
Donald Bren School of Information and Computer Sciences

2016 Graduate Student Handbook

ICS Student Affairs
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Welcome to the Donald Bren School of Information and Computer Sciences

Graduate Programs at UCI!

Getting Started

Now that you've arrived at UC Irvine as a Bren School graduate student, there are a few things you'll need to do right away:

- ✓ Visit the ICS Student Affairs Office (SAO) – bldg. 302 on the campus map, suite 352. Let us know you're here!
- ✓ International Students: Check-in at the International Center – bldg. 113 on the campus map. You must check-in within **five days** of your arrival.
- ✓ PhD students: Visit your advisor.
If you already have an advisor, introduce yourself (if you have not already met in person) and let them know you're here.
- ✓ Fellowship students: Contact Wendy Wehofer – bldg. 314 on the campus map, payroll/personnel office. All fellowship students must make an appointment with Wendy (wendyw@ics.uci.edu). You must complete this by September 15 for fees to be paid; we recommend you do this by September 8.
- ✓ Go to the UCI Bookstore – Student Center, "The Hill"
For your UCI student ID card.
- ✓ Visit Computing Support (ICS 364, bldg. 302 on the campus map)
For your ICS computer and email accounts.
- ✓ See Jason Cleaver (jcleaver@ics.uci.edu) – bldg. 314 on the campus map, rm. 1406
For your office keys (if applicable). Or go to keys.ics.uci.edu.
- ✓ Go to the Parking Office – bldg. 7 on the campus map
For students who are commuting to campus and need a parking permit.

Housing (on campus)

If you would like to live on campus but have not submitted a housing application, we recommend that you do so right away. If you need housing in the meantime, please visit Housing Outreach Services, G465 Student Center, and ask for a list of possible roommates, rooms for rent, or off-campus rentals. You may also visit <http://www.rental-living.com/> for local Irvine apartments.

Is Your Admission Provisional?

If your UCI admission is "provisional" (refer to your acceptance letter), please make sure to clear this with the UCI Graduate Division as soon as possible. You have until the end of Fall quarter to clear your provision(s). If you fail to do so, Graduate Division will revoke your graduate student status and you will not be able to register for winter quarter.

Registration

The registration, tuition and fee payment deadline is September 15, 2016. All students should have register and pay fees or authorized payment (fellowship students) by that date. The Bren School will not cover any late fees assessed for fellowship students not registering or authorizing payment by the deadline.

You can add and drop classes through Friday of the second week of the quarter (both with instructor's consent). An online petition will be used for adds, drops, and changes after enrollment deadlines have passed. Always check the Schedule of Classes on the Registrar's Website for the most recent course updates: <http://websoc.reg.uci.edu/perl/WebSoc>.

ICS 398A (and B) & 399

All students who are on Bren School fellowships or who plan to TA for a Bren School course must take ICS 398A. If you would like to be considered for an opportunity to teach an ICS class during the summer, you must also take ICS 398B. *Remember* that all PhD students must fulfill the two-quarter teaching requirement. All Teaching Assistants must also sign up for four units of ICS 399 each quarter they TA.

TA Assignments

If you are on a Bren School fellowship, your department manager will notify you of your Fall TA assignment, if applicable. Winter and Spring assignments will be given at a later date. The ICS Instructional Support Manager, Lumen Hwang (hwangl@ics.uci.edu) may have a desk copy of the book your class will be using. If the book is available, you are welcome to check it out for the quarter.

Mailboxes

All Bren School PhD Students will have a mailbox for receiving university-related mail. These mailboxes are small and space is limited, so please make sure all **personal** mail gets sent to your **home address**. PhD student mailboxes are located in the departments.

Important Dates to Remember for Fall 2016

Prior to arrival	F1 or J1 Student Online Orientation (new international students)
September 1	5pm Deadline to file fall quarter Petition for Resident Classification
September 15	4:00pm Deadline to pay fees at the Cashier's Office and enroll in classes using WebReg (\$50 late charge assessed after this time)
September 15	UC Irvine New International Graduate Student Orientation
September 16	UC Irvine Campuswide New Graduate Student Orientation
September 19	ICS New Graduate Student Orientation, 10am-12pm, Donald Bren Hall 1100
September 19	International TA Training, 1:30pm-5:30pm
September 20 and 21	TA Training Program – MANDATORY for all new PhD students
September 22	Classes Begin!
October 7	5pm deadline to add/drop a class
October 12	NOON Deadline to submit part-time study petition to Graduate Division (MS students only)
October 14	4:00pm, <u>Absolute</u> deadline to enroll late in courses and pay late fees to avoid loss of student status
November 7	Access WebReg to find out when winter quarter enrollment window opens (http://www.reg.uci.edu/registrar/soc/webreg.html)
November 11	Veteran's Day Holiday
November 24-25	Thanksgiving Holiday
December 2	Instruction ends
December 1-9	Finals Week
December 23-January 2	Winter Administrative Recess. Campus offices closed.

ICS Student Affairs Office (SAO) Staff

Name	Position	Email @ics.uci.edu	Location	Extn.
Mare Stasik	Office Manager	mstasik@uci.edu	ICS 352	X45156
Neha Rawal	Associate Director	neha@ics.uci.edu ucounsel@uci.edu	ICS 352	X45156
Jessica Shanahan	Undergraduate Counselor	shanahan@ics.uci.edu ucounsel@uci.edu	ICS 352	X45156
Michelle Nguyen	Undergraduate Counselor	mvn@uci.edu ucounsel@uci.edu	ICS 352	X45156
Edna Valdez	Undergraduate Counselor	ecvaldez@uci.edu ucounsel@uci.edu	ICS 352	X45156
Karina Bocanegra	Graduate Counselor	karina@ics.uci.edu gcounsel@uci.edu	ICS 352	X45156
Andrea O'Donnell	Graduate Counselor	andrea.odonnell@uci.edu mcs@ics.uci.edu & mhcid@ics.uci.edu	ICS 352	X45156
Lumen Hwang	Instructional Support Manager	hwangl@uci.edu	ICS 352	X45156
Kris Bolcer	Director of Student Affairs	kris@ics.uci.edu	ICS 352	X45156

- The primary focus of the Student Affairs Office is to assist students and faculty with University policies, procedures and requirements related to Bren ICS academic programs. The graduate staff coordinates the graduate admissions process, fellowships, and the annual graduate student review. It also handles the various forms and administrative functions relating to graduate students.
- The Student Affairs Office is open weekdays from 9am-12pm and 1pm-4pm. Walk-in **Graduate Counseling** is available Monday through Friday, 1pm-4pm.

Other Bren School Staff/Faculty you'll need to know:

Gopi Meenakshisundaram	ICS Associate Dean for Student Affairs	adsa	ICS 352	X45156
Wendy Wehofer	Employment, Payroll	wendyw	DBH 6024	X48543
Jason Cleaver	Keys, Office Assignments	jcleaver	DBH 1406	X49404
Computing Support	Computer Accounts, Issues	helpdesk	ICS 346	X44222
Holly Byrnes	CS Department Manager	hbyrnes	DBH 3042	X44478
Marty Beach	Informatics Department Manager	mbeach	DBH 5042	X42901
Rosemary Busta	Statistics Department Manager	rbusta	DBH 2042	X45392
Alex Nicolau	CS Department Chair	nicolau	DBH 3082	X44079
André van der Hoek	Informatics Department Chair	andre	DBH 5038	X42901
Dan Gillen	Statistics Department Chair	dgillen	DBH 2206	X49862
Gene Tsudik	CS Vice Chair for Graduate Studies	gtsudik	DBH 3228	X43410
Gillian Hayes	Informatics Vice Chair, Graduate Studies	gillianrh	DBH 5072	X41483
Babak Shahbaba	Statistics Vice Chair, Graduate Studies	babaks	DBH 2224	X40623
Nalini Venkatasubramanian	Director of Networked Systems	nalini	DBH 2086	X45898

**Important Web Sites Relating to
Graduate Study**

UCI Homepage	http://www.uci.edu
ICS Home Page	http://www.ics.uci.edu
ICS FAQ	http://www.ics.uci.edu/grad/ga/index.php
UCI Schedule of Classes (WebSoc)	http://webster.reg.uci.edu/perl/WebSoc
UCI Graduate Division	http://www.grad.uci.edu
Student Access	http://www.reg.uci.edu/access/student/welcome/
Associated Graduate Students	http://www.aggs.uci.edu/
UCI Thesis & Dissertation Manual	http://www.lib.uci.edu/libraries/collections/special/uci_t_d/tdmanual.html
UC SHIP Health Insurance	http://www.shs.uci.edu/health_insurance_privacy/insurance.aspx#shipplam
General Catalogue	http://catalogue.uci.edu
International Center	http://www.ic.uci.edu/
Speak Test	http://www.humanities.uci.edu/hirc/speak
TOEP Test	http://www.humanities.uci.edu/esl/toep.php

allgrads@ics.uci.edu – is the email alias to reach all ICS graduate students (moderated mailing list)

ICS Master of Science Graduate Programs

Programs of Study

The Bren School offers MS degrees in Computer Science, Information and Computer Science, Software Engineering, Networked Systems, and Statistics. Students pursuing the MS in Information and Computer Science must complete a concentration in Informatics.

The graduate program in Networked Systems is administered by faculty from two academic units: the Department of Computer Science (CS) in the Donald Bren School of ICS, and the Department of Electrical Engineering and Computer Science (EECS) in the Henry Samueli School of Engineering. The program offers MS and PhD degrees in Networked Systems. Students must apply directly to this program.

The objective of the terminal MS degree is to prepare students for a variety of advanced careers in the computing industry (e.g., software development, information technology consulting, application specific integrated circuit design, network design and configuration, embedded systems design, algorithms development, data mining). The Master's program can be pursued full- or part-time and should take no longer than two years (full-time).

The Bren school also offers the Master of Human-Computer Interaction & Design and Master of Computer Science (F17). Students must apply directly to these programs.

Timeline

Years 1 & 2: Students may take their required courses during years 1 & 2. Once a student has completed all courses of study, an **Advancement to Candidacy form** for the MS should be filed with the graduate counselor. **This is not an automatic process. Students are responsible for making sure this form gets filed.** The Master's Degree Advancement Form can be found at <http://www.grad.uci.edu/forms/>. The Advancement to Candidacy form should be submitted at least **one quarter before** the student plans on graduating.

Year 2: **Comprehensive Exam Option** - students take and pass the comprehensive exam for the MS.

Thesis Option - students make an oral presentation to their committee and turn in their completed thesis to the Special Collections and Archives.

Course Requirements

All course requirements can be found on pages titled "Course Requirements."

MS Exams and Reviews

Graduate Student Review

At the end of each spring quarter, the ICS Graduate Office, in consultation with the department Vice Chairs and the Associate Dean, conducts a formal review of all ICS MS students. If unsatisfactory progress is being made, a letter of probation will be sent to the student and placed in their file. The probation period varies, depending on each student's academic situation. If the problem is not cleared during the probation period, the Associate Dean may recommend to Graduate Division that the student be dismissed from the program. It is the student's responsibility to make sure the ICS Graduate Office is aware of any problem that has been

cleared during the probation period. Reasons for a probation letter may include a GPA below 3.0, too many "I" (Incomplete) grades, unsatisfactory progress, and not meeting timeline standards.

Advancing to Candidacy for the MS Degree

Both MS and PhD students can advance to candidacy for the MS degree (this is not applicable, however, to PhD students who already hold an MS degree in Computer Science or a related field). Advancement to candidacy implies that a student is almost finished with his/her degree requirements. Students must advance to candidacy at least one quarter prior to degree conferral.

Comprehensive Exam

Each student must pass a comprehensive examination offered by the department or by a representative of the specific research area (or complete a thesis, see below). Students should speak to the ICS Graduate Counselor or degree program representative regarding test dates, preparation, and reading lists. The faculty within the particular area develops the exam; this may result in the content and structure varying from year to year.

The exam is graded on two levels: Pass and Fail. Students may re-take the exam once. To take the exam for a third time, students must petition both the ICS Associate Dean for Student Affairs and the Dean of Graduate Division for permission. If the petition is denied, the student may be dismissed from the program.

Thesis Option

The thesis option is available to MS students who do not plan to take the comprehensive exam and who are in good academic standing with the School (not available to students in the Statistics program). Students pursuing this option must enroll in at least two quarters of Thesis Supervision (CS 298 or Inf 298), which will substitute for two required courses as specified under the concentration area or track of choice.

A committee of three faculty members, the majority of whom must be from the student's department, will guide the student and give final approval of the thesis. The committee consists of an advisor, who must be from the student's department and who is willing to supervise the thesis project, and two other faculty members who are willing to serve on the committee as readers. An oral presentation of the thesis to the committee is required.

Degree Conferral

The MS degree will be conferred by the UCI Graduate Division the quarter following advancement to candidacy if all degree requirements are satisfied. Graduate Division will send a letter of degree confirmation. Diplomas will be ready for pick up from the Registrar's Office about four months after graduation.

Graduate Division requires that all graduating MS students complete the UCI Master's Exit Survey: <http://apps.grad.uci.edu/exitsurvey/>. Electronic submission of the MS Thesis is an option available to all MS students. For more information, please go to: <http://special.lib.uci.edu/dissertations/electronic/tdmanuale.html>

ICS PhD Programs

Programs of Study

The Bren School offers PhD degrees in Computer Science, Informatics, Software Engineering, Networked Systems, and Statistics.

The graduate program in Networked Systems is administered by faculty from two academic units: the Department of Computer Science (CS) in the Donald Bren School of ICS, and the Department of Electrical Engineering and Computer Science (EECS) in the Henry Samueli School of Engineering. The program offers MS and PhD degrees in Networked Systems. Students must apply directly to this program.

The PhD programs are research oriented and encourage students to collaborate with faculty to solve advanced problems in computer science. The programs are full-time and usually take five years to complete (different degrees/concentrations may have different normative times to degree; students should check the catalogue for their area).

Course Requirements

All course requirements can be found on pages titled "Course Requirements."

PhD Exams and Reviews

Graduate Student Review

At the end of each spring quarter (and Fall quarters for Informatics and Software Engineering), the ICS Graduate Office, in consultation with the department Vice Chairs and the Associate Dean, conducts a formal review of all ICS PhD students. If unsatisfactory progress is being made, a letter of probation will be sent to the student and placed in their file. The probation period varies, depending on the individual student's academic situation. If the problem is not cleared during the probation period, the Associate Dean may recommend to Graduate Division that the student be dismissed from the program. It is the student's responsibility to make sure the ICS Graduate Office is aware of any problem that has been cleared during the probation period. Reasons for a probation letter may include a GPA below 3.5, too many "I" (Incomplete) grades, no advisor, unsatisfactory academic and research progress, and not meeting timeline standards.

Advancing to Candidacy for the MS

Both MS and PhD students can advance to Candidacy for the MS degree (this is not applicable, however, to PhD students who already hold an MS degree in Computer Science or a related field). Advancement to candidacy implies that a student is almost finished with his/her degree requirements. Students must advance to candidacy at least one quarter prior to degree conferral.

Teaching Requirement

All PhD students are required to participate in teaching activities for two quarters. Summer teaching or teaching at another university may be accepted in fulfillment of this requirement. Students who fulfill this requirement with a teaching assistantship at UCI are required to take an orientation course, ICS 398A, enroll in four units of ICS 399 each quarter they serve as a TA, and attend the TA training program during Welcome Week.

Students with a Previously Earned MS

ICS students with an MS degree from another university who are working towards their PhD may qualify to receive credit for required courses if their previous MS degree was in computer science or a closely related field. Course equivalency will be determined by the ICS Associate Dean following a written recommendation from the student's advisor. Advisors may require that students take additional courses when appropriate. Final approval will be determined by the Dean of Graduate Division. Students will be notified of the decision by email.

Advancing to Candidacy for the PhD

The advancement exam is an oral presentation to a five-member committee. The PhD Advancement Committee must be composed of the Chair, three general members, and one outside member. The Chair of the Candidacy Committee must hold either a primary or joint appointment in the student's department. At least two members in addition to the Chair must hold either a primary or joint appointment in the student's department. The majority of the committee must be from the student's department. The outside member must be a UC Irvine faculty member and may not be affiliated with the student's department.

Once the exam is finished, each committee member must sign the candidacy form (**PhD Form I, available at <http://www.grad.uci.edu/forms/index.html>**). The student should identify the three members who will be on their dissertation committee (the majority of whom must be from the student's department), get the ICS Associate Dean's signature from the ICS Graduate Office, and pay the \$90 advancement fee at the Cashier's Office (located in Aldrich Hall). The candidacy form should then be submitted to the Graduate Division Office; when the Dean of Graduate Division has approved advancement, the ICS Graduate Office will notify the student.

Final Defense

For the final dissertation defense, students should email the ICS Graduate Office with the date, time and location for the defense, the names of their committee members, and the title and abstract of their dissertation. This should be done no less than two weeks before the defense. This information will be sent to all ICS graduate students and faculty. In addition to the student's committee members, anyone else who wishes to attend the defense may do so. Students should obtain a **PhD Form II** (Report on Final Examination for the PhD Degree) from <http://www.grad.uci.edu/forms/index.html> and, at the end of the defense, have each of their committee members sign it.

The completed dissertation and signed **PhD Form II** should be submitted to the UCI Special Collections & Archives (525 Langson Library). Alternatively, the dissertation may be filed electronically. Please see the UCI Thesis and Dissertation Manual for filing and formatting procedures: http://www.lib.uci.edu/libraries/collections/special/uci_td/tdmanual.html. Students doing a paper submission, the Library will notify the Graduate Division office that the dissertation has been turned in and the degree is ready for conferral. Graduate Division will notify students once their degree has been conferred.

Graduate Division requires that all graduating PhD students complete several surveys. For more information, please go to: <http://www.grad.uci.edu/academics/degree-completion/electronic-submission.html>.

Course Requirements

ICS with a concentration in Informatics (MS)

Core Requirements - Students in ALL Informatics tracks must complete the Core Requirements.

All courses must be passed with a grade of B or better. Every student completing a degree in one of these areas must take the following courses:

This degree program requires 48 units of coursework, including 24 units of core requirements, and 24 units of electives (of which up to 12 units may be used as independent study).

A. Complete the following required core courses:

IN4MATX 261 Social Analysis of Computing
IN4MATX 231 User Interface Design and Evaluation
or IN4MATX 232 Research in Human-Centered Computing
IN4MATX 209S Seminar in Informatics (twice, usually in first year)

B. Complete the following Research Methods core courses:

IN4MATX 201 Research Methodology for Informatics
IN4MATX 203 Qualitative Research Methods in Information Systems
IN4MATX 205 Quantitative Research Methods in Information Systems

C. Select six electives in Informatics: ¹

¹ A set of six elective courses at the graduate level. The selection of courses should form a coherent educational plan to be approved by the student's faculty advisor or by the program director in the case that the student is not working with a faculty advisor. Although the courses may be chosen from any graduate level courses on campus, it is recommended that at least three be chosen from within the school of ICS. Students may use up to 12 units of independent study (IN4MATX 298/IN4MATX 299) as electives.

Note: MS students: Two of the six elective courses may be non-Informatics.

*Note: MS students pursuing a Thesis option must substitute two 4-unit courses of Inf 298, Thesis Supervision.

Informatics (PhD)

All PhD students are expected to maintain a minimum GPA of 3.5 throughout the program. In addition, no grade lower than B is counted towards satisfying any course requirements.

Pre-Candidacy Course Requirements

Required Core Courses

INF 261: Social Analysis of Computing
INF 232: Research in Human Computer Interaction
INF 209S: Seminar in Informatics (twice, usually in first year)

Research Methods Core

INF 201: Research Methods
INF 203: Qualitative Methods
INF 205: Quantitative Methods
INF 207S: Doctoral Seminar on Research and Writing (twice, usually after first year)

Research Experience

INF 299 (Independent Study): Four quarters required pre-advancement, recommended at least two quarters per year in each of the first two years.

Electives in Informatics (6 Ph.D. level classes)

A set of six elective courses. The selection of courses should form a coherent educational plan to be approved by the student's faculty advisor and by the Informatics PhD program director. A written record of this plan and its approval must be filed with the PhD program director prior to advancement. Although the courses may be chosen from any PhD level courses on campus, it is recommended that at least three be chosen from within the school of ICS.

Teaching Requirements

To enhance their education and experience in teaching, all students will be required to work as readers or TAs for at least two quarters. Additionally, before or during the first quarter in which they are working in this capacity, all students will enroll in ICS 398A, a two-unit seminar. Those students wishing to gain more instruction around their teaching may also enroll in ICS 398B, the advanced teaching seminar, which is also a two-unit seminar.

Field Examinations

There will be no formal field evaluations. However, each year, students will be evaluated individually and given written feedback about their progress (for first year students, this evaluation will take place before the end of Spring quarter; for continuing students, it will take place before the end of Fall quarter.) In preparation, students will write a statement about their progress and meet with their advisors who give some feedback and complete a form reporting their assessment of the student's progress. The program faculty as a whole will then meet to discuss all the students, with a letter written to the student summarizing the assessment and, if necessary, deadlines for specific activities to be finished or goals to be achieved. This evaluation letter will state either that the student is making good progress or has been given cautionary status. The students who have certain activities to finish will be reviewed again 6 months after this evaluation. A second cautionary review constitutes formal failure to make adequate progress within the program.

Qualifying Exams

At the end of the student's second year: The student develops an appropriate reading list to fit his/her areas of interest within Informatics, co-developed with the advisor. The student then writes a paper synthesizing this literature and noting the areas that are currently interesting and under-researched. The paper serves as the basis for an oral examination, generally in the Spring quarter of the second year.

At the end of the third year: The student will be evaluated by an assessment of a research portfolio. A portfolio should comprise three papers of publishable quality, as judged by the faculty. These papers might well be expansions or developments from term papers developed in class; the goal is to determine the student's capacity to produce research writing of publishable quality. Student may work on papers collaboratively, but the portfolio as a whole must demonstrate writing ability through single-authored or lead-authored work. (Collaboratively written papers will be accompanied by a statement of contributions signed by all authors.)

The students are encouraged to report on projects conducted with at least two different faculty members. Advancement to candidacy is on the basis of an oral defense of the research portfolio, normally in the Spring of the third year. The advancement committee is formed in accordance with UCI campus regulations.

Doctoral Dissertation

Students are required to complete a doctoral dissertation in accordance with Academic Senate regulations. In addition, they must pass an oral dissertation defense that consists of a public presentation of the student's research followed by an oral examination by the student's doctoral committee. The dissertation must be approved unanimously by the committee.

Final Examination

The dissertation defense committee is formed in accordance to UCI Senate regulations. This committee must approve the following for the student to pass the final examination:

Dissertation topic: The student must present a substantial written document representing the student's dissertation plan. This document must include the proposed dissertation abstract, a dissertation outline, a comprehensive survey of related work, and a detailed plan for completing the work. The student must present this dissertation plan to the dissertation committee, who must unanimously approve the student's proposal.

Dissertation document: The student must prepare the written dissertation in accordance with Academic Senate regulations and present this document to the committee with enough advance notice for appropriate review and critique prior to an oral defense. Following an oral defense of this document, any changes required must be approved by the entire committee.

Oral defense: The student must pass an oral dissertation defense that consists of a public presentation of the student's research followed by an oral examination by the student's doctoral committee. To ensure the public has an opportunity to participate in this examination, the student must announce the defense title, date, and time at least two weeks prior to the event to all faculty and doctoral students in the department.

Normative Time from Matriculation to Degree

Students making normal progress are expected to complete their coursework and produce 2-3 research papers of publishable quality in three years. The dissertation proposal is expected midway through the fourth year, with completion in the fifth.

Software Engineering (MS and PhD)

All Ph.D. students are expected to maintain a minimum GPA of 3.5 throughout the program. All M.S. students are expected to maintain a minimum GPA of 3.0 throughout the program. Failure to maintain this minimum will result in a recommendation that the student be disqualified. In addition, no grade lower than a B is counted toward satisfying any course requirements

Students must complete four software engineering core courses, six elective courses, and two quarters of seminars, literature survey, and individual study courses (MS students only need two quarters of 209S).

- **Software Engineering Core Courses**

- INF 211 Software Engineering
- INF 212 Analysis of Programming Languages
- INF 215 Software Analysis and Testing
- INF 221 Software Architecture

- **Software Engineering Electives**

Six elective courses chosen from the following courses offered by the School of ICS, all 4 units. The set of elective courses chosen by the student must be approved by the student's research advisor. With the advisor's permission, the student may substitute other non-seminar courses, as long as they are related to the student's research interests

- IINF 203 Qualitative Research Methods in Information Systems
- INF 205 Quantitative Research Methods in Information Systems
- INF 213 Formal Specification and Modeling
- INF 219 Software Environments
- INF 223 Applied Software Design
- INF 231 Human-Computer Interaction

- INF 233 Knowledge-Based User Interfaces
- INF 235 Advanced User Interface Architecture
- INF 241 Introduction to Ubiquitous Computing
- INF 242 Ubiquitous Computing and Interaction
- INF 251 Computer-Supported Cooperative Work
- INF 261 Social Analysis of Computing
- INF 269 Computer Law
- CS 203 Network and Distributed Systems Security
- CS 221 Information Retrieval, Filtering, and Classification
- CS 222 Principles of Data Management
- CS 225 Next Generation Search Systems
- CS 230 Distributed Computer Systems
- CS 232 Internet
- CS 237 Middleware for Networked and Distributed Systems
- CS 241 Advanced Compiler Construction
- CS 271 Introduction to Artificial Intelligence
- CS 273A Machine Learning
- CS 277 Data Mining
- **Seminars and Individual Study**
 - INF 209S Seminar in Informatics (2 quarters; 2 units each)
 - INF 291S Literature Survey (2 quarters; 2 units each)
 - INF 299 Individual Study (2 quarters, 4 units each)

MS Thesis/Examination

M.S. students must complete four software engineering courses, six elective courses, and two quarters of seminars (INF 290S). Students doing Capstone Plan I (Thesis) must complete two quarters, four units each, of Thesis Supervision (INF 298); students doing Capstone Plan II (Comprehensive Examination) must complete two quarters of literature survey courses.

The course requirements are identical to the PhD degree, diverging only in making the Literature Survey and the Individual Study courses mutually exclusive, depending on the students' Capstone option.

Capstone Requirement

- Plan I – Thesis Option: Students must take and pass the Research Assessment examination. Additionally, students are required to defend their thesis in a public exam according to UCI Senate Policy. This requirement must be completed by the end of the second year.
- Plan II – Comprehensive Examination Option: Students must take the written Comprehensive examination, and obtain an MS PASS or higher. This requirement must be completed by the end of the second year. In case of FAIL, the exam may be re-taken once more. A second FAIL results in disqualification of the student from the MS program.

All MS students must **Advance to Candidacy** at least one quarter before they plan on graduating.

Please find the MS Advancement to Candidacy form here:
<http://www.grad.uci.edu/forms/index.html>

PhD Written Comprehensive Exam

Students must pass a written examination testing their knowledge of the relevant topics and literature in Software Engineering and their ability to formulate clear arguments in writing and under time constraints. This examination is based on a predetermined reading list maintained by

the program faculty. Preparation for this exam is done during two quarters of INF 291S. This exam is administered at most twice a year.

The exam is graded a PhD PASS, M.S. PASS or FAIL. In case of M.S. PASS or FAIL, it may be re-taken once more, within twelve months, in an attempt to qualify for a PhD PASS. A second M.S. PASS or FAIL results in disqualification of the student from the doctoral program (with or without a terminal M.S. degree).

PhD Research Assessment

Students must find a faculty advisor and successfully complete a research project with that faculty member. The research project should be done over at least two quarters of independent study with that faculty member. The goal of this research assessment is to introduce the student to the practice of scientific publication.

Based on the project, the student must produce a research paper of publishable quality. This research paper must be reviewed by three faculty members in a peer-review process, revised by the student, and approved by the three faculty members.

The research assessment is graded PASS or FAIL. In case of FAIL, the student can re-submit the paper at most one more time within the maximum period of six months. A second FAIL results in disqualification from the program.

The Research Assessment form can be found here:

<http://www.ics.uci.edu/grad/policies/index.php>

PhD Advancement to Candidacy Exam

Each PhD student must pass the oral advancement to candidacy exam, which assesses the student's ability to conduct, present, and orally defend research work at the doctoral level. The research project and paper are the basis for the student's oral advancement to candidacy exam. The oral candidacy exam consists of the research presentation by the student, followed by questions from the candidacy committee.

The student must complete the course requirements, and pass the two qualifying examinations prior to advancing to candidacy. The candidacy committee will consist of five faculty members, the majority of whom must be members of the student's program, and is conducted in accordance with UCI Senate regulations. The Advancement to Candidacy announcement must be sent via allgrads at least two weeks prior to the event.

The Advancement to Candidacy form (PhD Form I) can be found here:

<http://www.grad.uci.edu/forms/index.html>

PhD Dissertation Topic Defense

The student must present a carefully articulated document representing the student's dissertation plan. This document must include the proposed dissertation abstract, a discussion of the approach, a comprehensive survey of related work, and a plan for completing the work. The dissertation plan is presented by the student to the dissertation committee, who must

unanimously approve the student's proposal. The dissertation defense committee is formed in accordance to UCI Senate regulations.

The Dissertation Topic Defense form can be found here:

<http://www.ics.uci.edu/grad/policies/index.php>

PhD Doctoral Dissertation and Final Examination

Students are required to complete a doctoral dissertation in accordance with Academic Senate regulations. The final defense announcement must be sent via allgrads at least two weeks prior to the event. In addition, they must pass an oral thesis defense which consists of a public presentation of the student's research followed by an oral examination by the student's doctoral committee. The committee must approve the thesis unanimously.

The PhD II/Report on Final Examination form can be found here:

<http://www.grad.uci.edu/forms/index.html>

Statistics (MS and PhD)

Master of Science in Statistics

Statistics Course Requirements

Intermediate Probability and Statistics (Stats 200A-B-C)

Statistical Methodology (Stats 202, 203, 210)

Introduction to Bayesian Data Analysis (Stats 205)

Three quarters of Seminar in Statistics (Statistics 280)

Five other graduate courses in or related to statistics, at least three of which are offered by the Department of Statistics.

Statistics 211 and 212 may be substituted for 202 and 203.

At most one of the five elective courses may be an Individual Study (Stats 299), and only with prior approval of the Department Graduate Committee.

The entire program of courses must be approved by the Statistics Department Graduate Committee. Students are required to pass a written comprehensive examination ordinarily at the end of the first year, covering the material from Stats 200A-B-C, and either 202, 203, and 210 or 210, 211, and 212.

Doctor of Philosophy in Statistics

Statistics Course Requirements

Intermediate Probability and Statistics (Stats 200A-B-C)

Statistical Methodology (Stats 210, 211, 212)

Advanced Probability and Statistics Topics (Stats 220A-B)

Bayesian Statistical Analysis (Stats 225)

Statistical Computing Methods (Stats 230)

Five other graduate courses in or related to statistics, at least two of which are offered by the Department of Statistics.

Continual enrollment in Seminar in Statistics (Stats 280) is required in all quarters.

Coursework must be completed prior to candidacy.

Each PhD student is required to take a written comprehensive examination ordinarily at the end of the first year, covering the material from Stats 200A-B-C, 210, 211 and 212. In addition, each student is required to take a written comprehensive examination after completion of the second year course work, covering material from Stats 220A-B, 225 and 230.

PhD students who have passed the written comprehensive examinations are required to give a post-comprehensive research presentation each year.

Computer Science (MS and PhD)

PhD students must complete at least 47 units with an average GPA of 3.5 and MS students with a 3.0. Students must receive at least a B in each course counted towards filling these requirements.

Required: Three quarters of Seminar in Computer Science Research (CS 200S)

Core Courses: one course from four of the following seven listed areas.

- Data Structures and Algorithms (CS 260, CS 261 or CS 263)
- Architecture/Embedded Systems (CS 250A or CS 244)
- System Software (CS 241, CS 243 or CS 230)
- Artificial Intelligence (CS 271 or CS 273A)
- Networks/Multimedia (CS 232, CS 203 or CS 212)
- Database Systems (CS 222 or CS 223)
- Scientific and Visual Computing (CS 206 or CS 211A)

Students must also take seven electives courses from any set of CS, Informatics, or Statistics courses, including the above core courses, but excluding CS 290, 298 299, or any course with a suffix of "S."

Two of these courses can be graduate courses offered by a department outside of ICS, with written consent of the advisor (M.S. students must obtain written consent from the Computer Science Vice Chair for Graduate Studies).

Two of the courses can be undergraduate courses from the following list: CS 111, CS 112, CS 122A, CS 132, CS 142A, CS 143A, CS 152, CS 161, CS 171, CS 178, ICS 161, ICS 162, ICS 163, ICS 166. Students may not retake courses they have used toward an undergraduate degree and receive credit toward the graduate requirements.

No more than two undergraduate courses or CS 295s may be taken to satisfy elective course requirements.

MS students completing the thesis option must take two quarters of CS 298 (4 units each) with a thesis advisor. These may substitute for two electives.

MS Thesis/Examination

Each student must 1) pass a comprehensive examination given by CS faculty. The examination covers the core requirements and is given within each core course, or 2) turn in a thesis which will be defended and approved in accordance with UCI Academic Senate policy.

All MS students must **Advance to Candidacy** at least one quarter before they plan on graduating.

Please find the MS Advancement to Candidacy form here:
<http://www.grad.uci.edu/forms/index.html>

Research project for the PhD Degree

PhD students must find a faculty advisor and successfully complete a research project with that faculty member by the end of their second year. In coordination with this project the student must take at least one independent studies course (CS 299) with the advisor. By the end of the second year, the student must present the outcome of the research in a technical report, which must be approved by the advisor.

PhD Candidacy Exam

The objective of the candidacy exam is to demonstrate in-depth knowledge of an area of computer science and readiness to carry out independent research at the doctoral level in that area. The student must complete all course requirements and the research project prior to advancing to candidacy. All requirements for candidacy including the candidacy exam must be completed by the end of the third year (or, for students entering the program with a master's degree, by the end of the second year). If the student does not pass on the first trial, they will be allowed until the end of the first quarter of the following year to advance to candidacy. Students should see the ICS Graduate Counselor for policies regarding committee membership. The student takes an oral exam, administered by the five-member committee, during which s/he is tested on knowledge relevant to the chosen area of specialization. Each area is defined by a set of topics and reading lists, which are maintained by the Computer Science department office. The current specialization areas include: Algorithms and Data Structures; Computer Architecture and Embedded Systems; Database Systems and Multimedia; Computer Networks; Distributed Systems; Artificial Intelligence and Machine Learning; Informatics in Biology and Medicine; Computer Graphics and Visual Computing; Cryptography and Computer Security; Computational Neuroscience; Scientific Computing; Systems Software.

Dissertation Topic Defense

The student must produce a substantial written document representing his/her dissertation plan. This must include the proposed dissertation abstract, a dissertation outline, and a detailed plan for completing the work. A dissertation defense committee is formed in accordance with UCI Academic Senate regulations. The dissertation committee must unanimously approve the student's proposal. At the discretion of the student's advisor, the student may be required to give an oral presentation of the proposed plan to the committee. This must be completed by the end of the fourth year in the program.

The Topic Defense form can be found here:
<http://www.ics.uci.edu/grad/policies/index.php>

Doctoral Dissertation and Final Examination

PhD students are required to complete a dissertation in accordance with Academic Senate regulations. In addition, they must pass an oral dissertation defense which consists of a public seminar presenting results followed by a private examination by the doctoral committee and other interested members of the faculty of the Computer Science Department.

The PhD II/Report on Final Examination form can be found here:

<http://www.grad.uci.edu/forms/index.html>

Networked Systems (MS and PhD)

MS Degree

Students pursuing the MS degree may choose either Plan I (Thesis Plan) or Plan II (Comprehensive Examination Plan).

Students following Plan I must complete the three core courses, two courses chosen from the breadth course list with at most one chosen from the Management and Applications of Technology List, three courses chosen from the concentration course lists with at least one course chosen from at least two different concentrations, two additional courses chosen with the approval of the advisor, and a thesis.

Students following Plan II must complete the three core courses, three courses chosen from the breadth course list with at most two chosen from the Management and Applications of Technology List, four courses chosen from the concentration course lists with at least one course chosen from at least three different concentrations, and two additional courses chosen with the approval of the advisor. Students pursuing this option must pass a comprehensive examination which will be administered through Net Sys 295 and will consist of a term paper on a topic relevant to the student's educational program and that year's speakers.

All MS students must **Advance to Candidacy** at least one quarter before they plan on graduating.

*Find the MS Advancement to Candidacy form here: <http://www.grad.uci.edu/forms/index.html>

PhD Degree

The PhD degree requires the following thirteen courses: three core courses; three courses chosen from the breadth course list, with at most two chosen from the Management and Applications of Technology list; four courses chosen from the concentration course lists, with at least one course chosen from at least three different concentrations; and three additional courses, chosen with the approval of the research advisor. Students must also complete two teaching practicum courses (ICS 399) and a dissertation.

Core Courses

Internet (Net Sys 201)

Networking Laboratory (Net Sys 202)

3 units of Networked Systems Seminar (Net Sys 295) in Fall, Winter and Spring of the same academic year

Breadth Courses

Computer Science & Engineering Breadth Courses

Foundations of Cryptographic Protocols (CS 201)

Principles of Data Management (CS 222)

Advanced System Software (EECS 211) OR Distributed Computer Systems (CS 230)

Computer Architecture (EECS 213) OR Computer Systems Architecture (CS 250A)

Design and Analysis of Algorithms (EECS 215) OR Fundamentals of the Design and

Analysis of Algorithms (CS 260)

Data Structures (CS 261)

Graph Algorithms (CS 265)
Random Processes (EECS 240) or Probability Models (CS 278)
Linear Systems I (EECS 260A)
Advanced Analog Integrated Circuit Design I (EECS 270A)

Management and Applications of Technology Breadth Courses

Instructional Design and Educational Technology (Education 240)
Issues in Educational Policy and Reform (Education 251)
New Information and Communication Technologies for Administrators (Education 270)
School Restructuring and Resource Allocation (Education 277B)
Computer-Supported Cooperative Work (In4matx 251)
Social Analysis of Computing (In4matx 261)
Computing and Cyberspace (In4matx 267)
Computer Law (In4matx 269)
Strategic Information Systems (MBA 275)
Managing Electronic Business (MBA 277)
Technology and Economic Development (PPD 106)
Technology Analysis (PPD 173)
Political/Social Impacts of Computing (Political Science 155B)
Network Theory (Sociology 212)
Analysis of Social Network Data (Sociology 280)

Concentration Courses

Networks Concentration

Advanced Networks (Net Sys 210)
Wireless and Mobile Networking (Net Sys 230)
Network and Distributed System Security (Net Sys 240)
Introduction to Embedded and Ubiquitous Systems (CS 244)

Performance Concentration

Network Coding (Net Sys 256)
Introduction to Optimization (CS 268)
Transportation Systems Analysis I (CEE 221A)
Transportation Systems Analysis II (CEE 221B)
Urban Transportation Networks I (CEE 228A)
Urban Transportation Networks II (CEE 228B)
Nonlinear Optimization Methods (MAE 206)
Management Science (MBA 201B)

Middleware Concentration

Middleware for Networked and Distributed Systems (Net Sys 260)
Distributed Computer Systems (Net Sys 261)
Multimedia Systems and Applications (CS 212)
Distributed Software Architecture and Design (EECS 219)
Real-time Computer Systems (EECS 223)
Fault-tolerant Computing (EECS 224)

Communications Concentration

Digital Image Processing (EECS 203A)
Digital Communications I (EECS 241A)
Digital Communications II (EECS 241B)
Information Theory (EECS 242)
Error Correcting Codes (EECS 243)
Wireless Communications (EECS 244)
Space-Time Coding (EECS 245)

Digital Signal Processing I (EECS 250)
Detection & Estimation & Theory I (EECS 251A)
Detection & Estimation & Theory II (EECS 251B)
Data Compression (CS 267)

Policies and Procedures

California Residency

To establish California residency for tuition/fee purposes students must:

- 1) File a Petition for Residence Classification with the Registrar's Office

- 2) Be a U.S. citizen or permanent resident
- 3) Be physically present in California for more than one calendar year
- 4) Have come to California with the intent to make California their permanent home
- 5) Show that they intend California to become their home

Examples of (#5) include:

- Registration as a voter in California
- Designation of California as their permanent residence on all University documents
- Obtaining a California Driver's License or ID Card
- Registration of their car with the State of California
- Payment of California income taxes as a resident
- Maintenance of a home in California

For more information about residence classification, please see <http://www.reg.uci.edu/residency/classification.html>.

Grading Policies

*** It is the student's responsibility to check grades at the end of each quarter ***

Grades are available from the Registrar's Office (fees apply for copies of official transcripts; unofficial transcripts are free of charge) or through Student Access.

Traditional grades: A, B, C, etc... Students are expected to maintain a B average (this is an absolute requirement if on a fellowship—GSR, TA, GAANN, etc.). In order to receive graduation credit, students must earn a grade of B or better in all required courses, core courses and breadth courses. A grade of B- or below does not have to be improved and can remain on the transcript if that grade is not going to be counted toward graduation requirements.

Pass/No Pass: P/NP is for undergraduate courses only. Graduate students must receive a letter grade to pass a course. Graduate students should not sign up for P/NP.

Satisfactory/Unsatisfactory: S/U is for graduate courses only and is considered to be a letter grade. Faculty can assign an S/U instead of an A, B, C, etc. Students are responsible for asking the instructor if they can receive the S/U option instead of an A, B, C, etc. at the beginning of the quarter. Please keep in mind that the S grade is equal to a B or better and the U grade is equal to a B- or below. A student who receives a U grade will have to repeat the course if it is going to count towards degree requirements.

Incompletes: The "I" grade is reserved for occasions when a student's work is satisfactory but is incomplete because of circumstances beyond the student's control, and when the student has been excused in advance from completing the quarter's work. Students may ask the instructor to assign an "I," but it may or may not be granted. If granted, a student has up to three quarters to complete the work. If the work is not completed and a grade has not been assigned after three quarters, the "I" will turn to an F. Once the work has been completed, the instructor must turn in a grade change report to change the "I" into a letter grade. The student should check Student Access often to confirm that the grade has been changed.

Graduate Division will not continue to approve employment for a student who has more than two Incompletes on their transcript.

No Reports: NR means no grade was reported. This can be the result of a variety of reasons:

The faculty member did not turn the grades in on time
The faculty member does not recognize the student's name on the class roster
The faculty member turned in the wrong grade
The course's grade roster was unreadable

An NR will turn into an F after one quarter. Students who receive an NR should talk to their instructor immediately. The instructor will need to complete a grade change report.

Transfers of Academic Credits

Previously taken graduate-level courses may count toward ICS degree requirements if they meet the following criteria:

Must have been passed with a grade of B or better

Must not have been applied toward a bachelor's degree or MS degree from another university

Cannot have been taken while the student was on a leave of absence from the ICS program

Must be approved by the ICS Associate Dean for Student Affairs and the Dean of Graduate Division

In addition, no more than *one-fifth* of the total units required for a Bren School MS or PhD degree may have been transferred from another institution, from UCI Extension, or from Summer Sessions at any other UC campus. Note: Students may only waive **two** courses of their Bren School degree requirements.

To obtain a petition to transfer course work from another university, contact the ICS Graduate Counselor. Keep in mind that, for courses taken at another university, students should petition to **WAIVE** the course. If the course in question is a UCI course, they should petition to **SUBSTITUTE** the course (see below).

Waive: If a course taken at another university is identical to a Bren School course, contact the professor who usually teaches the course. They can determine whether or not the course is equivalent. If it is, they can sign the petition form, which must also be approved by the Associate Dean for Student Affairs. Students must provide a syllabus of the course and their transcript from the other university along with their petition form.

Substitute: If the course to be substituted is a UCI course, students should speak to the professor who teaches the course, or to their faculty advisor. If they agree with the substitution, they can sign the petition form.

Once the form is completed and signed by the professor or advisor, it should be returned to the ICS Graduate Office. It will be forwarded to Graduate Division for consideration, and once a decision is made, the ICS Graduate Office will notify the student via email.

Leave of Absence

All graduate students can petition for a leave of absence from the program for a period of up to, but no more than, three quarters total. The LOA form is available in the ICS Graduate Office. Students should fill out the form well in advance to make sure it gets approved. The leave must be approved by both the ICS Graduate Office and the Dean of Graduate Division (the International Center, as well, for all international students). The Graduate Division will notify students via email once the leave has been approved or denied.

Curricular Practical Training (CPT)

International students may be eligible for CPT, a type of employment authorization that allows students to complete an internship/training off campus during the **summer**. Please consult the

International Center for CPT policies and application requirements. Students will need the approval of their advisor on the CPT application, and must attend the annual ICS CPT workshop in winter quarter.

Summer Enrollment

Continuing graduate students generally do not need to enroll in Summer Session (international students on CPT may be required to enroll). However, students who will graduate during summer quarter **MUST** either be enrolled or on **Filing Fee** (if eligible). During the summer, graduating students will generally enroll in the minimum allowable units of Individual Study or Thesis Supervision with their advisor. Graduating students who do not have an advisor should consult the ICS Graduate Counselors for assistance with summer enrollment.

Filing Fee

Graduate students are eligible for **one** filing fee quarter during their graduate career. During the filing fee quarter, students pay one-half the registration fee and do not enroll in any classes. The Filing Fee option applies only to students who have completed **ALL** requirements for a Master's or PhD degree except for official submission of a thesis or dissertation to the University Archives, or completion of the final formal examination (e.g., the comprehensive examination). Consult the ICS Graduate Counselors for other policies and limitations related to the filing fee. Additionally, international visa restrictions may preclude filing fee status for students who are not citizens or permanent residents of the United States. International students should verify their eligibility for filing fee status via the International Center well in advance of need.

Optional Practical Training (OPT)

International students may be eligible for OPT after graduation. OPT provides the opportunity to gain employment experience in the student's major/field of study. Please consult the International Center for OPT policies and application requirements. The ICS Graduate Counselors can verify your graduation date and sign the Graduation Confirmation/OPT Recommendation Form that is required as part of the OPT application package.

UC Irvine Academic Honesty Policy

Preamble

The University of California, Irvine is an institution of learning, research, and scholarship that is strengthened by the existence of an environment of integrity. As members of the academic

community, instructors, students, and administrators are responsible for maintaining this environment. It is essential that all members of the University practice academic integrity and accept individual responsibility for their work and actions. Violating the Academic Integrity Policy is unacceptable, devaluing the teaching and learning experience for the entire community. While at UCI, members of the academic community should become better educated about the ethical framework underpinning academic integrity and improve their moral standards supporting it.

The UCI Academic Senate Policy on Academic Integrity states the general rules and procedures associated with student academic integrity. This Academic Integrity Policy applies to undergraduate and graduate students enrolled in a UCI course. A separate policy governs the integrity of research.

Responsibilities

All members of the academic community have a responsibility to ensure that academic honesty is maintained.

Students' Responsibilities:

All students are expected to complete a course in compliance with the Instructor's standards. No student shall engage in any activity involving any Academic Integrity Policy Violations. No student shall engage in any activity that involves attempting to receive a grade by means other than honest effort, and shall not aid another student who is attempting to do so. All students are encouraged to notify instructors, but may also notify the AIAO, about observed incidents of Academic Integrity Policy Violations. Instructors should take reasonable steps to preserve the confidentiality of students making such reports.

All students have the responsibility to become familiar with and abide by the Academic Integrity Policy.

Instructors' Responsibilities:

Instructors should create an environment in their classes where academic integrity is understood and supported. They should assign grades in a transparent and equitable manner. Specifically:

When an Instructor believes that a Student has violated the Academic Integrity Policy, the Instructor should report the incident to the AIAO within thirty instructional days of discovering the possible Academic Integrity Policy Violation. The Instructor shall participate in the process according to the Academic Integrity Policy.

Please see additional Teaching Assistant's (TA) and Reader's Responsibilities, Resolution of Cases, Roles of the Instructor and the AIAO, along with Academic Integrity Procedures at:

<http://catalogue.uci.edu/appendix/#academichonestytext>

Bren School Policy on the Ethical Use of Computing Resources

Introduction

As a student you are probably aware of certain ethical responsibilities you have in doing class work. However, another area in which you have important ethical responsibilities is in your use of computing resources. Described in this policy document are some of these responsibilities, as

well as the ICS policy on student use of computing resources. Some of these policies might be different from what you would expect, so please read over and understand this document.

ICS provides for you, the student, a wide range of computing resources ranging from X-Terminals to PCs to large, multiuser UNIX systems. These machines are expensive to buy and expensive to maintain, but it is the School's goal to provide you with the very best computing environment possible. Many users depend on these computers for doing class assignments, research, and for communications. We are a community of computer users, and like any community we can all make the best use of our resources if we establish some guidelines for how we can use them responsibly.

Some computing facilities, such as those which hold classified data, may establish expensive and complex security systems. At the Bren School, we do not do this. Instead, we have some security mechanisms that greatly decrease the risk that one user will accidentally interfere with another, but no great ingenuity is needed to get around these mechanisms. As a result, we need to trust the people who use our machines.

The fundamental principle behind our policies is straightforward: While using the computers, you should never do anything that harms another user or prevents him or her from getting work done.

If you have any questions about these rules or if you suspect that an account (yours or someone else's) has been compromised, please contact the ICS Computing Support Group via email to helpdesk@ics.uci.edu, or stop by the Group's office in ICS 346 and explain the problem.

Computer Accounts

ICS has a wide range of computers available and they are located in several different labs. Some of these labs are open only to people enrolled in certain classes; other labs are available for general drop-in use. Each Bren School major is given both a Windows and a UNIX account on the Sun workstations. Different courses will require the use of different platforms. Non-majors will be given accounts only if required for a course in which they are enrolled.

All Bren School computers are to be used only by Bren School students, faculty, and staff. People outside the School who wish to use computers should go to one of the OIT (Office of Information Technology) drop-in labs (various locations around campus). OIT provides computing access for non-Bren School people.

Any computer account created for you remains the property of the Regents of the University of California. You are responsible for this account, and you may not allow any other person to use it.

The primary purpose of your account is to allow you to carry out your computing assignments and other instructional activities. You may also make modest use of these resources for other purposes, such as sending email to friends on campus, reading the electronic bulletin boards, and playing games, provided that this usage does not significantly interfere with instructional use of the machines.

An example of how one might "significantly interfere" would be to tie up a computer for game-playing when no other computers are free and someone else is waiting to use the computer to do an assignment. If you have a game or other program you would like to make available to other users, please give it to the system administrator for public installation (you can contact the system administrator by emailing helpdesk@ics.uci.edu). You may not use the machines for commercial purposes, such as preparing bills for your company or advertising products, or for work related to non-UCI organizations, such as an off-campus political or religious group. More

details about this are given below. If you are in doubt about the appropriateness of using an ICS machine, ask the Support Group staff.

Ethical Behavior

Below is a list of some examples of activities that the Bren School does not allow. If a student makes such unethical use of School computers, that student will be subject to the penalties described in the Disciplinary Procedures section.

- You may not introduce viruses, worms, Trojan horses, password cracking or login spoofing programs on any University computer or network. In fact, because of the serious damage such programs can cause, the Bren School faculty has adopted a policy which forbids students even to have these types of programs in their accounts or to place them on any School computer. In addition, you may not store such a program on a departmental computer even if you only wish to study the program.
- You may not try to use equipment or accounts that have not been assigned to you.
- You may not interfere with anyone's ability to make use of resources. For example, it might be reasonable to lock a workstation if you need to leave the room for two or three minutes, but it is not reasonable to lock it while you leave to buy lunch. Another example would be doing something that ties up all or a significant fraction of the machines, thus preventing others from receiving their fair time at the machines.
- You may not destroy other people's work.
- You may not "spy" on people, that is, you may not attempt to gain information from anyone else's accounts or from their external drives when there is good reason to believe that they do not wish you to obtain that information. Also, you may not attempt to violate the protection facilities provided by the system and/or take deliberate advantage of someone else's failure to protect sensitive information on their account. This works both ways; faculty, staff and members of Computing Support also have the responsibility to respect the privacy of the student. For example, it would be unethical for a faculty member or Support Group member to browse through your personal messages just out of curiosity, even if they have a security level that allows them to do so. The Bren School does, however, retain the right to inspect material on your account when this is necessary to investigate a suspected violation of University rules, such as a cheating incident or a violation of the rules in this document.
- You may not send email that appears to come from someone else.
- You may not advertise any commercial products or use your account to earn money. If for some reason you need an account that can be used for commercial purposes, contact OIT with your inquiry.
- You may not display offensive material in any publicly accessible area. There are materials available on the Internet and elsewhere that some members of the Bren School community will find offensive (one example is sexually explicit graphics; another is political argument on such issues as abortion). The School and the University are committed to maintaining the free and open exchange of ideas as well as a non-offensive working environment. Thus, the School does not restrict the availability of potentially offensive material, but does regard as unethical conduct the display of such material in any publicly accessible area, including on workstation screens in public rooms and in computer labs.
- You may not use the computers' printers as copying machines. For example, you may not print out 100 copies of a report; instead, print out one copy of the report and use a copying machine to obtain the other 99.

Disciplinary Procedures

What happens if you violate any of these rules? It depends on the seriousness of the offense, but could be one or more of the following. Disciplinary procedures and sanctions will be consistent with those outlined in the UCI Implementation of "Interim Policies and Procedures Applying to Campus Activities, Organizations, and Students, Part A."

1. You may have to meet with the chair of the Computing Resources Committee (CRC), the Dean of the Bren School of ICS, or the manager of the Computing Support Group to discuss abuse of computing resources.
2. Your account may be locked. (Again, we recognize an obligation to respect your rights, as well. No student account will be locked without discussion and approval of the Bren School Dean, or the chair of the CRC, except in the case of security violations. It would not be ethical for us to lock your account capriciously; for example, we agree not to lock it simply because you send a message to a board expressing disagreement with some School policy or action.)
3. For minor infractions, some form of departmental services (e.g., cleaning a lab) may be requested in exchange for unlocking the account.
4. For offenses involving abusing computing resources, cheating on course related work, or preventing others from working on assignments, your grade may be lowered in the class or you may receive a failing grade.
5. For severe offenses, or repeated minor offenses, you may lose access to all Bren School computing facilities for a period of time. Access to computing can be denied for a limited time (e.g., one week, the remainder of the quarter, an entire quarter) or permanently.
6. You may be suspended or dismissed from the University.
7. In serious cases, your name and a description of the violation may be reported to the police. California Penal Code Section 502 makes certain computer abuses a crime, and penalties can range up to a \$10,000 fine and up to three years in prison.

Good Citizenship

Your cooperation in the following areas will help us make efficient use of the computing resources and will avoid unnecessary impositions on the time of faculty, staff, and other students. These are not the sorts of things which we can expect to enforce rigidly; rather, we are asking for your cooperation for the benefit of the entire School community. Violations of these guidelines would not ordinarily result in any of the penalties listed above beyond number one, unless they were especially flagrant or persist after faculty or staff has asked you to stop.

- Please be careful not to use the computer to annoy people, for example by sending them messages which they do not wish to receive. (The mail system makes it rather easy to send a message to a very large group of people; please be responsible in your use of this capability. In particular, when you reply to a message sent to a large group, avoid cc'ing your reply to the entire group unless it is a matter of interest to them.)
- Please be careful not to annoy students in the lab for any reason. The lab is not a library, but we ask that each student do his/her part to help to maintain a pleasant working environment for all. Activities that are not conducive to a pleasant work environment include, but are not limited to: listening to music at a volume that is distracting to others, carrying on loud or inappropriate conversations, excessive or distracting cell phone use, failure to leave your workstation clean and ready for the next student, etc.
- Please do not waste anything (i.e., paper, disk space, CPU time, people time, etc.). Please put your old printouts in the recycling bins.

Acknowledgments

Some of these policies are adapted from those used by the UCLA CS Department. They adapted some of their policies from Columbia University and the California Institute of Technology.

UCI Computer and Network Policy

UC Irvine provides computing resources and worldwide network access to members of the Bren School electronic community for legitimate academic and administrative pursuits to communicate, access knowledge, and retrieve and disseminate information. All members of the UCI community (faculty, staff, students, and authorized guests) sharing these resources also share the rights and responsibilities for their use.

Rights and Responsibilities

Worldwide, open-access electronic communication is a privilege and continued access requires that users act responsibly. Users should be able to trust that the products of their intellectual efforts will be safe from violation, destruction, theft, or other abuse. Users sharing computing resources must respect and value the rights and privacy of others, respect the integrity of the systems and related physical resources, and observe all relevant laws, regulations, and contractual obligations. Users are responsible for refraining from acts that waste resources, prevent others from using them, harm resources or information, or abuse other people. To help protect files, users are responsible for setting passwords appropriately and for keeping passwords confidential by not giving them to another person.

Most UCI-owned computers are under the control of a system administrator or lab manager. These administrators are expected to respect the privacy of computer system users. However, UCI computer system administrators may access user files or suspend services on the systems they manage without notice as required to protect the integrity of computer systems or to examine accounts that are suspected of unauthorized use, misuse, or that have been corrupted or damaged. This includes temporarily locking vulnerable accounts, removing hung jobs, reprioritizing resource-intensive jobs, and such.

Many UCI departments have their own computing and networking resources and policies. When accessing computing resources, users are responsible for obeying both the policies described here and the policies of other departments. Student responsibilities are also described in the *Policies Applying to Campus Activities, Organizations, and Students*. In addition, all users are responsible for obeying policies of off-campus network services accessed using UCI resources.

Examples of Misuse

Examples of misuse include, but are not limited to:

- Knowingly running or installing on any computer system or network, or giving to another user, a program intended solely for the purpose of damaging or placing excessive load on a computer system or network. This includes, but is not limited to, computer viruses, Trojan horses, worms, bots, flash programs, or password cracking programs.
- Attempting to circumvent data protection schemes or uncover security loopholes without prior written consent of the system administrator. This includes creating and/or running programs that are designed to identify security loopholes and/or intentionally decrypting secure data.
- Using computers or electronic mail to act abusively toward others or to provoke a violent reaction, such as stalking, acts of bigotry, threats of violence, or other hostile or intimidating "fighting words." Such words include those terms widely recognized to victimize or stigmatize individuals on the basis of race, ethnicity, religion, sex, sexual orientation, disability, and other protected characteristics.
- Posting on electronic bulletin boards, Web pages, or any other computer network based dissemination channel, any materials that violate University policy or codes of conduct. Attempting to monitor or tamper with another user's electronic communications or

reading, copying, changing, or deleting another user's files or software without the explicit agreement of the owner.

- Violating copyright laws or restrictions.
- Violating terms of applicable software licensing agreements.
- Using campus networks to gain, or attempt to gain, unauthorized access to any computer system.
- Using a computer account or obtaining a password without appropriate authorization.
- Facilitating or allowing use of a computer account and/or password by an unauthorized person.
- Employing, either directly or by implication, a false identity when using an account or other electronic resources. This includes sending unauthorized mail that appears to come from someone else as well as posting or otherwise disseminating materials which misrepresent the identity of the sender. Disguising, misrepresenting, or concealing the identity of a computer system connected to the network.
- Performing an act without authorization that will interfere with the normal operation of computers, terminals, peripherals, networks, or will interfere with others' ability to make use of the resources.
- Using an account for any activity that is commercial in nature and/or not related to work at UCI, such as consulting services, typing services, developing software for sale, advertising products, and/or other commercial enterprises for personal financial gain.

Distributing, posting, or otherwise making available to those not authorized any confidential, sensitive, or private information.

Consequences of Misuse

Misuse of computing, networking, or information is unacceptable, and users will be held accountable for their conduct. Serious infractions can result in temporary or permanent loss of computing and/or network privileges and/or Federal or State legal prosecution. Appropriate corrective action or discipline may be taken in conformance with applicable personnel policies, student policies, collective bargaining agreements, and procedures established by the Academic Senate. California Penal Code, Section 502 makes certain computer abuses a crime (such as illegal reproduction of software protected by U. S. copyright law), and penalties can include a fine and/or imprisonment. Files may be subject to search under proper authorization.

Minor infractions of this policy, such as poorly chosen passwords, overloading systems, excessive disk space consumption, are typically handled internally by the department in an informal manner. More serious infractions such as abusive behavior, account invasion or destruction, attempting to circumvent system security, and the like are handled formally through the Office of the Dean of Students or by other appropriate officials.

Contact Information

For additional information, contact the Office of Information Technology by calling (949) 824-2222, or by email at oit@uci.edu.

Campus Resources

Campus Billing Services

Campus Billing Services (CBS) acts as the **ZotAccount Information Center** for the 27,000+ UCI students who are billed for registration fees each quarter. Every year, they handle thousands of inquiries about ZotAccount Online, including questions about charge amounts, due dates, and payment options. They can help you **understand your ZotBill** by explaining the various charges and credits, and showing you how the amount due was calculated.

Location & Contact Information:

109 Aldrich Hall

949-824-2455, 949-824-9807 Fax, email: cbs@uci.edu

Web Site: https://www.fs.uci.edu/CBS/Cbs_home.htm

Career Center

The Career Center's services, events, and resources are centered on providing access to opportunities, career consulting, and professional education to UCI students and alumni. It serves as a bridge between the academic and professional world, connecting students and employers. As UCI's "Internship Central", it has extensive resources and information on internships on and off campus. The team of Career Counselors is professionally trained to help students identify and create their career goals. The Center's nationally recognized webshops and videos are a fun and interactive way to learn professional development and career tips.

Location & Contact Information:

100 Student Services I

949-824-6881, email: career@uci.edu

Web Site: <http://www.career.uci.edu/>

Central Cashier

At UCI, the staff of the Central Cashier assists the campus community by processing payments and deposits, and answering questions at their service windows. They process your payments for registration and other charges, such as add/drops, readmission applications, and transcript and diploma requests. They also receive payments for bills like Student Health invoices, returned checks, and library fines.

Location & Contact Information:

228 Aldrich Hall

949-824-6916, 949-824-3252 Fax, email: cashiers@uci.edu

Web Site: <http://www.fs.uci.edu/Cashier/CashHome.htm>

Counseling Center (Psychological)

The Counseling Center is the primary counseling and mental health agency for UC Irvine undergraduate and graduate students. The Center provides short term time limited individual, couples, group and family counseling. The Center also assists students with urgent care and some psychological testing. Psychiatric evaluation and intervention are available on a limited basis for students concurrently seen in therapy. A wide range of workshops and courses related to interpersonal and developmental issues including cross cultural interaction, intimacy and friendships, interpersonal communication, and coping and resiliency are offered annually. The Center's services are available and free of charge to currently registered students.

Location & Contact Information:

203 Student Services I

949-824-6457

Web Site: <http://www.counseling.uci.edu/>

Cross-Cultural Center

The mission of the Cross-Cultural Center is to provide a network of support services promoting the personal, social, cultural, and academic well-being of UCI's ethnic and culturally diverse student body. Toward this end, the Cross-Cultural Center offers a wide array of educational programs that advance learning and discovery about UCI's various multicultural communities. The Cross-Cultural Center supports the campus's academic mission by promoting an environment that encourages intellectual exchange, civility, and the responsible exercise of individual expression.

Location & Contact Information:

Across Ring Mall from the UCI Student Center

949-824-7215, 949-824-3056 Fax

Web Site: <http://www.ccc.uci.edu/>

Disability Services Center

Core functions include: Provide effective and reasonable academic accommodations and related disability services to UCI students; Consult with and educate faculty about reasonable academic accommodations; Strive to improve access to UCI programs, activities, and facilities for students with disabilities; Advise and educate academic and administrative departments about access issues to programs or facilities; Promote increased awareness of disability issues on campus.

Location & Contact Information:

100 Disability Services

(Building 313 on campus map)

949-824-7494, 949-824-3083 Fax, 949-824-6272 (TDD), email: dsc@uci.edu

Web Site: <http://www.disability.uci.edu/>

UCI Student Health Center

Graduate students covered under the UC SHIP may be seen for all medical appointments at the UCI Student Health Center on the UCI campus.

Location & Contact Information:

501 Student Health

Phone: 949-824-5301

UC SHIP Coordinator: 949-824-9415

University of California Student Health Insurance Plan:

http://www.shs.uci.edu/health_insurance_privacy/insurance.aspx#shipplan

Student Health Center: <http://www.shs.uci.edu/>

International Center

The International Center promotes and facilitates international education by providing services to advance the university's mission and support the academic goals and objectives of international students, faculty, and researchers. The International Center Staff is committed to providing quality services to comply with government regulations and promote intercultural understanding.

Center staff counsel and assist international students, faculty, researchers, staff and scholars with immigration, orientation, employment and adjustment needs throughout their stay at UCI. In addition, the staff brings together international and domestic members of the UCI community for a variety of cultural, educational, social and recreational activities.

Location & Contact Information

G302 Student Center

(Building 113 on the campus map)
949-824-7249, 949-824-3090 Fax, email: internationalcenter@uci.edu
Web Site: <http://www.ic.uci.edu/>

Lesbian, Gay, Bisexual, Transgender (LGBT) Resource Center

The LGBT Resource Center is dedicated to providing a safe and welcoming environment for UCI's diverse lesbian, gay, bisexual, transgender, queer, questioning, intersex, and ally communities. They raise awareness, increase visibility, and engage in advocacy regarding LGBT issues. In addition, they provide opportunities for leadership and personal development, serve as a resource for LGBT students, and create programs and services that work to eliminate heterosexism, homophobia, and gender identity oppression.

Location & Contact Information:

G301 Student Center
949-824-3277, 949-824-7971 Fax, email: lgbtrc@uci.edu
Web Site: <http://www.lgbtrc.uci.edu/>

Graduate Resource Center

The Graduate Resource Center (GRC) exists to enrich the experiences of the graduate and postdoc community by providing coordinated services, events, programs, information and support. The GRC also serves as a meeting place for students to relax, interact with other students, plan events, share ideas, network and develop friendly relationships. The GRC offers a wide variety of personal and professional development opportunities for graduate students and postdoctoral scholars. They also sponsor writing workshops throughout the academic year.

Location & Contact Information:

3100 Gateway Study Center
949-824-3849
grc@uci.edu

Langson Library (Main) & Ayala Science Library

The UC Irvine Libraries' collections support the teaching and research mission of the campus. The UCI Libraries hold more than 2.7 million volumes and provide access to approximately 47,000 print and online journals and scholarly resources. The Libraries also maintain a collection of 2.3 million microforms -- as well as more than 114,000 cartographic and graphic materials, computer files, audio recordings, films, and videos.

Location & Contact Information:

Langson Library: 102 on the Campus Map
949-824-6836
Web Site: <http://www.lib.uci.edu/langson-library.html>
Ayala Science Library: 520 on the Campus Map
949-824-3681
Subject Librarian for ICS: Julia Gelfand, 949-824-4971, jgelfand@uci.edu
Web Site: <http://www.lib.uci.edu/science-library.html>

**2014-2015 Nondiscrimination, American Disability Act
& Clery Act Statements**

Nondiscrimination Policy Statement Regarding Student-Related Matters

The University of California, in accordance with applicable Federal and State law and University policy, does not discriminate on the basis of race, color, national origin, religion, sex, gender identity, pregnancy(1), physical or mental disability, medical condition (cancer related or genetic characteristics), ancestry, marital status, age, sexual orientation, citizenship, or service in the uniformed services(2). The University also prohibits sexual harassment. This nondiscrimination policy covers admission, access, and treatment in University programs and activities.

Inquiries regarding the University's student-related nondiscrimination policies may be directed to:

Kirsten K. Quanbeck, Director
Office of Equal Opportunity and Diversity
103 Multipurpose Science & Technology Building (MSTB)
Irvine, CA 92697-1130
Phone: (949) 824-5594
Email: oeod@uci.edu

1 *Pregnancy* includes pregnancy, childbirth, and medical conditions related to pregnancy or childbirth.

2 *Service in the uniformed services* includes membership, application for membership, performance of service, application for service, or obligation for service in the uniformed services.

American Disability Act Statement

The information in this publication will be made available in alternative formats for people with disabilities, upon request. Requests should be directed to the Disability Services Center, telephone 949-824-7494; TDD 949-824-6272. The campus and all buildings are accessible by wheelchair.

Clery Act Statement

Pursuant to 20 U.S.C. Section 1092 (f), the "Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act" ("Clery Act"), and the Code of Federal Regulations (CFR), UC Irvine distributes the annual crime statistics report.

Clery Crime Statistics reflect statistics for the past three years related to crimes and incidents reported to the UCI Police Department, local law enforcement agencies and campus security authorities (whether the crime occurred on campus, in off-campus buildings or property owned or controlled by the University, or on public property adjacent to campus). This report is available online at <http://www.police.uci.edu/awareness/jca.html>.