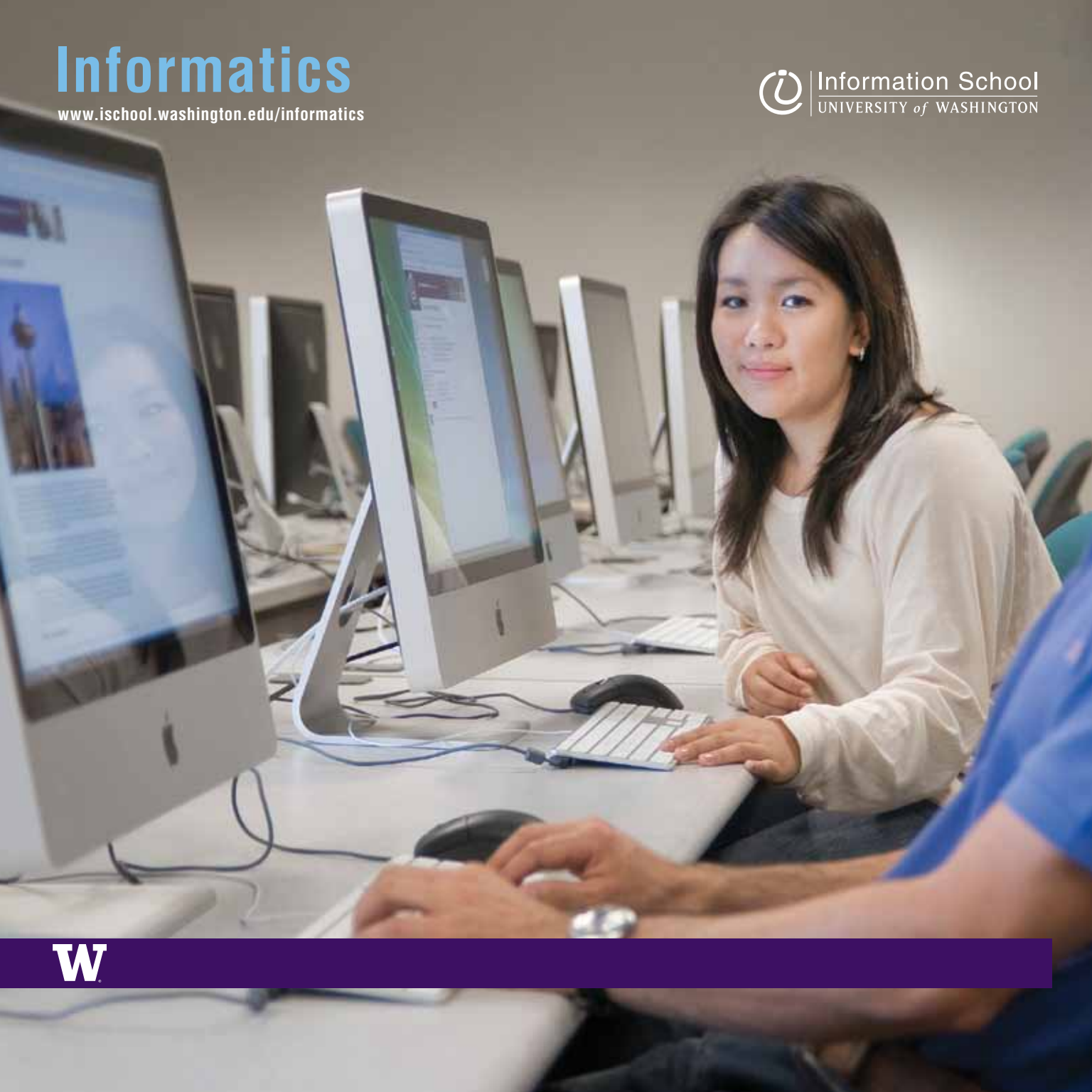


# Informatics

[www.ischool.washington.edu/informatics](http://www.ischool.washington.edu/informatics)



Information School  
UNIVERSITY of WASHINGTON



**W**



## OVERVIEW

### Informatics students make a difference

Informatics students design, build, implement and secure information systems that meet human, organizational and societal needs. They combine knowledge and skills from the program with their unique personal and professional interests to foster innovation in information and technology in the private, public and non-profit sectors.

#### **Informatics students:**

- › Share a passion for information and technology
- › Enjoy working with people
- › Love analyzing and solving problems
- › Can communicate effectively
- › Enjoy leading and managing projects
- › Want to change society and improve the world through information and technology

Informatics is a multidisciplinary field of study that draws upon areas such as computer science, information science, sociology, psychology, design and information management. Coursework is varied and includes technical classes such as programming, web development and database management as well as courses in project management, user-centered design, systems analysis and information policy.

#### **In the Informatics program, students study:**

- › Information systems, from simple systems that support personal information management to complex systems that involve vast databases of distributed information
- › National and global information policy
- › Issues related to the security and integrity of information systems
- › The information architecture necessary to store and access repositories of information
- › Social networking, search and mobile technologies

As students learn about the use and users of technology, they can apply their knowledge to positively impact organizations, their community and society. Informatics students make a difference.

# OVERVIEW

Where can my interest in information and technology lead me?

Beyond the required courses, students can choose to explore electives within their personal areas of interest or concentrate in particular areas of study.

Areas of strength in the Information School include:

- Human-Computer Interaction\***
- Information Architecture\***
- Networks and Information Assurance**
- Social Computing and Social Informatics**

\* Human-Computer Interaction and Information Architecture are offered as degree options. Upon completion of their degree, majors who chose these options will see Bachelor of Science in Informatics as well as the designation "Human-Computer Interaction" or "Information Architecture" on their UW transcript.

Throughout the major students develop the depth of skills and expertise they will use to obtain and thrive in their first job in the information field after graduation. As they embark upon their careers, graduates typically excel in professional roles as:

- |                                  |  |
|----------------------------------|--|
| <b>Usability engineers</b>       | <b>Business/Systems analysts</b>           |
| <b>User experience designers</b> | <b>Web designers</b>                       |
| <b>Information architects</b>    | <b>Information assurance professionals</b> |
| <b>Network managers</b>          |  |
| <b>Web developers</b>            |  |

The program also provides strong preparation for graduate studies. Students who elect to continue their education have been successfully placed in prestigious graduate schools in a wide variety of different programs of study.



# OUR STUDENTS

Informatics students have been great additions to our teams. As interns and graduates, they bring teamwork and leadership skills, as well as an equal balance of passion and curiosity, that make them ideally suited to help drive innovation and solve complex problems.

—Bob Davis  
General Manager, Microsoft Online  
Microsoft Corporation



we make information work

# CURRICULUM

Students choose from three degree paths: **Human-Computer Interaction, Information Architecture, or a student-designed concentration**

## Degree Options

In addition to the Bachelor of Science, students who complete one of two degree options will also have those options noted on their transcripts. Degree options are offered in:

### Human-Computer Interaction (HCI)

Preparation in human-computer interaction gives students the skills to design, construct and evaluate interactive technologies, with a focus on social implications, usability and accessibility for information and computing. Courses in the HCI option can be applied to the design, construction and evaluation of user interfaces, and new design techniques and methods for interaction and collaboration. The HCI degree option builds students' understanding of how technology and design intersect with human values.

### Information Architecture (IA)

The databases that drive e-commerce sites, and the visible navigation and underlying structure that make using great software logical and intuitive reflect the work of someone with a keen understanding of information architecture: how we present information in ways that allow users to put it to use. In the Information Architecture option, students learn how to understand user needs and design for those needs. They will master the skills needed to organize and label information for improved navigation and search and to build architectural frameworks to store and access information effectively.

### Student-Designed Concentration

Students may choose to develop their own concentration, with approval from the academic advisor. Student-designed concentrations are created out of a list of approved courses, and also result in the Bachelor of Science degree.

## PREREQUISITES

INFO 100 **Fluency in Information Technology**

INFO 200 **Intellectual Foundations of Informatics**

CSE 142 **Computer Programming I**

STAT 311 **Elements of Statistical Methods**

or QMETH 201 **Introduction to Statistical Methods**

**English Composition**

## CORE COURSES

CSE 143 **Computer Programming II**

INFO 330 **Information Structures**

INFO 340 **Database Management and Information Retrieval**

CSE 373 **Data Structures**

INFO 343 **Web Technologies**

INFO 380 **Systems Analysis**

INFO 360 **User-Centered Design**

INFO 450 **Information Ethics and Policy**

INFO 470 **Research Methods**

INFO 481 **Project Management**

INFO 490 **Capstone project**

## CONCENTRATIONS

### HUMAN-COMPUTER INTERACTION

ART 383 **Fundamentals of Interaction Design**

ART 483 **Interface Design**

ART 484 **Interaction Design**

CSE 440 **Introduction to HCI: User Interface Design, Prototyping, and Evaluation**

CSE 441 **Advanced UI Design**

INFO 310 **Individual Perspectives**

INFO 344 **Web Tools and Development**

INFO 424 **Information Visualization**

INFO 444 **Value Sensitive Design**

INFO 447 **Computer Supported Coop Work**

TC 317 **Usability Research**

TC 319 **Survey of Concepts of Human-Computer Interaction**

TC 318 **User Experience Design**

TC 438 **Web Technologies**

TC 455 **User Interface Design**

### INFORMATION ARCHITECTURE

INFO 320 **Information Needs, Searching, and Presentation**

INFO 344 **Web Tools and Development**

INFO 430 **Knowledge Organization and Representation**

INFO 431 **Metadata Design**

INFO 432 **Ontology Design**

INFO 445 **Advanced Database Design, Management, and Maintenance**

INFO 446 **Advanced Search Engine Systems**

### STUDENT-DESIGNED OPTION

With guidance from an academic advisor, students may create their own program out of all approved courses available to Informatics majors.



Informatics gives students strong technical skills and a powerful theoretical foundation that will allow them to grow throughout their careers

## ABOUT THE ISCHOOL

Why do students choose the iSchool?

### A Small School at a Big University

As a part of the UW's world-leading information school, Informatics majors experience the intimacy of a small school and the advantages of being at the University of Washington—ranked by Newsweek among the world's top 25 universities. Majors refine their skills in leading-edge facilities, including technology labs specifically for iSchool students. Labs are equipped with the most recent versions of software students will use in their professional lives.

Just as importantly, Informatics majors work closely with a talented and focused group of their peers in small classes. The Informatics major admits 70 students each year. A typical class has 35 students or fewer.

### Options

The combination of theoretical knowledge and practical skills prepares students for a career, not just a job. The skills required to connect people, information and technology are vital to all organizations and students can apply those skills wherever their interests lie. Typical starting salaries for Informatics graduates range from \$50,000 - \$85,000 per year.

### Excellent Faculty

Students develop personal relationships with faculty. The faculty of the Information School is dedicated to providing the highest levels of teaching, research and service. Collectively, our outstanding faculty represents the broad spectrum of activities and interests that characterize today's dynamic developments in information science.



## A GROWING FIELD

### Top 5 Fastest Growing Occupations:

- Network systems and data communications
- Personal and home care aides
- Home health aides
- Computer software engineers, applications
- Veterinary technologists and technicians

In a recent US Bureau of Labor Statistics report, five jobs in the information technology field were among the top 25 jobs in terms of predicted growth rates.



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## APPLYING

Priority application deadline  
April 15, 2009

### Program Admission Requirements—Prerequisites

- › INFO 100 Fluency in Information Technology
- › INFO 200 Intellectual Foundations of Informatics
- › CSE 142 Computer Programming I
- › STAT 311 Elements of Statistical Methods or QMETH 201 Introduction to Statistical Methods
- › One English composition course selected from the University list, with a minimum grade of 2.0 in each course. Departmentally approved transfer equivalents may be used to substitute for prerequisite courses.
- › A minimum 2.00 cumulative college GPA

Students with a previous technology background can request INFO 100 be waived. If INFO 100 is waived, students take an additional five elective credits in the major.

### Transferring into the Informatics Major

Transfer students should contact the Information School as soon as they become interested in the Informatics major. The School will consider courses equivalent to INFO 100 and INFO 200 and may allow a student to be admitted on the condition that the student completes those classes or equivalent with a minimum grade of 2.0 early in the program.

For complete application information, visit [www.ischool.washington.edu/informatics](http://www.ischool.washington.edu/informatics)

## CAREER PREPARATION

Informatics provides opportunities to build skills you'll use in professional settings

Informatics students are prepared for more than a first job; they are prepared for a lifetime career as leaders and innovators in the information and technology field. In addition to the skills and knowledge developed through classes and class projects, students have opportunities to expand their expertise through internships and the Capstone project.

### What is the Capstone Project?

The Capstone event showcases the breadth of skills and expertise students develop in the Informatics major. In poster sessions and oral presentations of their culminating projects, students demonstrate how they have been using information as a tool for transformation in their personal, academic and professional lives.

Capstone project collaborators include organizations from the public, private and non-profit sectors, and each project represents a concrete example of what it means to design and build novel applications of technology that meet the needs of people. With projects that encompass building social networking applications, improving services for homeless youth and supporting more efficient mass transit, the Capstone experience reflects the ways students at the iSchool make information work.

More information about the Capstone is available at [www.ischool.washington.edu/informatics/capstones/](http://www.ischool.washington.edu/informatics/capstones/)

### Internships

Internships provide hands-on learning within a professional environment. Every internship has an academic learning component and can be paid or unpaid. Most internships are 1-2 quarters in length and require 3-15 hours of work per week.

More information about internships is available from an academic adviser.



# ALUMNI PROFILES

Informatics prepares students to succeed professionally upon graduation



### Yared Ayele, Class of 2004

Consultant, Accenture

I take pride in the fact that I am developing social awareness on a global scale. As a graduate of the Informatics program, I have acquired a range of technical skills, which opened the door to internships with Microsoft, Intel and the U.S. Department of Defense. My passion in the social aspect of Informatics has taken me to South Africa to establish a computer literacy program and to West Africa doing research on Information and Communication Technologies (ICT) for sustainable development and global ICT policy. The Informatics program at UW is what you make of it; the possibilities of what you can pursue and what you can do with it are endless.



### Peter Griffin, Class of 2006

Google Applications Technical Sales Strategist, Google

My current role is in the growing Enterprise Online Sales group, bringing Google's consumer products and innovations to business users. I leverage my technical expertise to help prospective customers understand how Google's products work and integrate with their own networks and systems. I do traditional sales, coding and tool development, marketing work, conferences and trade

shows representing Google, and plenty in between. The broad education I received at the iSchool has helped me to be successful in the sometimes loosely-defined roles I fill at Google. The core classes I took at the iSchool polished up my real-world technical skills, and provided me with great context for business IT.



### Jessie Shulman, Class of 2007

Technology Leadership Associate, J.P.Morgan Chase

My Informatics background has allowed me to take on new roles as needed in a number of different job functions, serving a diverse set of internal and external customers. In my job at J.P. Morgan Chase as a Technology Leadership Associate, I am working on the Architecture, Integration and Data Movement team, developing an

enterprise data warehouse. My emphasis is on creating a data validation roadmap. The Informatics program honed my requirements-gathering skills and gave me the ability to articulate those requirements in functional specifications and other design documents. As the economy and the banking industry undergo profound change and demand great flexibility from workers, the Informatics educational philosophy has served me well.



### Carolynn Crews, Class of 2007

Research Associate, DatStat

I had almost completed my Psychology requirements when I had reached my junior year in school. I still wasn't sure what I wanted to do after graduation, so I started looking around at some other programs that would expand my experience in more technical areas because I knew it would be a valuable skill in the workforce. The Informatics web site gave me more information about how I could incorporate technol-

ogy with my psychology studies and I found the program allowed me to pursue my interests in human behavior, technology and even a bit of design from my artistic side.



### Marshall Bjerke, Class of 2008

Program Manager, Microsoft

I didn't know about Informatics when I chose my major but I knew I wanted to pursue my passion for technology and interest in social interaction. Once I discovered Informatics, I knew immediately that it is what I wanted to center my life around. Through the knowledge acquired in the Informatics program I was successful obtaining internships at Hewlett Packard and a startup web company. My

role at Microsoft as a Program Manager grew in part out of the relationships of iSchool staff. The opportunities that have been presented to me and the connections that I've made through the Informatics program are invaluable.

## CONTACT US

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