Agreement Between

The Department of Electrical and Computer Engineering at Colorado State University

and

The Department of Electrical and Computer Engineering at University of Puerto Rico at Mayagüez

I. INTRODUCTION:

The Department of Electrical and Computer Engineering (ECE) at Colorado State University (CSU) and the Department of Electrical and Computer Engineering at the University of Puerto Rico at Mayagüez (UPRM) agree to establish a collaborative Ph.D. program in Electrical and Computer Engineering. The main goals of this agreement are: 1) to encourage underrepresented students from UPRM to pursue graduate studies and careers in engineering research, and 2) to provide a means for faculty at UPRM to mentor Ph.D. graduate engineering students. UPRM does not currently offer a Ph.D. degree in ECE. Therefore, until such time as the UPRM ECE Department establishes a Ph.D. degree program, this collaborative agreement will serve as an important bridge for UPRM students and faculty researchers. The Ph.D. degree will be granted by CSU and the student is required to spend a minimum of two semesters in residence on the CSU campus. However, students will conduct most of their research on the UPRM campus working with both their UPRM and CSU advisors.

II. FACULTY PARTICIPATION:

- 1. One faculty member each from CSU and UPRM will serve as co-chairs of the student's dissertation committee. Both co-chairs will work closely with the Ph.D. student supervising the research and serving as the primary mentors.
- 2. UPRM faculty members must become affiliated members of the CSU ECE department in order to serve as a voting member of the student's dissertation committee. To apply for affiliate faculty status at CSU, UPRM faculty will state their interest in writing to the head of the CSU ECE Department and will include a current copy of their curriculum vita. The affiliate faculty appointments are voted on by the department faculty. Similarly, interested CSU faculty will apply to the Departmental Graduate Committee at UPRM for affiliate faculty status at UPRM.
- 3. Other UPRM ECE faculty may also elect to become affiliate faculty members at CSU and serve on the student's dissertation committee.
- 4. UPRM dissertation committee members must attend the student's oral qualifying and



preliminary exams and Ph.D. dissertation defense. Participation by videoconference is acceptable if travel to CSU is not feasible.

III. STUDENT PARTICIPATION:

It is envisioned that the student will come to CSU early in the course of their Ph.D. program to satisfy the CSU residency requirement and to take courses in preparation for the Ph.D. The requirements for the Ph.D. degree are described briefly below and in more detail in the CSU Graduate School Bulletin. These requirements are subject to change as in any graduate program.

- 1. The student must be accepted into the UPRM Electrical and Computer Engineering Department as a 'visiting' student registering in any regular course and/or a 0-9 credits per semester special course in "Thesis for Collaborative PhD Program".
- 2. Students must be accepted into the CSU Electrical and Computer Engineering Department Ph.D. program. It is recommended that students submit their CSU application at least one semester prior to the start of their year in residence at CSU. Official CSU graduate program deadlines are September 1 for Spring admission and April 1 for Fall admission.

In order to be admitted to the CSU graduate school, students must have graduated from an accredited university with a bachelor's degree, have a minimum 3.0 GPA on a 4.0 scale, have taken the GRE, and must submit an application, including at least 2 letters of recommendation, and pay the application fee.

- 3. The student should indicate on their CSU application that they are applying to the CSU/UPRM ECE Collaborative Ph.D. program.
- 4. The student will be provided with office and laboratory space (as required) while on the CSU or UPRM campus.
- 5. Students who apply to the CSU ECE Ph.D. program may also apply for the Colorado PEAKS Alliance for Graduate Education and the Professoriate Fellowships.
- 6. Students may also apply for other CSU graduate fellowships.
- 7. Students entering the Collaborative Program will sign a statement to the effect that they will return to UPRM after completing the residency requirement at CSU and remain at UPRM working as required for the PhD degree unless directed otherwise by the graduate committee. The exact duration of the residency on either campus will be determined on a case-by-case basis.

IV. Ph.D. DEGREE REQUIREMENTS:

To complete the Ph.D. degree, students must fulfill the same graduate school and

departmental requirements as any other CSU ECE Ph.D. student. (72 credit hours for Ph.D.)

- 1. The student must spend a minimum of two semesters in residence on the campus, after their acceptance into the CSU ECE Ph.D. Program. The student must register for a minimum of 9 regular course credits (non-dissertation credits) while satisfying the residence requirement. Student may register for dissertation credits during subsequent semesters.
- 2. Overall the student must maintain a 3.0 or higher GPA.
- 3. The student must pass the two Ph.D. exams, namely the qualifying exam and the preliminary exam.
- 4. Students must defend their Ph.D. dissertation on the CSU campus and schedule it with the CSU Graduate School at least 4 weeks in advance of the exam date. All committee members must be present for the defense (either in person or by video conference).
- 5. Students who wish to complete the M.S. degree at CSU and then pursue their doctoral degree, will be able to do so, following similar rules for the M.S.

V. FUNDING:

This program is open to U.S Citizens and Permanent Residents only. Funding to the student will be in the form of full fellowships, renewable according to the student's progress. The amount of the fellowship is determined by the individual program and the faculty in charge of the student. For example the fellowship amounts in the dept of ECE at UPRM range between \$15,000 to \$18,000 per year, in addition to tuition support. Individual faculty members are responsible for arranging funding for their travel between campuses. At a minimum, the student must travel to the CSU campus to attend the qualifying and preliminary exams as well as the Ph.D. dissertation defense. This travel can be exempted if the graduate committee is satisfied with the level of interaction offered by the prevailing videoconference technologies.

 UPRM will be responsible for funding student stipend and any student travel through programs supported by NSF or other agencies. While in residence at CSU, the student may receive a stipend from UPRM.

CSU will not encourage students to apply to this program without an agreement from a UPRM faculty member. Students coming under this agreement are eligible to apply to the CSU Graduate Assistantship Office for a tuition premium (difference between in-state and out-of-state tuition). The in-state tuition will be paid from the funding resources of the sponsoring faculty at CSU. Two tuition premium awards will be made available for this program at the start, with a plan to add one additional award per year. In summary, students coming under this program will have their tuition fee paid by CSU according to the above arrangement. As always, financial support is subject to the availability of

funds.

VI. CSU STUDENT FEES:

- 1. Students will be responsible for other required fees, including student activities and technology fees. For a full-time student the student activity fees for the year 2003 are \$418.20 per semester (to be paid for fall and spring semesters). These fees cover access to student health services, the recreational center, athletics and other programs. The technology fee for the college of engineering is \$150 per semester.
- 2. Issues such as health insurance and housing will be taken care of by the students.
- 3. While conducting research at UPRM, if they are not registered at CSU, a Ph.D candidate must pay a continuous registration fee to CSU. As of 2003 this fee is \$150 per semester. This fee must be paid to maintain status as a CSU Ph.D. student.

VII. UPRM STUDENT FEES:

- 1. The students while at UPRM need to follow the local regulations for health insurance, which may require paying the corresponding fees.
- 2. While at UPRM, students may register in a special graduate-program course at UPRM, called "Thesis for Collaborative PhD Program", which carries a flexible 0-9 credits hours load. The student can also register in courses approved by his/her graduate committee, which may be transferred to CSU in order to comply with CSU requirements as specified in Section IV.2.

VIII. DURATION OF AGREEMENT:

This agreement will be in effect a minimum of five years beginning from the date it is signed by both parties. At the end of the five years this agreement will be reviewed and considered for renewal by both parties. In addition, either institution can withdraw from the MOU with one semester notice to the other institution. In the event of premature cancellation of this agreement every effort must be made to accommodate completion of the degrees of the students in the program.

The undersigned approve this agreement on this 1 day of 03, 2003. Colorado State University Larry Renley, President Peter Nicholls, Provost Patrick Pellicane, Assistant Dean and CO-AMP Director Graduate School Dean Neal Gallagher, ECE Department Head Dean College of Engineering Edwin Chong, V.N.Bringi Professor in Charge of the Program Review Approved Chair, Graduate Committee University of Puerto Rico Mayagüez University Contracts Manager

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