



BACHELOR OF SCIENCE IN

Information Science

Undergraduate Degree Requirements | www.sci.pitt.edu | www.dins.pitt.edu

Our Bachelor of Science in Information Science (BSIS) degree program teaches you how to look at problems holistically, so you not only understand the technology, but also the needs of the people who will be using it. You will gain critical skills and broad, theoretical knowledge in systems analysis, user needs, programming principles, database systems, networks and more.

The following requirements fulfill the BSIS degree program. You also have the option to focus your studies in areas such as game and simulation development, human-centered computing, IT consulting and data analytics, and networks and security. For more information, see reverse side of this page.

Total credits for major: **30-31** | Total credits including Prerequisite course: **33-34**

PREREQUISITE COURSE *(Required for major eligibility)*

FOUNDATION OF INFORMATION SCIENCE

INFSCI 0010 Introduction to Information, Systems, and Society

**Also fulfills Dietrich School of Arts & Sciences Quantitative requirement*

REQUIRED COURSES

CORE COURSES

INFSCI 0009 Math for Information Science

OR INFSCI 1040 Introduction to Data Analytics

INFSCI 0017 Fundamentals of Object-Oriented Programming
(CS 0401 Intermediate Programming Using Java can be taken in place of INFSCI 0017) **OR** INFSCI 0019 Python Programming for Data Management and Analytics

INFSCI 1022 Database Management Systems
INFSCI 1024 Analysis of Information Systems
INFSCI 1044 Human Factors in Systems Design
INFSCI 1070 Introduction to Telcom and Networks

ELECTIVE UPPER-LEVEL COURSES

(Three or more required – must be upper level 1000 or higher) ***To view current specializations, see reverse side of page**

CAPSTONE

INFSCI 1059 Web Programming
INFSCI 1080 Independent Study
INFSCI 1081 Team-Based Capstone Project
INFSCI 1082 Information Science Cooperative Education Program
INFSCI 1085 Internship

GRADE REQUIREMENTS

All Courses: A grade of C or better is required in all classes required to fulfill the major. A minimum GPA of 2.5 in all courses counting toward fulfillment of the major. All grades are calculated into the overall GPA unless a course is repeated. If a course completed for the major does not meet grade requirements, the credits will not be counted toward the major.

Satisfactory/No Credit option: S grades are not accepted for courses required for completion of the major with the exceptions of INFSCI 1082 and INFSCI 1085.

CONTACT

Contact sciadmit@pitt.edu with any questions regarding this degree program or admissions to the School of Computing and Information.



Available Specializations

GAME AND SIMULATION DEVELOPMENT

Whether designing a virtual reality game for fun or a game to explore environmental challenges in urban areas, game design and development calls for a solid foundation in the Information Sciences. Our Game and Simulation Development specialization builds on that foundation with coursework in storytelling, game design, and game implementation, psychology of games, serious games, and simulation in health sciences.

CORE COURSES

Choose INFSCI 0009 Math for Information Science and INFSCI 0017 Fundamentals of Object-Oriented Programming

SUGGESTED SPECIALIZATION COURSES – 9 CREDITS

INFSCI 1017 Implementation of Information Systems
INFSCI 1052 User-Centered Design
INFSCI 1060 Game Design
INFSCI 1061 Game Implementation

IT CONSULTING AND DATA ANALYTICS

In the IT Consulting and Data Analytics specialization, you will learn how to break down complex problems, analyze critical data to support your decision-making, and design leading-edge solutions. You will learn how to successfully manage projects using industry standards and you will enhance your leadership skills to help you launch and navigate your professional career.

CORE COURSES

Choose INFSCI 1040 Introduction to Data Analytics and INFSCI 0019 Python for Data Analytics

SUGGESTED SPECIALIZATION COURSES – 9 CREDITS

INFSCI 1021 Trends in Information Technology Management
INFSCI 1023 Innovation & Entrepreneurship in Information Technology
INFSCI 1027 Project Management
INFSCI 1028 Going Digital: Transformational Change
INFSCI 1029 Business Essentials for the IT Professional

HUMAN-CENTERED COMPUTING

The Human-Centered Computing specialization explores the design and management of information systems, focusing on the user's needs and improving the user's experience. You will learn how to create systems that will specifically address the information tasks of the end-user, that are easy-to-use, and which are responsive to the user's changing needs and growing sophistication.

CORE COURSES

Choose INFSCI 0017 Fundamentals of Object-Oriented Programming (*CS 0401 Intermediate Programming Using Java can be taken in place of INFSCI 0017*) **OR** INFSCI 0019 Python Programming for Data Management and Analytics

AND INFSCI 1040 Introduction to Data Analytics

SUGGESTED SPECIALIZATION COURSES – 9 CREDITS

INFSCI 1052 User-Centered Design
INFSCI 1059 Web Programming
INFSCI 1060 Game Design
INFSCI 1073 Application Development for Mobile Devices

NETWORKS AND SECURITY

The School of Computing and Information is nationally renowned for its academic and research programs in Information Security – having been designated as a National Center for Academic Excellence in Information Assurance Education since 2003. In the Networks and Security specialization, you will learn the fundamentals of how computer networks work, how to make them secure, and what goes into the protocols and design of networks.

CORE COURSES

Choose INFSCI 0009 Math for Information Science and INFSCI 0017 Fundamentals of Object-Oriented Programming

SUGGESTED SPECIALIZATION COURSES – 9 CREDITS

INFSCI 0014 Cybersecurity and the Law
INFSCI 0071 Applications of Networks
INFSCI 1072 Introduction to Wireless Networks
INFSCI 1074 Computer Security
INFSCI 1075 Network Security
INFSCI 1079 Computer Networking Laboratory