Funding from the Dean's Strategic Fund was renewed to cover the current year. The day-to-day operations of the Unit are largely enabled by this position, it is critical to the Unit's success.

6.6 Resources

In order to launch the EDU:C, initial funding for three years will be requested from the Dean. The Director and Associate Director are committed to leading the Unit to financial independence from Faculty and University sources. This commitment is reflected in the goals and objectives of the Unit as well as the make-up and function of the Advisory Board. The requested funding will be critical, however, to the operation and growth of the Unit.

7. BENCHMARKS AND MEASURES OF SUCCESS

The success of the Institute for Sustainable Energy will be determined based on the extent to which it produces research and scholarly work in energy, facilitates collaborative research projects with industry, and enhances the training of energy research personnel. Specific metrics are described below:

1.) International recognition for the energy research of Unit members as quantified through the quantity and quality of the publications produced, collective citations metrics, and group/individual research awards.

2.) The extent of research collaborations and industry-researcher collaborations as quantified through the number of large research initiatives funded, the number of new collaborations created, the number of collaborative grants/contracts obtained, the value of grants/contracts obtained, and the number of spin-off companies produced.

3.) The training of energy research personnel as quantified through the number of trainees, the number of new energy graduate courses, the enrollment in energy graduate courses, the number of new/improved graduate programs, the research accomplishments of trainees, and the subsequent careers of alumni.

8. GOVERNANCE

The Institute for Sustainable Energy will be an EDU:C extra-departmental unit in accordance with the guidelines established by the University of Toronto Governing Council's *Guidelines for Administrative Functions and Protocols for Extra-Departmental Units* (February 26, 2007) and will follow the procedures and policies outlined in that document.

9. REVIEWS

Reviews will be commissioned by the Dean of the Faculty of Applied Science & Engineering at fixed intervals set aside for the appointment or re-appointment of the Unit's Director, and will be consistent with University-wide standards.

APPENDIX A: GUIDELINES FOR ADMINISTRATIVE FUNCTIONS AND PROTOCOLS OF EXTRA-DEPARTMENTAL UNITS (EDU)

University of Toronto

OFFICE OF THE VICE PRESIDENT AND PROVOST

Guidelines for Administrative Functions and Protocols of Extra-Departmental Units (EDU)

The EDU taxonomy highlights a range of interdisciplinary units that differ in stage of development and divisional protocol:

- An EDU:A has a well-established and defined area of scholarship as a focus. The unit has attained a critical mass of interdisciplinary scholarship at the University that allows for the unit to engage in the appointment of teaching staff, admission of students to a program of graduate or undergraduate study, and engage in interdisciplinary research. EDU:As differ from departments in that departments generally offer a full range of undergraduate and graduate programs and research. It is expected that the total number of EDU:As at any given time will be small.

- An EDU:B has a defined area of scholarship as a focus and also admits students to interdisciplinary programs and engages in interdisciplinary research. However, teaching staff appointments are made in established departments with teaching staff cross-appointed to the EDU:B.

- An EDU:C unit does not have a program to which students are admitted.

- An EDU:D represents a group of scholars who have come together for the purpose of pursuing specific research objectives or offering a set of courses in an area of academic interest not offered under departmental, EDU:A and EDU:B course offerings. It may be multidisciplinary or it may arise within a single discipline or department, EDU:A or EDU:B.

The creation of EDU:A and B must be approved by Governing Council, while the creation of EDU:C must be delegated to Faculty Councils, and EDU:D to the relevant academic unit.

The table below outlines the administrative frameworks and procedural guidelines involved in the establishment and work of each type of unit. These are intended to set lines of authority and reporting, and to clarify issues concerning reviews and the work of coordinators or directors.

	EDU:A	EDU:B	EDU:C	EDU:D
1. Description	Multidisciplinary, multi-departmental group with teaching staff and students working in a well-established and defined area of academic study and scholarship. It is a centrally established and independent unit designed to foster research and teaching in specialized areas. EDU:As offer programs where the number, quality, and research support of the faculty can foster an established program and where the resources available to teaching staff and students can guarantee a "critical mass" of scholarship and admissions.	Multidisciplinary, multi-departmental group with teaching staff and students working in a defined area of academic study and scholarship. It is a centrally established unit designed to foster research and teaching in new or highly specialized areas. EDU:Bs offer programs where the number, quality, and support of the teaching staff can foster a new or ongoing program and where the resources available to teaching staff and students can guarantee a "critical mass" of scholarship and admissions.	Normally a multidisciplinary multidepartmental research and/or academic unit with a defined research domain in a particular area of academic work. It exists to foster research and scholarly interest in the area.	A group of scholars who have come together for the purpose of pursuing specific research objectives or offering a set of courses in an area of academic interest not offered under departmental, EDU:A and EDU:B course offerings. It may be multidisciplinary or it may arise within a single discipline or department, EDU:A or EDU:B.

	EDU:A	EDU:B	EDU:C	EDU:D
2. Establishment	A proposed interdisciplinary teaching and research unit is discussed with the Deans and the Vice-President and Provost. The proposal should be in accordance with the University's *Policy for Assessment and Review of Academic Programs and Units*. The EDU is approved by the departments and division(s) involved. Following, the proposal for the unit is brought forward by the Vice-President and Provost before the appropriate Governing Council committees for approval.	As per EDU:A	Proposal for a multi-departmental research unit and/or academic program is brought for approval before the council or governing body of the division(s) concerned. The proposal should be in accordance with the University's *Policy for Assessment and Review of Academic Programs and Units*. After approval, the proposal for the unit/program, including recommendations on internal University and external grant funding and on staffing, will be reported to the Vice-President and Provost and the Vice-President Research and Associate Provost by the dean(s) of the divisions(s) involved, who have agreed upon resource commitments and budget.	Proposal for a research unit is brought for approval before the head(s) of the unit(s) concerned. The existence of the unit and the name of the Coordinator are reported to the Vice-President and Provost and the Vice-President Research and Associate Provost and the Office of Research Services.
3. Appointment of an Administrator	See: *Policy on Appointment of Academic Administrators*: Section II. The Office of Director of an Academic Centre or Institute. External reviews should be undertaken by the dean(s) of the appropriate division(s) at fixed intervals set aside for the appointment or re-appointment of a director. The review procedures should be defined by the division(s) at the unit's inception and approved by the Vice-President and Provost as being consistent with University-wide standards and reported to the Committee on Academic Policy and Programs under the University's policies and guidelines. Continuation of the unit is dependent on periodic review of the unit.	As per EDU:A	A director is appointed for a fixed term by the dean(s) by whom the unit was created. Reviews should be undertaken by the dean(s) of the appropriate division(s) at fixed intervals set aside for the appointment or re-appointment of a director. The review procedures should be defined by the division(s) at the unit's inception and approved by the Dean(s) as being consistent with University-wide standards. Termination of the appoint-ment of a director rests with the dean(s) of the division(s) concerned as per divisional guidelines. The name of the director is filed with the Office of the Provost. Any change in status of the director must be reported to the Office of the Provost.	A Coordinator is appointed by the head(s) of the department(s) or division(s) concerned to serve a fixed term determined by the department(s) involved. Termination of the appointment of a Coordinator rests with the head(s) of the department(s) or division(s) concerned. A periodic review is conducted by the unit(s) concerned, at such times as the appointment or re-appointment of a coordinator, the review of the division(s), and the evaluation of the research project(s) and/or course offerings.

	EDU:A	EDU:B	EDU:C	EDU:D
4. Reporting and Budgetary Authority	The director, under guidance of an advisory panel of three or more members appointed by the dean(s) concerned, is responsible for policy and administrative and financial operations to the dean(s) of the division(s) with significant involvement in the unit. The director administers an operating budget from ongoing divisional budget(s) and external grant sources.	As per EDU:A	The director, with the guidance of an advisory panel appointed by the dean(s) concerned, is responsible for policies and administrative operations to the dean(s) of the division(s) with significant involvement in the unit, as specified in Section 2 above. The director is responsible for financial operations to the dean(s) involved. The director may administer an operating budget from divisional budget(s) and external grant sources.	The Coordinator is responsible for administrative operations to the head(s) of the division(s) concerned and is responsible for the financial operations of the unit and administration funds, if so delegated by the division(s). Proposals for outside research funds and the name of the designated head for grant management should be reported to the appropriate divisional head(s). Ultimate financial authority goes through the appropriate head(s) to the dean(s) of the division(s) involved.
5. Teaching Staff	EDU:As have the ability to make teaching staff appointments, although teaching staff should normally be cross-appointed to a cognate department. The unit also has the ability to cross-appoint teaching staff as per an EDU:B. See *Policy and Procedures on Academic Appointments* Teaching staff have access to the grievance procedures in the policies and memoranda of the University. Step No. 1 authority for teaching staff is the Director, Step No. 2 authority the appropriate dean(s).	No primary teaching staff appointing rights; teaching staff may not hold their primary appointment in an EDU:B. Cross-appointment of teaching staff rests with the dean(s) of the division(s) involved, with the original department or college as the unit of primary appointment. Graduate membership may be extended as a cross-appointment. Teaching staff may pursue grievances through their department or division.	As per EDU:B	No rights of appointment or cross-appointment exist.
6. Teaching Role	Students enrol in a distinctive course of study at the undergraduate and/or graduate levels. Programs are established and reviewed in a manner similar to those of a department. However, since the academic requirements will span departments or divisions, approvals must be sought in all units involved, and may be required ultimately from any external agencies concerned. Students have access to the academic administrative appeal procedures of the divisions(s) concerned.	As per EDU:A	EDU-Cs do not register students. They offer a set of courses in an academic area. Students follow a designated program as prescribed in the calendar(s) of the departments or division(s) involved. Students register for information with the program coordinator who is responsible for their guidance through the course of study.	As per EDU:C