FINAL ASSESSMENT REPORT

Evaluation of Undergraduate Programs Faculty of Engineering – Department of Mechanical Engineering Cycle: 2018-2019

June 2, 2020

I. Evaluated Programs

- B.A.Sc. in Mechanical Engineering
- B.A.Sc. in Mechanical Engineering, Engineering Management and Entrepreneurship Option
- B.A.Sc. in Mechanical Engineering and B.Sc. in Computing Technology
- B.A.Sc. in Biomedical mechanical engineering
- B.A.Sc. in Biomedical mechanical engineering and B.Sc. in Computing Technology

II. Evaluation Process (Outline of the visit)

- The Final Assessment Report for the evaluation of the aforementioned program(s) was based on the following documents: (a) the self-study brief produced by the academic unit, (b) the report produced by the external evaluators following their site visit, and (c) the comments from the Dean of the Faculty of Engineering, Jacques Beauvais, and the Director of the Department of Mechanical Engineering, Natalie Baddour.
- During the site visit, the external evaluators met with the Vice-Provost, Academic Affairs, Aline Germain-Rutherford, the Director of the Office of Quality Assurance, Mawy Bouchard, the Dean of the Faculty of Engineering, Jacques Beauvais, the Vice-Dean, Programs, Michel Labrosse, the Associate Chair for undergraduate programs in Mechanical Engineering, Davide Spinello, the Associate Chair for undergraduate programs in Biomedical Mechanical Engineering, Marianne Fenech, members of the support staff, regular professors and undergraduate students.

III. Summary of Reports on the Quality of Programs¹

This section aims to inform the unit on the strengths and weaknesses observed during the evaluation process in order to improve its programs.

EMPHASIZING THE STRENGTHS AND IDENTIFYING CHALLENGES

STRENGTHS

• The programs conform to the norms of their respective disciplines. Having received a 6-year CEAB accreditation in 2018 is evidence of good quality program content and outcomes.

 A range of dynamic program components (design courses, laboratory work, blended learning courses, capstone experience, and team competitions) offers students the opportunity to attain course credits from team experience.

¹ Based on every document prepared during the assessment process.

- The programs attract talented students; entering admissions averages have been consistently high (80.4% to 88.7%).
- Students are very appreciative of the support and mentoring they receive from professors.
- The physical resources in the STEM building are outstanding and offer exceptional opportunities for students to work on projects.
- Evidence indicates that a high number of graduates from the programs are finding employment (91.7%).

CHALLENGES

- Barring a few exceptions, teaching approaches tend to rely heavily on lecture methods, and forms
 of assessment are emphasizing the transmission of technical facts and principles, but not
 adequately developing communication, teamwork, and leadership skills, which are increasingly
 emphasized in engineering programs.
- While the design courses are largely excellent, their content sometimes overlaps. Also, there are too few design courses that are offered in Biomedical Mechanical Engineering.
- Few courses make use of educational technology tools to facilitate alternative, innovative, or hybrid approaches to undergraduate teaching.
- Students occasionally have difficulty enrolling in a course in their language of choice.
- While laboratories are excellent, they are often overcrowded.
- Student attrition appears to be quite high.
- Limited sense of community among students.
- Inadequate support for international students.
- Part-time instructors often lack advanced access to relevant course information.
- Teaching assistants (TAs) would benefit from greater training...

IV. Program Improvement²

The programs under evaluation are in conformity with the standards of the discipline. The following recommendations aim at maintaining or increasing the level of quality already achieved by the programs.

PROGRAM OBJECTIVES, LEARNING OUTCOMES, MANDATE AND UNIVERSITY PLAN

• **Recommendation 1**: The SCEUP recommends that the Department update its Mission Statement in view of current developments in the discipline and new societal needs.

CURRICULUM AND STRUCTURE

- **Recommendation 2**: The SCEUP recommends that the program chairs proceed to a curriculum analysis in order to identify content gaps or overlaps, determine how design projects can be developed further, and tighten program coherence.
- Recommendation 3: The SCEUP recommends that the Department explore ways of better
 integrating the development of human skills such as communication, leadership, and teamwork
 into its curriculum.

² Partially based on the External Evaluators Report.

TEACHING AND EVALUATION

- Recommendation 4: The SCEUP recommends that, in consultation with the Teaching and Learning Support Service, the Department consider adopting a wider variety of assessment methods as well as integrate educational technology for blended learning.
- **Recommendation 5**: The SCEUP recommends that efforts be made to ensure that students can enrol in courses in their language of choice (either French or English).
- **Recommendation 6**: The SCEUP recommends that the Department examine ways of enhancing use of its excellent infrastructure in order to further facilitate large-scale design projects.
- **Recommendation 7**: The SCEUP recommends that the unit develop strategies to allow more students to participate in experiential and work integrated (coop) learning.
- **Recommendation 8**: The SCEUP recommends that part-time professors be involved earlier in the planning and preparation of courses they will be teaching, and that a training program be established for TAs.

STUDENT EXPERIENCE AND GOVERNANCE

- **Recommendation 9**: The SCEUP recommends that the new early warning system that has been created to identify factors having a negative impact on student retention be closely monitored.
- **Recommendation 10**: The SCEUP recommends that the Department review its lab schedule in order to avoid overcrowding.
- **Recommendation 11**: The SCEUP recommends that the Department work with the Faculty of Engineering to identify initiatives to further support international students and ensure their sense of belonging to the programs in which they are enrolled.

RESOURCES

Available resources allow for the successful delivery of the Program Learning Outcomes.

V. List of courses not offered for more than three years and the reasons

All courses were offered at least once in the last three years.

VI. Conclusion

As stated by the external evaluators, "[t]he Mechanical Engineering and Biomedical Engineering programs are both accredited by CEAB which indicates that they have met all of the basic requirements for these types of programs. The 6-year accreditation decision shows that the CEAB has confidence that these are stable programs that are sufficiently resourced and sustainable. In addition, the design facilities the Department has developed represent a significant opportunity and point of differentiation."

Both part-time and full-time professors are highly competent and dedicated to student success, as demonstrated by many quality indicators. High-end physical resources available at the STEM complex (Science, Technology, Engineering and Mathematics) and the high rate of employability for the program's graduates are distinctive elements that ensure viability.

The responses from all stakeholders involved in the programs show a high level of engagement in the ongoing development of both programs. The programs have developed a solid plan of action to address the recommendations of the external evaluators and, to improve the coherence of the curriculum and strengthen the student learning experience. Close monitoring of students' trajectories and their level of success will provide new clarity on their needs and expectations, and in turn offer some direction for new initiatives in teaching and evaluation methods.

The Senate Committee on the Evaluation of Undergraduate Programs (SCEUP) commends the unit for its dedication to continuous program improvement and for the production of a solid report that demonstrates the many qualities of the programs it offers. The SCEUP also wishes to thank the external evaluators for their important contribution to the process of quality assurance.

Schedule and Timelines

A meeting will be organized with the program chairs, the Faculty Dean and Vice-Dean following the reception of the Final Assessment Report, so that an Action Plan can be put in place, along with deadlines particular to each recommendation. A progress report that outlines the completed actions and subsequent results will be submitted to the Senate Committee on the Evaluation of Undergraduate Programs (SCEUP) on a date agreed upon at the time of the meeting regarding the Action Plan.

The next cyclical review will take place at the latest in six years, in keeping with the timelines of the CEAB accreditation (in 2024-2025). The self-study brief must be submitted no later than June 15, 2024.

Université d'Ottawa

University of Ottawa

ACTION PLAN

Faculty: Engineering

Department: Mechanical Engineering

Program(s) evaluated: B.A.Sc. in Mechanical Engineering, B.A.Sc. in Mechanical Engineering, Engineering Management and Entrepreneurship Option, B.A.Sc. in Mechanical Engineering and B.Sc. in Computing Technology, B.A.Sc. in Biomedical mechanical engineering, B.A.Sc. in Biomedical mechanical engineering and B.Sc. in Computing Technology

Cyclical review period: 2018-2019

Date: May 28, 2020

FOCUS AREA #1: OBJECTIVES

Recommendation 1: The SCEUP recommends that the Department update its Mission Statement in view of current developments in the discipline and new societal needs.

Define the actions to undertake	Priority Level*	Assigned Person or Persons	Deadline to attain the objective	Expected results	Implementation Indicators	Progress on the actions taken: accomplished, to be sustained, to be continued, to be developed
The department recognizes the	2	Curriculum	2021	Positive impact on	Discussed at the Curriculum	
crucial role played by engineering in		Committee		recruitment and	Committee and brought to	
addressing societal needs, some of				perspective students	the Department	
which are relatively persistent while						
new ones continuously emerge and						
evolve. We believe that an						
education in mechanical and						
biomedical mechanical engineering						
strongly position our students to be						To be completed by
adaptable to a fast changing societal						the Evaluation
landscape, thanks to the unique						Committee when
blend of fundamental applied						reviewing the
science skills and modern, cutting						progress report
edge applied skills that interface						p 19 111 tp 1
with high demand trends in						
automation and machine learning.						
This also aligns with several points						
identified as core in the University						
Mission. Our Mission Statement will						
be updated to better convey this						
message, and explicitly link to						
modern important applications.						

^{*} PRIORITY LEVEL: 1. URGENT-Immediate action required 2. IMPORTANT-Action required within 18 months (maximum) 3. ADVISED: DEVELOPMENT AND STRATEGY-Action to be discussed and must be in place by mid-cycle (within 4 years)

Recommendation 2: The SCEUP recommends that the program chairs proceed to a curriculum analysis in order to identify content gaps or overlaps, determine how design projects can be developed further, and tighten program coherence.

Define the actions to undertake	Priority Level*	Assigned Person or Persons	Deadline to attain the objective	Expected results	Implementation Indicators	Progress on the actions taken: accomplished, to be sustained, to be continued, to be developed
The Department has in place a data driven curriculum improvement process dictated by CEAB (the organization managing and supervising the external accreditation), which consists of data collection to measure aggregate student performance and ultimately evaluate the program against relevant outcomes, to inform relatively granular interventions that include the ones indicated in Recommendation 2. The process is currently almost completely implemented, with results used to produce an annual report circulated to internal and external stakeholders whose feedback is processed by the Curriculum Committee and discussed by the Department at large. Additionally, the Curriculum Committee is planning to present a		Curriculum Committee	Continual	Continual data driven improvement	Annual reporting from Vena system shared with Departmental (internal) and external (alumni, industry) stakeholders	To be completed by the Evaluation Committee when reviewing the progress report

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proposal to the Department Council						
to form an ad hoc committee to						
identify points of excellence in our						
programs as well as weaknesses.						
The ad hoc committee will produce						
a set of recommendations to be						
further discussed by the						
Department in order to take actions						
with short and long term effects, for						
example in terms of proposals for						
new hiring in strategic areas and						
creation of new technical elective						
courses that shape the						
specializations of fourth year						
students. It will be important to						
leverage the numerous						
collaborations with the industry						
already existing within the						
Department, to be sure that the						
eventual changes will be relevant in						
the short and in the long term.						

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This important point is part of the data driven continual program improvement currently in place and being improved through data collection, data analysis, and reporting. Communication, leadership, and teamwork are mandatory complementary skills to be acquired in parallel with the technical ones, and recent curriculum changes are moving in this direction. The Department considers the recent creation of CEED (Center for Entrepreneurship and Engineering Design) under the direction of Dr. Hanan Anis to be essential in shaping our programs into a well balanced mix of fundamental applied science and engineering design offered through our traditional design courses distributed	1	Curriculum Committee	In place	Improvement of soft skills to be measured in aggregate	Positive trends measured through relevant CEAB indicators and learning outcomes, tracked through the Vena data collection system.	To be completed by the Evaluation Committee when reviewing the progress report

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	Level*	or Persons	attain the			actions taken:
			objective			accomplished,
						to be sustained, to be continued,
						to be continued,
through the programs, and						
novel, cutting edge						
entrepreneurial and general						
design content uniquely						
embedded into our programs by						
exposing our students to multi-						
disciplinary group based, project						
driven courses in which they						
work with other students from						
different departments,						
developing teamwork,						
leadership, and communication						
skills. This content is delivered						
through courses created within						
CEED (GNG1103/1503,						
GNG2101/2501, GNG4120/4520						
and GNG4100/4500), and						
through the voluntary						
participation in student teams,						
many of which participate in						
international competitions. The						
first two courses (GNG1103 and						
GNG2101), respectively titled						

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	Lever	or Persons				accomplished,
			objective			to be sustained,
						to be continued,
						to be developed
"Engineering Design" and						
"Introduction to Product						
Development", have been						
adopted as mandatory in all our						
programs, with the intent of						
exposing all students to						
entrepreneurial and design						
content within a project-based						
approach, with several practical						
activities taking place in the						
dedicated teaching spaces in						
STEM. The course GNG4100 -						
Design Studio, has recently been						
double coded as a general						
engineering course, having						
started as a MCG course to						
channel into structured course						
work the activities of several						
mechanical and biomedical						
mechanical engineering student						
groups participating in						
competitions, in which our						
students have traditionally						

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played a leadership role (both numerically and in terms of contributions) due to their core background in applied science (solid mechanics and materials, thermo-fluid dynamics, dynamics and control systems).						

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Recommendation 4: The SCEUP recommends that, in consultation with the Teaching and Learning Support Service, the Department consider adopting a wider variety of assessment methods as well as integrate educational technology for blended learning.

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The Curriculum Committee, in concert with the Department, is eager to identify a list of courses for which innovative teaching techniques can be successfully applied to maximize student learning. As a first step, we will seek help from the Teaching and Learning Support Service (TLSS) regarding pedagogical best practices and innovative teaching methods that encourage active learning, enhance problem-solving skills, and facilitate life-long learning, all of which the Department recognizes are fundamental to a successful engineering education. We will invite one or more representatives from TLSS to meet with the Departmental Curriculum Committee to discuss this matter. After this, information will be circulated within the Department	2	Curriculum Committee; Individual instructors	Ongoing	Improvement of teaching and learning experience	Several new course components integrated in traditional courses, new delivery modes for pre-existing and new courses (e.g. online). Creation of a Faculty of Engineering Community of Practice Hub for novel teaching methods.	To be completed by the Evaluation Committee when reviewing the progress report

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and its members will be						
encouraged to identify courses in						
which these techniques could be						
implemented and in what format						
they might take. Professors will						
then be invited to share their						
proposals at a subsequent						
Departmental Council meeting.						
Through this the Department						
looks forward to a closer						
collaboration with TLSS to						
introduce effective innovation in						
teaching, based on a						
demonstrated positive impact for						
its students.						
Due to constraints imposed by the						
COVID-19 pandemic, many						
innovative teaching tools and						
techniques have been developed						
by necessity and are currently						
being implemented by several						
instructors. It is noted further						
that professors now have access						
to the Engineering Teaching						

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Innovation Hub, a Microsoft						
Team instituted by the Office of						
the Vice-Dean, Quality						
Assurance and Teaching						
Innovation. This hub includes a						
broad range of teaching						
resources related to the						
practical application of teaching						
technologies in engineering						
education and regularly offers						
webinars and other virtual						
meet-ups to alert faculty to the						
most recent developments in						
this area. Many of the faculty						
within the Department have						
already availed themselves of						
this resource and will continue						
to do so in the coming academic						
year.						

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Currently, the Department can offer courses in both languages up to Fall 3 rd year. The goal is to offer all courses in both languages, but this will require further efforts in hiring new full-time tenure track professors that are also strategically located within the University missions. The Department has successfully secured two new positions starting in 2020, and we are actively competing for additional full-time positions with full bilingualism as one of the objectives. In addition, the Department will continue supporting the hiring of full-time members with teaching only duties, bringing proposals to the APUO despite unsuccessful past attempts.	2	Department	2030	Additional courses offered in French, beyond the Fall 3 rd year term.	New tenure track full time professors hired	To be completed by the Evaluation Committee when reviewing the progress report

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The Department considers the recent creation of CEED (Center for Entrepreneurship and Engineering Design) under the direction of Dr. Hanan Anis to be fundamental in shaping our programs into well balanced mix of fundamental applied science and engineering knowledge, engineering design offered through our traditional design courses distributed through the programs, and novel, cutting edge entrepreneurial and general design content uniquely embedded into our programs by exposing our students to large scale, multi-disciplinary, group based, project driven courses in which they work with other students from different departments. This content is delivered through courses created within CEED (GNG1103,	1	Curriculum Committee and Department Council	2020 (already implemented)	Additional design content that complements the core mechanical and biomedical mechanical design content delivered through MCG1100, MCG2101, MCG3131, and MCG4322. The design content delivered in the set of courses described in the action plan is oriented towards multidisciplinarity, communication, group work, entrepreneurship, and complementary soft skills. Support for existing and new engineering competition teams	New courses already mandatory in MCG and MGB curricula Participation of uOttawa Engineering competition teams in international engineering competitions.	To be completed by the Evaluation Committee when reviewing the progress report

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GNG2101, GNG4120 and						
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"Engineering Design" and						
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students have traditionally						
played a leadership role (both						
numerically and in terms of						
contributions) due to their core						
background in applied science						
(solid mechanics and materials,						
thermo-fluid dynamics,						
dynamics and control systems).						
All these courses are hosted in						
STEM spaces, and we are						
confident that our students will						
continue to play important						
leadership roles in the many						
related multidisciplinary						
activities. Since the inauguration						
of STEM, we have highly						
advertised CEED's activities, and						
we strongly encourage every						

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student starting from first year to get involved and participate. We will definitely continue along this direction, and we plan to further expand as we work closely with Dr. Anis' team, in which a Department member (Dr. P. Dumond) plays a crucial role in coordinating and developing new initiatives, and in teaching several of the courses discussed above.						

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Recommendation 7: The SCEUP recommends that the unit develop strategies to allow more students to participate in experiential and work integrated (coop) learning.

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This is a very important point that we are currently actively improving in cooperation with the Faculty Undergraduate Office, the Faculty Marketing Office, and recently with the University International Office. Considerable marketing efforts are made towards the advertising of our COOP program which, although not mandatory, is the second largest in Ontario and offers students a very broad spectrum of local, Canadian, and international opportunities that span the private and the public sector. Additionally, as discussed in detail in the response to Point 6, Mechanical and Biomedical Mechanical Engineering students are highly involved in student groups and multi-disciplinary student competitions operating under the umbrella of CEED and hosted in the STEM building with its state of the	1	Curriculum Committee; Associate Chairs for Undergraduate Studies; COOP coordinator	2022	Increased participation in COOP and experiential learning; increased participation in international exchanges, both academic and experiential.	New COOP sequence; List of equivalences for courses that students can take abroad.	To be completed by the Evaluation Committee when reviewing the progress report

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art fabrication facilities available to						
our students.						
To add important international						
opportunities that are often						
difficult to offer due to strong						
constraints imposed by CEAB						
accreditation rules, the Chair and						
Vice Chairs Undergraduate Studies						
have recently met with colleagues						
from the International Office and						
from the Undergraduate Office, to						
create an equivalency map						
between our core courses and						
courses offered by international						
institutions that already have						
agreements in place with the						
University of Ottawa, with the						
intent of advertising to our						
students pre-vetted opportunities						
for semesters above that they can						
pursue with minimal bureaucratic						
efforts. Pilot offers have shown						
enthusiastic reception from our						

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students, and therefore we are						
fully committed and in the process						
of compiling a comprehensive list.						

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Recommendation 8: The SCEUP recommends that part-time professors be involved earlier in the planning and preparation of courses they will be teaching, and that a training program be established for TAs.

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Part-time instructors are increasingly going to be in the loop regarding continual program improvement by providing feedback to the curriculum committee on an annual report emerging from CEAB data collection and Faculty and Central Administration surveying. Additionally, we are in the process of coordinating with the Faculty Undergraduate Office to implement the following measures: a. Distribution to each part-time professor of the Professor's handbook, and individual meeting with each newly assigned part-time instructor to discuss the handbook and to review Department's vision/strategy regarding teaching and learning. b. Assignment of a faculty member to mentor newly assigned part-time	1	Curriculum Committee; Full time professors	2022	Improved support of part time instructors; improved teaching outcomes; improved students' experience.	Mentorship of part time instructors by full time departmental members. Participation of part time instructors to workshops supported by TLSS, the Faculty, and the Department.	To be completed by the Evaluation Committee when reviewing the progress report

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Recommendation 8: The SCEUP recommends that part-time professors be involved earlier in the planning and preparation of courses they will be teaching, and that a training program be established for TAs.

Define t	he actions to undertake	Priority Level*	Assigned Person or Persons	Deadline to attain the objective	Expected results	Implementation Indicators	Progress on the actions taken: accomplished, to be sustained, to be continued, to be developed
	instructors. This process is already in place informally,						
	since full-time professors that						
	are experts and/or regularly						
	teaching a course meet with						
	newly assigned part-time						
	professors to discuss course						
	content, syllabus, learning						
	outcomes, and expectations.						
	With the support of the						
	Faculty, this procedure could						
	be formalized.						
C.	Part-time instructors will be						
	expected to participate in						
	professional development						
	workshops supported by						
	TLSS. The Department, in						
	consultation with the Vice-						
	Dean Quality Assurance						
	(David Taylor), the Vice-Dean,						
	Undergraduate Studies						
	(Michel Labrosse), the						
	Faculty's Human Resources						
	personnel and TLSS itself, will						

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Recommendation 8: The SCEUP recommends that part-time professors be involved earlier in the planning and preparation of courses they will be teaching, and that a training program be established for TAs.

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establish guidelines appropriate to this that are also in line with existing collective agreements.						

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Recommendation 9: The SCEUP recommends that the new early warning system that has been created to identify factors having a negative impact on student retention be closely monitored.

Define the actions to undertake	Priority Level*	Assigned Person or Persons	Deadline to attain the objective	Expected results	Implementation Indicators	Progress on the actions taken: accomplished, to be sustained, to be continued, to be developed
The Department is grateful for the monitoring and early intervention system put in place by the Faculty through the Undergraduate Office. Given the recent implementation of the initiative, we have to date not been directly involved, as the monitoring system has been implemented by gathering course grades data from Virtual Campus (Brightspace system) directly by the personnel at the Undergraduate Office. We immediately plan to actively collaborate with the Undergraduate Office by a. Helping to identify critical courses to monitor. b. Introducing the requirement of uploading course component grades in Virtual Campus for all instructors teaching the identified critical courses. This is can be easily implemented since	1	Curriculum	2021	Improved retention	Broader use of Brightspace grade book with instructors giving access to grades, allowing the Faculty to fully implement the system.	To be completed by the Evaluation Committee when reviewing the progress report

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Recommendation 9: The SCEUP recommends that the new early warning system that has been created to identify factors having a negative impact on student retention be closely monitored.

Define the actions to undertake	Priority Level*	Assigned Person or Persons	Deadline to attain the objective	Expected results	Implementation Indicators	Progress on the actions taken: accomplished, to be sustained, to be continued, to be developed
the instructor will not need to use Virtual Campus other than for uploading grades, requiring minimal effort that can be delegated to Teaching Assistants. For the ones already using the system, no significant changes will be required.						

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Recommendation 10: The SCEUP recommends that the Department review its lab schedule in order to avoid overcrowding.

Define the actions to undertake	Priority Level*	Assigned Person or Persons	Deadline to attain the objective	Expected results	Implementation Indicators	Progress on the actions taken: accomplished, to be sustained, to be continued, to be developed
In recent years, the Department has received a substantial steady financial support from the Faculty to improve undergraduate laboratory equipment. In addition to additional space dedicated to undergraduate laboratories, this is has resulted in a tangible improvement of teaching lab facilities, as recognized in the recent (2017) external accreditation visit, where external evaluators praised the drastic improvement with respect to the previous visit. There is still room for improvement, and our continual efforts are directed in that sense, mainly with focus on students' experience which can be improved in terms of scheduling with the support of the dedicated personnel, and with further replacement and addition of equipment and space, as well as the development of some online labs to complement in-person lab delivery.	1	Department	Continual	Improved student's experience	Improved scheduling; new equipment; additional dedicated space; development of online labs to complement in-person labs.	To be completed by the Evaluation Committee when reviewing the progress report

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Recommendation 11: The SCEUP recommends that the Department work with the Faculty of Engineering to identify initiatives to further support international students and ensure their sense of belonging to the programs in which they are enrolled.

Define the actions to undertake	Priority	Assigned Person	Deadline to	Expected results	Implementation Indicators	Progress on the
	Level*	or Persons	attain the		,	actions taken:
			objective			accomplished,
						to be sustained,
						to be continued, to be developed
International students are a very	1	Curriculum	2022	Improved retention rate	Closer collaboration with	to be developed
International students are a very	1		2022	Improved retention rate of international students		
important and numerically		Committee		of international students	the International Office	
substantial part of our students'						
body, being about 15% and 20%						
of our newly admitted students						
respectively in biomedical						
mechanical and in mechanical						
engineering steadily for the past						
few years. International students						
face additional challenges, which						To be completed by
also results in lower retention						the Evaluation
rate.						Committee when
The Department plans to						reviewing the
improve the support of our						progress report
international students by						
1) Fully implementing a						
multi-dimensional grade						
monitoring system with						
early warnings						
(supported by the						
Faculty), by expanding						
the use and access to						
Brightspace grade						

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Recommendation 11: The SCEUP recommends that the Department work with the Faculty of Engineering to identify initiatives to further support international students and ensure their sense of belonging to the programs in which they are enrolled.

	the actions to undertake	Priority	Assigned Person	Deadline to	Expected results	Implementation Indicators	Progress on the
		Level*	or Persons	attain the			actions taken:
				objective			accomplished,
				objective			to be sustained,
							to be continued,
							to be developed
	books, as explained in						
	the plan of action						
	associated to						
	Recommendation 9.						
	Early warning to						
	international students						
	could involve specific						
	resources offered by the						
	International Office of						
	the University.						
2)	Closer collaboration						
	with the International						
	Office, for example by						
	taking full advantage of						
	the Mentoring Centre,						
	part of which could be						
	tailored to Engineering						
	students that face						
	specific challenges from						
	their studies, and						
	therefore could benefit						
	from networking with						
	other international and						
	non international						

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Recommendation 11: The SCEUP recommends that the Department work with the Faculty of Engineering to identify initiatives to further support international students and ensure their sense of belonging to the programs in which they are enrolled.

Define the actions to undertake	Priority Level*	Assigned Person or Persons	Deadline to attain the objective	Expected results	Implementation Indicators	Progress on the actions taken: accomplished, to be sustained, to be continued, to be developed
engineering students that faced the same challenges in a recent past. 3) Expanding the excellent Mentoring Center of the Faculty of Engineering, which focuses more on the academics and therefore can work in complementarity with the International Office.						

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FOCUS AREA #5: RESOURCES								
Available resources allow for the successful delivery of the Program Learning Outcomes.								
Define the actions to undertake	Priority Level*	Assigned Person or Persons	Deadline to attain the objective	Expected results	Implementation Indicators	Progress on the actions taken: accomplished, to be sustained, to be continued, to be developed		
		N	ot applicable			To be completed by the Evaluation Committee when reviewing the progress report		

^{*} PRIORITY LEVEL: 1. URGENT-IMMEDIATE ACTION REQUIRED 2. IMPORTANT-ACTION REQUIRED WITHIN 18 MONTHS (MAXIMUM) 3. ADVISED: DEVELOPMENT AND STRATEGY-ACTION TO BE DISCUSSED AND MUST BE IN PLACE BY MID-CYCLE (WITHIN 4 YEARS)