

Modification of Approved Program – New Delivery Format

The **University of Baltimore** requests that the following program, which is already approved and has been operating for years, be approved to be offered via the distance education method(s) described below.

Mission

The online delivery of the Master of Science (MS) in Interaction Design and Information Architecture (IDIA) program fits with mission of the MS program and the University of Baltimore (UB). The University's mission states that it makes excellence accessible to traditional and nontraditional students motivated by professional advancement and combines theory and practice to create meaningful, real-world solutions to 21st-century urban challenges. The IDIA program's mission states that interdisciplinary courses and a combination of theoretical inquiry and real-world projects encourage innovation and discovery of information and interaction. The online delivery of the IDIA program supports these missions in the following ways:

- Making the program available entirely online provides access to traditional and nontraditional students in Maryland and beyond.
- Presenting theoretical courses in a modern and online delivery format gives students the skills needed to work in diverse work environments typical in 21st century workplaces.
- The online format enables more real-world partners to work with students in the innovation of solutions via interaction and information.

Characteristics of the Program

The MS in IDIA is a 36-credit degree that can be completed through either (a) 30 credits of coursework and completion of a 6-credit thesis or (b) 30 credits of coursework and completion of a 6-credit project. Course descriptions are in Appendix B.

Core Courses (18 credits):

Interaction and Interface Design (IDIA 612) – 3 sch
Information Architecture (IDIA 630) – 3 sch
Humans, Computers and Cognition (IDIA 640) – 3 sch
Research Methods (IDIA 642) – 3 sch

and one of the following 3-credit courses:

Topics in Advanced Interaction Design (IDIA 712),
Topics in Advanced Information Architecture (IDIA 730) or
Topics in User Research (IDIA 742)

and one of the following 3-credit courses:

Dynamic Web Sites (IDIA 618) or
Interactive Multimedia (IDIA 619)

Electives (12 credits)

With the program director's approval, choose four 3-credit courses from the following focus areas:

Interaction Design,
Information Architecture or
User Research

Thesis/Project (6 credits) – IDIA 799

The Student Learning Objectives (SLOs) for the IDIA program achieved through both on-line and face-to-face instruction are:

- Apply principles of iterative, user-centered design to the development of interactive information systems.
- Develop proper structures of information as they apply to global and diverse target audiences.
- Conduct user research with industry standard tools and techniques.
- Evaluate methodological, social, and cultural effects of interactive information systems and their implementations.
- Design interactions that meet the needs of diverse environments and users.
- Communicate research findings to computer programmers, graphic designers, and business partners.

Method(s) of instructional delivery

The IDIA program offers online classes in a number of ways for the convenience of our existing students.

Conceptually, learning technologies take place over two dimensions: form of cooperation and geographical nature. The forms of cooperation deal with the temporal aspects of online learning as being synchronous, asynchronous, or mixed. In this case, synchronous means class is done at the same time and asynchronous means that classwork is done at different times by team members. The geographical nature dimension describes where the participants are in relation to each other and we would describe them as co-located, remote; or mixed (modified from Rodden and Blair (1991)).

Name	Description	Forms of Cooperation	Geographical Nature	Example Courses
Remote Class	Class meets at a designated time via Web classroom software. Typically, the software supports audio and video, chat, and a whiteboard for presentations. The class engages in discussion and small group work. This is the same as a traditional face-to-face	Synchronous	Remote	Discussion-based Lecture Computer Programming

	class except everyone is remote. This is by far our most common delivery method.			
Co-synchronous Class	Class meets at a designated time with some students co-located in a classroom with an instructor and others connecting to the classroom with Web classroom software. The co-located classroom has a number of cameras for the remote students to see and the remote students' video feed is projected in the front of the room for the co-located students to see. The Web classroom software is projected and used for all students. This format enables classes to run less frequency as more students can attend the same class.	Synchronous	Mixed (co-located and remote)	Discussion Based Lecture Computer Programming
Asynchronous Class	This is the traditional online class where content is posted and students have the opportunity to work on the lessons and activities on their own time. This offers the most flexibility for students. The instructor participates in various online activities to continue engaging the students throughout the week. Currently, this is our least common method of delivery.	Asynchronous	Remote	Computer Programming Basic Skills

The program is housed within the Division of Science, Information, Arts and Technologies which is overseen by the division chair. All program business comes before the division at divisional meetings. The division is within the Yale Gordon College of Arts and Sciences, overseen by a dean and with curricular input and oversight from a college faculty senate. The college has a graduate curriculum committee that oversees the creation and modifications of courses and programs. The University's shared governance includes a university-wide faculty senate, which oversees academic program policies and changes and advises the provost and executive team on these matters. UB program proposals are reviewed and approved by USM prior to MHEC's approval.

The Center for Excellence in Learning, Teaching, and Technology (CELTT) assists in the design and development of new technologies for e-learning and offers professional development for faculty using these technologies. The University currently uses Sakai as its learning management program, but UB has experience with earlier programs as well and has the capacity to evaluate the effectiveness of the platform. UB also supports Skype for Business and other technical tools that can be used for instructional purposes.

Adequacy of evaluation –

Faculty are evaluated through online student course evaluations and requirements set forth in the promotion and tenure policy of the Yale Gordon College of Arts and Sciences.

Student learning outcomes are assessed on a regular schedule so that all program outcomes are assessed within a three-year period. The Academic Core Assessment Team works with collegiate associate deans and the assistant provost for student advising, retention, and success to ensure all academic assessment is completed on a timely basis and with appropriate evaluation techniques. The IDIA program is also part of the USM program review process.

Minority student achievement goals –

UB is a diverse, majority-minority institution that offers programs in flexible formats to reach students with a range of needs and goals, including those students who may work full- or part-time while pursuing their academic programs. The MS in IDIA recruits students from the diverse undergraduate UB population and from the region as a whole, as well as including some international students. Consistent with the interest in more STEM majors as articulated in *Maryland Ready*, this program helps graduate STEM majors who can help attract and retain technology companies in Maryland. Graduates have been hired by Google, as well as Maryland companies.

Relation to low-productivity programs – N/A

State Supply and Demand; State Need as Identified in the State Plan

The program has offered online classes as a convenience for students, and its faculty have found the online sections fill up semester after semester. With the growing number of technology companies in Maryland, interaction designers and information architects are needed. These job roles can work on large information systems, web-based applications, or mobile technologies. The program thus supports the *Maryland Ready* State Plan goal of Economic Growth and Vitality.

Usability researchers are important to companies that evaluate technology as well as to the Federal government. The United States Department of Labor indicates that the need for Web developers (the category most associated with this field) will grow 27% between 2014 and 2024 (the average 7%). According to *CNN Money*, User Experience Designer (another title given to those who graduate from this program) is the 14th out of 100 best jobs in America with an 18% job growth over 10 years. The Maryland State Plan for Postsecondary Education includes Access, Affordability, and Completion; Diversity; and Innovation among its goals. Offering this program online would increase access to those in other parts of the state and region thereby increasing the potential for diversity in classes and leading to continued innovation in this field.

In a survey to industry professionals not associated with our school conducted by our students and faculty, the essential skills in the field include research methodologies, cognitive psychology, project management, business acumen, and portfolio creation. All these skills lend themselves to online delivery at the graduate level.

Our graduates have gone on to work at high-profile companies and institutions including Google, PayPal, Citibank, Northrup Grumman, and the Federal Government. Employers often contact the existing

program to recruit new employees. We have often been told that employers could hire more students if we could produce more. Our analysis of the professional networking site LinkedIn showed that almost all our graduates to date work in the field (only one did not). A recent search on Monster.com for interactive designer, user experience designer, and web designer came up with several thousand job openings across the country and around 600 in Maryland alone.

References:

<http://www.bls.gov/ooh/computer-and-information-technology/web-developers.htm>

<http://money.cnn.com/gallery/pf/2015/01/27/best-jobs-2015/14.html>

Reasonableness of program duplication:

There are no similar online programs in Maryland.

The UMBC Online Master of Science in Information Systems is different in that it focuses on computer and information systems. The proposed IDIA Online program includes some discussion of these topics but focuses most heavily on user research, user-centered design, and interaction design. Moreover, the high demand for employees would support some duplication if there were any.

Relevance to HBIs

The program would not impact any programs at HBIs. In fact, we think that the online nature of the program would offer graduate students at HBIs in related, in-person programs to the chance to take IDIA online classes as electives from areas around the state.

For evidence of Principles of Good Practice for online programs, see Appendix A.

Resources and Finance

Adequacy of Faculty Resources

Faculty teaching in the program will come primarily from the Division of Science, Information Arts, and Technologies. The program director, Greg Walsh, has extensive experience developing online courses and currently leads his colleagues in the development and refinement of the distance education components of this program, which was initially approved in 2001. The evolution of the curriculum followed the shared governance model used in general at UB.

Bridget Blodgett, assistant professor, received a Ph.D from Pennsylvania State University. Her work is focused on communities within virtual worlds and other Internet-based media as well as recent issues within the online gaming community involving gender, inclusiveness and identity. Dr. Blodgett has taught online for over seven years.

Lucy Holman, Dean of Langsdale Library and director of the post master's certificate in library technologies, received a Doctor of Communications Design from the University of Baltimore and has an M.S. from the University of North Carolina, Chapel Hill, as well as an MHDL from the University of North Carolina, Charlotte. Dr. Holman has been teaching classes online for over seven years.

Deborah Kohl, associate professor, received a Ph.D. from The Johns Hopkins University. Dr. Kohl is the associate dean for the Yale Gordon College of Arts and Sciences and teaches research methods and applied cognitive psychology at the graduate level. She has been teaching on-line for 2 years.

Kathryn Summers, professor, received a Ph.D. from Texas Christian University. Her current work focuses on making voting more inclusive. Summers is the program director for the D.S. in Interaction and Information Design and director of the User Research Lab. She has been teaching online for over six years.

Greg Walsh, assistant professor, received a Ph.D. from the University of Maryland. His current work focuses on participatory design of interactive experiences for children and families. Walsh is the program director for the M.S. in Interaction Design and Information Architecture and its related certificates. He also directs the Digital Wimsey Lab. Dr. Walsh received a master's in Instructional Technology from Bloomsburg University in 1998 and has been developing online course materials for over 17 years.

Adequacy of Library Resources

Students in distance education courses, as with students on campus, have access to the UB library, which in turn is part of the University System of Maryland libraries. Through its networks and the AskUsNow! service, librarians are available to answer inquiries online 24/7. UB libraries have extensive research database access, support terminal degree programs (including in the related information and interaction design D.S.), have a public repository function, and have been developed over decades to have services developed for adult students who earn degrees either full- or part-time. The Achievement and Learning Center is now housed in the library, and services are available both online and in person.

Adequacy of physical facilities, infrastructure and instructional equipment

UB has offered courses online through various learning management systems for over 15 years and the MS in IDIA degree program has routinely offered courses on line during that time period. The distance education tools available to students in this degree program are already available through tools available to the University as a whole. Software licenses for specialized programs and institutional costs for Sakai are currently in place and are adequate to support anticipated growth in enrollments for both face-to-face and on-line versions of the courses in the IDIA program. There is no anticipated need for additional resources.

Resources and Expenditures

The MD in IDIA has offered on-line courses since 2001. Over the past 15 years, the incremental development of on-line versions of courses within the degree program has resulted in the capacity to offer the entire degree program fully on-line. This evolution, along with UB's long use of learning management systems, means recognizing the program as online will not incur any additional expenditure beyond those already incurred by the IDIA degree program. The IDIA program has an existing plan for enrollment growth. The ability to represent the program as an on-line program is expected to enhance this enrollment growth by modest but meaningful amounts.

MHEC directions on its website for putting a program online call for two years of financial data:

TABLE 1: Resources

Resources Categories	(Year 1)	(Year 2)
1. Reallocated Funds ¹	None*	None*
2. Tuition/Fee Revenue ² (c+g below)	200,980	315,940
a. #F.T Students	2*	2*
b. Annual Tuition/Fee Rate	14,270*	14,270*
c. Annual Full Time Revenue (a x b)	28,540	28,540
d. # Part Time Students	6	10
e. Credit Hour Rate	2127/268	2127/268
f. Annual Credit Hours	72*	120*
g. Total Part Time Revenue (d x e x f)	172,440	287,400
3. Grants, Contracts, & Other External Sources ³	None	None
4. Other Sources	None	None
TOTAL (Add 1 - 4)	150,435	315,940

*Notes:

- 1. Reallocated funds: Current funds already support this program
- 2a. Historically, students in this program who rely on the on-line courses are part-time.
- 2b. Calculated using the in-state rates
- 2f. Calculated based on each student taking two course (6 credits) each semester.

TABLE 2: Expenditures

Expenditure Categories	(Year 1)	(Year 2)
1. Total Faculty Expenses (b + c below)	None predicted*	None predicted*
a. # FTE	----	----
b. Total Salary	----	----
c. Total Benefits	----	----

2. Total Administrative Staff Expenses (b + c below)	None predicted*	None predicted*
a. # FTE	----	-----
b. Total Salary	----	----
c. Total Benefits	-----	-----
3. Total Support Staff Expenses (b + c below)	0	11,635
a. # FTE	-----	----
b. Total Salary	0	4,500
c. Total Benefits	0	7,135
4. Equipment	----	----
5. Library	----	----
6. New or Renovated Space	----	----
7. Other Expenses	----	----
TOTAL (Add 1 - 7)		

***Notes:**

*1. This already existing program has been offering courses on line for 15 years, and has sufficient capacity to absorb the projected enrollments increases over the next two years, including the additional on-line enrollments, without incurring any additional faculty expenses.

*3. These funds are to support a graduate assistantship (3a assistantship stipend; 3c tuition remission).

APPENDIX A - MS, Interaction Design and Information Architecture (IDIA) at UB

Evidence that the online MS addresses the Principles of Good Practice (pdf) (as outlined in COMAR 13B.02.03.22C)

a. Curriculum and Instruction

- i. A distance education program shall be established and overseen by qualified faculty.
- ii. A program's curriculum shall be coherent, cohesive, and comparable in academic rigor to programs offered in traditional instructional formats.

This 36-credit Master of Science program in Interaction Design and Information Architecture (IDIA) emphasizes the **design, development and application** of significant information technologies to satisfy human needs and desires. Students learn to imagine, design and build interactive systems to address needs and interests that people are only beginning to recognize. The program has been approved since 2001 for face-to-face delivery. Program requirements can be found above in the proposal and at http://www.ubalt.edu/academics/uploads/catalogs/program_requirements/1516_cas/Interaction%20esign%20and%20Information%20Architecture.pdf

The online program is made up of courses that were developed for the convenience of students in the IDIA program.

- iii. A program shall result in learning outcomes appropriate to the rigor and breadth of the program

The course materials and the learning objectives for all courses in the program are identical, regardless of the method of instruction. Often, the same instructor teaches both an online section and a face-to-face section of the same course. The degree requirements between the face-to-face and online programs are identical. The Student Learning Objectives (SLOs) for the IDIA program achieved through both on-line and face-to-face instruction are noted above in the proposal.

- iv. A program shall provide for appropriate real-time or delayed interaction between faculty and students.

All instructors in the IDIA program maintain office hours and are reachable by phone, email, and in some cases, video conferencing software. Instructors are also available by appointment outside of regular office hours.

- v. Faculty members in appropriate disciplines in collaboration with other institutional personnel shall participate in the design of courses offered through a distance education program.

See above in the proposal for faculty names and credentials. The Bank of America Center for Excellence in Learning, Teaching and Technology is available for consultation on the technologies and best practices for online courses. The program director's long history with online learning enables new faculty to get guidance on the development of instruction for the target audience and topic. New courses and significant changes go through the College's Graduate Curriculum Committee, and the dean, the Provost's Curriculum Review Committee, and the Provost. New programs and substantive changes also

go through the University Faculty Senate and, in many cases, the Chancellor of the University System of Maryland.

b. Role and Mission

- i. **A distance education program shall be consistent with the institution's mission**

See page 1 of this proposal under "Mission."

Review and approval processes shall ensure the appropriateness of the technology being used to meet a program's objectives

A shared governance process is used for approval of programs. The process requires the review and approval of faculty first, the appropriate dean, the Chief Information Officer and, when distance learning is involved, the Assistant Vice President who oversees CELTT to ensure that the technologies can be supported. Finally, the provost must approve all programs.

c. Faculty Support

- i. **An institution shall provide for training for faculty who teach with the use of technology in a distance education format, including training in the learning management system and the pedagogy of distance education**
- ii. **Principles of best practice for teaching in a distance education format shall be developed and maintained by the faculty**
- iii. **An institution shall provide faculty support services specifically related to teaching through a distance education format**

As noted above, UB uses its Center for Excellence in Learning, Teaching and Technology (CELTT) to provide a central location for appropriate faculty professional development in teaching with technology. The center has an administrative director and Faculty Fellows who have course release to work on CELTT initiatives. Learning workshops are offered, support from CELTT staff is available by request, and the Sakai learning management system platform has support services available online, including 24/7 support.

The faculty of the Division of Science, Information Arts and Technology themselves, however, direct the means by which the content of the IDIA program is delivered. Academic policies, including those involving distance education, are developed through shared governance. CELTT maintains and promotes a catalog of best practices for distance education.

See above in the proposal for a list of faculty in the program and their credentials.

d. Learning Resources for Students (library, academic support)

An institution shall ensure that appropriate learning resources are available to students, including appropriate and adequate library services and resources

Students in distance education courses, as with students on campus, have access to the UB library, which is turn is part of the USM libraries. Through its networks and the AskUsNow! service, librarians

are available to answer inquiries online 24/7. UB libraries have extensive research database access, support terminal degree programs (including in the related information and interaction design D.S.), have a public repository function, and have been developed over decades to have services developed for adult students who earn degrees either full- or part-time. The Achievement and Learning Center is now housed in the library, and services are available both online and in person.

e. Students and Student Services

- i. A distance education program shall provide students with clear, complete, and timely information on the curriculum, course and degree requirements, nature of faculty/student interaction, assumptions about technology competence and skills, technical equipment requirements, learning management system, availability of academic support services and financial aid resources, and costs and payment policies.**

The UB website provides current catalog information with course and degree requirements, as well as information about costs, financial aid, and student support services, including those through the Office of Technology Services, the library, the Achievement and Learning Center, and other UB offices. The Sakai platform offers learning resources for enrolled students (Sakai access is available with ID and password only).

The application process for this program is rigorous and ensures that students who do not have the appropriate technical skills are not admitted. See also iii.

- ii. Enrolled students shall have reasonable and adequate access to the range of student services to support their distance education activities;**

The Sakai learning management system has a 24/7 help feature that is external to UB. UB help desk is readily available through phone and email contact.

The Achievement and Learning Center and the Langsdale Library provide online or other remote assistance.

- iii. Accepted students shall have the background, knowledge, and technical skills needed to undertake a distance education program;**

The application process is competitive, and to begin the program, students have to pass a proficiency exam. The following information is posted on the UB website page for the program requirements:

“Prerequisites: Upon admission, if you have not passed the Hypermedia Proficiency Examination ([register online](#) to take the exam), you are expected to complete PBDS 501: Introduction to Web Development with a grade of B or better before undertaking any other coursework; this course does not count toward the completion of the degree program.”

- iv. Advertising, recruiting, and admissions materials shall clearly and accurately represent the program and the services available.**

Information about the program is provided to prospective students through the UB web page, which accurately represents the program and services available. Other advertising of the program drives students to the UB web page.

f. Commitment to Support

i. Policies for faculty evaluation shall include appropriate consideration of teaching and scholarly activities related to distance education programs.

Policies for faculty evaluation are posted online in the UB Policy Guide and at the University System of Maryland Board of Regents Bylaws and Policies page. Faculty evaluation includes consideration of activities related to distance education programs, and faculty in the division have presented nationally many times on related topics. Such activities are also part of the annual workload reports for both instruction and non-instructional productivity.

ii. An institution shall demonstrate a commitment to ongoing support, both financial and technical, and to continuation of a program for a period sufficient to enable students to complete a degree or certificate.

This master's degree program has been operating and evolving for 15 years. UB has committed faculty lines, specialized teach laboratories, and curriculum development funds to the program. There is no question that students entering the program expecting to complete the degree will be able to do so. Both CELTT and the SIAT faculty are prepared to support students who plan to do the entire degree online, and UB has the technical expertise and equipment needed to assure ongoing support.

g. Evaluation and Assessment

An institution shall evaluate a distance education program's educational effectiveness, including assessment of student learning outcomes.

As noted above, the student learning outcomes for courses taught through distance education are exactly the same as those for students in the face-to-face versions of the same classes in the already approved and operating MS in IDIA. Student learning is assessed through a regular internal process at UB, which has been on a three-year cycle. In addition, the MS in IDIA is on a 7-year program review cycle through USM/MHEC. The latter review process requires the participation of outside evaluators.

Students in courses taught through distance education participate in the course evaluation process.

Appendix B Course Descriptions for UB's MS in IDIA

See <http://www.ubalt.edu/course-descriptions/index.cfm?content=list&subject=IDIA>

• **IDIA 602 GRAPHIC DESIGN PRINCIPLES (3)**

Emphasizes strategies for visual problem-solving and techniques for creating comprehensive layouts using principles of design and typography. Hands-on course for students with a limited background in graphic design. Pass/fail grading. Lab fee required.

• **IDIA 612 INTERACTION DESIGN (3)**

Explores electronic environments as fluid spaces where interactions among people, machines and media (words, images, sounds, video, animations, simulations) must be structured for the unforeseen. The course focuses on planning, analyzing, prototyping and integrating interaction design with interface design. Lab fee required. Prerequisite: PBDS 501 or passing score on HTML Proficiency Exam.

• **IDIA 614 SEQUENTIAL VISUALIZATION AND ANALYSIS (3)**

Teaches students to use sequential visual narratives—storyboards, flowcharts, prototypes and simulations—as analysis tools for the development of information systems. The course draws on theoretical approaches to film as well as other forms of visual storytelling, including animation, illustration and comics. Through a series of practical, analytical and creative projects, students learn to apply storyboards and limited multimedia prototypes to interface design and develop content. Lab fee required. prerequisite: PBDS 660 or passing score on Hypermedia Proficiency Exam

• **IDIA 616 DESIGNING FOR MOBILE WEB (3)**

Hands-on application and site development for the mobile Web. Students learn current programming languages and development environments for the latest mobile devices and work intensively on a major mobile design project. Lab fee required. prerequisite: PBDS 660 or passing score on the Hypermedia Proficiency Exam

• **IDIA 618 DYNAMIC WEB SITES (3)**

Familiarizes students with the basic concepts and vocabulary of website programming, including application scripting, and database management. Provides students with the fundamental skills required to develop and maintain a dynamic, data-driven website. Each student develops a complete website using a simple text editor to create and manipulate relational data, learn a middleware markup language to store and retrieve data and control the rules of interaction, and write HTML to format data and control display. Lab fee required. Prerequisite: PBDS 501 or passing score on HTML Proficiency Exam.

• **IDIA 619 PROGRAMMING FOR UX DESIGN (3)**

Practical and theoretical introduction to genres, strategies and techniques for producing client-side interactive projects for the Internet. Students use a scripting language to create interactive information tools such as games, simulations and dynamic websites. Background readings provide theoretical and practical context for development of individual projects. Lab fee required. Prerequisite: PBDS 501 or passing score on HTML Proficiency Exam.

• **IDIA 630 INFORMATION ARCHITECTURE (3)**

Teaches students to gather requirements data, model information structures and develop a variety of documents to communicate the information architecture to other participants, including technical experts, usability experts, clients and users. Students learn to determine a target audience, develop personas or user profiles, refine and validate requirements and create site maps and other "specs" and wire frames. Lab fee required. prerequisite: PBDS 660 or passing score on Hypermedia Proficiency Exam

• **IDIA 640 HUMANS, COMPUTERS, AND COGNITION (3)**

Introduces concepts, theories and methods that support the study of human-computer interaction and user-centered system design. Students apply concepts from cognitive psychology and visual processing to explore human problem-solving, learning, knowledge representation, and problems of interface design. Prepares students to understand and analyze research based on empirical study of human behavior in its variety and complexity and on models of learning and understanding. Lab fee required.

• **IDIA 642 RESEARCH METHODS FOR INTERACTION DESIGN (3)**

Introduces the chief methods for studying users' interactions with software and information resources in ways that support design decisions. Encompasses both quantitative and qualitative methods, including methods such as surveys, focus groups, field studies, and traditional usability studies. Lab fee required.

• **IDIA 712 TOPICS IN ADV INTERACTION DESIGN (3)**

Intensive exploration of topics in advanced interaction design of mutual interest to students and faculty. Content varies according to the concurrent interests of faculty and students. Course may be repeated for credit when topic changes. Lab fee required. prerequisite: PBDS 660 or passing score on the hypermedia proficiency exam and IDIA 612

• **IDIA 715 MANAGING UX PROJECTS (3)**

Introduces students to managing projects that deal with interaction design, user research, and information architecture. Through project-based assignments, students learn how to scope, manage, and organize user experience teams. Lab fee required.

- **IDIA 730 TOPICS IN ADVANCED INFORMATION ARCHITECTURE (3)**

Intensive exploration of topics in advanced information architecture of mutual interest to students and faculty. Content varies according to the concurrent interests of faculty and students. Course may be repeated for credit when topic changes. Lab fee required. Prerequisite: PBDS 501 or passing score on the hypermedia proficiency exam, and IDIA 630.

- **IDIA 742 TOPICS IN USER RESEARCH (3)**

Intensive exploration of topics in user research of mutual interest to students and faculty. Content varies depending on the interests of faculty and students. Course may be repeated for credit when topic changes. Lab Fee required. Prerequisite: PBDS 501 or passing score on the hypermedia proficiency exam in addition to IDIA 642

- **IDIA 750 SPECIAL TOPICS (3)**
- **IDIA 790 INDEPENDENT STUDY (1 - 3)**
- **IDIA 798 CONTINUOUS ENROLLMENT (1)**
- **IDIA 799 THESIS/ PROJECT (3 - 6)**