



Standard Operating Procedures (SOP) for the Department of Biomedical Engineering Graduate Program

This document is intended for the use of faculty members and students enrolled in or applying to enter the Department of Biomedical Engineering or in/to the Department when serving as the conjoint department in the Individual Interdisciplinary Studies Program (<https://www.ualberta.ca/graduate-studies/programs/interdisciplinary-studies>) and contains information related to Department programs. General guidelines concerning graduate studies can be found on the Faculty of Graduate Studies and Research (FGSR) website at <https://www.ualberta.ca/graduate-studies>.

The Department of Biomedical Engineering offers both an MSc and a PhD program, both with either a 'in Biomedical Engineering' or a 'in Biomedical Sciences' designation (see Section A12).

Policies of the Department of Biomedical Engineering may differ from those set by the FGSR.

NOTE: All conditions and procedures specified in this document apply to both students enrolled in the Department of Biomedical Engineering and to those enrolled in the Individual Interdisciplinary Studies Program of the University with the Department of Biomedical Engineering serving as the conjoint department.

Department of Biomedical Engineering
Faculties of Engineering and Medicine & Dentistry
University of Alberta
Edmonton AB Canada T6G 2V2

Tel: 780-492-2541

E-mail: bmegrad@ualberta.ca

<https://www.ualberta.ca/biomedical-engineering/>

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*General guidelines and definitions concerning Graduate Studies conducted under the BME can be found in **Appendix 13** of this document. Responsibilities of students, supervisors, the supervisory committee, the Department Graduate Committee, and FGSR are briefly summarized.*

A) Admission procedures

- A1. Before applying to graduate studies in the Department of Biomedical Engineering (BME), a prospective student must have a faculty member from the Department of BME or an adjunct professor from BME to act as their primary supervisor (see BME website for listing of faculty members).
- A2. The Department of BME has a minimum entrance requirement of a 3.3 (B+) GPA. The FGSR minimum requirement is 3.0 (B). Grades from external institutions are converted according to an internal procedure. Generally, we consider either the latest two years of transcripts.
- A3. If a student is proceeding with an application, please notify the Department Administrator (currently Ms. Maisie Goh) so that the office can be made aware of incoming transcripts and letters of reference. Three letters of reference, a statement of research interests and previous work experience in the field needs to be included in the application. Be sure to cc all correspondence between grad chair to the administrator (Maisie) so monitor the student's status and document all correspondence concerning student's application (cc to bmegrad@ualberta.ca).
- A4. Once a student's file is complete, the application is approved by the Department's Admissions Graduate Coordinator (currently Dr. Alan Wilman) and the application is then sent to FGSR for final approval. FGSR charges the student a fee of \$100.00 (non-refundable) to apply to graduate studies.

A5. Deadlines for admissions:

Canadian or US Applicants:

The FGSR has no deadlines for Canadian or USA applicants although it is recommended that at least one month is given to process the application.

Foreign Applicants:

The deadline dates by which a completed international student application file (except China (PRC) applications; see below) must be received in the FGSR are:

- July 1 for September admission
- November 1 for January admission
- March 1 for May admission
- May 1 for July admission

China (PRC) Admissions

China (PRC) students may experience a delay in obtaining the necessary documentation from their home government and the Canadian Embassy.

The FGSR has established as a guideline a four-month lead-time by which completed China (PRC) applications with a departmental recommendation must be received in the FGSR office:

- May 1 for September admission
- September 1 for January admission
- January 1 for May admission
- March 1 for July admission

A6. Language Requirement

The Department of BME and FGSR recognize four English language examinations.

They are:

1. TOEFL (Test of English as a Foreign Language). Minimum score of 600 (paper-based), or 250 (computer-based), or 100 (Internet-based) with a minimum of 25 per individual skill area on internet-based exam.
2. IELTS (International English Language Testing System). Minimum overall band score is 7.5, with at least 7 on each test band.
3. Canadian Academic English Language Assessment (CAEL). Minimum score of 70.
4. Michigan English Language Assessment Battery (MELAB). Minimum score of 91.

Note: the minimum requirements in the Dept. of BME may be different than that of FGSR.

B) Funding Commitment:

B1. Procedures and expectations

- All graduate students in the BME program must receive funding throughout the tenure of their program. The department **does not** have funds to support a student's stipend, which is the **responsibility in whole of the supervisor**.
- Before a student commences his/her graduate program, the supervisor must provide a letter stating the salary of the student, e.g., xx dollars is available for xx years. Following this, supervisors are to commit their funding on standard letters each year to their students (use form in [Appendix 1](#)). Minimum pay should exceed \$20K for MSc and \$22K for PhD.
- To attract top students, supervisors can offer additional funding beyond the department's minimum amount but the amount and duration should be clearly stated in an additional letter to the student.
- Students are encouraged to apply for all graduate scholarships such as the Faculty of Medicine (75th Anniversary Awards), the University (Province of Alberta, Dissertation fellowships, etc), and [external agencies](#) (AIHS, NSERC, CIHR, and disease specific agencies like Heart and Stroke, etc.). Please ensure that you are eligible to apply since the requirements (found at their websites) for each agency are different. Please refer to FGSR awards website for the latest procedures.
- All U of A assistantships are governed by collective agreements based on how the assistantship is funded. See the links for complete information about assistantships <http://www.hrs.ualberta.ca/MyEmployment/Agreements.aspx>
- Registrations: All graduate students in M.Sc. and Ph.D. programs must register full time. All students must maintain full time registration until they finish their degree. Full time registration is defined as a minimum of 9 credits. Students are not permitted to register as part time students. Questions concerning registrations and tuitions are not covered by this booklet, and the student should check the FGSR website for regulations and fees - <https://www.ualberta.ca/graduate-studies/prospective-students/tuition-and-cost-of-living-estimate>.

C) Requirements while in Graduate Program

<https://www.ualberta.ca/graduate-studies/about/graduate-program-manual>

The Graduate Student

Graduate students are ultimately responsible for their own programs. They are expected to read the Calendar and any other relevant documents to become familiar with all regulations and deadlines relating to their programs.

The students' fundamental responsibilities include ensuring that their registration is accurate and does not lapse, submitting appropriate forms to the department for signature and processing, and paying all fees required by the deadline dates set out in the Calendar.

Graduate Student Guidelines

Graduate students should:

- make themselves aware of the contents of the graduate portions of the Calendar and take responsibility for their own programs in that the Calendar sets out the requirements for the various programs;
- be aware of possible scholarship opportunities, and seek advice and assistance from the department in making applications, etc;
- be aware of the supervisor's and any departmental expectations
- inform the supervisor or advisor regularly about progress, and provide the supervisor with an annual report for distribution to the supervisory committee;
- maintain open communication with their supervisor or advisor and graduate coordinator concerning any problem; and in the event of a conflict in the supervisor-student or advisor-student relationship, discuss with the supervisor or advisor and graduate coordinator in a timely fashion (see [Section 9](#) of the Graduate Program Manual for further information);
- make research results accessible (beyond their appearance in a thesis) to an appropriate audience;

(FGSR Council, 1989/06/19)

Recommendation for Termination by a Department

On occasion it becomes necessary to consider the termination of a student's program. Only the FGSR can terminate a graduate student's program. All departmental requests for termination of a student's program must be made in writing by the Chair or Graduate Coordinator of the department to an Associate Dean of FGSR, with a copy to the student. Supervisors and department administrators cannot terminate a student's program but they can recommend such action to an Associate Dean, FGSR through the Chair or Graduate Coordinator.

The written recommendation should give the effective date of the proposed termination and document carefully the reasons for the recommendation. Reference should be made to any previous discussions or correspondence with the student related to the matter. It is expected that the Chair or Graduate Coordinator will have discussed the issue with the student (and with the supervisor, where appropriate) prior to the letter being sent. Departments are encouraged, but not required, to have internal appeal procedures. If the recommendation is upheld, the student's transcript will indicate "Required to Withdraw".

If a student completes a Withdrawal form due to lack of adequate academic progress, this does not preclude a department from recommending the student be required to withdraw.

Reasons for Termination

The reasons for termination may include:

- failure to maintain adequate academic standing; failure to meet requirements set out in a conditional admission; candidacy or final oral examination failure; or expiry of program time limit. Requests to terminate for these reasons must be documented in the academic record or student's file: for example, grades, exam reports, etc;
- failure to make satisfactory academic progress in other aspects of the program, such as adequate progress in research. Requests to terminate for these reasons should be supported by evidence that the process of progressive discipline (as outlined below) has been followed;
- failure to secure a supervisor (for thesis-based students); or
- failure to complete the practicum component of a graduate program, if that practicum component is an integral part of the program.
- cannot terminate except for just cause;
- except in documented emergency cases (health, safety issues, etc.) students shall be given adequate warning, feedback and timelines related to what is the nature of the inadequate progress, what special performance would be required to rectify the inadequacy, and what is the timeline for demonstration of the required improved performance;
- student should be given an opportunity to respond in writing to any warning given;
- meetings with appropriate advisors (members of supervisory committee; Chair's designate, etc.) may assist the process of providing adequate warning and advice; and
- cases requiring mediation should be brought first to the Chair and then, if necessary to the FGSR for resolution.

FGSR Responsibilities

In responding to a departmental recommendation for the termination of a student's program, the Associate Dean, FGSR will consider such matters as: was the cause sufficient to terminate, was the case properly documented, was due process followed, was adequate warning given, were student's responses fairly considered, were conditions of performance and time lines reasonable, was the Department Chair (or designate) properly involved?

An Associate Dean, FGSR will consider the recommendation and normally will hold interviews with the student, supervisor, or other individuals concerned. The formal, written decision of the FGSR will be sent to the student and copied to the department. A decision of the FGSR to terminate a program can be appealed by the student using the FGSR academic appeals procedures (see [s.9.2 Academic Grievances and Appeals](#) in the Graduate Program Manual).

Termination Made by a Student

Students wishing to terminate their own program of studies are strongly advised to discuss the issue with their supervisor, Graduate Coordinator and, if desired, with an Associate Dean, FGSR before terminating their program. There may be alternative actions that are more in the student's interest.

Following this consultation if a student still wishes to withdraw from the program, the student should complete a Withdrawal form indicating on it withdrawal from the entire program. The form should include the effective date of the proposed termination. The transcript will indicate "Voluntarily Withdrew from Program."

IV. DISCIPLINE

<https://www.ualberta.ca/governance/resources/policies-standards-and-codes-of-conduct/code-of-student-behaviour>

C1. Required courses:

Master Program:

3 graduate level (500 level or above) courses (at least 1 BME course) as well BME 600 (Attendance is compulsory) during the degree program. Master's students courses are suggested by the supervisory committee but must have the ultimate approval from the BME graduate coordinator.

PhD Program:

4 graduate level courses (at least 1 BME course) as well BME 600 during the degree program (Attendance is compulsory). Students with a prior Master's degree only require two graduate courses; however, a minimum of 2 BME graduate courses must be obtained. If a student transfers from a Masters Program to a PhD program without completing the Master's degree, all

courses and time taken in the MSc program will be credited towards the PhD program (see time limit for PhD program below).

- In certain cases, undergraduate courses can be substituted for graduate credits where a single term 3-credit undergraduate course is worth 0.5 of a graduate course (i.e. 2 undergraduate courses is equivalent to one graduate course). For example, PHSYL 210 or BME 320/321 (2-terms = 6 credits) is worth 1 graduate course. Exceptions can be included where a single undergraduate course is considered to be of sufficient difficulty given the student's academic background. For example, PHSYL 372 is worth a full graduate course for students with an engineering/physics background.
- Approval of the course list are suggested by the supervisory committee but must have the ultimate approval from the BME graduate coordinator. For this reason, it is important that the Supervisory Committee meet within the student's first year.
- As well as the necessary engineering knowledge, all BME students must demonstrate knowledge of biological sciences (physiology, molecular biology) appropriate to their project. Biology knowledge can be obtained by taking BME 320/321, PHSYL 210.
- If a suitable graduate level BME course is not available, another graduate level course may be taken pending approval from the BME graduate committee.
- BME 600 is a seminar series course, presently required of all first year (MSc and PhD) students. BME 600 must be taken in addition to the required credit courses. Attendance is compulsory.

C2. Required GPA

- All students in degree programs (including time spent as a qualifying graduate student) or diploma programs must maintain a minimum cumulative grade point average of 3.0 (B) throughout the course of the program. In cases where the cumulative grade point average falls below 3.0, the Department may recommend termination of the program or continuation in the program for a specified period as a probationary student; in any case, convocation shall not take place with a cumulative grade point average of less than 3.0. Notwithstanding the above, a student whose academic standing falls below a grade point average of 2.7 may be required to withdraw at any time.
- The pass mark in any course taken is a grade of C+ (2.3).

see also FGSR Manual Ch. 7: <https://www.ualberta.ca/graduate-studies/about/graduate-program-manual/section-7-administration-of-graduate-programs/7-4-academic-standing>*Note: As with entrance requirements, the Department of Biomedical Engineering minimum may differ from the FGSR or MSGP requirement.*

C3. Student Program Monitoring

- A student summary report must be filled out each year by the supervisor and student (see form in Appendix 6). The Department will review this form.
- Conditions of admissions are monitored regularly by the FGSR.
- Grades of individual students are monitored and approved by the FGSR after each term.
- The Department and FGSR monitor individual student time limits.
- The Department and FGSR monitor to ensure students have registered in at least the minimum number of course weights (or equivalent) in order to convocate.

It is the responsibility of the supervisors to monitor their students program, re committee members, meetings, and courses taken and their grades after each term and duration of their degree program. It is the responsibility of the supervisor to keep the Student Progress Form up to date and to send updated forms to the Administrative Assistant (see form in Appendix 4)

C4. Supervisory Committee

MSc program:

- The MSc supervisory committee shall be comprised of a minimum of the supervisor plus one full-time faculty (including adjuncts) from the Department of BME. The Supervisory Committee Form (see form in Appendix 2) shall be completed within the first year of the student's graduate program to FGSR via the BME Administrative Administrator.
- The Supervisory Committee must meet within the first year of the student's program and no less than once per year after that. A summary of the meeting (see form in Appendix 3) shall be filled out and placed in the student's file.

PhD program:

- The PhD Supervisory Committee shall be comprised of a minimum of the supervisor, one member from the Department of BME (adjunct or primary appointment), and one full-time faculty member outside of the Department of BME. The Supervisory Committee Form (see Appendix 2) shall be sent within the first year of the student's graduate program to FGSR via the BME Administrator.
- The Supervisory Committee must meet within the first year of the student's program and no less than once per year after that. A summary of the meeting (see form in Appendix 3) shall be filled out and placed in the student's file.

C5. Eligibility Criteria for Supervisors & Supervisory Committee Members

Department Faculty members should make every effort to take part in examining committees (as chair or examiner) when asked as part of their commitment to Department service. As minimum criteria, supervisors and committee members must:

- normally be full-time faculty
- be active in the general area of the student's research

- have a tenured (or tenure track) faculty appointment (including soft tenure track faculty appointments such as University Research Fellows and Heritage Scholars) in a department relevant to the field
- hold a degree equivalent to or higher than that for which the student is a candidate (this would always be the case for newly appointed faculty, but certain recognized and well-established exceptions should be respected)
- demonstrate continuing scholarly or creative activity of an original nature
- must have a primary or adjunct appointment in the Department of BME

The FGSR Policy Review Committee has clarified the FGSR's policy for supervisory and committee membership to make it more permissive for Sessionals, Research Associates, FSO's, and PDF's to serve on committees. Members of these academic groups will be eligible to serve on new committees for up to three years if the Chair provides a note indicating the reasons for, and the benefits of, having such a colleague on the committee, and the proposed individual's current CV. Previously these were considered on an adhoc basis. Approval still lies with the Dean, FGSR. For details, see '[Eligibility Criteria for Supervisors and Committee Members](#)' in Section 8: [Supervision, Oral Examinations, and Program Completion of the Graduate Program Manual](#).

For all FGSR forms go to [FGSR Forms Cabinet](#)

C6. Thesis Proposal and Candidacy Exam Regulations

MSc Program

- A thesis proposal meeting is not required, but supervisory meetings should occur each year – use form in Appendix 3.
- MSc students do not require candidacy examinations

PhD Program

- The PhD program in BME is conducted under the Biomedical Graduate Program (BMGP) (see Appendix 13 for details)
- A thesis proposal application must be completed within the first two years of program. This requirement includes both students entering into the BME PhD program with a prior Masters and students transferring from an MSc in BME to a PhD in BMGP with a minimum requirement of GPA 3.3. Guidelines and Application forms can be found on Appendices 13 & 14.
- An oral candidacy exam must be completed within the first two years of the PhD program, preferably after completion of required courses. The PhD proposal must be approved before scheduling the candidacy exam. Use form in Appendix 5. If the student fails the candidacy exam, the student will revert to an MSc program or apply to the BME graduate committee for re-examination.
- PhD Candidacy committee: Minimum of Supervisory Committee plus one member from the Department of BME (adjunct or primary appointment) and one faculty member outside of the Department of BME (minimum total of 5).

C7 Duration of Program

MSc Program

- An MSc program is recommended for 2 years (minimum) and not more than 3 years. If the student is not finished after 3 years, an explanatory letter shall be sent to the Graduate Coordinator in charge of current students (currently Dr. Alan Wilman). If after a 4th year, the supervisor must apply for an extension to FGSR (see Section D below) to allow student to continue in a 5th year.

PhD Program

- Recommended duration of PhD is 4 years (minimum 3 years) and should not exceed 5 years. Supervisors must provide written letter to BME Graduate Committee reasons for PhD program extending beyond 5 years. If after a 5th year, the supervisor must apply for an extension to FGSR (see Section D below) to allow student to continue to 6th year.

C 8. Thesis Defense

Please refer to the [Structure of Examining Committees](#) on the U of A Calendar for additional information.

MSc Thesis Committee: a minimum of 2 Supervisory Committee members plus one arm's length, full-time faculty member from the University of Alberta.

Master's Time Lines and Approval of the Final Oral Examining Committee

- At least three weeks prior to the final oral examination the department MSc preliminary acceptance of thesis (<https://www.ualberta.ca/biomedical-engineering/graduate-studies/student-resources/forms-cabinet>) should be completed and sent to the department before we can forward the "Notice and Approval of a Master's Final Oral Examination" to FGSR.
- Student must supply to the examiners a copy of the thesis so that they may have adequate time to appraise the thesis

PhD Thesis Committee: Supervisory Committee plus two Arms Length Examiners (one of whom must be an examiner external to the University). In addition, a non-examining/non-supervisory chair is required from the department of BME.

Scheduling of Final Oral Examinations

According to FGSR regulations, it is the responsibility of the supervisor, and not the student to arrange the final oral examinations.

The arrangements that must be made before the final oral examination include:

- Three months in advance: The supervisor must submit the name and CV of external examiner to BMGP/ FGSR for approval.
- Five weeks in advance: Supervisory committee members must each declare in writing that the thesis is of adequate substance to warrant that the student proceed to the final examination.
- Four weeks in advance: Notice of final exam must be submitted to BMGP/FGSR for approval.
- Three weeks in advance: Distribute copies of thesis to supervisory committee and the External examiner.

External examiners and supervisory committee members deserve the courtesy of receiving a complete, carefully written thesis well in advance of the final examination and students need to know that arrangements for their thesis defenses will not be changed at the last minute.

All students in the MSc and PhD program must give a public seminar within 2 weeks before their Final Oral examinations.

A standard “Thesis Defense” form is to be used (see Appendix 5).

C 9. Thesis Submission

For complete details on the process of thesis submission (electronic format) see <https://www.ualberta.ca/graduate-studies/current-students/academic-requirements/thesis-requirement-and-preparation>

NOTE: The Department of Biomedical Engineering requires a hard bound copy.

Students may still have bound copies produced for their supervisor/personal use, should they choose.

C 10. Required Documentation

- The student must fill out the “*Working Alone*” document (see form in Appendix 7) and submit this form to the Administrative Assistant for the Department of BME.
- ***Ethics Training Requirement***: Ethics and academic integrity training is mandatory for all newly-admitted U of A graduate students who started their program on or after September 1, 2004.

Each student is normally expected to complete the equivalent of at least eight (8) hours of structured academic activity to meet the ethics requirement. Ethics training requirements are offered in one of two ways:

1. GET (Graduate Ethics Training) a web-based course offered by FGSR (equivalent to five hours of training, go to <https://www.ualberta.ca/graduate-studies/current-students/academic-requirements/ethics> for details).

PLEASE print out a copy of your completed training results and send it to The Department Biomedical Engineering for your file. This will then be kept in your file upon your next completion below after verifying all requirements have been met for you to graduate upon your thesis approval/program completion

2. The Faculty of Medicine hosts a weekend Scientific Integrity Day; more information about this workshop can be found at <https://www.ualberta.ca/medicine/research/graduate/esi/esiday>. It is advisable for students to check the website often and sign up for the course as quickly as possible because it is first come first serve registration and it fills up very quickly.

- The Department of BME is responsible for your Completion of Academic Integrity and Ethics Training Component to be completed as required for Completion of Ethics requirement is necessary before the student can convocate and is indicated on the student's transcript.
- ***Individual Development Plan/Professional Development Requirement:*** IDP/PD training is mandatory for all newly-admitted U of A graduate students who started their program on or after September 1, 2016. This is in addition to the Ethics training.

Each student is normally expected to complete the equivalent of at least eight (8) hours of structured professional development activity to meet the FGSR requirement. Requirements may be met by attending various workshops offered by the university.

In addition to the professional development activities, students are required to submit an individualized professional development plan to our department for their program of studies (graduate coordinator or graduate chair) within 12 months of the program's commencement for MSc students and within 18 months of the program's commencement for PhD students.

For more information, please refer to the FGSR websites:

<https://www.ualberta.ca/graduate-studies/professional-development>

<https://www.ualberta.ca/graduate-studies/professional-development/professional-development-requirement>

D. Program Extension:

The FGSR will consider a departmental recommendation for an extension of the time limit for a candidate who has failed to complete all the requirements for the degree within the appropriate period.

FGSR limit for MSc is 4 years. The Department of BME limit is 3 years.

FGSR limit for PhD is 6 years. The Department of BME limit is 5 years.

Extensions are viewed as exceptions. Requests for one or more extensions will be considered only under compelling circumstances. To qualify for an extension, candidates must present in writing to the department the causes for the delay and demonstrate substantial progress on the thesis or in the course-based program. Unanticipated events unrelated to the student's program, such as family emergency, personal crisis, and parental leave may be considered. An extension is normally granted for no more than one year.

Frequent requests by one supervisor or one department will be viewed by the FGSR as a possible indication of problems with students' supervision.

To request an extension, the department must submit a Request for a Program Extension form and attach the following information:

- a summary of the student's progress to date (the timetable for completion preferably approved by the supervisory committee)
- written justification by the department for the extension
- an explanatory letter from the supervisor
- an explanatory letter from the student with the expected date of completion

The FGSR will return its decision in writing to the department and the student. An approved extension begins when the time limit for the degree has been reached.

A candidate who is granted an extension may be required to remain in close geographic proximity to the campus until all degree requirements have been met.

E. Transferring to Another Department

The FGSR Policy Review Committee has approved a new streamlined procedure for graduate students who wish to transfer from one graduate program to another program in a different department. Effective immediately, only a Recommendation for Transfer of Department form is required. Previously, students who wanted to change departments had to withdraw from their current program and complete a new application for admission for the program offered in the new department. For details, see:

- Transfer of Department under 'Registration & Fees', or

- Section 7: Administration of Graduate Programs in the Graduate Program Manual (<https://www.ualberta.ca/graduate-studies/about/graduate-program-manual/section-7-administration-of-graduate-programs>)

APPENDIX 1

Letter of Appointment

The Letter of Appointment must contain the following information (see sample template on next page):

- ✓ The graduate assistantship will be governed by the Collective Agreement Governing Graduate Assistantships, which can be found at <http://www.hrs.ualberta.ca/en/MyEmployment/Agreements.aspx>. The Agreement may be amended in accordance with terms of the Collective Agreement and such amendments are binding upon the University and the graduate students holding assistantships.
- ✓ Type of appointment (GTA, GTA-PI, GRA, or GRAF).
- ✓ Start and end date of assistantship.
- ✓ Hours assigned per week for a GTA or GRA (up to 12 hours in combined appointments). *<No hours assigned for GRAF>*
- ✓ Stipend per Month *<for GRA/GTA include amount of award & salary; for GRAF indicate fellowship amount>*. If applicable, indicate the salary amount of the 5% performance increase.
- ✓ Graduate Assistantship Supervisor *<this is the person responsible for the supervision and coordination of the duties performed by the graduate student during the graduate assistantship period >*
- ✓ At the beginning of the term, the Graduate Assistantship Supervisor will meet with the graduate student to complete an *Assistantship Time Use Guidelines Form* (Appendix C), which will form part of the graduate assistantship appointment. Note: the nature of the assistantship duties may vary from term to term depending on the needs of the department, available graduate assistantships and external factors
- ✓ Criteria in selecting graduate students for employment as GRAs and GTAs should be provided with this appointment letter or as a web link (*see Article 7*).
- ✓ The graduate assistantship offer is subject to the maintenance of satisfactory academic standing in the graduate program, as defined in the Faculty of Graduate Studies & Research Graduate Policy Manual, the Department's Graduate Studies Manual, and on satisfactory completion of the assigned duties of the graduate assistantship.
- ✓ *This offer is expressly contingent upon the University's receiving regular "confirmation," if required by Service Canada, of your continuing eligibility for employment in Canada. Loss of either "confirmation," if required by Service Canada or Immigration Refugees and Citizenship Canada (IRCC) status (i.e., work permit and/or permanent residence) will render this appointment null and void.*
- ✓ Failure to report to the department by the appointment start date may result in termination of the graduate assistantship without further notification.

Other

- ✓ If applicable, add "the assistantship may not cover the full cost of living in Edmonton and your graduate tuition and fees."
- ✓ If applicable, add "The Faculty of Graduate Studies and Research has a [Graduate Teaching and Learning Program](https://uofa.ualberta.ca/graduate-studies/professional-development/graduate-teaching-and-learning-program) which we encourage all graduate students to explore. More information can be found at <https://uofa.ualberta.ca/graduate-studies/professional-development/graduate-teaching-and-learning-program>."
- ✓ If applicable, indicate what portion the assistantship is of the total funding package provided to the student.

[Enter date]

[Enter name]

[Enter address]

Dear [Enter name],

We are pleased to offer you an appointment as a graduate assistant at the University of Alberta in accordance with the terms set out below. Should you accept this offer, your appointment will be governed by the Collective Agreement Governing Graduate Assistantships. The Agreement may be amended in accordance with terms of the Collective Agreement and such amendments are binding upon the University and the graduate assistant.

- (a) Type of Appointment: [Enter GTA, GTA-PI, GRA, or GRAF]
- (b) Period of Appointment: [Enter start date and end date]
- (c) Maximum Hours Assigned Per Week: [Enter hrs/wk for GTA, GTA-PI, GRA - n/a for GRAF]
- (d) Stipend: \$[Enter both the Award and Salary for GTA, GTA-PI, GRA and Fellowship for GRAF]
Includes Annual 5% Performance Increase to salary (if applicable): \$[Enter Amount for GTA, GTA-PI, GRA]
- (e) Graduate Assistantship Supervisor: [Enter person responsible for the supervision of the duties performed]
- (f) At the beginning of the term, the Graduate Assistantship Supervisor will meet with you to complete an *Assistantship Time Use Guidelines Form* (refer to Appendix C of the Graduate Student Assistantship Collective Agreement), which will form part of the graduate assistantship appointment. Note: the nature of your duties may vary from term to term depending on the needs of the department, available graduate assistantships and external factors.
- (g) The graduate assistantship offer is subject to the maintenance of satisfactory academic standing in the graduate program, as defined in the Faculty of Graduate Studies & Research Graduate Policy Manual, the Department's Graduate Studies Manual, and on satisfactory completion of the assigned duties of the graduate assistantship.
- (h) If you are not a Canadian citizen, this appointment is expressly contingent upon you meeting and continuing to meet eligibility requirements for employment, as set out in the Immigration and Refugee Protection Act and Regulations. It is further contingent upon the University of Alberta receiving regular "confirmation," if required by Service Canada. Should you be ineligible for employment at any time, or should the University of Alberta be unable to obtain "confirmation" if required, this appointment shall be rendered null and void effective immediately.
- (i) Failure to report to the department by the appointment start date indicated above may result in termination of this offer of appointment without further notification to you.
- (j) [insert a statement around the department's documented criteria in selecting graduate students for employment as Graduate Research Assistants and Graduate Teaching Assistants or include a web link.]
- (k) This assistantship may not cover the full cost of living in Edmonton and your graduate tuition and fees. To prevent disputes, misunderstandings and continuous progress in program, it is suggested that the undersigned maintain a personal record of hours worked and duties performed as a GRA/GTA/GTA-PI.

The return of one signed copy of this letter to the undersigned by [Enter yyyy/mm/dd] will constitute your acceptance of this offer.

[Enter name (e.g. Dean/Chair/Assoc Chair)]
Appointing Officer

[Enter name of faculty if supported by restricted funds]
Faculty Member

I accept this offer of appointment as set out in this letter. I acknowledge that I have read and agree to be bound by the Collective Agreement Governing Graduate Assistantships which can be found at the Human Resource Services website at <http://www.hrs.ualberta.ca/en/MyEmployment/Agreements.aspx>

Signature

Date

All personal information collected by UAlberta for the purpose of employment shall be collected under the authority of Section 33c of the Alberta Freedom of Information and Protection of Privacy Act (FOIPPA) and will be protected under Part 2 of that Act. Certain information will be made available to federal and provincial departments and agencies under appropriate legislative authority. For further information regarding the collection and use of the personal information, contact Human Resource Services, 2-60 University Terrace, University of Alberta, phone 780-492-4555.

Cc Student's File in Department
Human Resource Services

APPENDIX 2

Approval of Supervisor/Supervisory Committee: Example Form

Student information requested on this form is collected under the authority of Section 33(c) of the Alberta Freedom of Information and Protection of Privacy Act in order to administer and maintain students' graduate programs. Personal information is protected under this Act. For further information contact the Administrative Officer, FGSR, 105 Admin Bldg, University of Alberta, Edmonton, T6G 2M7, phone: 780-492-3499, fax: 780-492-0692.

Information and Instructions:

Forward the following information to the Faculty of Graduate Studies and Research, 105 Administration Building.

Once the FGSR approves the departmental recommendation the information will be entered on the student record database (OASIS). If there is a problem, the department will be notified.

The supervisory committee needs at least three faculty members who are normally full-time. One or more members may be from another department. The chair of the supervisory committee is the supervisor. The members of the supervisory committee should be appointed before the second year of the student's program.

For more information refer to the Calendar and the *Graduate Program Manual*.

1. Full Name of Student:

2. ID Number:

3. Department:

4. Degree:

5. List each:

Supervisor	Employee ID #	Academic Rank	Department
Supervisory Committee Member	Employee ID #	Academic Rank	Department/Institution
Supervisory Committee Member	Employee ID #	Academic Rank	Department/Institution

Signature of Department Chair or Graduate Coordinator

Date

APPENDIX 3

Department of Biomedical Engineering
Report of Supervisory Committee Meeting

(to be filled in and signed at the time of the meeting and return to Graduate Coordinator)

Name of Student: _____ Date of Committee Meeting: _____

Name of Supervisor: _____

Members of supervisory committee (Note any changes):

Name: _____ Department _____

Performance of student:

Type of Meeting:

Was a written report submitted by the student
to committee members in advance of the meeting?
 Yes No

Supervisory Committee
 Thesis Proposal Evaluation

General performance of student at the meeting:

excellent very good good satisfactory unsatisfactory

Specific suggestions for improvement and comments regarding progress to be added by the supervisor
(use additional sheets if necessary):

We, the members of the supervisory committee, concur with the contents of this report.

Signatures: _____

To be signed by the student, signifying that s/he has read this report.

APPENDIX 4

**Department of Biomedical Engineering Graduate Program
Student Program Control Sheet**

Name: _____ I.D. Number: _____

Start Date: _____ Program (M.Sc. or Ph.D.): _____

Supervisor & co-supervisor (if any) _____

Committee Members _____
(with departments): _____

ALL COURSE WORK DURING PROGRAM:

Year Taken								
Course #								
Grade								

If a Master's student is entering his/her 3rd year or if a PhD student is entering his/her 5th year of the program, a letter requesting permission to the BME Graduate Committee for an extension is required together with the Annual Report.

All Supervisory Meetings during program

	1	2	3	4	5
Date					

THESIS PROPOSAL MEETING _____

Examining Committee: _____

Result: _____ Transfer to Ph.D. (Yes/No): _____

PH.D. CANDIDACY EXAMINATION DATE: _____

Examining Committee: _____

Result: _____

FINAL ORAL EXAMINATION DATE: _____

Examining Committee: _____

Result: _____

DESTINATION AFTER PROGRAM: _____

APPENDIX 5

Summary Report for Oral Examination

Student's Name: _____ ID #: _____

PhD Candidacy Final Oral Examination for MSc PhD

Time	Date (mm/dd/yyyy)	Place

Attendees:

Chair:	Deliberations: (CONFIDENTIAL)	
	Acceptability of	
Examiners (<i>in order of questioning</i>):	Knowledge \supseteq / Defence of Thesis $\not\subset$	Potential for Research \supseteq / Thesis $\not\subset$

\supseteq for PhD Candidacy Examination; Outcomes: P = pass; CP = conditional pass; F = fail
 $\not\subset$ for MSc or PhD Final Oral Examination; Outcomes: P = pass; PSR = pass subject to revisions; A =
 adjourned; F = fail

Protocol:

1. The examination was opened at ____ (time) by the Chair or Dr. _____.
 Then, one of two formats was followed:
 - a. [**Public Seminar Format**] Introduction of the student followed by presentation of the thesis research project and a question/answer period with the public audience. Proceeding this the student, examiners and Chair entered the *in camera* session.
 - OR**
 - b. [**Closed Examination Format**] Introduction of the student and examiners by the Chair.

2. The Chair completed any remaining introductions and briefly described the purpose and procedures to be followed (previously reviewed with the student: Yes No).
 - a. The student was excused from the room and the role of the Chair, order of questioners (listed above), time constraints, first question and other matters were discussed.
 - b. Review of the student's academic record (program start date, course work completed, supervisory committee meetings). Comments & questions were entertained.
3. If [*Closed Examination Format*] : The student was re-admitted to the room and gave a _____ minute presentation of the thesis research project.
4. The Chair began to moderate the first round of the question period, reiterating the order of questioning by the examiners. The Chair maintained a set of minutes (attached) indicating the name of the examiner, time they began asking questions and a summary of the questions asked.
5. A break was held after the first round of questions: Yes No
6. After the second round of questions, the examiners were asked for further questions or comments. (see attached minutes)
7. The student was asked for questions or comments and added the following:

8. The student was excused from the room and deliberations began. Each examiner offered an outcome on the acceptability of the oral examination in two areas. This was recorded on page 1.
Results: Consensus Yes No ; **Unanimous** Yes No
9. The examination outcome was: _____
 Comments relevant to the outcome: _____
10. Comments to be included in the minutes to reflect any message the examiners want relayed to the student:

11. The Chair thanked the examiners and host(s) for the examination. The punctuality and contributions of all examiners and the input from examiners from other institutions/departments were appreciated.
12. The student was readmitted and the Chair announced (and explained, if applicable) the outcome of the examination, as follows:

13. The Chair adjourned the examination at approximately _____ (time).

Please report errors or omissions to the Chair of the Examination. Respectfully submitted.

Bottom of Form

APPENDIX 6

BME GRADUATE STUDENT ANNUAL REPORT
(Please return to BME Graduate Coordinator by June 1st of each year)

Name: _____ Date: _____

Supervisor & co-supervisor (if any) _____

Committee Members: _____

1. Title of research project:

2. Funding:

(a) Detail sources of student's support funding for the current academic year:

Period of support: _____ Amount: _____

Source of support: _____

(b) Detail sources Student's support funding for the upcoming academic year May – August

Period of support: _____ Amount: _____

Source of support: _____

3. Indicate proposed coursework (if any remaining):

4. Conferences attended during the entire MSc/PhD program. Provide name, date, and location of conferences. Indicate if you presented a paper or poster, and provide the title and authorship of the abstract. Separate them into local, provincial, national, international conferences.

5. Teaching experience during the last academic year (if any).

6. Papers (submitted or published) or patents (applied or awarded) during the entire MSc/PhD program. Give the complete citation.

7. Other activities:

8. At What Point is the Student in His/Her Program?

- () Far behind schedule
- () Somewhat behind schedule
- () On schedule
- () Ahead of schedule

Signature of Student

Signature of Supervisor

I have read my supervisor's report.

PLEASE APPEND THE FOLLOWING:

- **The Supervisor's Brief Report on the student's progress in the graduate program to date.**
- **The Student's Brief Report assessing their progress in the graduate program to date.**

APPENDIX 7

**Communication Arrangements for
Staff Working Alone**

I have discussed my work in the office with my supervisor, or with someone designated by her/him. I have read and understood the Hazard Assessment Report for the space/s where I work. I have set up a communication system with someone in case of emergency. I understand that it has to be in place before I can work alone in the laboratory and/or office.

Employee Signature

Date

I have reviewed the communication arrangement and I am satisfied that the Work Alone requirements have been met.

Supervisor's Signature

Date

APPENDIX 8



**DEPARTMENT OF BIOMEDICAL ENGINEERING
Faculties of Engineering and Medicine &
Dentistry**

**PERMISSION TO REGISTER IN BIOMEDICAL ENGINEERING
READING or PROJECT COURSES**

Student Name: ID: Email:

Student Faculty: Course & Class ID Number:

Course Coordinators/Instructors:

Marking: (name of 2 Faculty Members):

- 1)
- 2)

Title(has to be 19 characters [max] including spaces):

Description of Project:

Due Dates for Essays:

- 1
- 2
- 3

Final Grade:

Reading Areas:

(1) (2) (3)

Signatures of Coordinators: Student Signature

Date:

Date

APPENDIX 9



DEPARTMENT OF BIOMEDICAL ENGINEERING
Faculties of Engineering and Medicine &
Dentistry

PERMISSION TO REGISTER IN BIOMEDICAL ENGINEERING COURSES

Student Name:

ID:

Email:

Student Faculty:

Registration in BME or EE BE courses is normally restricted to Engineering or Physics students

1. Applicant takes form to the department(s) offering the course(s). BME department will only approve a student for a course if all Engineering or Physics students have been accommodated.

2. Teaching department(s) will only register students in course(s) AFTER approval from their Faculty and BME.

Course	Section	Class No.	Department Signature
_____			Fall Term
_____			Fall Term
_____			WinterTerm
_____			WinterTerm

Signature of Student:

Date _____

DEPARTMENT OF BIOMEDICAL ENGINEERING APPROVAL

Signature of Chair or Designate

Date _____

APPENDIX 10



Department of Biomedical Engineering

Edmonton, Alberta, Canada T6G 2V2
 www.med.ualberta.ca/bme

Tel: 780.492.4972 Fax: 780.492.8259

Initial items relevant to your work, research, and safety in the Department of Biomedical Engineering and return to the Department Administrator.

	<u>Initials</u>	<u>Date</u>
Working Alone Protocol	_____	_____
Workplace Hazardous Materials Information System (WHMIS)	_____	_____
Chemical Safety	_____	_____
Bio-safety	_____	_____
Radiation Safety	_____	_____
Lab Specific Orientation and Safety	_____	_____
Transportation of Dangerous Goods (TDG)	_____	_____
First Aid & Heart-saver CPR	_____	_____
Ethics Training	_____	_____
Individual Development Plan	_____	_____

I declare that I have reviewed, studied, and discussed with members of the Department where appropriate those items above that I have initialed and that are relevant to my work and research in the Department of Biomedical Engineering. I further understand that if in the future an item(s) that I have not initialed at this time should become relevant to my research and work in the Department, that it is my responsibility to initial the item above and to have reviewed, studied, and discussed with members of the Department issues relevant to the item(s).

 Printed name

 Signature

Student ID: _____

Email: _____

 Department

 Date

APPENDIX 11

Thesis Completion Form (Last Updated by FGSR: 2016-05-30):

<https://www.ualberta.ca/graduate-studies/-/media/gradstudies/forms-cabinet/records/degree-certificate-completion/thesis-approval-program-completion-form.pdf>

APPENDIX 12

Faculties of Engineering and Medicine & Dentistry Biomedical Engineering Graduate Program

Policies and regulations discussed below apply to all graduate students registered in the Department of Biomedical Engineering, including those in the Individual Interdisciplinary Studies Program with the Department as either the home or conjoint department.

In cases of information not covered in the following or in interpretation thereof, please consult with the Associate Chair (Graduate) of the Department who holds final authority.

ADMISSION

1. An undergraduate degree with an average of 3.3 (out of 4.0) in the last two years of undergraduate work (or graduate work) at the University of Alberta, or an equivalent qualification from a recognized institution.
2. Where applicable, a TOEFL score of 600 paper-based or 100 internet-based with at least 20 per section, or an equivalent approved English language examination.

DEGREES OFFERED

1. The Department offers both the MSc and PhD degree.
2. At the time of admission a student may elect to pursue either the MSc or PhD degree, but may switch from one to the other degree program provided they are within and adhere to requirements and deadlines of the new program.
3. All students will be enrolled as MSc students, the exception being students who enter with a scholarship that requires they be enrolled as a PhD student.
4. Students seeking the PhD degree (enrolled as MSc students) will have their registration changed to PhD student following approval of their PhD Research Proposal (see below).

DEGREE DESIGNATIONS

1. Either degree, when awarded, will be followed by the designation of either 'in Biomedical Engineering' or 'in Biomedical Sciences', for example, a PhD in Biomedical Engineering.
2. The designation assigned to the degree will depend upon the undergraduate degree and preparation of the student. For students with an undergraduate degree in engineering or an academically related area such as physics or mathematics, the designation will be 'in Biomedical Engineering'. For students with an undergraduate degree in a biological science or a medicine science, the designation will be 'in Biomedical Sciences'.
3. In cases of doubt regarding the choice of a designation, the Student and Supervisor may suggest to the Associate Chair (graduate) a designation; however, the final choice of designation will be that of the Associate Chair (Graduate).

FINANCIAL SUPPORT

1. All students accepted into the Department will be guaranteed financial support from their supervisor at or above the minimum rate specified by the University of Alberta for graduate students, dependent upon adequate performance. A student pursuing a MSc degree must be guaranteed support for a minimum of two years, a student pursuing a PhD degree for three years.
2. Students are encouraged to apply for scholarships from either the University of Alberta or elsewhere; students receiving such scholarships will be guaranteed financial support above that of the minimum rate specified by the University of Alberta for graduate students.

MSc DEGREE REQUIREMENTS

1. The FGSR requires that the MSc degree be completed within four years of initial enrollment; the Department encourages completion within three years.
2. The FGSR requires a minimum of 24 credits including thesis registration for graduation. The Department requires a minimum of 9 credits of graded graduate-level courses.
3. The Student will meet at least one time per year with his/her Supervisory Committee and will submit an Annual Review to his/her Supervisor.
4. The Department requires the successful defense of a thesis reporting the research project.

PhD DEGREE REQUIREMENTS

1. The FGSR requires that the PhD degree be completed within six years of initial enrollment; the Department encourages completion within five years.
2. The FGSR requires a minimum of 36 credits including thesis registration for graduation. The Department requires a minimum of 12 credits of graded graduate-level courses for students entering the program without a MSc degree, 6 credits for Students entering with a MSc degree.
3. The Student will meet at least one time per year with his/her Supervisory Committee and will submit an Annual Review to his/her Supervisor.
4. Students pursuing the PhD degree must have submitted a PhD Research Proposal (see below) to the Biomedical Engineering Graduate Program Committee (BMEGPC), and the Committee acted upon the Proposal within two years from the time of initial enrollment of the Student.
5. If the BMEGPC approves the Proposal, the student will become a PhD student. If the BMEGPC does not approve the Proposal, the student may submit a new or revised Proposal to the BMEGPC within two months of the Committee meeting. If approved, the student will become a PhD student; if not approved, the student will no longer be eligible for the PhD degree, but may continue with the option of pursuing a MSc degree.
6. If the BMEGPC approves the PhD Research Proposal of the student, the student must sit within four months of approval a Candidacy Examination (see below).
7. The Department requires the successful defense of a dissertation reporting the research project of the Student. Results of the research project of the Student must be accepted or appear as one or more articles in peer-reviewed publications.

PhD RESEARCH PROPOSAL

1. The Student must prepare a PhD Research Proposal that will contain the following:
 - a. Copies of the Student's University of Alberta and other institution's transcripts.
 - b. A completed Proposal Form.
 - c. A statement (maximum 200 words) written by the Supervisor outlining the potential contribution to science and medicine of the Student's PhD project.
 - d. A section written by the student, not to exceed four (4) pages exclusive of figures and legends, references, questionnaires, and tables that may be included in an appendix.
 - e. A sign-off page that the Supervisor, Supervisory Committee members, and Associate Chair (Graduate) will sign, approving the Proposal.
2. The Proposal will contain:
 - a. A review of the pertinent literature, minimum of 20 references.
 - b. The research hypothesis or objectives.
 - c. A review of the previous relevant work performed by the Student and/or research group.
 - d. The planned experimental approach of the study.
 - e. The significance of the anticipated results.
3. The completed Proposal, including signed sign-off page, must be delivered to the BME Office, Maisie Goh, within one year and ten months following initial enrollment of the Student in order to allow for assessment by external reviewers and delivery to the BMEGPC within two years following initial enrollment of the Student.

PhD CANDIDACY EXAMINATION

1. Within four months following approval of a PhD Student's Research Proposal, the Student must sit a Candidacy Examination.
2. The composition of the Examination Committee will adhere to FGSR regulations.
3. Questions from the Examination Committee members will be confined to the following areas:
 - a. General knowledge related to any courses (undergraduate or graduate) taken by the Student as they appear on the Student's transcript(s).
 - b. A general knowledge of the broad area of biomedical engineering within which the Student's research falls, for example, biomaterials, MRI, modeling, or tissue engineering, and related medical knowledge.
 - c. Limited questions related to the underlying principles of the Student's research project.

RESPONSIBILITIES

Student

1. Is aware of all regulations and takes responsibility for his/her program.
2. Is aware of all deadlines, including those of scholarships, and acts accordingly.

3. Submits appropriate forms to his/her Supervisor or the Associate Chair (Graduate) for signature and processing.
4. Maintains open communication with his/her Supervisor and Associate Chair (Graduate) concerning any problems, either real or perceived.
5. Informs his/her Supervisor regularly about progress and provides an annual report for distribution to the Supervisory Committee.
6. Makes research results accessible to an appropriate audience.

Supervisor

1. Recommends to the Student courses that should be taken.
2. Ensures that financial support for the Student and the research is in place.
3. Arranges all required meetings and examinations on behalf of the Student.
4. Ensures that the Student is aware of his/her responsibilities and meets them.
5. Establishes a realistic timeline for completion of various phases of the program.
6. Establishes a Supervisory Committee within one year of the Student commencing the graduate program and that it meets with the Student at least one time each year.
7. Completes all relevant forms, including signatures, and submits them to the Associate Chair (Graduate).
8. If going on leave or absent for an extended period, advises the Associate Chair (Graduate) which member of the Supervisory Committee will be the Acting Supervisor.
9. For PhD Students, assists with and submits to the BMEGPC a PhD Research Proposal and ensures that all members of the Supervisory Committee have approved and signed off on the Proposal.
10. For PhD Students, ensures that all members of the Supervisory Committee have signed a statement approving the suitability of the thesis prior to submission of the final oral examination.

Supervisory Committee

1. Is accessible to the Student for consultation.
2. Participates in regular Committee meetings.
3. With the Student and Supervisor, recommends courses.
4. Approves the Student's research proposal before submission to the Associate Chair (Graduate).
5. Signs a statement approving the suitability of the thesis for examination prior to submission for the final thesis defense.
6. Participates in candidacy and final defense examinations.

Associate Chair (Graduate)

1. Acts as the representative of the Department to the BMEGPC and the FGSR, and is the Department's official representative on the FGSR Council.
2. Is accessible for consultation with Students and faculty members of the Department.
3. Ensures that Students in the Department receive proper supervision and that the regulations and requirements of the FGSR and the BMEGPC are met.

4. Ensures that a Supervisor and a Supervisory Committee are set up within one year of the Student starting beginning his/her graduate program.
5. Ensures that the Supervisor has appropriate financial support for the Student and the research project.
6. Ensures, in consultation with the Supervisor and Chair of the BMEGPC as required, that the subject matter of the Student's PhD proposal falls within the broad context of biomedical engineering.
7. For PhD Students, reviews and approves the Student's PhD Research Proposal prior to it being sent to the BMEGPC and ensures that deadlines are met.
8. Ensures that the Supervisor and members of the Supervisory Committee have the qualifications and time to properly supervise the Student.
9. For Students in the Individual Interdisciplinary Studies Program, ensures that all regulations are met.
10. Monitors the progress of all Students in the Department.
11. Chairs the candidacy and final defense examinations or delegates the responsibility as necessary.

Biomedical Engineering Graduate Program Committee (BMEGPC)

1. Sets policy for graduate programs in the Department.
2. Ensures that minimum admission requirements, course requirements, residency requirements, and length of program requirements are met.
3. Assesses PhD Research Proposals with one of the following outcomes: approval, approval with conditions, resubmission after revision or presentation to the BMEGPC, or failure.

APPENDIX 13

**Biomedical Engineering Graduate Program
PhD Proposal Form**

E-mail and submit the original paper copy of the complete PhD Proposal Package to: BMGPC, Biomedical Engineering, 1011A RTF, E-mail: bmegrad@ualberta.ca

(Please insert additional rows if required – ‘place cursor in row, choose table – insert – row’)

<i>Student:</i> _____		<i>Date of Submission:</i> _____			
<i>Department:</i> _____					
<i>Title of Proposal:</i> _____					
<i>Suggested degree program. (Biomedical Sciences or Engineering)</i>					
<i>Supervisor(s):</i>					
<i>Name:</i>	<i>Position:</i>	<i>Department:</i>			
<i>Committee Members:</i>					
<i>Name:</i>	<i>Position</i>	<i>Department:</i>			
<i>I. Student's Completed Graduate Coursework (please include grades and # of Credits)</i>					
<u>Course</u>	<u>Year/Term</u>	<u>Grade/Credits</u>	<u>Course</u>	<u>Year/Term</u>	<u>Grade/Credits</u>

II. Student's Proposed Coursework					
<u>Course</u>	<u>Year/Term</u>	<u>Grade/Credits</u>	<u>Course</u>	<u>Year/Term</u>	<u>Grade/Credits</u>
III. Student's Source of Funding					
<u>Source</u>		<u>Duration</u>		<u>Amount</u>	
IV. Source of Funding for Project					
<u>Source</u>		<u>P.I.</u>		<u>Duration</u>	<u>Amount</u>
V. Student's Publications (submitted, in press or published)					
VI. Student's Honours and Awards					
VII. PhD Program Timeline: Indicate expected dates for:					
➤ Supervisory Committee Meeting(s):					
➤ Candidacy Exam:					
➤ Final Oral Exam:					

Instructions for Preparing the PhD Proposal Package

The Biomedical Engineering Graduate Program Committee (BMEGPC) requests the proposal package consist of the following information, in the following order:

1. Student's academic record, both U of A transcripts and other institutions if applicable.
2. The proposal form (Appendix 13) must be completed, stating
 - Supervisory Committee Members
 - Project Title
 - Student's completed and proposed coursework
 - Project's source of funding, including the name, duration and amount.
 - Supervisor's source of funding, including the name, duration and amount.
 - Student Publications
 - Student Honours and Awards
 - Timeline of the PhD program, indicating supervisory committee meetings, proposed month of the candidacy examination and final oral examination
3. A statement (maximum 200 words), written by the supervisor, outlining the potential contribution to science of the student's PhD project.
4. A proposal outlining the scope of the proposed research, using the following guidelines and including:
 - A written proposal which does not exceed four (4) pages (not including appendices), single spaced, size 12 Times New Roman font, and 1.0 inch or 2.5 cm margins. The proposal,
 - Must be written independently by the student
 - Must clearly and precisely illustrate the students role in the proposed research
 - Appendices - should be restricted to figures, legends, references, questionnaires and tables
 - A sign-off page with the supervisor, supervisory committee members and departmental graduate coordinators' signatures approving the proposal

As a general guideline, the proposal will contain:

- a review of the pertinent literature

- the research hypothesis
- the specific objectives of the research
- a review of the relevant work done previously by the student or the research group on the subject
- a detailed presentation of the planned experimental approach, and
- the significance of the anticipated results.

Please Note: Anything exceeding these guidelines will be returned to the student and not be included for review.

The information in the PhD proposal package will help the BMEGPC to assess the:

1. Student's background and readiness
2. Supervisor and research environment
3. Supervisory committee and their contributions to the development of the student
4. Scope, rigor and quality of the research project.

If the Committee approves the proposal, the Graduate Coordinator, Supervisor and Student are notified in writing. If the Committee has concerns about any aspect of the proposal package, further clarification will be requested.

Proposals submitted must be accompanied by a **list of 4 potential reviewers/referees outside the student's department**. This information is to be supplied by the supervisor.

E-mail the document and submit an original paper copy of the complete PhD Proposal Package to:

BMEGPC, Department of Biomedical Engineering
1098 Research Transition Facility
bmegrad@ualberta.ca

APPENDIX 14

Individual Development Plan (IDP) & Professional Development (PD)

<https://d1pbog36rugm0t.cloudfront.net/-/media/gradstudies/forms-cabinet/records/professional-development/idp-and-pd-completion-form.pdf>