Farmingdale State College
STATE UNIVERSITY OF NEW YORK

Interaction Design (IxD)

Prof. Bill Steedle, Acting Chair
Visual Communications Department
Bill.Steedle@farmingdale.edu
631-420-2181
School of Business

Bachelor of Technology Degree

The Interaction Design Bachelor of Technology degree focuses on human behavior and user experience in the design and development of mobile applications, responsive web design and user experiences, service design, social networks, way-finding projects, brick and mortar and on-line retailing, exhibit design and more. This program encourages a culture in which students learn the value of collaboration, vision, risk-taking, discovery, entrepreneurship, passion, social responsibility and play. Students will immerse themselves in an environment that focuses on the practical application of user-centered, needs-based design solutions built upon strong research and development, observation, and prototyping.

Interaction Designers have the ability to influence the future development of products, systems and services in fields as diverse as education, healthcare, banking, business, and more. Graduates of the program will enter into employment such as mobile interface design, web design, user experience design (UX), user interaction design (UI), human computer interaction and more.

For additional information, or to schedule an interview and tour of our facilities, please contact the Visual Communications Department at 631-420-2181

Typical Employment Opportunities

Application Development
Data Visualization
Immersive Experience
Interactive Installation
Kiosk Design and Development
Museum Experience Design
User Experience Design (UX)
User Interface Design (UI)
Web Development and Design

Interaction Design (IXD) (BT) Program Outcomes:

- Graduates will develop and build upon strong foundational design skills through exploration and experimentation.
- Graduates will master skill sets in traditional and digital techniques to design successful interactive experiences.
- Graduates will exhibit an understanding of graphic design and interaction design from both an historical perspective as well as from a contemporary perspective with current and future trends of industry being paramount.
- Graduates will build professional skills including resume development, self promotion, job search, industry procedures and practices and presentation techniques.

- Graduates will present a portfolio of work in order to successfully compete in the current job market and to apply for graduate study. In this portfolio, students will demonstrate knowledge of current technical and conceptual interaction design standards.

Fall 2019 - Subject to Revision

Liberal Arts and Sciences	(33 credits)
EGL 101 Composition I: College Writing (GE)	3
MTH Elective (Statistics Preferred) (GE)	3
EGL 102 Composition II: Writing About Literature	3
ART 200 History of Graphic Design (GE)	3
SPE Elective (GE)	3
SOC 122 Introductory Sociology (GE)	3
HIS Elective (GE)	3
ART 201 Survey of Art History: Prehistoric Times through Middle Ages (GE)	

OR

ART 202 Survey of Art History: Early Renaissance to the Present (GE)	3
PSY 101 Introduction to Psychology (GE)	3
BIO/ PHY Elective (GE)	3
ART 203 History of Interaction Design (GE)	3

Support Courses	(21 credits)
BCS 130 Website Development I	3
BCS 240 Website Development II	3
PSY 328 Introduction to Human Factors	3
Free Electives	6
300 + Electives (Includes RAM 303)	6

Interaction Design Core	(67 credits)
VIS 110 Drawing I	3
VIS 112 Two-Dimensional Design	3
VIS 115 Three-Dimensional Design	3

VIS 116 Digital Media and Methods	3
VIS 122 Typography I	3
VIS 225 Photography I	3
VIS 228 Four-Dimensional Design	3
IXD 210 Typography for Interaction	3
IXD 212 Interaction Design I-Foundation	4
IXD 310 Interaction Design II- User Interface	4
IXD 312 Research Strategies	3
IXD 320 Interaction Design III- User Experience	4
IXD 322 Prototype Tools	3
IXD 330 Design for Social Change	3
IXD 410 Interaction Design IV- Advanced Interaction Design	4
IXD 412 Special Topics Studio	3
VIS 340 Industry Preparation	3
VIS 416W Senior Project I	3
VIS 426 Senior Project II	3
IXD 414 Design and Play Mechanics	3
VIS 418 Portfolio	3
Total Credits	121

Degree Type: BT
Total Required Credits: 121

Please refer to the General Education, Applied Learning, and Writing Intensive requirement sections of the College Catalog and consult with your advisor to ensure that graduation requirements are satisfied.

Course Descriptions

EGL 101 Composition I: College Writing (GE)
This is the first part of a required sequence in college essay writing. Students learn to view writing as a process that involves generating ideas, formulating and developing a thesis, structuring paragraphs and essays, as well as revising and editing drafts. The focus is on the development of critical and analytical thinking. Students also learn the correct and ethical use of print and electronic sources. At least one research paper is required. A grade of C or higher is a graduation requirement. Note: Students passing a departmental diagnostic exam given on the first day of class will remain in EGL 101; all others will be placed in EGL 097. Prerequisite is any of the following: successful completion of EGL 097; an SAT essay score (taken prior to March 1, 2016) of 7 or higher; an SAT essay score (taken after March 1, 2016) of 5 or higher; on-campus placement testing. Credits: 3

EGL 102 Composition II: Writing About Literature
This is the second part of the required introductory English composition sequence. This course builds on writing skills developed in EGL 101, specifically the ability to write analytical and persuasive essays and to use research materials correctly and effectively. Students read selections from different literary genres (poetry, drama, and narrative fiction). Selections from the literature provide the basis for analytical and critical essays that explore the ways writers use works of the imagination to explore human experience. Grade of C or higher is a graduation requirement. Prerequisite(s): EGL 101 Credits: 3

ART 200 History of Graphic Design (GE)
Graphic design has great power and has both reflected and influenced our society and culture throughout history. This course identifies the key movements within the history of graphic design from the Graphic Renaissance throughout today and highlights how these movements have mirrored and changed the course of our society and the field of graphic design. Lectures, images and texts will be used in of each of the following periods: Graphic Renaissance, the Industrial Revolution, Mid-Century Modernism, Late-Modernism Post-Modernism and the Digital Age. Prerequisite(s): EGL 101 Credits: 3

SOC 122 Introductory Sociology (GE)
This is an introductory course designed to familiarize students with the field of sociology. In addition to learning about the central concepts and major theoretical sociological perspectives, students study human behavior in groups, the organization of social life, the impact of social institutions on individuals, and the process of sociological research. Great emphasis is also placed upon development of students? ?sociological imagination? ? specifically, the ability to understand the ways that our individual lives are shaped by larger social forces and institutions. Note: Students who take SOC 122 may not receive credit for SOC 122W. Credits: 3

ART 201 Survey of Art History: Prehistoric Times through Middle Ages (GE)
A survey of the history of the visual arts from their beginnings in prehistoric times to the end of the Middle Ages. Works of art are studied both as monuments of intrinsic aesthetic value and as expressions of the needs, ideals, and aspirations of the societies in which they were created. Prerequisite(s): EGL 101 Credits: 3

ART 202 Survey of Art History: Early Renaissance to the Present (GE)
A survey of the history of the visual arts from the Early Renaissance to the Present. Works of art are studied both as monuments of intrinsic aesthetic value and as expressions of the needs, ideals, and aspirations of the societies in which they were created. Prerequisite(s): EGL 101 Credits: 3

PSY 101 Introduction to Psychology (GE)
This course is designed to present basic psychological concepts and to introduce students to the scientific study of behavior. Core topics include methods of psychological research, the biological bases of behavior, principles of learning, memory and cognition, personality, and psychopathology. Other selected topics to be covered would include the following: motivation and emotion, life-span development, social psychology, health psychology, sensation and perception, intelligence, human sexuality, statistics, and altered states of consciousness. Credits: 3

ART 203 History of Interaction Design (GE)
The foundations of interaction design preceded the invention and use of the first computers and have evolved with the constant changes in technology. From punch cards to voice recognition, from the earliest computers to the mobile platforms of today, the need for a formal definition and definitive history of Interaction Design has increased as quickly as the technology has changed. This class will provide an over view of the history of the relationship between human beings and the tools and technology they use. The evolution of the computer and other digital devices will be explored with the emphasis on the events that lead to the formalization of Interaction Design into a vibrant and growing discipline. Prerequisite(s): EGL 101 Credits: 3

BCS 130 Website Development I
In this course, students will use both HTML and CSS to modify the appearance of Web page content and layout. Hypertext Markup Language (HTML) is a standardized code used to format web pages. Cascading Style Sheets (CSS) is a style sheet language used for describing the presentation of a document written in a markup language, such as HTML. In addition, students will learn the principles of Responsive Web Design to create an optimal viewing experience irrespective of the device used to display the Web page. Credits: 3

BCS 240 Website Development II
In this course, students will learn how to create websites that deliver a seamless experience across a diverse range of desktop, mobile, and handheld devices. In addition, students will learn how to perform forms validation, create navigation and menuing systems, build responsive layouts with flexible content, code media queries, and create and modify template and child pages. Students will use CSS 3 and a Content Management System to create user interfaces with toolbars, animations, buttons, forms, lists, events, and themes. Prerequisite(s): BCS 130 with a grade of C or higher Credits: 3

PSY 328 Introduction to Human Factors
This course will provide an introduction to the field of human factors psychology. Human factors psychology is the application of the body of scientific facts about human characteristics to the design, operation and organization of human machine systems. Human-machine systems can range from simple consumer products to complex arrangements of hardware, software and personnel, such as aviation systems. Human factors knowledge, methods and techniques will be surveyed with an emphasis on ensuring that the systems, equipment, personnel tasks and work environment are compatible with the human sensory, perceptual, cognitive and physical attributes of the personnel who function within the human machine system. Prerequisite(s): PSY 101. Credits: 3

VIS 110 Drawing I
Drawing is the foundation for all other applications of design. To that end, this course explores the principles of freehand drawing, and emphasizes the use of line, light and shade, perspective, proportion and pictorial composition. Subject matter in class will include both still-life (natural and fabricated) and an introduction to drawing the figure. Students will experiment with a variety of black and white media as they learn about drawing and all its possibilities, both creative and analytical. Credits: 3

VIS 112 Two-Dimensional Design
This course is an in-depth examination of the elements and principles of design and how they influence the creation of two-dimensional compositions. Students will acquire vocabulary and concepts that will be used throughout their careers. Individual visual expression will be emphasized through design assignments that allow the exploration of a variety of media and tools. Contemporary and historically significant works of art and design will be utilized. This will help students recognize the successful application of the elements and principles of design for evaluating their own work and that of their peers. Credits: 3

VIS 115 Three-Dimensional Design
Three-dimensional is the foundation for many of the specialized areas of graphic design, including package design, product design, environmental graphics, animation and three-dimensional modeling. Thus, this course stresses the application and appreciation of the principles and elements that make successful three-dimensional designs. Study will include: mass, volume, line, surface, plane, space, time and motion. In the design and construction of three-dimensional objects, students will explore a variety of materials and construction methods. Constructions will be made typically of wood, paper, bristol board, foam core, corrugated board, plaster and other three-dimensional materials. The course will also stress the efficient and safe use of tools and materials. Credits: 3

VIS 116 Digital Media and Methods

The concepts and techniques of digital media are essential for the modern graphic designer. This course serves as an essential foundation for all subsequent courses in computer graphics. Students will gain an understanding of how this evolving technology applies to the visual communication industry and will be introduced to the hardware and software utilized within the field. The terminology that we use as designers when dealing with technology will also be stressed. Networking, printing, file sharing, on-line course management tools, etc., specific to the Visual Communication Department and Farmingdale State College campus will be covered. This course is required and must be taken in residence at Farmingdale. Credits: 3

VIS 122 Typography I
Typography is the formal study of letterform. Each typeface has qualities that allow it to be identified, classified and appreciated for its own individual beauty. In this course, students will gain perspective into this important field by starting with a focus on early visual communication, symbols handwritten letterforms, calligraphy and the development of movable type. Students will then explore ways to categorize type into families and identify and define the similarities and subtle differences in classical typeface. Class discussions, projects, critiques and lectures will focus on typographic terminology and vocabulary, as well as the aesthetic discipline of using type effectively as a designer. An emphasis will be placed on typography as an essential element of graphic design. Prerequisite(s): VIS 112 and 116 Credits: 3

VIS 225 Photography I
This course introduces photographic principles with the primary emphasis on the technical issues of photography in studio and natural lighting conditions. Students will learn the concepts and techniques for proper lighting, exposure, focus, depth-of-field, and creative composition. The methodology for the creation of compelling and original photographic images will be covered as it applies to graphic design projects. Image management software, archival storage solutions, and presentation techniques will be explored. Students must supply their own digital camera (see department web page for current specific equipment requirements). Prerequisite(s): VIS 112 and 116 Credits: 3

VIS 228 Four-Dimensional Design
4 D (4-Dimensional) design will explore the process of designing user experiences that rely heavily on time, space and motion to communicate an idea. In this course students will examine the increasingly important role time-based media plays in the world of graphic design. Applications may include web design, video, animation, storyboards and sequential narratives. Students will concentrate on using storytelling techniques and experiential structures to provide a viewer with an immersive experience. Prerequisite(s): VIS 116 and VIS 122 Credits: 3

IXD 210 Typography for Interaction
This course will allow students to build technical and practical skills for understanding and effectively utilizing typography in a range of special applications including digital, environmental and immersive application. The course investigates typographic terminology, structures, and methods for creative successful interactive experiences. Students will develop a unified method for orchestrating typography into their visual vocabulary to create cohesive solutions that successfully communicate. Experimentation will be encouraged. Prerequisite(s): VIS 116, VIS 122 all with a grade of C+ or higher Credits: 3

IXD 212 Interaction Design I-Foundation
This course will introduce the basics of Interaction Design and the concepts and techniques necessary to develop and implement immersive, innovative experiences that inform and delight. Students will learn the rigorous process for the design of interactive solutions through research, planning, testing and iteration. Assignments will require the conception, planning and development of systems for various applications using lo-fidelity sketching techniques. Social Media, Usability and Usability testing, and Information Architecture will be covered. Class assignments will favor process and meaning over technology, limiting the use of digital tools to research and information gathering. Prerequisite(s): VIS 116, VIS 122 all with a grade of C+ or higher. Credits: 4

IXD 310 Interaction Design II- User Interface
User Interaction will expand on the concepts and tools introduced in IXD-212 User Interaction I ? Foundation with an emphasis on the concepts and principles of User Interaction design: effectiveness, efficiency and satisfaction. Usability, heuristics, user and task analysis, information architecture and graphical user interface design will be added to the student?s design vocabulary. The formal use of the computer and digital tools will be introduced and emphasized. Prerequisite(s): IXD 212 with a grade of C+ or higher. Credits: 4

IXD 312 Research Strategies
In this course students will learn research methods commonly used in design research. They will model interaction by conducting qualitative and quantitative research of users behaviors, attitudes and expectations through online and in person user analysis, task analysis, observational studies, customer interviews, usability testing, and other processes and methodologies that facilitate research and discovery. Students will be expected to utilize storytelling techniques to solve design problems, establish personas, develop presentation skills, and support design solutions. Class assignments will favor process and meaning over technology. Prerequisite(s): PSY 101 Credits: 3

IXD 320 Interaction Design III- User Experience
This advanced interaction design course builds on skills covered in previous IXD courses and emphasizes user-centered design and research methods and practices used in experience modeling. Students will work in teams to study users in various settings and contexts utilizing interpretive methods of analysis to discover and create solutions for problems that emerge. Projects will emphasize research and usability testing of the needs, wants, and limitations of the end users of a product, service or process at each stage of the design process ensuring effective, efficient and satisfactory experiences. Prerequisite(s): IXD 310 with a grade of C+ or higher Corequisite(s): IXD 322 Credits: 4

IXD 322 Prototype Tools
This course will provide students with an advanced and intensive exploration of prototyping tools. It is taken concurrently with IXD-320 Interaction Design III: User Experience. Various methods of prototyping will be used to understand, analyze, explore, and evaluate systems through the development process. Students will employ these methods to translate a concept into sketches through multiple iterations. Prototypes will be constructed using paper, pen, post-it, scissors, and non-graphical hand drawn and digital wireframes. Students will also learn to develop these concepts using various digital prototyping tools to create hi-fidelity prototypes that demonstrate an application in digital form. Prerequisite(s): IXD 310, BCS 240 with a grade of C+ or higher Corequisite(s): IXD 320 Credits: 3

IXD 330 Design for Social Change
In this course students will apply the skills they have learned in the IXD program to work collaboratively in identifying a social need and solving it through user-centered design. The class will work with a real world client to identify a project that addresses a social need, engages people and inspires positive change. Students will be expected to conduct design research including observational studies, customer interviews, usability testing, and other forms of research in establishing and addressing the social need. Prerequisite(s): SOC 122, IXD 212 with a grade of C+ or higher Credits: 3

IXD 410 Interaction Design IV- Advanced Interaction Design
In this course students will work collaboratively to execute projects that include advanced application of the skills developed during the previous semesters. Students will be expected to utilize the applicable conceptual, design, prototyping, storytelling and research skills in combination with typographic and visual design to complete advanced interaction design applications. Class assignments will focus on creating finished, portfolio-ready projects using the Interaction Design Association? s definitions of interaction design categories including: Connecting: Facilitating communication between people and communities. Disrupting: Re-imagining completely an existing product or service by creating new behaviors, usages or markets. Empowering: Helping people to do things they otherwise couldn't do. Engaging: Capturing attention, creating delight

and delivering meaning. Expressing: Enabling self-expression and/or creativity. Optimizing: Making daily activities more efficient. Prerequisite(s): IXD 320, IXD 322 both with a grade of C+ or higher Credits: 4

IXD 412 Special Topics Studio
This course offers instruction in special content areas within the field of interaction design. Areas of exploration may include topics such as: Content Strategy and Research, Advanced User Experience, Advanced Technologies, Interaction Design in Advertising, Design Thinking, Psychology of Design, Systems Design and the Cultural Significance of Social Media. Depending upon the topic and the instructor(s) discipline the class may be divided into 2 -3 modules with students focusing on a different topic or aspect of a topic in each module. The class will encourage total immersion in the subject(s) presented. Students will rely on the skills developed in past classes to complete rigorous and intensive research and prototyping in the creation of design artifacts. Prerequisite(s): IXD 320, IXD 322 both with a grade of C+ or higher Credits: 3

VIS 340 Industry Preparation
Students will explore and develop professional practices to gain future employment in the design field and attain professional success. While students will not be creating a portfolio in this class, they will be introduced to the varied options available for multifunctional portfolios and will choose which option would best promote their work. An emphasis will be placed on defining, organizing, and developing self-promotion, as well as marketing materials. It will also encompass job search strategies, interview skills, and industry best practices. Prerequisite(s): VIS 332 and 334 or IxD 320 and IxD 322 Credits: 3

VIS 416W Senior Project I
The Senior Project I class is the capstone of the Visual Communications baccalaureate experience. In this course students will be developing and defining their own voice in both written and visual form. Students will begin to develop a self-directed project that will culminate in Senior Project II, VIS 426, with a book, portfolio and exhibition. The individual creative process will be encouraged through research, experimentation, writing and critique. Prerequisite(s): VIS 414 with a grade of C+ or better Credits: 3

VIS 426 Senior Project II
The Senior Project II class is one of the capstone courses of the Visual Communications baccalaureate experience. In this final semester students will produce a series of professional quality works of art, which will be displayed in a senior exhibition and book. A series of group critiques with both internal and external reviewers will aid in the development of this body of work as well as strengthen the students? ability to professionally present and defend their artwork. Prerequisite(s): VIS 416 Corequisite(s): VIS 418 Credits: 3

IXD 414 Design and Play Mechanics
Design and Play will explore the intersection of game theory and game mechanics to design interfaces, experiences and objects that encourage playful interactions and behavioral change in traditionally non-game contexts such as business and education. Concepts such as Gamification for education and business and identification of interaction models will be investigated. Interaction design as it relates to increasing user engagement by adding ?fun? components will be explored in-depth. Prerequisite(s): IXD 320, IXD 322 both with a grade of C+ or higher Credits: 3

VIS 418 Portfolio
The Portfolio class is one of the capstone courses of the Visual Communications baccalaureate experience. In this final semester students will produce a series of professional quality works of art, which will be displayed in a senior exhibition and portfolio. A series of group critiques with both internal and external reviewers will aid in the development of this body of work as well as strengthen the students' ability to professionally present and defend their artwork. Prerequisite(s): VIS 416 with a grade of C+ or higher Corequisite(s): VIS 426 Credits: 3

Farmingdale State College
STATE UNIVERSITY OF NEW YORK

Admission to Farmingdale State College - State University of New York is based on the qualifications of the applicant without regard to age, sex, marital or military status, race, color, creed, religion, national origin, disability or sexual orientation.