

Internal Academic Review 2008-2009

Robert M. Buchan Department of Mining Internal Academic Review Committee Report to Senate

The Internal Academic Review (IAR) of the Robert M. Buchan Department of Mining is now complete. The Internal Academic Review Committee (IARC) has taken into consideration all of the submissions related to the IAR of the Robert M. Buchan Department of Mining and respectfully submits the following report. The IARC Report to Senate is intended to supplement the findings of the attached Review Team Report and to provide a mechanism for the Head of the Robert M. Buchan Department of Mining and the Dean of the Faculty of Engineering and Applied Science to jointly report on the progress in addressing the Review Team recommendations (please see the “Outcomes” section of this report).

Summary of the Internal Academic Review of the Robert M. Buchan Department of Mining

The IARC acknowledges the Robert M. Buchan Department of Mining as a department with a strong undergraduate program that is dedicated to the teaching and training of future mining engineers. The Department is commended for its dedicated staff and faculty and for its strong ties to industry which enrich the educational process.

The IARC congratulates the Robert M. Buchan Department of Mining for revitalizing its undergraduate program, increasing its undergraduate enrolment and employing experienced adjunct professors that have connections, both nationally and internationally, to the mining industry. In order to stay competitive, the Department is encouraged to maintain a strong recruitment strategy and ensure that its curriculum is up-to-date and embeds instruction in technical writing within existing courses.

The IARC supports the recommendation within the Review Team report that the graduate program is in significant need for revitalization. In conjunction with the School of Graduate Studies, efforts should be made to implement a recruitment strategy that will increase the domestic and international graduate student applicant pool. Attention should also be paid to identifying additional sources of graduate student funding.

The IARC agrees with the concerns expressed by the external reviewers and the internal review team regarding the lack of a ‘research culture’ within the Department. In order to raise the Department’s research profile, Faculty members are encouraged to further discuss funding opportunities regularly with the Dean of the Faculty of Engineering and Applied Science. The research objectives of the Department would also be enhanced by increased publication of research findings in scholarly journals.

To guide the future direction of the Department, the IARC encourages Mining to develop a strategic plan that is consistent with the Faculty of Engineering and Applied Science’s strategic framework. A strategic plan is especially warranted in light of the recent donation of Mr. Robert M. Buchan which places the Department in a favourable financial position.

The IARC recognizes the Robert M. Buchan Department of Mining as having a solid reputation, which is well-known both nationally and internationally, for its undergraduate program. The IARC fully supports the Department in its efforts to strengthen its graduate program and research portfolio. The IARC also

supports the recommendation of developing a strategic plan that explores new ways to address the opportunities and challenges that the Robert M. Buchan Department of Mining will be facing in the future.

**Outcomes of the Internal Academic Review of the
Robert M. Buchan Department of Mining**
*Joint response submitted by the
Dean of the Faculty of Engineering and Applied Science and the
Head of the Robert M. Buchan Department of Mining*

The Dean of the Faculty of Engineering and Applied Science and the Head of the Robert M. Buchan Department of Mining welcome the positive review of the department's activities by the IARC. We have set several processes in motion to address the specific recommendations of the committee.

1. Graduate Program

The enrollment has increased substantially since the time of the initial IAR submission. The increase is related to new areas of research as well as to recruitment efforts by our faculty.

A significant number of new students, interested in the area of mineral economics, are starting their programs in September 2010. These students receive financial support from the Department, to boost this area of research. We expect student interest to continue in the future and the area of mineral economics to be able to attract research grants and other funding as well as generate significant research output.

A number of our students, who graduated recently, are returning for graduate work. This is a result of active recruitment and continuous emphasis on the research achievements and capabilities of the department.

As we go through a period of enrolment increase, which is subsidized by the Department, we would appreciate a corresponding increase in the support our students receive in terms of awards from the University, so that we can guarantee equal levels of award funding with other departments and remain competitive. The current practice of capping funding on the basis of targets is restrictive in our effort to grow.

We expect our graduate program to strengthen. The hiring of a faculty member in the area of Mining Systems and Robotics is expected to generate new funding for research and training of graduate students. The efforts to start a new program, related to mineral resource management is expected to create international interest in course Master's work. The Chairs in Mineral and Metals Processing and Sustainability are contributing in the research effort and generate interest for graduate studies. We believe that it is important for the two Chairs to continue past the period of their tenure, to provide stability to the program and long term benefits.

2. Research Culture

The addition of the two Chairs and the new hire in Mining Systems and Robotics have an impact on the research output of the Department as well as teaching. The effort in starting a graduate program in mineral resource management will also be a substantial boost in graduate enrollment and international recognition. As a result, research output is expected to rise, as the research effort intensifies and a larger number of people are involved. We anticipate that more research seminars will be presented and more graduate level courses will be offered, increasing the visibility of research. Research output is also expected to rise as a result of continuous involvement of some of our faculty members in international journal editorial boards.

3. Strategic Plan

The Department is working toward developing and implementing a strategic plan. The Department has gone through one session of strategy development, while other sessions will follow in the near future. As expected, the Plan will be in harmony with the overall Academic Plan, which is now being developed by the University.