Board of Governors, State University System of Florida
Limited Access Program Request
Reference: BOG Regulation 6.001, Admissions

University:	University of Florida	**Degree(s) offered:**	Biomedical Engineering
Program:	Biomedical Engineering	**Six digit CIP code:**	14.0501

1. Will the entire program be limited access or only a specific track?
The whole program will be limited access

2. If only a track is limited access, please specify the name of the track
_____

3. How many students will the program plan to accommodate?
Fall_20____ Spring_____ Academic Year Total __20__
Note: this is a new program ramping up, the ramp-up of admissions are below:

Semester	Incoming Students
Fall 2012	20
Fall 2013	30
Fall 2014	30
Fall 2015	40
Fall 2016	50
Fall 2017	70

The steady state limit of the program will be 70 new students per year.
The current student / faculty ratio in the college of engineering is 18, implying that 16*4½=72 students per class in steady state is the appropriate target student population. This will establish the University of Florida as the largest BME program in the State of Florida and make a most substantial contribution to the needs / demands of students for BME education and for the State economy for trained biomedical engineers.

4. When do you propose to initiate limited access?
Fall 2012

5. What is the justification for limiting access?

Limited access is requested because (a) very large demand is anticipated; (b) especially in the growth phase, resources will be very limited; (c) the development of quality for a new program depends on having reasonable class sizes.

(a) Anticipated Demand
In section II.B of the full proposal, details on demand nationwide, in the state of Florida and at the University of Florida are given. In summary: we can expect demand to be well-above 100 qualified students per year at the outset, with growth expected.

(b) Limited Resources
At present the BME Department has 9.25 FTE faculty. Commitments from the Provost permit growth to 16 FTE. If the faculty were to be expanded beyond this number, funding would have to be identified for salaries and for startup costs, which are high for an intensely experimental field such as BME. Although excellent new space has been created for the BME Department, it is sufficient only for growth to 16 faculty. A significantly larger

undergraduate program than planned would require new or renovated building space for additional classrooms and administration as well as for research for the faculty involved.

Note that the Department already administers a graduate program with 85 students and has a full-fledged research program.

(c) Maintenance of Quality
Creation and maintenance of a high quality program requires that enrollment be appropriately managed. This is especially true for the beginning of the program where every course offered is a new course, with need for great attention to curricular matters both great and small. The staging of the enrollment is based on knowledge and communications from other universities to permit the necessary adaptation without sacrifice of the quality of the experience for the students, as well as for faculty who must balance teaching, research and service. In the long run, enrollment proportionate to faculty size is critical to the maintenance of quality.

6. By what means will access be limited? Please provide a description of the program's admissions requirements and procedures, and indicate how these requirements and procedures ensure equal access for Florida community college Associate of Arts degree graduates in the competition for available space in the program.

Admission to the program will depend on both academic record as well as strength of interest in biomedical engineering, as judged by readers of personal essays. Students can apply after their sophomore year. As a minimum, students are required to obtain an average GPA of 3.0 in the junior level tracking courses. For UF students, this includes PCB3XXX Cell and Systems Physiology, and BME3XXX Energy Balance. For transfer students these courses are not considered and they can be taken in the Fall semester after transferring. Limited admission is evaluated based academic performance (tracking GPA, overall GPA), and a personal statement. Students will be admitted only if they are clearly capable of completing the rigorous program and if they show very strong personal commitment to the field. These criteria will apply equally to students transferring from community colleges, and as such these students are not disadvantaged.

The curriculum is designed so that students may take lower level courses that, by articulation agreement, transfer to the University of Florida and satisfy the entrance and tracking requirements. Thus they are not disadvantaged by lack of availability of coursework.

Transfer students will apply to the program along with the on-campus students, with selection criteria being common.

7. Present the current race and gender profiles of the students in the program. Discuss the impact of the proposed action on the race and gender profiles. Cite sources used for discussion. What strategies, should they be necessary, will be used to promote diversity in the program?

Engineering academic programs are striving to appeal more strongly to women and underrepresented minority groups in order to maximize the talent in our discipline. Important also is that our graduates will be our liaison to the world at large, and will educate and lead the next generation.

BME, as compared to the balance of engineering disciplines, is highly attractive to women nationwide and should be similarly attractive at the University of Florida. While engineering programs nationwide matriculate 17.8% women overall, for Biomedical Engineering this is 36.9%, the second highest behind Environmental Engineering with 43.7% (ASEE Engineering Statistics 2009).

The recruitment of underrepresented minorities is more challenging. However, Engineering at Florida has one of the most diverse student populations of all engineering schools in the US, especially including the matriculation of Hispanic students. Hence there is considerable support by the UF to achieve this goal.

To augment the more general efforts at UF, the BME Department will participate in the existing College of Engineering's "Successful Transition through Enhanced Preparation for Undergraduate Programs" (STEPUP) program. There are two components to the STEPUP program: a six-week summer residential program, and a non-residential fall and spring semester program. In addition, participants in both the residential and non-residential programs continue to participate in study halls, tutoring, and personalized academic advising throughout their freshman year. Specifically, Biomedical Engineering will do the following:

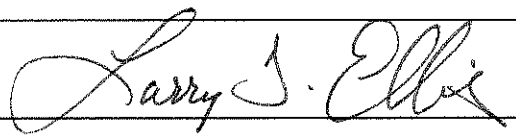
1. Have a tour and/or seminar in the department during the summer STEPUP program
2. Faculty brown bag lunches with the students during summer STEPUP program.
3. BME faculty will serve as judges in the design project poster competition for STEPUP at the end of the summer session.
4. Connect a STEPUP student interested in BME with an upper division student (as early as possible) to serve as a mentor.

The intent is to provide students with an excellent opportunity to understand what comprises biomedical engineering. By assumption many underrepresented minorities will have had very little opportunity to be acquainted with any form of engineering, let alone biomedical engineering, before arriving on campus. The program goal is to compensate for limited experience so that these students compete on an equal footing (in addition to the general goal of providing advising to students for their careers).

8. Are the graduates of the program in high demand? If so, and if the program is to be limited due to lack of adequate resources, provide a justification for limiting access to the program rather than reallocating resources from programs with low market demand.

Graduates of programs in the broad area of Biomedical Engineering are in high demand nationwide, with growth expected to exceed significantly the growth in most employment fields and other fields of engineering. Demand for the specific major of Biomedical Engineering is exceptionally high nationally. It is important to note, however, that some of the demand, for both intellectual background and future professional positions, can and is being met by traditional majors, especially those that include biomedical engineering or biology related minors as a complement to their degree program. Hence, in aggregate, the College of Engineering provides access significantly greater than can be accommodated within the BME degree program at maximum capacity. Examples of existing programs include the Biomechanics Minor in Mechanical Engineering, the Biomolecular Minor in the Chemical Engineering, and the Biomaterials track in Material Science and Engineering. The BME curriculum is quite distinctive with its rigor and degree of scientific integration. It is

important to match students to the best of the various alternatives, and restriction on enrollment is an important component. Reallocation of resources is already quite significant (e.g. 8 added faculty lines). Further reallocation to handle all who could possibly want BME is not warranted. Restriction of the program size is thus justified for reasons of both resources and appropriate guidance of students into their best career paths.

Request Initiated by:	
EEO Officer's Signature:	
Provost's Signature:	

Send the completed form to:

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