Requirements for a Joint Ph.D. Degree in Computer Science and Psychology with CSE as Primary and Psychology as Secondary Field

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1 Introduction

This document specifies rules and regulations for a Joint Ph.D. Degree in Computer Science and Psychology. It is the result of adapting the generic document about joint Ph.D. programs in computer science and engineering and another field (see the attached document “Requirements for a Joint Ph.D. Degree in Computer Science and Another Field” approved by the faculty of the Department of Computer Science and Engineering in March 2004) to the specific information for the Joint Ph.D. in computer science and psychology with computer science the primary and psychology the secondary field (the requirements for psychology as primary and computer science as secondary field are specified in the attached document “Proposal for a Joint Ph.D. Degree in Psychology and Computer Science and Engineering”, which has been approved by the faculty of the Department of Computer Science and Engineering in February 2005).

2 Admission to CSE as Primary and Psychology as Secondary Departments

Despite its being a single degree, the joint degree is nonetheless based on the idea that one of the two departments should be designated the department of primary interest and the other the department of secondary interest. The
student will be admitted through the CSE department and will do the ma-
majority of her/his work and derive the majority of her/his financial support
from it. He or she must also in due course apply and be admitted to the
Psychology department for pursuit of the joint degree. This application and
admission, however, is not intended to follow the usual procedure. Admission
by the Psychology department signifies only admission to pursue the joint
degree (it does not signify admission to pursue the regular Ph.D. in that
department). Admission as a regular Ph.D. student in Psychology may, of
course, be sought, but it is not constituted by admission into the joint degree
program.

3 Qualifying Exams

Each Ph.D. student in a Joint Ph.D. program with Computer Science and
Engineering as primary must take and pass the qualifying examinations in
CSE (as specified in the graduate student handbook). In addition to the
qualifying exam in CSE, students in the joint degree program will be required
to satisfactorily complete one of the written qualifying examinations in one of
the Program Areas in the Psychology Department determined jointly by the
student, his/her psychology advisor and the Director of Graduate Studies in
the Psychology department. The constituency of the examination committee
for the basic examinations will be the two co-advisors and two additional
examiners from the area of specialization in psychology.

4 Advising

Each student in the joint degree program will have two advisors, one from
the CSE and one from the psychology department. Choice of advisors will
be mainly the student’s prerogative.

5 Course Work

5.1 CSE (Primary)

Joint Ph.D. students with CSE as the primary department have to satisfy
the following requirements:
• a minimum of 36 hours of credits
• three mandatory core courses (CSE 511, CSE 521, and CSE 542)
• two semesters of research seminar
• four additional courses from the “analysis”, “application”, and “system” areas (at least one course from each)
• a maximum of 15 credit hours may be awarded for courses taken outside CSE (of which up to 6 can come from departments other than the secondary)

5.2 Psychology (Secondary)
Joint Ph.D. with Psychology as secondary department will be required to take 24 credits in psychology including completion of Introductory Statistics (PSY 507 and 508), Advanced Research Methods (PSY 610) or Psychological Measurement (PSY 609), and one additional statistics course with a grade of B- or better. The remaining credits will be filled in a way agreed upon by the student, his/her psychology advisor and the director of graduate studies in the psychology department. The remaining coursework should be chosen so that the student is prepared to pass the qualifying exam in the student’s chosen Program Area within the Psychology Department.

6 Master Thesis
Ordinary Ph.D. students in computer science are required to submit a proposal for a master’s thesis and defend it before a thesis committee composed of a minimum of three faculty. The thesis work is then completed and defended before the same committee. The same requirement will apply to joint Ph.D. students with CSE as the primary and psychology as the secondary department with the additional requirement that both CSE and psychology advisors be part of the master’s thesis committee and that a fourth member be added so that the advisors do not constitute a majority.
7 Examinations

All joint Ph.D. students are required by the graduate school to pass an oral candidacy examination. There will be only one joint oral examination, which will be an defense of the dissertation proposal (see the Section on “Dissertation” below). The oral exam should be completed no later than the end of the joint Ph.D. student’s fifth year of graduate studies.

8 Dissertation

Since the program is a single degree program, there will be one dissertation of interest to both fields. It will be co-directed by the advisor from the primary department and the advisor from the secondary department. It should have both significant contributions from computer science and psychology, and be of such a quality as to make it suitable for publication in a good professional journal. Approval by both advisors will be required for acceptance of the dissertation. The examination committee will consist of the two coadvisors plus at least three additional members — at least two from the Department of Computer Science and Engineering, and at least one from the other department. The choice of the additional members will be made by the student in consultation with the two coadvisors.

9 Determination of Fitness to Continue in the Program

The progress decision for joint Ph.D. students will follow whatever rule is in effect for regular CSE Ph.D. students as of the year of admittance of the joint Ph.D. student.

10 Financial Support

As mentioned above, it seems reasonable to expect the joint degree to require six to seven years for completion. Assuming a six year model, CSE as the primary department should provide support for five of those years while Psychology as the secondary department will provide support for one year at its customary level. Finally, joint Ph.D. students with CSE as primary
department must satisfy the two-semester TA requirement, like ordinary Ph.D. students in CSE.

Approved.

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Director of Graduate Studies, Department of Computer Science and Engineering  Date

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Director of Graduate Studies, Department of Psychology  Date

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Chair, Department of Computer Science and Engineering  Date

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Chair, Department of Psychology  Date

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Dean, College of Arts and Letters  Date

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Dean, College of Engineering  Date

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Vice President, Graduate School  Date