Build today's technology, solve tomorrow's problems

Technological skills give you an edge in any major.

Start by choosing a technology course that meets your General Education requirements.

Arts and Humanities (A&H) Courses	IUB Gen Ed	CASE A&H	Cr.	Offered
MSCH-C 223 Introduction to Design and Production Provides a conceptual framework for writing, designing, and evaluating a variety of media products. This is not a hands-on production course but does offer an overview of the production process. Topics include scriptwriting, production design, visualization, composition, editing styles, and others. This course is a prerequisite for advanced-level courses in the design/production area.		✓	3	FA, SP
MSCH-C 226 Visual Communication Theories of visual communication including human perception, psychology of color, and principles of design. Application of those theories to photography, video, and computer graphic design in news communication.		✓	3	FA, SP, SU
MUS-Z 120 Music in Multimedia Overview of multimedia elements for interactive environments and linear media. Introduction to digital media including animation, audio, video, and images. Audio techniques including sound synchronization with cue points, loops, digital signal processing effects, mixing, and conversions using a waveform editor.	✓		3	FA, SU
SOAD-C 181 Design: Creative Revolution Introduction to comprehensive design: design formed by the cross pollination between artistic and design processes. Introduces examples of comprehensive design as they form within the entity of the city and as they take form within objects of design (e.g. clothing, furniture, architecture, automobiles). Also introduces students to methods and approaches in 2D and 3D design execution.		✓	3	FA, SP
SOAD-N 130 Digital Imagery for Non-majors An introduction to the fundamental practice of creating art imagery using digital software. Demonstrations and optional hands-on lab sessions emphasize technical production in Photoshop and Illustrator. Art projects created in Photoshop and lecture topics focus on aesthetic approaches and issues facing artists working in contemporary digital imaging.	✓	✓	3	FA, SP
SOAD-S 210 Digital Art: Survey and Practice Beginning class on digital media's role in the world of art production and reception. Class emphasizes learning to use digital media to produce original, creative artwork. Topics include digital imaging, communicative art, and interactivity.	✓	✓	3	FA, SU
SOAD-S 250 Introduction to Design Practice Drawing and perception in the history and practice of visual communication, including a basic introduction to the field and exercises with pencil, marker, computer, and other tools, to produce symbols, letter forms, and symbol-letter combinations.		✓	3	FA, SU
THTR-T 125 Introduction to Theatrical Production Introduction to the methods, practices, and materials used in theatrical design and production. Class focuses on stagecraft and theatrical design with introductions to lighting and costuming and an emphasis on scenic design.	✓	✓	3	FA, SP, SU

No previous experience required!
No prerequisites! Everything you need to know, you'll learn in class.

Natural and Mathematical Sciences (N&M) Courses	IUB Gen Ed	CASE N&M	Cr.	Offered
CSCI-A 110 Introduction to Computers and Computing Introduction to the basic principles of computers and software. This course examines the social and lifestyle effects of information technology with an emphasis on problem-solving techniques. Productivity software skills are taught using real-world projects.	✓	✓	3	FA, SP, SU
CSCI-A 201 Introduction to Programming I Introduction to general problem-solving techniques with programming. Programming constructs include loops, arrays, classes, and files. Emphasis on modular programming, user-interface design, and developing good programming style. Not intended for computer science majors.	✓	✓	3	FA, SP, SU
CSCI-C 102 Great Ideas in Computing Survey of great ideas in computing and the role of computing in the modern world. Explores how people use computing tools to realize their ideas. Emphasis on the impact of modern technology and the use of hardware and software to create solutions to everyday problems.	✓		3	FA, SP
CSCI-C 211 Introduction to Computer Science Introduction to programming and to algorithm design and analysis. Using the Scheme programming language, the course covers several programming paradigms. Intended for computer science majors.	✓	✓	3	FA, SP, SU
GEOG-G 237 Mapping our World Use of computers in the management of geographic information, including data storage, database construction, creation and production of maps, and related representation of geographic data. Laboratory includes computer cartography, experimentation, and interactive experiences using geographic information system (GIS) and mapping software.	✓	✓	3	FA, SP
GEOG-G 336 Environmental Remote Sensing Principles of remote sensing of the earth and its atmosphere, emphasizing satellite data in visible, infrared, and microwave portions of the electromagnetic spectrum. Emphasis on practical applications and digital image analysis.		✓	3	FA
GEOG-G 338 Introduction to Geographic Information Systems Overview of the principles and practices of geographic information systems (GIS). The course will deal with issues of spatial data models, database design, introductory and intermediate GIS operations, and case studies of real-world GIS applications.		✓	3	FA, SP, SU
INFO-I 101 Intro to Informatics Provides students with an engaging hands-on approach to understanding and using technology, using problem-solving techniques, information theory, and career panels. The lab component teaches basic skills in web design, media computation, and an introduction to basic programming. No experience necessary.	✓		4	FA, SP, SU
LING-L 245 Language and Computers Present-day computer systems work with human language. This course surveys issues relating natural language to computers, covers real-world applications, and provides practical experience with natural language on computers. Topics include text encoding, search technology, machine translation, dialogue systems, computer-aided language learning, and the social context of technology.	✓	✓	3	SP
LING-L 435 Foundations of Computational Linguistics No previous programming experience required. Introduces basic concepts in programming such as loops or functions with the goal of attaining practical skills for text processing and solving problems in computational linguistics: expression searching, managing text, searching in text, and extracting information from text.		✓	3	FA
LING-L 445 The Computer and Natural Language Present-day computer systems work with human language in many different forms, whether as stored data in the form of text, typed queries to a database or search engine, or speech commands in a voice-driven computer system. We also increasingly expect computers to produce human language, such as user-friendly error messages and synthesized speech. This course surveys a range of linguistic issues and problems in computational linguistics.		✓	3	SP
PHYS-P 105 Basic Physics of Sound Physical principles involved in the description, generation, and reproduction of sound. Topics include physics of vibrations and waves, propagation, Fourier decomposition of complex wave forms, harmonic spectra, standing waves and resonance, sound loudness and decibels, room acoustics, analog/digital, and recording/reproduction.	✓	✓	3	FA, SP
PHYS-P 120 Energy and Technology Provides physical basis for understanding interactions of technology and society, and for the solution of problems such as energy use and the direction of technological change.	✓	✓	3	FA
PHYS-P 150 How Things Work Exploration of the physics involved in our technology. The course introduces ideas from physics needed to understand the function of a selection of modern devices and systems.	✓	✓	3	FA, SP
SOC-S 110 Charts, Graphs, and Tables Introduction to how sociologists collect, interpret, and display data about the social world. Topics include the basics of research methods, sampling, and statistics; the visual presentation of quantitative data; and the design of informative and easy-to-read tables. These topics will be introduced through a series of hands-on examples and interactive classroom activities.	✓	✓	3	FA, SP, SU

Social and Historical Studies (S&H) Courses	IUB Gen Ed	CASE S&H	Cr.	Offered
INFO-I 222 The Information Society In this course, students will learn to think critically about what it means to live in an "Information Society." From printing press to telephone to computer to the Internet, they will explore the history and social implications of the various information revolutions that shaped contemporary commercial, scientific, organizational, and political life.	✓		3	FA

Make a difference.

Studying technology will change the way you think and expand your opportunities.

Additional Courses	Interest Area	Cr.	Offered
BIOT-T 270 Alcohol and the Science of Fermentation Introduction to the principles and biotechnological aspects of microbial fermentation and to the many and varied industries that rely on fermentation.	STEM	3	SP
BUS-K 160 Introduction to Modeling and Solving Business Problems Provides students with a foundational introduction to framing, modeling, and solving business problems in Microsoft Office. The course will emphasize basic file management skills, internet research, resource utilization, computer concepts, a solid foundation in business applications of Microsoft Excel, and introductory Microsoft Office skills for Access, Word, and PowerPoint.	Business	3	FA
BUS-K 201 The Computer in Business Introduction to computer basics, information systems, and their applications to managerial decision making. The course stresses end-user computing responsibility and explores current managerial issues in the hardware and software markets. Major topics include microcomputer orientation, systems software, development software, and commercial applications software.	Business	3	FA, SP, SU
COLL-X 211 Exploring Technology for Social Good Introduction to technology as a key component of academic and career planning for any field. Topics include technological applications for addressing social problems in a variety of fields, including fine arts, humanities, healthcare, gaming, linguistics, and others.	STEM	2	FA
CSCI-C 200 Introduction to Computers and Programming Broad introduction to algorithmic thinking and, specifically, to programming. This class covers the basics of programming using real-world applications in natural, physical, and social sciences. Students will develop the ability to program by identifying problems in the real world and then creating a program that solves the problem.	STEM	4	FA, SP
EDUC-W 200 Using Computers in Education Introduction to instructional computing and educational computing literature. This class includes hands-on experience with educational software, utility packages, and commonly-used microcomputer hardware.	Social Sciences	3	FA, SP, SU
ILS-Z 399 Special Topics: Computer-Mediated Communication Computer-mediated communication (CMC) is human-to-human interaction via computer networks such as the Internet. This course examines potentials and constraints of several types of CMC, and considers how content and dynamics are influenced by the systems' technical properties and the cultures that have grown up around their use.	STEM	3	FA, SP, SU
ILS-Z 399 Special Topics: Introduction to Game Programming Introduction to programming simple games in JavaScript using a free and open source game engine library. This class teaches computational approaches to game design by recognizing and implementing object and state-based algorithms and structures.	STEM	3	FA, SP, SU
INFO-Y 100 Exploring Informatics and Computer Science Exploration of the many academic tracks within the fields of informatics and computer science. Students will also learn about the multiple careers available to computer science and informatics majors.	STEM	1	FA, SP
MUS-A 100 Introduction to Personal Recording For students inside and outside the Jacobs School of Music who are not recording arts majors. Introduction to the science, technology, and techniques necessary to create and edit recordings.	Arts and Media	3	FA, SP
MUS-Z 361 Introduction to Midi and Computer Music Basics of the Musical Instrument Digital Interface (MIDI) system, its software, and the instruments commonly used with desktop MIDI workstations (synthesizers, digital samplers). MIDI sequencing, digital audio editing, and principles of digital synthesis.	Arts and Media	3	FA, SP, SU
SPEA-V 261 Technology in Public Affairs Introduction to information technology (IT) and computing applications in public affairs. Topics include basic IT concepts, project proposals, network and infrastructure design, security and ethics, data and document management, cloud computing, and IT futures. Direct application of the above with office suites, website development, spreadsheets and statistics, and databases.	Social Sciences	3	FA, SP
SPEA-V 369 Managing Information Technology Analysis and discussion of information technology (IT) as applied to problem solving and management in the public and non-profit sectors. Topics include management, infrastructures, policies, and concepts such as scalability, manageability, security, and the costs of technology. Focus on high-level issues surrounding IT and the strategic positioning of IT in all business sectors.	Social Sciences	3	FA, SP, SU
SPH-K 200 Microcomputer Applications in Kinesiology Hands-on introduction to microcomputers as problem-solving tools in physical education. Application programs in word processing, spreadsheets, data management, and graphics applied to specific problems in physical education, athletics, and sports.	Public Health	3	FA, SP