Informatics, BS

Program Description

Informatics is about discovering, developing and understanding computer applications that improve people's lives. The BS program in informatics prepares students to become skilled professionals who take a transdisciplinary, user-oriented perspective toward information and computing systems, apply current informatics methods to address society's needs and contribute to the next generation of such systems.

The informatics bachelor's degree program provides an option for students interested in a flexible program in applied information and computing technologies. The program provides skills in design and implementation of computer systems while offering opportunities for building applications used by people in many fields. Students learn to develop software for devices of all sizes, from supercomputers to cell phones and even smaller. The challenges of informatics include designing, developing and applying tools that model, aid or automate activities within science, engineering, business, geography, education and entertainment.

At a Glance

- **College/School:** [Ira A. Fulton Schools of Engineering](#)
- **Location:** [Tempe campus](#)
- **Additional Program Fee:** Yes
- **Second Language Requirement:** No
- **First Required Math Course:** MAT 210 - Brief Calculus or MAT 265 Calculus for Engineers I
- **Math Intensity:** Substantial

Required Courses (Major Map)
2022 - 2023 Major Map
Major Map (Archives)

Concurrent Program Options

Students pursuing concurrent degrees (also known as a "double major") earn two distinct degrees and receive two diplomas. Working with their academic advisors, students can create their own concurrent degree combination. Some combinations are not possible due to high levels of overlap in curriculum.

Accelerated Program Options

This program allows students to obtain both a bachelor's and master's degree in as little as five years. It is offered as an accelerated bachelor's and master's degree with:

- Global Management (Creative Industries and Design Thinking), MGM
- Global Management (Data Science), MGM
- Global Management (Digital Audience Strategy), MGM
- Global Management (Global Affairs), MGM
- Global Management (Global Business), MGM
- Global Management (Global Development and Innovation), MGM
- Global Management (Global Digital Transformation), MGM
- Global Management (Global Entrepreneurship), MGM
- Global Management (Global Health Care Delivery), MGM
- Global Management (Global Legal Studies), MGM
- Global Management (Integrated Health Care), MGM
- Global Management (Nonprofit Leadership and Management), MGM
- Global Management (Public Administration), MGM
- Global Management (Public Policy), MGM
- Global Management (Sustainability Solutions), MGM
- Global Management (Sustainable Tourism), MGM
- Global Management, MGM
- Robotics and Autonomous Systems (Artificial Intelligence), MS

Acceptance to the graduate program requires a separate application. During their junior year, eligible students are advised by their academic departments to apply.
Admission Requirements

General University Admission Requirements:
All students are required to meet general university admission requirements.

Freshman | Transfer | International | Readmission

Additional Requirements:

The admission requirements for a Bachelor of Science in informatics are higher than minimum university admission requirements. Students should select a second major choice when applying for admission to a degree program in the Ira A. Fulton Schools of Engineering.

International students may have an additional English language proficiency criterion. Foreign nationals must meet the same admission requirements shown below with the possible additional requirement of a minimum TOEFL score. If the university requires a TOEFL score from the applicant (students should check https://admission.asu.edu/international/undergrad-student), and admission to engineering requires a minimum TOEFL score of 550 (paper-based), 213 (computer-based), 79 on iBT (internet-based) or a minimum IELTS score of 6.5.

Freshman Admission:

- minimum 1210 SAT combined evidence-based reading and writing plus math score or minimum 24 ACT combined score or minimum ABOR GPA of 3.00 or class ranking in top 25% of high school class, and
- A competency deficiency in either math or laboratory science is allowed. Competency deficiencies in both math and science are not allowed.

Transfer Admission Requirements:

Transfer students with fewer than 24 transferable college credit hours:

- Minimum transfer GPA of 3.00 for less than 24 transfer hours, and
- A competency deficiency in either math or laboratory science is allowed. Competency deficiencies in both math and science are not allowed, and
- minimum 1210 SAT combined evidence-based reading and writing plus math score (or 1140 if taken prior to March 5, 2016) or minimum 24 ACT combined score, or minimum ABOR GPA of 3.00, or class ranking in top 25% of high school class.

Transfer students with more than 24 transferable college credit hours:

Primary Criteria

- Minimum transfer GPA of 3.00 for 24 or more transfer hours, and
- A competency deficiency in either math or laboratory science is allowed. Competency deficiencies in both math and science are not allowed (if Admission Services requires submission of a high school transcript).
Secondary Criteria

- Minimum transfer GPA of 2.75 for 24 or more transfer hours, and
- Minimum GPA of 2.75 in all critical courses for Terms 1 and 2 (see major map for critical courses)

Change of Major Requirements

Admission requirements for many majors in the Ira A. Fulton Schools of Engineering are higher than university admission standards. Students should review the following Engineering website for more information: https://engineering.asu.edu/admission-requirements/.

Students should refer to https://changemajor.apps.asu.edu for information about how to change a major to this program.

Transfer Options

ASU is committed to helping students thrive by offering tools that allow personalization of the transfer path to ASU. Students may use MyPath2ASU™ to outline a list of recommended courses to take prior to transfer.

ASU has transfer partnerships in Arizona and across the country to create a simplified transfer experience for students. These pathway programs include exclusive benefits, tools and resources, and they help students save time and money in their college journey. Students may learn more about these programs by visiting the admission site: https://admission.asu.edu/transfer/MyPath2ASU.

Global Opportunities

Global Experience

With over 250 programs in more than 65 countries (programs vary in length, from one week to one year), study abroad is possible for all ASU students who wish to acquire global skills and knowledge in preparation for a 21st century career. Students earn ASU credit for completed courses, while staying on track for graduation, and they may apply financial aid and scholarships toward program costs. https://goglobal.asu.edu/

Career Opportunities

Informatics careers center on solving problems through the design and creation of information systems, user interfaces, mobile technologies and social media.
Graduates have the ability to develop future information technology solutions that place a strong emphasis on user needs and provide the ability to adapt and change dynamically with society's needs. This makes the informatician a strong candidate for jobs in:

- data analytics
- management consulting firms
- technology research centers
- technology startups

Additionally, they are prepared for graduate programs that offer an emphasis in emerging technologies.

Career examples include but are not limited to those shown in the following list. Advanced degrees or certifications may be required for academic or clinical positions.

<table>
<thead>
<tr>
<th>Career</th>
<th>*Growth</th>
<th>*Median Salary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Intelligence Analyst</td>
<td></td>
<td>not available</td>
</tr>
<tr>
<td>Computer Scientist</td>
<td>15.4%</td>
<td>$126,830</td>
</tr>
<tr>
<td>Corporate Web Developer</td>
<td>5.7%</td>
<td>$92,870</td>
</tr>
<tr>
<td>Geographic Information Systems Technician (GIS Technician)</td>
<td>5.7%</td>
<td>$92,870</td>
</tr>
<tr>
<td>Information Security Analyst</td>
<td>31.2%</td>
<td>$103,590</td>
</tr>
<tr>
<td>Information Technology Manager (IT Manager)</td>
<td>10.4%</td>
<td>$151,150</td>
</tr>
<tr>
<td>Instructional Specialist</td>
<td>5.9%</td>
<td>$66,970</td>
</tr>
<tr>
<td>Software Developer</td>
<td></td>
<td>not available</td>
</tr>
<tr>
<td>Video Game Designer</td>
<td></td>
<td>not available</td>
</tr>
</tbody>
</table>

* Data obtained from the Occupational Information Network (O*NET) under sponsorship of the U.S. Department of Labor/Employment and Training Administration (USDOL/ETA).

🌞 Bright Outlook  🌿 Green Occupation

Contact Information

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