## APPENDIX C

## Board of Governors, State University System of Florida

Request Form: Limited Access Status for an Academic Program In Accordance with BOG Regulations 6.001 - General Admissions and 8.013 - Limited Access

University:	University of South Florida Tampa	Degree(s) offered:	B.S.
Program:	Biomedical Engineering	Six digit CIP code:	14.0501

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

The entire program will be limited access, including the required BME Specialization and STEM Specialization tracks (student chooses one track).

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

N/A

3. Please specify:

The total number of new students anticipated to enroll in the program each academic year: 100

The total number of students anticipated to enroll in the program each academic year: 400

- 4. When do you propose to initiate limited access? (please specify the effective term and year) Spring 2019
- 5. What is the justification for limiting access?

USF is requesting limited access status for the undergraduate Biomedical Engineering program due to the following reasons:

- 1) limited space, equipment and other instructional facilities, including required laboratories for accreditation; and
- 2) the program is of such nature that in order to demonstrate potential for success in the program, applicants must attain a grade point average of Minimum 3.5 GPA for the BME Major prerequisite courses, listed below in answer to #6.
- 6. By what means will access be limited? Please provide a description of the program's admissions requirements and procedures. Additionally, please indicate how these requirements and procedures ensure equal access for Florida College System Associate of Arts degree graduates in competing for available space in the program.

Students who enter the University of South Florida as First Time in College (FTIC) identify pre-BME as their major of choice and begin enrolling in the required critical tracking courses to prepare for upper-division coursework. The USF Office of Admissions provides all freshmen admission decisions. (Individual departments have no involvement or influence over freshmen admission decisions). During the fall

semester of the sophomore year, pre-BME majors apply for admission to the upperdivision BME major, which begins in the spring semester of the sophomore year. The department admits transfer students during the fall, spring, and summer terms.

## **Sophomores**

Current USF students must meet the following minimum requirements to be considered for admission to the upper-division program.

- Minimum 3.5 GPA for the prerequisite courses, as listed in the table below (best attempt);\*
- No more than two attempts allowed for the prerequisite courses listed in the table below (withdrawals included);
- Minimum grade of C in each prerequisite course listed in the table below;
- Completion of the first three semesters of the BME plan of study by the end of the third semester after matriculation to the University;
- Completed BME departmental online application.

\*Only the best attempt in each prerequisite course as listed below, is considered for admission into the BME program.

## **Transfers**

Transfer students must meet the following minimum requirements to be considered for admission into the BME program.

- Minimum 2.0 cumulative (overall) GPA;
- Minimum 3.5 GPA in the prerequisite courses listed below;
- Minimum grade of C in each prerequisite course listed in the table below;
- No more than two attempts allowed for the prerequisite courses listed in the table below (withdrawals included);
- Completed BME departmental online application.

Applicants who do not meet the minimum admission requirements as stated above will not be eligible for admission into the BME program.

Transfer applications are referred to the department only after the USF Office of Admissions (including official transcripts) considers them complete. Applications are reviewed periodically and not on a rolling basis. The date of review may vary depending on the number of applications received.

Transfer applicants coming from out-of-state or private Florida institutions will be considered on a space available basis only.

USF Course	
Prefix	USF Course Name
MAC 2311	Calculus I
MAC 2312	Calculus II
MAC 2313	Calculus III
MAP 2302	Differential Equations
CHM 2045	General Chemistry I
CHM 2045L	General Chemistry I
	Laboratory
CHM 2046	General Chemistry II
CHM 2046L	General Chemistry II

	Laboratory
PHY 2048	General Physics I - Calculus
	Based
PHY 2048L	General Physics I Laboratory
PHY 2049	General Physics II - Calculus
	Based
PHY 2049L	General Physics II Laboratory
CHM 2210	Organic Chemistry I
CHM 2210L	Organic Chemistry I Lab

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 and cite sources used to inform the discussion. What strategies, should they be necessary, will be used to promote diversity in the program?

The program is new, so there is no current race and gender profile.

Biomedical Engineering is one of the top two most popular engineering majors for women, so we anticipate attracting female applicants in proportions at or exceeding the other engineering majors (<a href="https://www.asee.org/papers-and-publications/publications/collegeprofiles/15EngineeringbytheNumbersPart1.pdf">https://www.asee.org/papers-and-publications/collegeprofiles/15EngineeringbytheNumbersPart1.pdf</a>
Page 12). Also, USF is notably ranked #8 in the US, for all universities awarding doctorate degrees in engineering, for percentage of women graduates (35.1%); which bodes well for attracting women for our new undergraduate BME program (<a href="https://www.asee.org/papers-andpublications/publications/college-profiles/15EngineeringbytheNumbersPart1.pdf">https://www.asee.org/papers-andpublications/publications/college-profiles/15EngineeringbytheNumbersPart1.pdf</a>

Page 23). Underrepresented ethnic groups are highly underrepresented in STEM fields such as engineering

(https://www.asee.org/papersandpublications/publications/college-profiles/15EngineeringbytheNumbersPart1.pdf

Page 13); however, the USF College of Engineering has relatively high numbers compared to many other colleges of engineering nationally. USF is one of the national leaders in awarding graduate degrees in Engineering to Black students, as cited in Diverse Issues in Higher Education, Top 100 Producers of Graduate Degrees, 2017 -African American Engineering Research Doctorates (USF ranked #12 in the US) (http://diverseeducation.com/top100/pages/GraduateDegreeProducers2017.php?dts earch=&dtdegree=Doctorate\Res\/Schol,%20Other&dtrace=African%20American&dt major=Engineering&dtschool=&dtstate=&dtpage=1) and Hispanic students, as cited in: Diverse Issues In Higher Education, Top 100 Producers of Graduate Degrees, 2017 -Hispanic Engineering Research Doctorates (USF ranked #2 in the US) (http://diverseeducation.com/top100/pages/GraduateDegreeProducers2017.php?dts earch=&dtdegree=&dtrace=Hispanic&dtmajor=Engineering&dtschool=&dtstate=&dtp age=0). News release citation: <a href="http://news.usf.edu/article/templates/?a=3576">http://news.usf.edu/article/templates/?a=3576</a>. Consequently, we expect that our new degree program in Biomedical Engineering will have a similar favorable mix of underrepresented minorities, building upon the successes of the USF College of Engineering in related majors such as Chemical, Electrical, Mechanical, Industrial and Civil Engineering. In addition, the intellectual and professional environment in the USF College of Engineering is very favorable for underrepresented minorities in support of our new undergraduate BME Major; specifically, the USF College of Engineering is ranked in the top 20 in the US for all

colleges of engineering for the number of Hispanic Professors with Tenure/Tenure Track (<a href="https://www.asee.org/papers-andpublications/publications/collegeprofiles/15EngineeringbytheNumbersPart1.pdf">https://www.asee.org/papers-andpublications/publications/collegeprofiles/15EngineeringbytheNumbersPart1.pdf</a> Page 33).

In addition, The College of Engineering continues to be committed to engaging underrepresented and minority high school students into engineering programs. The College engages routinely with teachers, students and parents in Title I schools to attract students from diverse racial and ethnic and socio-economic backgrounds. This BME major will leverage the College's recruitment and outreach programs such as "Bulls I Mentoring", ESTEAM events, Selmon S3 program and course offerings for high school students with a goal to secure a robust pipeline of diverse student population.

Another specific step USF will take to ensure a diverse student body will be working closely with the coordinator of minority student recruitment in the USF College of Engineering. USF will actively recruit applicants from top high schools nationally with excellent underrepresented minority students, including attendance at state and national conferences, and visitations and summer courses at USF, and other successful recruiting techniques for these student populations.

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.

Yes, graduates are in high demand (see full data in the accompanying full BME Major Proposal). There are no programs in the USF College of Engineering with low market demand, and these existing programs are currently under-staffed relative to their student enrollments; so no reallocation is possible.

Request Initiated by:	Robert Frisina, PhD; Chair and BME Director
EEO Officer's Signature:	
Provost's Signature:	3/5/18
University Board of Trustees Approval Date (please include a copy of the UBOT agenda with this form)	