

Iowa State University

About the Catalog

The Iowa State University Catalog is a one-year publication which lists all academic policies, and procedures. Versions prior to 2011 were two-year publications. New courses and programs take effect in the fall term.

The catalog also includes information for fees; curriculum requirements; first-year courses of study for over 100 undergraduate majors; course descriptions for nearly 5000 undergraduate and graduate courses; and a listing of faculty members at Iowa State University.

New courses developed and offered since catalog publication can be found on the Web at www.iastate.edu/catalog/exp/.

Every effort has been made to make the catalog accurate as of the date of publication. However, all policies, procedures, fees, and charges are subject to change at any time by appropriate action of the faculty, the university administration, or the Board of Regents, State of Iowa.

Updates to the Catalog

The curriculum process is governed by the Faculty Senate. The ad hoc committee, Faculty Senate Curriculum Committee (<http://www.facsen.iastate.edu/AACouncil/curriculumcommittee.htm>) considers new curricula proposals, changes and discontinuations to the catalog. Additional information may be in the college governance documents.

The curriculum approval process generally consists of a proposal from the department/program level, approved by the department/program curriculum committee (if applicable), college curriculum committee, and the dean. Additional approvals are needed from the Graduate College if the program proposal is a graduate program. The program proposal is submitted to the Faculty Senate Curriculum committee for review. The Academic Affairs Committee reviews the proposal before passing it onto the Faculty Senate. The Board of Regents, State of Iowa approves all new programs and majors. For additional information about the approval process, see the link to Faculty Senate/Faculty Handbook Curriculum Approvals – Section 10.8

<http://www.provost.iastate.edu/faculty/handbook/current/section10.html#section-10.8>

Catalog updates are generally processed with approvals from department, college, and Faculty Senate Curriculum Committee (<http://www.facsen.iastate.edu/AACouncil/curriculumcommittee.htm>) representatives. Editing begins in late February with course changes due by June 1. Curriculum and other general information is due December 1. Publication is the following February.

See the Faculty Senate Curriculum Committee web site (<http://www.registrar.iastate.edu/catalog/fsc>) for details related to catalog editing.

About Iowa State University

Iowa State University is one of the most respected land-grant universities in the nation. Established by the Iowa General Assembly in 1858, the Iowa Agricultural College and Model Farm was designated the first land-grant college when Iowa became the first state to accept the terms of the federal Morrill Act in 1864.

The act allowed Iowa to sell federal land to finance a new college open to all, regardless of wealth, race or gender; offering a practical education in engineering, agriculture and military science as well as classical studies. Iowa State University officially opened in 1869 and was the first coeducational land-grant school. In 1887, land-grant institutions were given additional responsibilities to establish experiment stations to conduct research to benefit the state's citizenry.

In 1903, the nation's first cooperative agricultural extension program was launched when Iowa State professors worked with farmers and county governments to establish demonstration farms and institutes. That program resulted in a federal act in 1914, formalizing programs at each land-grant university that took research-based knowledge to the citizens of that state.

It is our institutional commitment to these land-grant principles and responsibilities that has produced alumni who are leaders in their professions, research that has forever changed our society and knowledge-based information that has assisted the citizens of our state, nation and world community.

Iowa State's Points of Pride

*The world's first electronic digital computer was developed at Iowa State by math and physics professor John V. Atanasoff and engineering graduate student

Clifford Berry, in the late 1930s. Their invention, the ABC computer, has been called the most important technological innovation of the 20th century.

*The university is a leader in virtual reality research and its most advanced virtual reality theater, the C6, is the nation's first six-sided theater that totally immerses the user in images and sound.

*Iowa State's faculty includes a Nobel Prize winner in chemistry and members of the National Academy of Engineering and the National Academy of Sciences.

*Iowa State's faculty members are recognized for their scholarly efforts. They serve as editors and on editorial and advisory boards of national and international academic professional journals.

*Iowa State's faculty includes two professors who have been recognized among the top 100 young technology innovators in the world.

*Iowa State is a member of the prestigious Association of American Universities that has a membership of only 62 major research universities in the United States and Canada.

*Iowa State is one of the top three U.S. universities in the development of patentable biotechnology.

*With more than 100 majors, 1700 faculty and 800 clubs and organizations, Iowa State has built a reputation for almost unlimited academic and social opportunities in a personal and welcoming environment.

*Iowa State's undergraduate programs for future entrepreneurs are ranked among the top 25 in the country.

*Iowa State's interior design, architecture and landscape architecture programs are ranked among the best in the nation.

*Iowa State's learning communities program for undergraduate students is rated among the nation's best.

*Every state and more than 100 countries are represented in Iowa State's student body.

*Iowa State students have a reputation for winning national and international awards. They win contests for apparel design, NASA food technology, news writing for print and broadcast, computer software, vocal music, music composition and many more.

*Iowa State is nationally ranked for its beautiful campus and its central campus has been honored by the Association of Landscape Architects as one of only three university Centennial Medallion sites in the nation.

*Iowa State's 600 works of art on campus make its public art collection the largest of any university in the nation.

*Iowa State's Reiman Gardens has been recognized for having the nation's most outstanding public rose garden.

*Iowa State's wrestling program boasts 6 Olympic gold medalists – the latest being graduate Jake Varner at the 2012 Olympic Games in London. Another Cyclone Olympic winning wrestler, Cael Sanderson, had a perfect collegiate wrestling record at Iowa State of 159 wins that has been recognized by Sports Illustrated as the second most impressive feat in college sports history.

*Iowa State holds a world record certified by the Guinness Book of World Records for growing the tallest amaranth plant in the world.

*The College of Veterinary Medicine has educated over 7,000 veterinarians serving the public and animals worldwide since 1879.

*The College of Human Sciences is home of the world's most effective drug prevention program for youth, the fastest method of detecting salmonella in contaminated foods, U.S. President-recognized teachers, and performance-boosting swimsuits worn by Olympic gold medalists.

**The Wall Street Journal* ranks the College of Engineering among the top 15 in the nation for the most well-trained and educated students and who are best able to succeed once hired.

*The College of Business undergraduate program ranks among the top 20% and the MBA program ranks among the top 15% of all U.S. programs accredited by the Association to Advance Collegiate Schools of Business.

*Supported by its agricultural career fair, the largest in the nation, the College of Agriculture and Life Sciences' placement rate for its graduates has been more than 97% annually for more than a decade.

*The College of Design is one of the most comprehensive design colleges in the United States, with an exceptional range of design disciplines and programs that regularly rank in the nation's top 10.

*The faculty in the College of Liberal Arts and Sciences lead seven of Iowa State's top 10 nationally ranked academic programs.

The Iowa State University Strategic Plan 2010-2015

The challenges of the 21st century demand that we focus on what we do best. To ensure that Iowa State University is a leading research university in 2050, we must recruit, support, and retain students, faculty, and staff who are committed to excellence, integrity, the free exchange of ideas, and collaboration. It is imperative that the creation, sharing, and application of knowledge be a global effort characterized by a profound respect for the diversity of people and ideas. These are the values that enrich our work and guide Iowa State's Strategic Plan.

Mission

Create, share, and apply knowledge to make Iowa and the world a better place.

We must prepare the leaders of our nation and the world. To make the world a better place, Iowa State will call upon its great strengths in student-centered education, global collaboration, and transformational basic and applied research. Iowa State will lead in developing more sustainable ways to produce and deliver safe and nutritious food, water, materials, and energy; integrate the protection of plant, animal, and human health; and care for our environment. We will design tools and infrastructure that will create entrepreneurial opportunities. The major changes sweeping the world are creating extraordinary opportunities for Iowa State to capitalize on its land-grant mission and be at the forefront in addressing our common, global challenges.

* To create knowledge, Iowa State must be a magnet for attracting outstanding students, faculty, and staff who will learn, work, and conduct world-class research and scholarship that address the challenges of the 21st century.

* To share knowledge, Iowa State's faculty, staff, and students must be able to communicate with and learn from diverse populations. The University must maintain a strong focus on student success and provide exceptional undergraduate, graduate, professional, and outreach programs that prepare students and citizens for leadership and success.

* To apply knowledge, Iowa State's faculty, staff, and students must be able to develop global partnerships to convert what they know into products, services, and information that will improve the quality of life for the citizens of Iowa, the nation, and the world.

Vision

Iowa State University will lead the world in advancing the land-grant ideals of putting science, technology, and human creativity to work.

Under the provisions of the Morrill Act of 1862, the State of Iowa designated Iowa State as the nation's first land-grant institution. The Act established the land-grant ideals that higher education should be accessible to all, regardless of race, gender, or economic circumstance, and that the university should teach liberal arts and practical subjects to provide an outstanding quality of life for future citizens. Iowa State pioneered the nation's first extension service and remains a leader in realizing the promise of the land-grant vision. The university enjoys a number of internationally known and prestigious assets that provide a unique foundation for continued growth and productivity. Iowa State and the city of Ames are home to a U.S. Department of Energy national laboratory; five U.S. Department of Agriculture research laboratories; the nation's finest genomic-based agricultural breeding, health, and biotechnology programs; world-renowned virtual reality, plant science, and bioeconomy institutes; and one of the nation's most successful technology transfer programs. Major recent investments in new research and educational facilities and an outstanding tradition of cross-disciplinary research bring all of Iowa State's colleges and departments together with global partners. The student experience emphasizes outstanding practical, international, and leadership opportunities, as well as a focus on student success. Iowa State alumni and friends are deeply engaged and invested in improving Iowa State. Over the next five years, Iowa State will continue to enhance its campus, capitalize on and leverage its strengths, and engage with partners to realize the goals of this Strategic Plan and create a better future for all.

Priorities

Iowa State will be a magnet for attracting outstanding students who seek an education that prepares them to make a difference in the world.

Goals:

* Recruit, support, retain, and graduate a diverse group of outstanding undergraduate, graduate, and professional students dedicated to making a difference in the world.

* Provide accessible residential and distance educational programs that build on Iowa State's strengths and excellence in science and technology integrated with design, business, education, arts, humanities, and social sciences.

* Provide a high quality student life that engages and challenges students to collaboratively learn, grow, and succeed as resilient global citizens and involved alumni.

Iowa State will be a magnet for attracting outstanding faculty and staff who create, share, and apply knowledge to improve the quality of life.

Goals:

* Recruit, support, and retain a diverse group of outstanding faculty and staff.

* Foster a university culture and work environment that rewards faculty and staff for their contributions, supports a balance between work and life, and inspires individuals to work together to achieve at the highest level of their abilities.

* Collaborate with Ames and surrounding communities to provide a premier living environment.

Iowa State will be internationally known for faculty, staff, and students who address the challenges of the 21st century.

Goals:

* Produce and disseminate transformational basic and applied research and creativity to improve the quality of life. Focus the resources of Iowa State on developing the basic knowledge and designing new technologies to create entrepreneurial solutions to the challenges of 2050 and beyond.

* Build and enhance outreach and global partnerships to promote scientific advances, economic growth, creative thinking, and improvement of the human condition.

Iowa State will be a treasured resource for Iowa, the nation, and the world.

Goals:

* Incorporate research and engagement in the student experience to produce civic-minded graduates who are well prepared to address complex societal problems.

* Build partnerships with communities of place and interest to solve problems and create opportunities.

* Involve citizens of Iowa and the world in collaborative interactions through extension, outreach, and engagement.

Nondiscrimination and Affirmative Action Statement

(November 1, 2010 Reaffirmation)

Iowa State University is committed to developing and implementing a program of nondiscrimination and affirmative action, a responsibility the university accepts willingly because it is the right and just thing to do. Because an educational institution exposes the youth of Iowa and of the nation to a multitude of ideas that strongly influence their future development, it is an area of our society where removing barriers is critical. We insist on promoting the concept of inclusion and participation.

This commitment is part of a larger commitment to developing a safe and supportive climate for all members of the ISU community in classrooms and laboratories, in offices, in the residence hall system, and throughout the campus. Iowa State University recognizes that a non-discriminatory environment complements a commitment to academic inquiry and intellectual and personal growth.

The goal is to provide a non-discriminatory work environment, a non-discriminatory living and learning environment and a non-discriminatory environment for visitors to the campus. Iowa State University herein recommit itself to comply with all federal and state laws, regulations, and orders, including the policies of the Iowa Board of Regents, which pertain to nondiscrimination and affirmative action.

All administrators and personnel providing input into administrative decisions are directed to ensure that all decisions relative to employment, conditions of employment and access to programs and services will be made without regard to race, color, age, religion, national origin, sexual orientation, gender identity, genetic information, sex, marital status, disability, or status as a U.S. veteran. Exceptions to this directive may be made in matters involving bona fide occupational qualifications, business necessity, actions designed to eliminate workforce underutilization, and/or where this policy conflicts with federal and state laws, rules, regulations, or orders.

Iowa State University does not discriminate on the basis of race, color, age, religion, national origin, sexual orientation, gender identity, genetic information, sex, marital status, disability, or status as a U.S. veteran. Inquiries can be directed to the Director of Equal Opportunity and Compliance, 3280 Beardshear Hall, (515) 294-7612.

No otherwise qualified person will be denied access to, or participation in, any program, activity, service, or the use of facilities on the basis of factors previously enumerated. Reasonable accommodation will be made to facilitate the participation of persons with disabilities in all such activities consistent with applicable federal and state laws, orders and policies.

Further, all supervisory personnel will be responsible for maintaining an environment that is free of discrimination and harassment. Acts by anyone that adversely affect another person's employment, conditions of employment, academic standing, receipt of services, and/or participation in, or enjoyment of, any other activity, will be regarded as a violation of university policy and thereby subject to appropriate disciplinary action. Retaliation against persons filing complaints, for bringing the violation of this policy forward for review, or for assisting in a review, pursuant to a filed complaint or grievance, is prohibited.

Iowa State University's commitment to nondiscrimination and affirmative action is of the highest priority and is to be adhered to as such. It applies to all university-sponsored programs and activities as well as those that are conducted in cooperation with the university.

Iowa State University has designated Carla R. Espinoza as the affirmative action officer and assigns overall program responsibility to her as the Director of Equal Opportunity. Questions regarding complaints and/or compliance with affirmative action or equal opportunity should be directed to her at 3280 Beardshear Hall, Iowa State University, Ames, IA 50011-2024, (515) 294-7612.