UNIVERSITY OF WASHINGTON

OFFICE OF THE PRESIDENT

April 17, 2009

Dean Matthew O'Donnell
College of Engineering
Box 352180

Dear Matt:

Based on the recommendation of its Subcommittee on Admissions and Programs, the Faculty Council on Academic Standards has recommended approval of the change in name of the degree program from Technical Communication to Human Centered Design and Engineering; revised program requirements for the Bachelor of Science in Human Center Design and Engineering degree; and the creation of new options in Technical Communication and Human-Computer Interaction. A copy of the changes is attached.

I am writing to inform you that the Department of Human Centered Design and Engineering is authorized to specify these requirements beginning autumn quarter 2009.

The new requirements should be incorporated in printed statements and in individual department websites as soon as possible. The *General Catalog* website will be updated accordingly by the Registrar's Office.

Sincerely yours,

Mark A. Emmert
President

Enclosure

cc: Mr. Gian Bruno (with enclosure)
Mr. Robert Corbett (with enclosure)
Dr. Deborah Wiegand (with enclosure)
Mr. Todd Mildon, J.D. (with enclosure HCDE-20090127)

301 Gerberding Hall • Box 351230 • Seattle, Washington 98195-1230 • 206-543-5010 • FAX: 206-616-1784

FEB 0 9 2009

OFFICE USE ONLY

Control # HCDE-20090127

UNIVERSITY OF WASHINGTON

CREATING AND CHANGING UNDERGRADUATE ACADEMIC PROGRAMS

For information about when and how to use this form: http://depts.washington.edu/grading/pdf/UGSummary.pdf

College: Engineering

Department or Unit: Technical Communication

Date: 1/27/09

New Programs

- ☐ Leading to a Bachelor of _____ in _____ degree.
- ☐ Leading to a Bachelor of _____ degree with a major in _____.
- ☑ Leading to a HCI or TC Option within the existing major in ~~Technical Communication~~ HCDE.
- ☐ Leading to a minor in _____.

Changes to Existing Programs

- ☐ New Admission Requirements for the Major in _____ within the Bachelor of _____.
- ☐ Revised Admission Requirements for the Major in ~~HCDE~~ within the Bachelor of _____.
- ☑ Revised Program Requirements for the Major in ~~Technical Comm~~ within the Bachelor of Science.
- ☐ Revised Requirements for the Option in _____ within the major in _____.
- ☐ Revised Requirements for the Minor in _____.

Other Changes

- ☑ Change name of program from Technical Communication to Human Centered Design & Engineering
- ☐ New or Revised Continuation Policy for _____.
- ☐ Eliminate program in _____.

Proposed Effective Date:

Quarter: ☑ Autumn ☐ Winter ☐ Spring ☐ Summer **Year:** 20 09

Contact Person	Contact's Phone	Contact's Email
Gian Bruno	206 – 543 – 1798	gbruno@u.washington.edu

EXPLANATION OF AND RATIONALE FOR PROPOSED CHANGE

For new programs, please include any relevant supporting documentation such as student learning outcomes, projected enrollments, letters of support and departmental handouts. *(Use additional pages if necessary).*

Please see attached

CATALOG COPY

Catalogue Copy as currently written. Include only sections/paragraphs that would be changed if you request is approved. Please cross out or otherwise highlight any deletions.

Please see attached

PROPOSED CATALOG COPY

Reflecting requested changes (Include exact wording as you wish it to be shown in the printed catalog. Please underline or otherwise highlight any additions. If needed, attach a separate, expanded version of the changes that might appear in department publications)

Please see attached

SIGNATURES (required)

Chair/Program Director — Date 1-28-09

~~Dean~~ College Committee — Date FEB 3, 2009

~~College Committee~~ Dean — Date 2-4-09

Faculty Council on Academic Standards — Date 2/27/2009

UoW 1503 (12-05) REVERSE

APR. 10, 2009

RESET FORM

January 22, 2009

MEMORANDUM

TO: University of Washington Curriculum Committee

FROM: Jan Spyridakis, Chair, Human Centered Design & Engineering
Jennifer Turns, Associate Chair for Learning, Human Centered Design & Engineering
Gian Bruno, Adviser, Human Centered Design & Engineering

RE: Changes to the Undergraduate Program in Human Centered Design & Engineering (formerly Technical Communication)

With the attached information, we are requesting changes to the undergraduate program in Human Centered Design & Engineering (formerly Technical Communication).

The Department of Technical Communication (TC) received approval from the Office of the Provost on January 1, 2009 to change its name to the Department of Human Centered Design & Engineering (HCDE), and we will implement our new name in autumn 2009. The changes requested in this information packet are intended to bring the undergraduate program into alignment with the new name while also retaining our affiliation with the field of Technical Communication.

Independent of this request, we have also requested that all course prefixes be changed from "T C" to "HCDE" starting autumn 2009. This request has already received approval from the Office of the Provost and has been forwarded to the Registrar and the Curriculum Office. We have used the "HCDE" prefix in this proposal for clarity, moving forward.

This packet contains the following information:

1. Schematic representation of proposed undergraduate program. A diagram illustrating the proposed undergraduate program in terms of the common requirements for all undergraduates, the three proposed completion paths (an HCI option, a TC option, and an undesignated path).
2. Explanation and rationale for proposed changes. An explanation of the proposed changes to the Bachelor of Science in Technical Communication degree.
3. Proposed catalog copy. The catalog copy that we are proposing for our new undergraduate program.
4. Catalog copy as currently written. A copy of the current catalog descriptions of our program, provided for reference.
5. Human-Computer Interaction (HCI) Memo. Because the HCI option is a cross-disciplinary, cross-departmental endeavor, we have included a memo drafted by the partnering departments that explains the rationale for the HCI option and the commitments made by the partnering departments.

In closing, we are quite excited about the proposed changes and look forward to having them in place in the autumn 2009 term. To this end, we have endeavored to explain our proposed changes clearly and succinctly. Please do not hesitate to forward any questions to us.

Proposed Human Centered Design & Engineering program Summary

Admission Requirements (37 credits)

13 Written & Oral Communication Credits (including HCDE 231)
10 Math Credits
15 Natural Science Credits

Core Course Requirements (43 credits)

HCDE 310 (5), HCDE 400 (5), HCDE 403 (3), HCDE 411 (5), HCDE 417 (5), HCDE 418 (5), HCDE 437 (5) , HCDE 493 (5), HCDE 495 (3), HCDE 496 (2)

Degree Options (27 credits)

Human-Computer Interaction Option	Technical Communication Option	No Option Selected
•4 courses from the list below (see the proposed catalog copy for complete details of allowed course combinations) •7 to 9 additional approved elective credits ART 383, 483, 484 CSE 440, 441 HCDE 419, 438, 455 INFO 310, 324, 444, 447, 498	•HCDE 401 (5) •3 courses from the list below (12 to 15 HCDE credits) •7 to 10 additional approved elective credits HDCE 402 HCDE 407 HCDE 412 HCDE 415 HCDE 435	•2 courses from list below (6 to 10 HCDE credits) •17 to 21 additional approved elective credits HCDE 401 HCDE 402 HCDE 407 HCDE 412 HCDE 415 HCDE 419 HCDE 435 HCDE 436 HCDE 455

Technical/Analytical (12 credits)

CSE 142 or PHIL 120 and the remaining credits from:
AA 101, AA 210, CSE 143, CHEM E 260, CIVE 220, EE 215, ENGR 100, ENGR 101, INDE 250, IS 300, ME 123, ME 230, MSE 170, TC 496

EXPLANATION AND RATIONALE FOR PROPOSED CHANGES TO THE BACHELOR OF SCIENCE IN TECHNICAL COMMUNICATION DEGREE

Over the last several years, our department has engaged in a major strategic planning effort that focused on all aspects of our department, including our name. As part of that effort we reviewed each of our academic programs with input from faculty, staff, students, alumni, employers, and other stakeholders. Based on that review, we have changed our name from Technical Communication to Human Centered Design & Engineering and now propose the following changes and improvements to our undergraduate BS degree, effective for students who enter autumn 2009:

1. Change the title of our degree from "Bachelor of Science in Technical Communication" (BSTC) to a "Bachelor of Science in Human Centered Design & Engineering" (BSHCDE). This change reflects the new name of our department and more accurately represents the activities that our students and faculty engage in.

2. Change our program requirements to add required courses that focus on areas of strength in our department and require that all students take at least one course in each of those areas. Those areas are Usability Testing (HCDE 417, 5 credits), User Experience Design (HCDE 418, 5 credits), and Directed Research (HCDE 496, 2 credits).

3. Create multiple pathways by which students can complete their degree based on their interests. To this end, we are also creating two transcriptable options: "Human-Computer Interaction" (HCI) and "Technical Communication" (TC). The HCI and TC options allow students to gain additional depth in a focused area of study and highlight an area of knowledge that is well understood by employers. The HCI option is the result of a collaborative effort between faculty in the Department of Technical Communication, Computer Science & Engineering, the School of Art Division of Design, and the Information School. A memorandum of support for the HCI option from the chairs and directors of those departments has been provided as attachment 1.

4. With the change in name and the creation of degree options, remove required core courses that are more aligned with the Technical Communication focus specifically. This provides students with the flexibility to complete the options/customize their degree. The following core courses would no longer be required of all students, and instead become electives or specific option requirements:
   HCDE 401 Style in Scientific and Technical Writing (5)
   HCDE 402 Scientific and Technical Editing (5)
   HCDE 407 Software User Assistance (5)
   HCDE 412 Print Production (5)

Note: A graphic that summarizes the entire Bachelor of Science in Human Centered Design & Engineering degree after all changes are finalized is attached.

Currently enrolled students will not be penalized or negatively impacted in any way by the proposed changes. They will be able to complete their program under the old requirements without issue. All changes apply to new incoming students or current students who meet the new program requirements.

PROPOSED CATALOG COPY

The undergraduate program in Human Centered Design & Engineering (HCDE) emphasizes the technological, communicative, design, and social dimensions of computing. HCDE offers its students a strong education in user-centered design, user-interface design, usability research, human-computer interaction, software user assistance, human-robot communication, computer-supported cooperative work, and technical content development. Coursework takes place in the context of social and political issues and human needs. To support this interdisciplinary mission, HCDE faculty have expertise from several fields—Cognitive Psychology, Computer Science, Education, Industrial Engineering, Information Studies, Language and Literature, and Linguistics.

Our students work as interface designers, user researchers, technical communicators, and in many other roles as well. They obtain outstanding jobs. Many go to high-tech industry (e.g., Microsoft, Boeing, Intel, Amazon, T-Mobile, Google). In general students are prepared to assume positions of intellectual leadership in industry, government, non-profit organizations, and academia

HCDE also has a strong international perspective. From technology adoption in Central Asia to humanitarian logistics in Mozambique to interfaces for handheld digital devices in Germany, we explore what it means to communicate globally. The Technical Japanese program provides a unique opportunity to develop cross-cultural experience and expertise.

The HCDE department is a small, academic community. HCDE emphasizes student-centered, hands-on learning. Beyond taking traditional classroom courses, students join research groups and work side-by-side with top-ranked professors to enlarge the knowledge base of the fields encompassed the by the Department. Our educational mission is supported by first-rate facilities. Undergraduate students are encouraged to attend conferences and professional meetings.

Undergraduate Program

Adviser
14 Loew Hall, Box 352195
206-543-1798 or 206-616-0797
tcadvise@u.washington.edu

The Department of Human Centered Design & Engineering offers the following programs of study:

- The Bachelor of Science in Human Centered Design & Engineering degree
    - Transcripted option in Human-Computer Interaction
      ~or~
    - Transcripted option in Technical Communication
      ~or~
    - Non-transcripted, individualized course of study
- A minor in technical Japanese

Bachelor of Science in Human Centered Design & Engineering

Suggested First-Year College Courses: HCDE 231, approved math or statistics (see list on HCDE website), approved science (see list on HCDE website)

Department Admission Requirements

Applicants are considered in two groups--Early Admission and Upper-Division Admission. Admission is competitive. Completion of minimum requirements does not guarantee admission. All applicants have the right to petition and appeal the department's admission decision.

Early Admission

1. *Course requirements:* 38 credits to include 10 credits of approved mathematics or statistics; 15 credits of approved natural science; and 13 credits of approved written and oral communication (including HCDE 231). All courses must be completed prior to the July 1 application deadline.
2. Applicants must be currently enrolled at the UW and must have completed a minimum of 15 credits taken in residence at the UW. Application deadline is July 1 for autumn quarter only.
3. *Grade requirements:* Minimum 3.00 GPA in written and oral communications courses and minimum 2.00 cumulative GPA.

Upper-Division Admission

1. *Course requirements:* 10 credits of approved mathematics or statistics; 15 credits of approved natural science; and 13 credits of approved written and oral communication (including HCDE 231). All courses must be completed prior to the July 1 or February 1 application deadlines.
2. 60 credits completed by application deadline: July 1 for autumn quarter and February 1 for spring quarter.
3. Students applying in their senior year must spend a minimum of four quarters in the program.
4. *Grade requirements:* Minimum 3.00 GPA in written and oral communications courses and minimum 2.00 cumulative GPA.

Students may also declare into the Human Centered Design & Engineering degree program through the College of Engineering Advanced Admission program (see the College of Engineering section for Advanced Admission entrance and continuation requirements).

Graduation Requirements

180 credits as follows:

General Education Requirements (93 credits)

1. *Written and Oral Communications (13 credits):*
    a. 5 credits of English composition from the University list
    b. HCDE 231
    c. 5 credits of oral/written communication from HCDE list (see adviser).
2. *Visual, Literary, & Performing Arts (VLPA), and Individuals & Societies (I&S) (30 credits):*
    a. *Visual, Literary, & Performing Arts* (minimum of 10 credits)
    b. *Individuals & Societies* (minimum of 10 credits)
3. *Math and Natural Science (50 credits):*
    a. *Mathematics (minimum 15 credits; see list of qualifying courses on HCDE website)*
    b. *Science (minimum 15 credits; see list of qualifying courses on HCDE website)*

Make website consistent

Major Requirements (82 credits)

1. *Human Centered Design & Engineering Core (43 credits)*: HCDE 310, HCDE 400, HCDE 403, HCDE 411, HCDE 417, HCDE 418, HCDE 437, HCDE 493, HCDE 495 (3), HCDE 496 (2)
2. *Technical/Analytical (12 credits):* Must include either CSE 142 or PHIL 120.
3. Area of concentration (27 credits). Students can optionally obtain a transcriptable option in either Human-Computer Interaction (HCI) or Technical Communication (TC). Alternatively, students can work with their adviser to select a coherent and relevant list of approved electives to create a non-transcripted, individualized area of specialization that is aligned with their personal interests or career goals.

Free Electives (5 credits)

Transcriptable Options:

Human-Computer Interaction (HCI) Option (27 credits). The notation "Human-Computer Interaction" is indicated on the permanent record, or transcript, of a student who graduates with a degree of Bachelor of Science in Human Centered Design & Engineering and who completes the following requirements.

1. Takes a minimum of four classes from the list below.
2. Takes at least one class in two of the four course areas (other than Foundations): i.e., User Interface Software and Technology; Design; Usability and User Research; Social and Ethical Dimensions.
3. Takes at least one class in the list below from a participating department outside Human Centered Design & Engineering.
4. Takes at least seven to nine additional approved elective credits.

Course Areas:

Foundations
ART 383 Introduction to Interaction Design (5)
CSE 440 Introduction to HCI: User Interface Design, Prototyping, and Evaluation (5)
HCDE 419 Concepts in Human-Computer Interaction (5)

User Interface Software and Technology
CSE 441 Advanced HCI: Advanced User Interface Design, Prototyping, and Evaluation (5)
INFO 344 Web Tools and Development (5)
HCDE 438 Web Technologies (5)

Design
ART 483 Fundamentals in Interface Design (5)
ART 484 Advanced Projects in Interaction Design (5)
INFO 424 Information Visualization and Aesthetics (5)
HCDE 455 User Interface Design (4)

Usability and User Research
INFO 310 Individual Perspectives on Information Systems (5)

Social and Ethical Dimensions

INFO 444 Value Sensitive Design (5)
INFO 447 Computer Supported Cooperative Work (5)

The following courses may be approved within any of the course areas on an individual and per-course basis, depending on the topic matter and its suitability to an area within the HCI option.

INFO 498 Special Topics in Informatics
HCDE 496 Directed Research in Technical Communication (1-3)
HCDE 498 Special Topics (1-5)

Technical Communication Option (27 credits). The notation "Technical Communication" is indicated on the permanent record, or transcript, of a student who graduates with a degree of Bachelor of Science in Human Centered Design & Engineering and who completes the following requirements.

1. Takes HCDE 401 Style in Scientific and Technical Writing (5).
2. Takes three of the HCDE courses listed below.
3. Takes at least 7 to 10 additional approved elective credits.

Additional HCDE Courses:

HCDE 402 Scientific and Technical Editing (5)
HCDE 407 Software User Assistance (5)
HCDE 412 Print Production (5)
HCDE 415 Production Editing (4)
HCDE 435 Introduction to Content Management (3)

Undesignated Path (27 credits). Students who choose to complete the Bachelor of Science in Human Centered Design & Engineering without a transcripted option will complete the following requirements.

1. Takes two of the HCDE courses listed below.
2. Takes 17 to 21 additional approved elective credits. Must demonstrate a coherent and relevant area of specialization.

Additional HCDE Courses:

HCDE 401 Scientific and Technical Writing (5)
HCDE 402 Scientific and Technical Editing (5)
HCDE 407 Software User Assistance (5)
HCDE 412 Print Production (5)
HCDE 415 Production Editing (4)
HCDE 419 Concepts in Human-Computer Interaction (5)
HCDE 435 Introduction to Content Management (3)
HCDE 436 Design and Authoring of CAI (3)
HCDE 455 User Interface Design (5)

Minor

Minor Requirements: Technical Japanese: Minimum of 25 credits to include HCDE 461 (5), HCDE 462 (5), HCDE 463 (5), plus 10 credits from the approved list of elective courses. For more information, contact the Technical Japanese Office, 13 Engineering Library.

Student Outcomes and Opportunities

- *Learning Objectives and Expected Outcomes:* The department has identified several areas of competency for students. By achieving mastery in all these areas, upon graduation HCDE students are well prepared to advance to careers in human centered design & engineering, apply to top graduate programs, and conduct research in the field.

  Graduates are able to:

  - Understand the HCDE field
  - Use appropriate tools, technologies, and principles to design and develop human centered solutions
  - Identify and work with the major genres of Human Centered Design & Engineering
  - Understand and use principles for effective display of information
  - Analyze communication situations and problems in scientific and technical settings
  - Write and edit at a professional level
  - Manage HCDE projects effectively and work effectively on teams
  - Be sensitive to relevant larger contexts and environments

- *Instructional and Research Facilities:* Department facilities include the HCDE Computer Lab, Laboratory for Usability Testing and Evaluation (LUTE), Human-Robot Communication Lab (HRCL), Computing for Healthy Living and Learning Lab (CHiLL), Sociotechnical Information Systems Analysis Laboratory (SISAL), Technical Japanese Computer Lab, and the Engineering Writing Center (EWC)
- *Technical Japanese:* The Technical Japanese program provides a unique opportunity to develop cross-cultural experience and expertise.
- *Honors Options Available:* With College Honors. With Distinction. See adviser for details.
- *Research, Internships, and Service Learning:* All Human Centered Design & Engineering undergraduates are required to complete at least one 3-credit internship. The supervised internship must be approved by the faculty adviser. As an internship substitution, students may elect to take part in a six-month co-op, sponsored by the Engineering Co-op program. Additionally, undergraduates are invited to work in research groups with grad students and faculty.
- *Department Scholarships:* Annually, HCDE selects one recipient of the Sakson Diversity Through Excellence Fund Scholarship ($2500/year for two years). The criteria for this scholarship are the applicant's prior academic history and likelihood for success in the Human Centered Design & Engineering field. Additionally, the Society for Technical Communication (STC) offers annual scholarships open to all students enrolled in a TC related program. Finally, HCDE typically offers a College of Engineering Endowed Scholarship.
- *Student Organizations/Associations:* Students in the Human Centered Design & Engineering degree program often participate in the Student Chapter of the Society for Technical Communication (STC), DUB, SIGCHI, UPA, the Minority Science and Engineering Program (MSEP), and Women in Science and Engineering (WISE).

CATALOG COPY AS CURRENTLY WRITTEN

Technical communicators use their language, visual, and analytical skills, as well as training and research in electronic and other media, to create and enhance communication in scientific and technical environments. Technical communication prepares students to design, create, edit, and evaluate technical and scientific discourse. The department provides coursework in the development of online help systems and in the design of general-audience content for delivery by means of advanced communication technologies such as the Web.

The complexities of modern life have greatly increased the number of people who need to communicate about technical and other specialized topics. Scientific journal articles, manuals, proposals, and other genres are important for a vast array of readers. With the Information Age, gaining and sharing technological understanding and capability has become a crucial human activity. We communicate in more genres, address broader (often global) audiences, and face more complex rhetorical problems than ever before.

To achieve success in their communication activities, progressive organizations are employing sophisticated planning and development methods, including user-centered design and evaluation, content management, and systems-based analyses. In addition, they undertake research projects and apply existing research to their own needs. Contemporary research in technical communication ranges from controlled empirical research on the processing of text, graphics, and multimedia content to observational research on how meaning is created and negotiated in business environments and virtual communities.

Other major interests include the human-computer interface, hypermedia, communications technology, the rhetoric of technical discourse, international communication, visual communication, publications and communications management, policy analysis of technological systems, and research and testing.

Undergraduate Program

Adviser
211 Engineering Annex, Box 352195
206-543-1798 or 206-616-0797
tcadvise@u.washington.edu

The Department of Technical Communication offers the following programs of study:

- The Bachelor of Science in Technical Communication degree
- A minor in technical Japanese

Bachelor of Science in Technical Communication

Suggested First-Year College Courses: T C 231, approved math or statistics (see list on T C Web site), approved science (see list on T C Web site)

Department Admission Requirements

Applicants are considered in two groups -- Early Admission and Upper-Division Admission. Admission is competitive. Completion of minimum requirements does not guarantee admission. All applicants have the right to petition and appeal the department's admission decision.

Early Admission

4. *Course requirements:* 38 credits to include 10 credits of approved mathematics or statistics; 15 credits of approved natural science; and 13 credits of approved written and oral communication (including T C 231). All courses must be completed prior to the July 1 application deadline.
5. Applicants must be currently enrolled at the UW and must have completed a minimum of 15 credits taken in residence at the UW. Application deadline is July 1 for autumn quarter only.
6. *Grade requirements:* Minimum 3.00 GPA in written and oral communications courses and minimum 2.00 cumulative GPA.

Upper-Division Admission

5. *Course requirements:* 10 credits of approved mathematics or statistics; 15 credits of approved natural science; and 13 credits of approved written and oral communication (including T C 231). All courses must be completed prior to the July 1 application deadline.
6. 60 credits completed by application deadline, which is July 1 for autumn quarter and February 1 for spring quarter.
7. Students applying in the senior year must spend a minimum of four quarters in the program.
8. *Grade requirements:* Minimum 3.00 GPA in written and oral communications courses and minimum 2.00 cumulative GPA.

Students may also declare into the Technical Communication degree program through the College of Engineering Advanced Admission program (see the College of Engineering section for Advanced Admission entrance and continuation requirements).

Graduation Requirements

180 credits as follows:

General Education Requirements (93 credits)

4. *Written and Oral Communications (13 credits):* 5 credits of English composition from the University list; T C 231; 5 credits of oral/written communication from T C list (see adviser).
5. *Visual, Literary, & Performing Arts (VLPA), and Individuals & Societies (I&S) (30 credits):* A minimum of 10 credits is required in each area.
6. *Math and Natural Science (50 credits):*
    a. *Mathematics (minimum 15 credits; see list of qualifying courses on T C Web site)*
    b. *Science (minimum 15 credits; see list of qualifying courses on T C Web site)*

Major Requirements (82 credits)

4. *Technical Communication Core (51 credits)*: T C 310, T C 400, T C 401, T C 402, T C 403, T C 407, T C 411, T C 412, T C 437, T C 493, T C 495
5. *Technical/Analytical (12 credits):* Must include either CSE 142 or PHIL 120.
6. *Approved Electives (19 credits):* Must demonstrate a coherent and relevant area of specialization.

Free Electives (5 credits)

Minor

Minor Requirements: Technical Japanese: Minimum of 25 credits to include T C 461 (5), T C 462 (5), T C 463 (5), plus 10 credits from the approved list of elective courses. For more information, contact the Technical Japanese Office, 13 Engineering Library.

Student Outcomes and Opportunities

- *Learning Objectives and Expected Outcomes:* The department has identified several areas of competency for students. By achieving mastery in all these areas, upon graduation TC students are well prepared to advance to careers in technical communication, apply to top graduate programs, and conduct research in the field.

  Graduates are able to:

  - Understand the TC field
  - Write and edit at a professional level
  - Analyze communication situations and problems in scientific and technical settings
  - Identify and work with the major genres of technical communication
  - Use appropriate tools and technologies to develop communication solutions
  - Understand and use principles for effective display of information
  - Understand and practice effective content development
  - Manage TC projects effectively
  - Work effectively on teams
  - Be sensitive to relevant larger contexts and environments

  The Department of Technical Communication prepares students to assume positions of intellectual leadership in industry, government, and non-profit organizations. Students also specialize in science writing or Web site design. The Technical Japanese program provides a unique opportunity to develop cross-cultural experience and expertise.

  Whatever their professional direction, technical communication students learn the newest communication technologies and practices, the most effective information-design strategies, and the research skills appropriate to their interests. They also learn the enduring theory and principles that enable them to understand the constant changes they will encounter throughout their careers. Finally, their coursework takes place in the context of social and political issues and human needs.

- *Instructional and Research Facilities:* Department facilities include the T C Computer Lab, Technical Japanese Computer Lab, Laboratory for Usability Testing and Evaluation (LUTE), and the Engineering/iSchool Writing Center (EiWC).
- *Honors Options Available:* With College Honors. With Distinction. See adviser for details.
- *Research, Internships, and Service Learning:* All Technical Communication undergraduates are required to complete at least one 3-credit internship. The supervised internship in a publications organization must be approved by the faculty adviser. As an internship substitution, students may elect to take part in a six-month co-op, sponsored by the Engineering Co-op program. Additionally, undergraduates are invited to work in research groups with TC grad students and faculty.
- *Department Scholarships:* Annually, T C selects one recipient of a College of Engineering Scholarship. The criteria for this scholarship are the applicant's prior academic history and likelihood for success in the technical communication field. Additionally, the Society for Technical Communication (STC) offers annual scholarships open to all students enrolled in a T C-related program.

- *Student Organizations/Associations:* Students in the Technical Communication degree program often participate in the Student Chapter of the Society for Technical Communication (STC), the Minority Science and Engineering Program (MSEP), and Women in Science and Engineering (WISE).

Of Special Note: The T C department is a small, academic community. Students generally call their professors by their first name and have the opportunity to work individually on projects and research supervised by T C faculty. Undergraduate students are encouraged to work in research groups and to attend conferences and professional meetings.

Technical Communication
University of Washington

January 22nd, 2009

MEMORANDUM

TO: University of Washington Curriculum Committee

FROM: Jan Spyridakis, Chair, Technical Communication
Hank Levy, Chair, Computer Science & Engineering
Christopher Ozubko, Director, School of Art
Harry Bruce, Dean, Information School

RE: Human-Computer Interaction (HCI)

According to the Association for Computing Machinery (ACM), "Human-Computer Interaction is a discipline concerned with the design, evaluation, and implementation of interactive computing systems for human use and with the study of major phenomena surrounding them" [SIGCHI]. HCI is necessarily a multidisciplinary field—incorporating facets of information science, computer science, design, and technical communication among other fields.

At the University of Washington, we have faculty and students interested in HCI located within multiple schools and colleges who have come together and established a group known as the DUB group (design:use:build) to foster collaboration, community, and research. http://dub.washington.edu/

Owing to the strong relationships that have developed as a result of these collaborations, the Department of Technical Communication (recently renamed as the Department of Human Centered Design & Engineering), Department of Computer Science, the Division of Design within the School of Art, and the Information School recognize that in order for HCI to be strong at the University of Washington, it is critical that all of us work together. HCI as an area of study must incorporate the perspectives of our individual disciplines, but none of us can do fully on our own.

A small group of faculty from each of our departments has been working on an undergraduate "concentration" in Human-Computer Interaction (already approved as a degree option in Informatics). That concentration will allow students to select courses from multiple participating departments. The Department of Technical Communication is requesting that this become a transcriptable option within their undergraduate BS program and all of us support the Department of Technical Communication's request to approve a transcriptable option in HCI.

While academically speaking HCI is a new and developing field, the University of Washington is becoming a global leader. We already have exceptional faculty collaborating on world-class research and by working together we will be able to extend our collaboration directly to our students in the classroom. Students will be able to obtain first-class academic preparation in a

Department of Technical Communication . Box 352195 . 14 Loew Hall . College of Engineering . University of Washington . Seattle, WA 98195-2195
Tel 206.543.2567
Fax 206.543.8858
TC@uwtc.washington.edu

variety of different forms ranging from individual courses all the way up to perhaps a new major one day.

We believe that this is just the beginning of a strong and growing partnership across our units and that this partner will allow HCI to grow and flourish as an academic area of study at the University of Washington.

Jan Spyridakis, Chair

Hank Levy, Chair

Christopher Ozubko, Director

Harry Bruce, Dean

Department of Technical Communication . Box 352195 . 14 Loew Hall . College of Engineering . University of Washington . Seattle, WA 98195-2195

Tel 206.543.2567
Fax 206.543.8858
TC@uwtc.washington.edu

Seattle: Options in Technical Communication and Human-Computer Interaction (HCDE-20090127)

Tri-Campus Review Comments:

NONE