

AFFILIATED RESEARCH CENTERS

Carnegie Mellon encourages collaboration across departmental, college and institutional boundaries, continuing the university's strong tradition of interdisciplinary research. Many faculty members have joint appointments, and adjunct faculty members complete the wide array of expertise available to students. Through research, coursework and seminars, students enjoy opportunities to expand their knowledge in interrelated areas. The centers listed here also provide opportunities for students to broaden their study.

Carnegie Bosch Institute for Applied Studies in International Management cbi.tepper.cmu.edu/

Carnegie Mellon Electricity Industry Center wpweb2.tepper.cmu.edu/ceic/

Center for Arts Management and Technology camt.artsnet.org/

Center for Automated Learning and Discovery www.ml.cmu.edu

Center for Bioimage Informatics www.cbi.cmu.edu

Center for Business, Technology and the Environment www.history.cmu.edu/research/btctr.html

Center for Circuit and System Solutions c2s2.ece.cmu.edu

Center for Computational Analysis of Social and Organizational Systems www.casos.cs.cmu.edu

Center for Computational Finance www.math.cmu.edu/~ccf

Center for Integrated Study of the Human Dimensions of Global Change hdgc.epp.cmu.edu/

Center for the Neural Basis of Cognition www.cnbc.cmu.edu

Center for Sensed Critical Infrastructure Research www.ices.cmu.edu/censcir

Chief Information Officer Institute ism.cmu.edu/CIO-Executive-Education

Climate Decision Making Center cdmc.epp.cmu.edu/

Computer Emergency Response Team www.cert.org

CyLab www.cylab.cmu.edu

CyLab Japan www.cmu.jp

Data Storage Systems Center www.dssc.ece.cmu.edu

Human Computer Interaction Institute www.hcii.cmu.edu/

Industrial Technology Research Institute www.ece.cmu.edu/~itri

Institute for Complex Engineered Systems www.ices.cmu.edu

Institute for Software Research www.isri.cmu.edu

Institute for the Study of Information Technology and Society insites.heinz.cmu.edu

IT Services Qualification Center (ITSqc) itsqc.cmu.edu

Medical Robotics and Information Technology for Medicine and Surgery www.ri.cmu.edu/centers/mrcas/index.html

Pittsburgh Science of Learning Center einstein.pslc.cs.cmu.edu/

Pittsburgh Supercomputing Center www.psc.edu

Ray and Stephanie Lane Center for Computational Biology lane.compbio.cmu.edu

CARNEGIE MELLON UNIVERSITY

Founded in 1900 by industrialist and philanthropist Andrew Carnegie, Carnegie Mellon University today is a world-class research university of about 7,500 students and 3,000 faculty, research and administrative staff. Students represent all 50 states and more than 100 countries.

The university consists of seven colleges and schools: the Carnegie Institute of Technology (engineering), the College of Fine Arts, the College of Humanities and Social Sciences, the H. John Heinz III School of Public Policy and Management, the Mellon College of Science, the School of Computer Science and the Tepper School of Business. In its annual rankings, *U.S. News and World Report* consistently rates several of Carnegie Mellon's programs highly, including those in the fields of engineering, computer science, design, art, business, and public policy and management.

Carnegie Mellon is located in Pittsburgh, Pennsylvania, with a greater metropolitan area of more than 2 million residents. The campus encompasses approximately 100 acres and adjoins a 500-acre park and residential communities with abundant student housing.

Carnegie Mellon University does not discriminate and Carnegie Mellon University is required not to discriminate in admission, employment, or administration of its programs or activities on the basis of race, color, national origin, sex or handicap in violation of Title VI of the Civil Rights Act of 1964, Title IX of the Educational Amendments of 1972 and Section 504 of the Rehabilitation Act of 1973 or other federal, state, or local laws or executive orders.

In addition, Carnegie Mellon University does not discriminate in admission, employment, or administration of its programs on the basis of religion, creed, ancestry, belief, age, veteran status, sexual orientation or gender identity. Carnegie Mellon does not discriminate in violation of federal, state, or local laws or executive orders. However, in the judgment of the Carnegie Mellon Human Relations Commission, the Presidential Executive Order directing the Department of Defense to follow a policy of "Don't ask, don't tell, don't pursue" excludes openly gay, lesbian and bisexual students from receiving ROTC scholarships or serving in the military. Nevertheless, all ROTC classes at Carnegie Mellon University are available to all students.

Inquiries concerning application of these statements should be directed to the provost, Carnegie Mellon University, 5000 Forbes Avenue, Pittsburgh, PA 15213, telephone 412-268-6684 or the vice president for enrollment, Carnegie Mellon University, 5000 Forbes Avenue, Pittsburgh, PA 15213, telephone 412-268-2056.

Carnegie Mellon University publishes an annual campus security report describing the university's security, alcohol and drug, and sexual assault policies and containing statistics about the number and type of crimes committed on the campus during the preceding three years. You can obtain a copy by contacting the Carnegie Mellon Police Department at 412-268-2323. The security report is also available online.

Obtain general information about Carnegie Mellon University by calling 412-268-2000. The security report is also available online at www.cmu.edu/police/csr.htm.

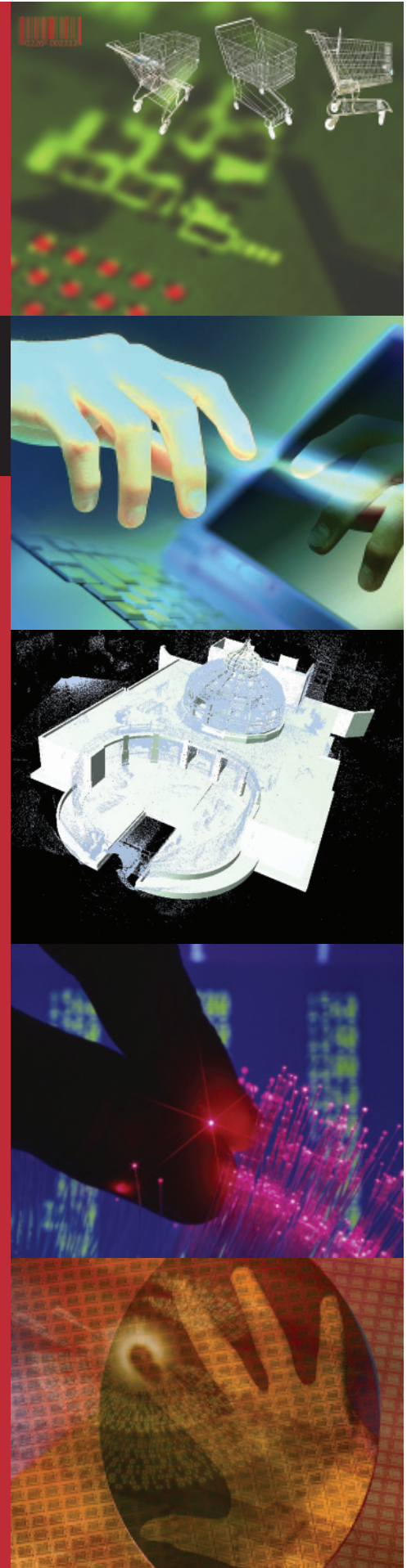
Carnegie Mellon

5000 Forbes Avenue
Pittsburgh, Pennsylvania 15213
412/268-2000
www.cmu.edu

Carnegie Mellon

GRADUATE STUDY IN INFORMATION, COMPUTER & COMMUNICATIONS TECHNOLOGIES

BIOTECHNOLOGY & MANAGEMENT
CIVIL & ENVIRONMENTAL ENGINEERING
COMPUTATIONAL BIOLOGY
COMPUTATIONAL FINANCE
COMPUTER SCIENCE & ROBOTICS
EDUCATION RESEARCH
ENGINEERING & PUBLIC POLICY
ENTERTAINMENT TECHNOLOGY
INFORMATION & INTERACTION DESIGN
INFORMATION MANAGEMENT, SYSTEMS
& TECHNOLOGY
INFORMATION NETWORKING
LOGIC
MACHINE LEARNING
PUBLIC POLICY & MANAGEMENT
SOFTWARE ENGINEERING
STATISTICS
STRATEGY, ENTREPRENEURSHIP
& TECHNOLOGICAL CHANGE
TELECOM & ELECTRONIC SECURITY



CARNEGIE MELLON'S INTERDISCIPLINARY APPROACH

Carnegie Mellon University takes a unique interdisciplinary approach to teaching and research—encouraging collaboration among students and faculty across departments and colleges. This unique perspective fosters the growth of innovative discoveries that provide solutions to real-world problems in a variety of disciplines.

Several interdisciplinary programs for graduate study have grown from this approach. This brochure provides an overview of graduate programs offered at Carnegie Mellon that focus on information, computer and communications technologies. We encourage you to visit the websites listed.

Additional research opportunities exist outside of the degree programs, such as with the on-campus research centers listed on the back page.

ADMISSIONS TO GRADUATE PROGRAMS

Admission to graduate programs is handled by the individual academic departments, and requirements and deadlines vary from department to department. For detailed information on the individual programs, refer to the contact information provided in the margin of each page.

FUNDING FOR GRADUATE STUDY

Doctoral programs at Carnegie Mellon usually provide tuition and stipends for their students. Master's programs are typically not funded, but partial departmental assistance may be available. Additionally, various types of financial aid are available for master's and Ph.D. programs. For more information, contact the individual departments or Enrollment Services (www.cmu.edu/hub/fa/fa_grad.html).

General information regarding graduate education can be found at www.cmu.edu and through each department. General inquiries can be directed to grad-ed@cmu.edu.

BIOTECHNOLOGY & MANAGEMENT

M.S. in Biotechnology and Management
www.heinz.cmu.edu/msbtm

CIVIL & ENVIRONMENTAL ENGINEERING

M.S. and Ph.D. in Civil and Environmental Engineering
M.S. and Ph.D. in Advanced Infrastructure Systems
M.S. and Ph.D. in Computational Science and Engineering
www.ce.cmu.edu/graduate/

COMPUTATIONAL BIOLOGY

M.S. in Computational Biology
www.cmu.edu/bio/graduate/

Ph.D. in Computational Biology
www.compbio.cmu.edu/

COMPUTATIONAL FINANCE

M.S. in Computational Finance
www.tepper.cmu.edu/master-in-computational-finance/index.aspx

COMPUTER SCIENCE & ROBOTICS

Computer Science Department
Ph.D. in Computer Science
www.csd.cs.cmu.edu/education/phd/

Joint Ph.D. with the Center for the Neural Basis of Cognition
www.cnbc.cmu.edu/Training

Human Computer Interaction

Professional Human-Computer Interaction Master's
Ph.D. in Human Computer Interaction
Dual Master's of Human-Computer Interaction (*with the University of Madeira, Portugal*)
www.hcii.cmu.edu/Academics/Academics.html

Language Technologies

M.S. and Ph.D. in Language Technologies
www.lti.cs.cmu.edu

Machine Learning Department

Secondary M.S. in Machine Learning
www.ml.cmu.edu/prospective_students/masters

continued

Ph.D. in Machine Learning
(*also available is a special track in the Center for the Neural Basis of Cognition*)
Joint Ph.D. in Statistics and Machine Learning
www.ml.cmu.edu/prospective_students/phd_programs.html

Robotics

M.S. and Ph.D. in Robotics
www.ri.cmu.edu

EDUCATION RESEARCH

Pre-Doctoral Program in Interdisciplinary Education Research
www.cmu.edu/pier

ENGINEERING & PUBLIC POLICY

Ph.D. in Engineering and Public Policy
Joint Ph.D. programs with each of the five traditional engineering departments (Biomedical, Chemical, Civil and Environmental, Electrical and Computer, Materials Science and Engineering, and Mechanical) and Computer Science
Ph.D. in Telecommunications Policy
www.epp.cmu.edu

ENTERTAINMENT TECHNOLOGY

Master of Entertainment Technology
www.etc.cmu.edu

INFORMATION & INTERACTION DESIGN

M.Des. in Communication Planning and Information Design
M.Des. in Interaction Design
Ph.D. in Design
www.design.cmu.edu

INFORMATION MANAGEMENT, SYSTEMS & TECHNOLOGY

Heinz School
Master's of Information Systems Management
www.mism.cmu.edu

Master of Public Management
(*with concentrations in Educational Technology, Management or Information Systems*)
www.heinz.cmu.edu/mpm

continued

M.S. in Information Security and Management
<http://ism.cmu.edu/Information-Security-and-Policy-Management>

M.S. and Ph.D. in Public Policy and Management
www.heinz.cmu.edu/academics/default.html

Information Systems Management

Master of Information Systems Management
M.S. in Information Technology
M.S. in Information Security Policy and Management
www.ism.cmu.edu/

Tepper School of Business

Ph.D. in Information Systems
www.tepper.cmu.edu/doctoral-program/index.aspx

M.S. IN INFORMATION TECHNOLOGY (MSIT) TRACKS

Heinz

- Information Technology Management
- Information Security and Assurance
- Software Design and Management
- Software Engineering Management
www.heinz.cmu.edu/academics

Information Networking Institute

- Information Security (*CyLab Japan and CMU West*)
- Software Management (*CMU West*)
- Mobility (*CMU West*)
www.ini.cmu.edu/programs

School of Computer Science

- Very Large Information Systems
- Robotics Technology
- eBusiness Technology
www.cs.cmu.edu/education/graduate/masters/

Software Engineering

- Embedded Systems Engineering
- Software Engineering
- Software Engineering Management
www.mse.cs.cmu.edu

INFORMATION NETWORKING

M.S. in Information Networking
(*Pittsburgh, Athens and Aveiro (Portugal) locations*)
M.S. in Information Security Technology and Management
(*Pittsburgh campus*)
Also see INI's MSIT offerings under MSIT header.
www.ini.cmu.edu/programs

LOGIC

M.S. and Ph.D. in Logic, Computation and Methodology
www.hss.cmu.edu/philosophy/graduate.php

Ph.D. in Pure and Applied Logic
<http://logic.cmu.edu/>

MACHINE LEARNING

Ph.D. in Machine Learning
Ph.D. in Statistics and Machine Learning (*special track in the Center for the Neural Basis of Cognition also available*)
Supplementary M.S. in Machine Learning (*for those in a Ph.D. program at Carnegie Mellon*)
www.ml.cmu.edu

PUBLIC POLICY & MANAGEMENT

Ph.D. in Public Policy and Management
www.heinz.cmu.edu

SOFTWARE ENGINEERING

Master's of Software Engineering
www.isri.cmu.edu

Master's distance education
www.distance.cmu.edu/SE/paths.html

Ph.D. in Software Engineering
www.cs.cmu.edu/~wls/isri/phd.html

Ph.D. in Computation, Organizations and Society
www.cos.cs.cmu.edu

M.B.A. and Master of Software Engineering (MBA/MSE)
www.mse.cs.cmu.edu/PlanOfStudy-MBA-MSE.html

Joint Certificate in Systems and Software Engineering (*with Cornell University*)
www.mse.cs.cmu.edu/certificate.html

Also see Software Engineering MSIT offerings under MSIT header.

STATISTICS

Ph.D. in Statistics and Information Systems
www.stat.cmu.edu/

Ph.D. in Statistics and Machine Learning
www.ml.cmu.edu/about/index.html

STRATEGY, ENTREPRENEURSHIP & TECHNOLOGICAL CHANGE

Ph.D. in Strategy, Entrepreneurship and Technological Change
www.cmu.edu/SETChange

TELECOM & ELECTRONIC SECURITY PROGRAMS

Electrical & Computer Engineering
M.S. and Ph.D. in Electrical and Computer Engineering
(*with a focus on Signal Processing and Communications or Software Systems and Computer Networking*)
www.ece.cmu.edu

Information Networking Institute

M.S. in Information Networking
M.S. in Information Security Technology and Management
www.ini.cmu.edu/programs

School of Computer Science

M.S. and Ph.D. in Human-Computer Interaction
www.hcii.cs.cmu.edu

Ph.D. in Computation, Organizations and Society
www.cos.cs.cmu.edu

CARNEGIE MELLON WEST *Located in the heart of Silicon Valley*

M.S. in Software Engineering (part-time and full-time)
M.S. in Software Engineering (*part-time with three tracks: Technical, Development Management or Program Management*)
M.S. in Information Technology (*See MSIT listings for details.*)
<http://west.cmu.edu/>