NEW GRADUATE INITIATIVES

PROPOSAL PROCEDURES CHECKLIST

Academic units should adhere to the following procedures when requesting new curricular initiatives (degrees, concentrations or certificates).

☑ Obtain the required approval from the Office of the Provost to move the initiative forward for internal ASU governance reviews/approvals. Please see the academic strategic plan website at: https://provost.asu.edu/curriculum-development.

☑ Submit any new courses that will be required for the new curricular program to the Curriculum ChangeMaker online course approval system for review and approval.
  ▪ Additional information can be found at the Provost’s Office Curriculum Development website: Courses link
  ▪ For questions regarding proposing new courses, send an email to: courses@asu.edu

☑ Prepare the applicable proposal template and operational appendix for the proposed initiative.

☑ Obtain letters or memos of support or collaboration (if applicable).
  ▪ when resources (faculty or courses) from another academic unit will be utilized
  ▪ when other academic units or degree programs may be impacted by the proposed request
  ▪ if the program will have an online campus option support will be required from the Provost’s office and ASU Online. (Please complete the ASU Online Offering form in Curriculum ChangeMaker to begin this request.)

☑ Obtain the internal reviews/approvals of the academic unit.
  ▪ internal faculty governance review committee(s)
  ▪ academic unit head (e.g. Department Chair or School Director)
  ▪ academic unit Dean or their designee (will submit approved proposal to the curriculumplanning@asu.edu email account for further ASU internal governance reviews (as applicable, University Graduate Council, CAPC and Senate)

Additional Recommendations

All new graduate programs require specific processes and procedures to maintain a successful degree program. Below are items that Graduate College strongly recommends that academic units establish after the program is approved for implementation.

☐ Establish satisfactory academic progress policies, processes and guidelines – Check within the proposing academic unit and/or college to see if there are existing academic progress policies and processes in place. If none have been established, please go to http://graduate.asu.edu/faculty_staff/policies and scroll down to the academic progress review and remediation processes (for faculty and staff) section to locate the reference tool and samples for establishing these procedures.

☐ Establish a Graduate Student Handbook for the new degree program – Students need to know the specific requirements and milestones they must meet throughout their degree program. A Graduate Student Handbook, provided to students when they are admitted to the degree program and published on the website for the new degree, gives students this information. To be included in the handbook are the unit/college satisfactory academic progress policies, current degree program requirements (outlined in the approved proposal) and a link to the Graduate Policies and Procedures website: http://graduate.asu.edu/faculty_staff/policies.
PROPOSAL TO ESTABLISH A NEW JOINT
MASTER’S DEGREE PROGRAM

This template is to be used only by programs that have received specific written approval from the University Provost’s Office to proceed with internal proposal development and review. A separate proposal must be submitted for each individual new degree program.

DEGREE PROGRAM

College/School: Ira A. Fulton Schools of Engineering (51%) / College of Integrative Sciences and Arts (49%)

Note: Program ownership is coded at the College/School level first and may not be a center, department or division apart from it.

Department/Division/School: Polytechnic School

Proposing faculty group (if applicable):

Name of proposed degree program: Master of Science (MS) in User Experience

Proposed title of major: User Experience

Master’s degree type: MS - Master of Science

If Degree Type is “Other”, provide degree type and proposed abbreviation: N/A

Is a program fee required? No, a program fee is not required.

Note: for more information about program fee requests, visit https://provost.asu.edu/curriculum-development/changemaker/form-instructions#fees

Is the unit willing and able to implement the program if the fee is denied? N/A

Requested effective term and year: Fall 2018

(The first semester and year for which students may begin applying to the program)

PROPOSAL CONTACT

Name: Russell J. Branaghan Title: Associate Professor

Phone number: 480-727-1390 Email: russ.branaghan@asu.edu

DEAN APPROVAL(S)

This proposal has been approved by all necessary unit and college/school levels of review, and the college/school(s) has the resources to offer this degree program. I recommend implementation of the proposed degree program.

Note: An electronic signature, an email from the dean or dean’s designee, or a PDF of the signed signature page is acceptable.

College/School/Division Dean name:

Signature: Date: 5/11/17

College/School/Division Dean name: (if more than one college involved)

Signature: Date: 5/11/2017
This proposal template should be completed in full and submitted to the University Provost’s Office [mail to: curriculumplanning@asu.edu]. It must undergo all internal university review and approval steps including those at the unit, college, and university levels. A program may not be implemented until the Provost’s Office notifies the academic unit that the program may be offered.

1. PURPOSE AND NATURE OF PROGRAM

   A. Provide a brief program description

User experience focuses on systems compatibility with peoples’ needs and peoples’ reciprocal satisfaction with those systems. The user experience program addresses the research, design, content development, communication, tone of voice and validation of all system components and products with which an end user interacts. This includes hardware and software user interfaces, informational products, help systems, user support, and the like. It is a natural extension, and an important specialization, within Technical Communication (TWC), Graphic Information Technology (GIT) and Human Systems Engineering (HSE), which focus on understanding user needs, tasks, procedures, capabilities, and limitations when using technology and interacting with information. User experience focuses on peoples' compatibility and satisfaction with those systems and products.

   B. Will concentrations be established under this degree program? ☒ Yes ☐ No

(Please provide additional concentration information in the curricular structure section – number 7.)

2. PROGRAM NEED

Explain why the university should offer this program (include data and discussion of the target audience and market).

User experience (UX) is the overall experience of a person using a system or product. It is a combination of human systems engineering, technical communications and graphic information technology. UX is a rapidly growing field, and UX professionals work in virtually every industry. A nationwide search on Indeed.com using the search term “user experience” resulted in approximately 5500 results on 8/10/2016, including jobs in UX research, user-centered design, information design, interaction design, information architecture, product design, content strategy, and usability analysis/testing. UX professionals need skills in research, analysis, design, and communication; they need to lead teams and collaborate with both clients and technical personnel. There are currently few academic programs that prepare students for these trans-disciplinary roles. The MS degree program we are proposing draws on existing expertise from Human Systems Engineering, Graphic Information Technology, and Technical Communication to provide students with strengths across all of these areas. The program will attract students with an interest in the human side of engineering, as well as students interested in a degree that will allow them to put their analytical, problem-solving, design, and communication skills to work in an applied environment.

ASU should offer this program because User Experience is one of the fastest growing, and highest paying fields in computing these days. It is a technical field that tends to draw females, as well as students from non-engineering fields. Recently CNN.com identified it as number 14 in their list of Best Jobs in America (http://money.cnn.com/gallery/pf/2015/01/27/best-jobs-2015/14.html). It was ranked number 9 in CBS Money Watch Best Jobs in America for 2017 (http://www.cbsnews.com/media/the-best-11-jobs-in-america-for-2017/4/). Peer and aspiration universities have already developed MS degrees in User experience or Human Computer Interaction (an older synonym for User Experience): Carnegie Mellon, Georgia Tech, Indiana University, University of Michigan, Michigan State, Purdue, Rutgers, DePaul, Iowa State, Kent State, Bentley University, University of Texas, University of Wisconsin, and University of Washington. Typically students with this background will conduct user research, design user interfaces, conduct usability testing, develop interaction design guidelines, and set user interface design strategy for products from medical devices to automotive instrument clusters, to web applications, to cyber-security platforms. Common job titles include user experience researcher, user experience designer, user experience strategists, chief experience officer, and the like.

When developing a new program, it is important to determine whether potential students will be able to recognize and recall the name, as well as knowing what the degree entails. Nowadays, with substantial press coverage and undergraduate classes, concentrations, and even degree programs in User Experience, the degree is quite likely to be recognized by potential students. Further, the degree seems to be newsworthy given the interesting and lucrative employment opportunities and the success of User Experience oriented companies like Apple, IDEO, Intuit, and others.
3. IMPACT ON OTHER PROGRAMS

Attach any letters of collaboration or support from impacted programs (see checklist coversheet). Please submit as a separate document.

Note: We have requested an impact statement from Raghu Santanam, who chairs both the MS in Information Management and MS in Business Analytics programs for WP Carey. While we await his response, we thought it would be useful to provide a table (below) comparing the curricula in WP Carey’s programs and the proposed MS in UX program. Note that none of the UX classes overlap in title or description. Indeed, the Carey programs focus appropriately on business, management and quantitative data analysis, whereas the UX program focuses on cognitive psychology, technical communications, and interaction design.

<table>
<thead>
<tr>
<th>MS Information Management</th>
<th>MS Business Analytics</th>
<th>User Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description of Curriculum from website</strong> - Develop strong management skills and leverage technology to improve performance.</td>
<td><strong>Description of Curriculum from website (MS-BA)</strong> builds on your quantitative skills and develops the analytics depth you need to make an immediate impact.</td>
<td><strong>Description of Curriculum</strong> User experience focuses on systems’ compatibility with peoples’ needs and peoples’ reciprocal satisfaction with those systems. The user experience program addresses the research, design, content development, communication, tone of voice and validation of all system components and products with which an end user interacts. This includes hardware and software user interfaces, informational products, help systems, user support, and the like. It is a natural extension, and an important specialization, within Technical Communication (TWC), Graphic Information Technology (GIT) and Human Systems Engineering (HSE), which focus on understanding user needs, tasks, procedures, capabilities, and limitations when using technology and interacting with information. User experience focuses on peoples’ compatibility and satisfaction with those systems and products.</td>
</tr>
<tr>
<td>Our curriculum takes you beyond mere technical application, integrating management and business knowledge with the latest techniques and tools driving change in information systems.</td>
<td>The MS-BA will deepen your quantitative and analytical skills, and you’ll discover how to derive value from data and modeling, lead data-driven analyses, and create a business advantage across markets and industries.</td>
<td><strong>Data and Information Management</strong> - Addresses central issues in managing information to achieve competitive advantage and support innovation. Specific topics covered include data.</td>
</tr>
</tbody>
</table>
| **Introduction to Enterprise Analytics** - Ensures the foundational understanding of contextualized analytics within the business enterprise continuum, covering how data | **Cross-Media Design Solutions** - Universal design theory, creative problem solving, and case study applications for print, Web, and new media products of the graphics industry.
<table>
<thead>
<tr>
<th>Course Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PROPOSAL TO ESTABLISH A NEW JOINT MASTER'S DEGREE PROGRAM</strong></td>
<td></td>
</tr>
<tr>
<td>Modeling using entity relationship (ER) diagrams, data quality, building analytic capability, and providing user-friendly access to organizational data.</td>
<td></td>
</tr>
<tr>
<td><strong>Strategic Value of Information Technology</strong> - Instills students a balanced and disciplined view of IT and business with their interplay. Cases and assignments involving the symbiotic relationship of IT and business are assigned to provide real-world exposure for critical thinking and engaging discussion.</td>
<td><strong>Introduction to Applied Analytics</strong> - Introduces quantitative modeling tools and techniques used to solve problems faced in modern supply chains, including forecasting demand, determining the capacity of a manufacturing line and the cycle times of parts being processed on the line, and methods to manage inventory.</td>
</tr>
<tr>
<td><strong>Business Intelligence</strong> - Covers how organizations strategically use Business Intelligence (BI) to gain a sustainable, competitive advantage. Builds the foundations for evidence-based managerial decision making, covers technologies for data warehousing and data mining from a managerial perspective, and incorporates contemporary topics such as real-time BI, business analytics, and business performance management.</td>
<td><strong>Data Mining I</strong> - Charts a roadmap for data-driven decision making and getting a practical understanding of how IT tools and techniques can allow managers to extract predictive analytics and patterns from numeric data.</td>
</tr>
<tr>
<td><strong>Information security and controls</strong> - Provides a broad survey of information security and controls, utilizing the COBIT framework to illustrate how information security and controls contribute to effective IT governance. Develops an understanding of the issues associated with information security and effective IT governance, assesses effectiveness of information security alternatives, and designs an organizational information security program.</td>
<td><strong>Data Driven Quality Management</strong> - Addresses the use of analytics tools and techniques to enhance the ability of quality management approaches to improve processes. The course introduces modern quality management approaches including Six Sigma and Design for Six Sigma, and covers DMAIC, the implementation cycle used to drive Six Sigma projects.</td>
</tr>
<tr>
<td><strong>Business Process and Workflow Analysis</strong> - Builds foundations for Analytical Decision Making</td>
<td><strong>Fundamentals of Technical Communication</strong> -</td>
</tr>
</tbody>
</table>

Request to implement a new master's degree program 10-27-16 Page 5 of 26
<table>
<thead>
<tr>
<th>Process Analysis</th>
<th>Quantitative Modeling Tools</th>
<th>Basic Information Design Principles</th>
</tr>
</thead>
<tbody>
<tr>
<td>by focusing on information, documents, people, roles, and business rules. Provides an introduction to various techniques and tools of process analysis, including an understanding of organizational issues in rolling out change initiatives.</td>
<td>and techniques for business decision-making and deterministic optimization techniques. This includes linear, nonlinear, and integer programming, network models, and an introduction to meta-heuristics.</td>
<td>for producing effective technical communication, including rhetorical and audience analysis, as well as common workplace genres and technical communication tools.</td>
</tr>
<tr>
<td>Emerging Technologies - Explores decision models and frameworks applied to assess, evaluate and implement technologies. Provides context for applying the decision models and frameworks, including enterprise integration technologies, mobile platforms and devices, semantic web, and electronic collaboration technologies.</td>
<td>Data Mining II - Explores how to support informed decision making and extract predictive analytics and patterns from nonnumeric data by leveraging tools and techniques to analyze unstructured data.</td>
<td>Visualizing Data and Information - Covers how to process data and information in ways that help discover what's important about the information and what the clearest way is to communicate that information. Covers how to manage data and use a variety of software tools to communicate patterns and tell visual stories, as well as how to make choices in visualization style in ways that will assist an audience to effectively interact with and process the information.</td>
</tr>
<tr>
<td>Managing Enterprise Systems - Investigates major categories of enterprise systems, factors driving software adoption and keys for successful implementation. Special attention is paid to evaluating the potential impact of emerging technologies on business environments.</td>
<td>Analytical Decision Making Tools II - Addresses the skills and knowledge necessary to model situations where uncertainty is a major factor. Models include decision trees, queuing theory, Monte Carlo simulation, discrete event simulation, and stochastic optimization, along with application for solving a wide variety of common business problems.</td>
<td>User Experience - Explores principles, techniques and tools of user experience (UX), including user and task analysis, user-centered design and usability testing.</td>
</tr>
<tr>
<td>IT Services and Project Management - Focuses on key aspects of commoditization of hardware, software, and business processes. Introduces the IT product development and service delivery processes with sound</td>
<td>Business Analytics Strategy - Evaluates how to strategically align, plan for and direct investments in, and governance of, processes for continuous renewal of analytic deployments in business.</td>
<td>Special Topics: Interaction Design, Planning and Implementation</td>
</tr>
<tr>
<td>Management principles for on-budget and on-time projects that meet end-user needs.</td>
<td>Marketing Analytics - Focuses on developing analytical methods and applying statistical and mathematical tools to predict consumer behavior. Introduces formal models to analyze how and when customers make product purchase decisions, configure new products, develop market segments, forecast market share, and determine optimal pricing strategies.</td>
<td>Human Factors in Transportation - Examines human performance and human-machine design issues in aviation and ground transportation.</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td><strong>Information Enabled Business Modeling</strong> - Explores how different industries and organizational functions are deriving value from big data, the challenges they’re encountering, and how to avoid pitfalls. Addresses the value and importance of adopting data science and building an analytical culture within an organization, and how companies utilize big data as part of their business strategy.</td>
<td><strong>Artificial Intelligence and Business</strong> - This course presents an exploration of modern artificial intelligence (AI) technology, applications, techniques and their implications for business. The students will learn people, process and technology factors related to the innovation and adoption of AI in the commercial enterprise and how it will shape the competition and society in the future. Implications for information systems professionals as it pertains to managing the AI infrastructure (robots, algorithms, platforms) will also be covered.</td>
<td><strong>Applied Project</strong> - Addresses a problem in a domain where the use of your analytics skills yields real-world experience through projects drawn from real business settings that represent important aspects of organizations’ deployment of analytics in their business model. You will be challenged to understand the context of the business situation and then identify relevant tools and analytics frameworks to gain both insights into past and present operations, as well as predictions of future performance. In addition, your end-to-end project will offer challenges that may include messy data sources and undefined business value, which will develop and advance your communication skills and leadership abilities. This team-based project is intended to push the envelope of your skills in applying data science to a variety of domains.</td>
</tr>
<tr>
<td><strong>Human Factors in Transportation</strong> - Examines human performance and human-machine design issues in aviation and ground transportation.</td>
<td><strong>Human Factors in Medical Systems</strong> - Comprehensive introduction to human factors issues related to healthcare systems, medical training, and medical device design. Topics range from psychological and physiological aspects of human behavior like perceptual and cognitive functions, motor behavior, learning, motivation, physiology, and ergonomics to applied issues in the context of medicine and healthcare like human-computer interactions in medical information systems, the ergonomic design of medical devices, evaluation of medical device usability, team training in healthcare and the organization of medical environment.</td>
<td></td>
</tr>
</tbody>
</table>
**Product Design and Evaluation** - Applies human systems engineering methods to product design and evaluation. Consumer behavior, consumer research methods, systems and design thinking, how to conduct interviews, observational research, contextual analysis, questionnaire design and analysis, opportunity identification, usability testing and creativity.

**Principles of Visual Communication** - Principles and tools of visual communication in print and electronic media, with an emphasis on document design, including typography and color.

**Global Issues in Technical Communication** - Helps students understand issues that shape workplace communication in a global environment. Technical communicators are expected to be specialists who interact effectively with a broad range of audiences. Given the global nature of today's workplace, those audiences typically include people from many cultures and countries. Through readings, written assignments, and analysis of case studies, documents and Websites, explores ways in which culture and language shape professional interactions. Also examines other critical issues such as translation, localization, technology and distributed work teams that impact writing and designing documents in a globalized work environment.
|                              | Content Management and Topic-Based Authoring - Explores concepts, techniques, strategies and technologies for authoring, managing and publishing reusable content in online documentation, help files and other types of technical communication. |

See attached (Appendix III).
4. PROJECTED ENROLLMENT

How many new students do you anticipate enrolling in this program each year for the next five years?

Note: The Arizona Board of Regents (ABOR) requires that nine master’s degrees be awarded every three years. Thus, the projected enrollment numbers must account for this ABOR requirement.

<table>
<thead>
<tr>
<th>5-YEAR PROJECTED ANNUAL ENROLLMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Please utilize the following tabular format</td>
</tr>
<tr>
<td>Number of Students Majoring (Headcount)</td>
</tr>
</tbody>
</table>

5. ACCREDITATION OR LICENSING REQUIREMENTS (if applicable)

Provide the names of the external agencies for accreditation, professional licensing, etc. that guide your curriculum for this program, if any. Describe any requirements for accreditation or licensing.

N/A

6. STUDENT LEARNING OUTCOMES AND ASSESSMENT

Attach a PDF copy of the assessment plan printed from the University Office of Evaluation and Educational Effectiveness assessment portal demonstrating UOEEE’s approval of your assessment plan for this program. Visit the assessment portal at https://uoeee.asu.edu/assessment-portal or contact uoeee@asu.edu with any questions.

See Appendix II for the Assessment Plan.

7. CURRICULAR STRUCTURE

A. Curriculum Listing

<table>
<thead>
<tr>
<th>Required Core Courses for the Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prefix and Number</td>
</tr>
<tr>
<td>GIT 540</td>
</tr>
<tr>
<td>GIT 542</td>
</tr>
<tr>
<td>HSE 521</td>
</tr>
<tr>
<td>HSE 542</td>
</tr>
<tr>
<td>TWC 501</td>
</tr>
<tr>
<td>TWC 514</td>
</tr>
<tr>
<td>TWC 544</td>
</tr>
</tbody>
</table>

Section sub-total: 21

<table>
<thead>
<tr>
<th>Elective or Research Courses – Choose 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>(As deemed necessary by supervisory committee. Other courses may be used with approval of the academic units.)</td>
</tr>
<tr>
<td>Prefix and Number</td>
</tr>
<tr>
<td>GIT 598</td>
</tr>
<tr>
<td>HSE 423</td>
</tr>
<tr>
<td>HSE 425</td>
</tr>
</tbody>
</table>
PROPOSAL TO ESTABLISH A NEW JOINT MASTER'S DEGREE PROGRAM

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Core</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSE 429</td>
<td>Product Design and Evaluation</td>
<td>No</td>
<td>3</td>
</tr>
<tr>
<td>TWC 511</td>
<td>Principles of Visual Communication</td>
<td>No</td>
<td>3</td>
</tr>
<tr>
<td>TWC 535</td>
<td>Global Issues in Technical Communication</td>
<td>No</td>
<td>3</td>
</tr>
<tr>
<td>TWC 545</td>
<td>Content Management and Topic-Based Authoring</td>
<td>No</td>
<td>3</td>
</tr>
</tbody>
</table>

Section sub-total: 6

Culminating Experience(s)

- Capstone course, portfolio, written comprehensive exam, applied project, thesis (must be 6 credit hours with oral defense)

<table>
<thead>
<tr>
<th>Culminating Experience(s)</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>TWC 560, HSE 560, or GIT 560 Capstone in User Experience</td>
<td>3</td>
</tr>
</tbody>
</table>

Section sub-total: 3

Total required credit hours: 30

1. List all required core courses and total credit hours for the core (required courses other than internships, thesis, dissertation, capstone course, etc.).
2. Omnibus numbered courses cannot be used as core courses.
3. Permanent numbers must be requested by submitting a course proposal to Curriculum ChangeMaker for approval. Courses that are new, but do not yet have a new number can be designated with the prefix, level of the course and X’s (e.g. ENG 5XX or ENG 6XX).

B. Will concentrations be established under this degree program? □ Yes ☑ No

8. COURSES

A. Course Prefix(es): Provide the following information for the proposed graduate program.

i. Will a new course prefix(es) be required for this degree program? Yes □ No ☑

ii. If yes, complete the Course Prefixes / Subjects Form for each new prefix and submit it as part of this proposal submission.

B. New Courses Required for Proposed Degree Program: Provide course prefix, number, title, credit hours and description for any new courses required for this degree program.

TWC 560, HSE 560, or GIT 560 Capstone in User Experience (3)

These courses are three-credit project-based classes in which students create a capstone representing their professional work to date. The capstone provides a comprehensive summary of the student’s work, skills and accomplishments to date. Typically, the capstone will include research reports, sketches, wireframes, software user interface prototypes, and other artifacts important to the design of user experiences.

9. FACULTY, STAFF, AND RESOURCE REQUIREMENTS

A. Faculty

i. Current Faculty – Complete the table below for all current faculty members who will teach in the program.

<table>
<thead>
<tr>
<th>Name</th>
<th>Rank</th>
<th>Highest Degree</th>
<th>Area of Specialization/Expertise</th>
<th>Estimated Level of Involvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Russell Branaghan</td>
<td>Associate Professor, Human Systems Engineering</td>
<td>PhD</td>
<td>User Experience, Product Development, Consumer Psychology, Healthcare Human Factors</td>
<td>25%</td>
</tr>
<tr>
<td>Susan Squire</td>
<td>Lecturer, Program Chair, GIT</td>
<td>MS Tech</td>
<td>Web design and development, web usability, information architecture, UX</td>
<td>25%</td>
</tr>
<tr>
<td>Christina Carrasquilla</td>
<td>Lecturer, GIT</td>
<td>MS Tech</td>
<td>Graphic design, web design and development, print design, social media, UX</td>
<td>25%</td>
</tr>
</tbody>
</table>
ii. New Faculty - Describe the new faculty hiring needed during the next three years to sustain the program. List the anticipated hiring schedule and financial sources for supporting the addition of these faculty members.

Because the proposed MS in User Experience relies on faculty from three programs, the need for new faculty will depend in part on the growth of those programs as well as the enrollment in the MS in User Experience itself. We anticipate needing one additional faculty member in each program over the following three years in order to effectively staff courses and mentor students. Additional faculty will be requested through the appropriate approval process when that time comes.

iii. Administration of the program - Explain how the program will be administered for the purposes of admissions, advising, course offerings, etc. Discuss the available staff support.

The Polytechnic School Advising Services Office will manage the admissions review process and administer all program advising. Advisors will be trained to recognize and communicate the transdisciplinary nature of the degree. Program admission decisions will be made by a committee comprised of faculty from each of the three collaborating programs (HSE, GIT, TWC).

B. Resource requirements needed to launch and sustain the program: Describe any new resources required for this program’s success such as new staff, new facilities, new library resources, new technology resources, etc.

None.
1. **Proposed title of major**: User Experience

2. **Provide a brief program description** (catalog type (i.e. will appear in Degree Search) – no more than 150 words):

   The MS program in user experience combines topics in web, human factors, visual displays, and technical communication to make products, systems, and services useful, usable, and desirable. Students learn how to research user needs, identify criteria for successful products and services, prototype those products and services, and refine them through usability testing and other user-centered methods. User experience skills are increasingly valued by industry, yet are not typically covered in depth in traditional engineering or technical communication programs. Students with a master’s degree in user experience will enhance their employment potential.

3. **Marketing description** (Optional - 50 words maximum. The marketing description should not repeat content found in the program description.)

   ASU’s Master of Science in User Experience (UX) educates tomorrow’s leaders in the user experience profession. UX is a rapidly growing field and UX professionals need skills in research, analysis, design, and communication to effectively lead teams and collaborate with clients and technical personnel.

4. **Campus(es) where the program will be offered**:

   *Note: Office of the Provost approval is needed for ASU Online campus options.*

   - [ ] ASU Online only (all courses online and managed by ASU Online)
   - All other campus or location options (please select all that apply):
     - [ ] Downtown Phoenix
     - [x] Polytechnic
     - [ ] Tempe
     - [ ] West
     - [ ] Other: __________________________

   *Note: Once students select a campus or Online option, students will not be able to move back and forth between the on-campus and the ASU Online options. Approval from the Office of the University Provost and Philip Regier (Executive Vice Provost and Dean) is required to offer programs through ASU Online. Please complete the ASU Online Offering form in Curriculum ChangeMaker to begin this request.*

5. **Admission Requirements**:

   Applicants must fulfill the requirements of the Graduate College, the Ira A. Fulton Schools of Engineering, and the College of Integrative Sciences and Arts.

   Applicants are eligible to apply to the program if they have earned a bachelor's or master's degree in related fields such as psychology, graphic information technology, graphic design, cognitive science, design, technical communication, from a regionally accredited institution.

   Applicants must have a minimum of a 3.00 cumulative GPA (scale is 4.00 = “A”) in the last 60 hours of a student’s first bachelor’s degree program, or applicants must have a minimum of a 3.00 cumulative GPA (scale is 4.00 = “A”) in an applicable master’s degree program is required.

   **Applicants are required to submit**:
   1. graduate admission application and application fee
   2. official transcripts
   3. proof of English proficiency
Additional Application Information

Applicants whose native language is not English (regardless of current residency) must provide proof of English proficiency.

Because this degree requires strong communication skills, we will expect non-English speaking applicants to have the following TOEFL scores: traditional paper-based score of 600 and internet-based score of 100.

6. Application Review Terms (if applicable session):

Indicate the first term and year in which applications will be opened for admission. Applications will be accepted on a rolling basis after that time.

Note: It is the academic unit’s responsibility to display program deadline dates on their website.

<table>
<thead>
<tr>
<th>Terms</th>
<th>Years</th>
<th>University Late Fee Deadline</th>
</tr>
</thead>
<tbody>
<tr>
<td>☑ Fall (regular)</td>
<td>(year): 2018</td>
<td>July 1st</td>
</tr>
<tr>
<td></td>
<td>(year):</td>
<td>October 1st</td>
</tr>
<tr>
<td>☑ Spring (regular)</td>
<td>(year): 2019</td>
<td>December 1st</td>
</tr>
<tr>
<td></td>
<td>(year):</td>
<td>February 8th</td>
</tr>
<tr>
<td>☐ Summer (regular)</td>
<td>(year):</td>
<td></td>
</tr>
<tr>
<td>☐ Summer B</td>
<td>(year):</td>
<td></td>
</tr>
</tbody>
</table>

Note: Session B is only available for approved online programs.

Program admission deadlines website address: http://poly.engineering.asu.edu/gradprogramoverview/

7. Curricular Requirements:

Curricular Structure Breakdown for the Academic Catalog:
(To be completed by the Graduate College)

30 credit hours including the required capstone course (GIT 560), or
30 credit hours including the required capstone course (HSE 560), or
30 credit hours including the required capstone course (TWC 560)

Required Core (21 credit hours)
GIT 540 Cross-Media Design Solutions (3)
GIT 542 Usability and User Experience (3)
HSE 521 Methods and Tools in Human Systems Engineering (3)
HSE 542 Foundations of Human Systems Engineering (3)
TWC 501 Fundamentals of Technical Communication (3)
TWC 514 Visualizing Data and Information (3)
TWC 544 User Experience (3)

Electives or Research (6 credit hours)

Culminating Experience (3 credit hours)
GIT 560 Capstone in User Experience (3), or
HSE 560 Capstone in User Experience (3), or
TWC 560 Capstone in User Experience (3)

Additional Curriculum Information
Please see the academic units for a complete list of approved electives and research courses. Other courses may be used with
approval of the academic units.

Students choose one capstone course as the culminating experience for the program.

8. Comprehensive Exams:
   Master's Comprehensive Exam (when applicable), please select from the appropriate option. N/A

9. Allow 400-level courses: ☑ Yes ☐ No
   Note: No more than 6 credit hours of 400-level coursework may be included on a graduate student plan of study.

10. Committee:
    Required number of thesis committee members (must be at least 3 including chair or co-chairs): N/A
    Required number of non-thesis option committee members (must be a minimum of one): 1

11. Keywords: List all keywords that could be used to search for this program. Keywords should be specific to the proposed program – limit 10 keywords.

   DESIGNRES        Design Res        Design Research
   HUMANFACT       Human Fact       Human Factors
   HUMCOMPINT      -                Human-Computer Interaction
   INTERACDES      Interactio      Interaction Design
   INTERFACE       -               Interface Design
   DIGVISDSR      Digital Vi      Digital Visualization Designer

12. Area(s) of Interest
A. Select one (1) primary area of interest from the list below that applies to this program.
   ☑ Architecture & Construction ☐ Interdisciplinary Studies
   ☑ Arts ☐ Law & Justice
   ☑ Business ☐ Mathematics
   ☑ Communication & Media ☐ Psychology
   ☑ Education & Teaching ☑ STEM
   ☑ Engineering & Technology ☐ Science
   ☑ Entrepreneurship ☐ Social and Behavioral Sciences
   ☑ Health & Wellness ☐ Sustainability
   ☑ Humanities

B. Select one (1) secondary area of interest from the list below that applies to this program.
   ☑ Architecture & Construction ☐ Interdisciplinary Studies
   ☑ Arts ☐ Law & Justice
   ☑ Business ☐ Mathematics
   ☑ Communication & Media ☐ Psychology
   ☑ Education & Teaching ☑ STEM
   ☑ Engineering & Technology ☐ Science
   ☑ Entrepreneurship ☐ Social and Behavioral Sciences
   ☑ Health & Wellness ☐ Sustainability
   ☑ Humanities

13. Contact and Support Information:
### Office Location
(Building Code & Room):

Wanner 240

### Campus Telephone Number:
(may not be an individual’s number)

480-727-1874

### Program Email Address:
(may not be an individual’s email)

polygrad@asu.edu

### Program Website Address:
(if one is not yet created, use unit website until one can be established)

https://poly.engineering.asu.edu/

### Program Director (Name):

Russell Branaghan and Andrew Mara

### Program Director (ASURITE):

rbranagh and afmara

### Program Support Staff (Name):

Amy Wolsey

### Program Support Staff (ASURITE):

awolsey

### Admissions Contact (Name):

Amy Wolsey

### Admissions Contact (ASURITE):

awolsey

**14. Application and iPOS Recommendations:** List the Faculty and Staff who will input admission/POS recommendations to Gportal and indicate their approval for Admissions and/or POS:

<table>
<thead>
<tr>
<th>NAME</th>
<th>ASURITE</th>
<th>ADMSN</th>
<th>POS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amy Wolsey</td>
<td>awolsey</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Meghan Vaughn</td>
<td>mmackowi</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Erin Eldridge</td>
<td>eelredir</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Cindy Boglin</td>
<td>ewest</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
### APPENDIX II

**Assessment Plan**

**Academic Program Assessment Plan**

<table>
<thead>
<tr>
<th>Date</th>
<th>Program Name</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>2/7/2018</td>
<td>MS in User Experience</td>
<td>UOEEE Provisional Approval</td>
</tr>
</tbody>
</table>

**Comment**

**Assessment Plan**

<table>
<thead>
<tr>
<th>Outcome 1</th>
<th>Students will be able to integrate and evaluate user experience activities and deliverables appropriate to each part of the life cycle.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measure 1.1</td>
<td>Students in HSE 542 Foundations of Human Systems Engineering (a required course) will write a paper on how to integrate a user experience design process into a real or fictional company’s current design process.</td>
</tr>
<tr>
<td>Performance Criterion 1.1</td>
<td>At least 85% of the students will receive a grade of B or better.</td>
</tr>
<tr>
<td>Measure 1.2</td>
<td>Students in TWC 544 User Experience (a required course) will work on a Return on Investment (ROI) and Evaluation plan assignment in which they analyze how UX projects enrich and benefit overall product development.</td>
</tr>
<tr>
<td>Performance Criterion 1.2</td>
<td>At least 85% of the students will pass this assignment with a grade of B or better.</td>
</tr>
<tr>
<td>Measure 1.3</td>
<td>Student capstone projects (as part of their culminating experience) will be required to contain one section in which students have integrated a user experience design process into a previous product development process.</td>
</tr>
<tr>
<td>Performance Criterion 1.3</td>
<td>At least 85% of the students will pass the capstone project review with a grade of B or better.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Outcome 2</th>
<th>Identify, analyze, and apply user research methods, including contextual inquiry, usability testing, heuristic evaluation, and cognitive walkthroughs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measure 2.1</td>
<td>Students in HSE 521 Methods and Tools in Human Systems Engineering (a required course) will conduct a research project requiring the selection, design, conduct, analysis, and reporting of a user research project.</td>
</tr>
<tr>
<td>Performance Criterion 2.1</td>
<td>At least 85% of the students will pass this assignment with a grade of B or better.</td>
</tr>
<tr>
<td>Measure 2.2</td>
<td>Students in TWC 544 User Experience (a required course) will learn about the variety of UX research methods and create the research proposal plan in which they advocate for a selection of specific research methods based on the context of the project. They will use this plan to conduct research. They will analyze the research data to create user stories with personas, scenarios, and sketch boards.</td>
</tr>
<tr>
<td>Performance Criterion 2.2</td>
<td>At least 85% of the students will pass TWC 544 with a grade of B or better.</td>
</tr>
<tr>
<td>Measure 2.3</td>
<td>Student capstones (as part of their culminating experience) will be required to contain one section in which students have selected, designed, conducted, analyzed, and reported a user research project.</td>
</tr>
<tr>
<td>Performance Criterion 2.3</td>
<td>At least 85% of the students will pass the capstone review with a grade of B or better.</td>
</tr>
</tbody>
</table>

**Outcome 3**

| Students will be able to select, apply, and justify user experience design principles in practice. |

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**PROPOSAL TO ESTABLISH A NEW JOINT MASTER'S DEGREE PROGRAM**

---

**Request to implement a new master's degree program**

10-27-16
PROPOSAL TO ESTABLISH A NEW JOINT MASTER'S DEGREE PROGRAM

Measure 3.1
Students in GIT 542 Foundations of Human Systems Engineering (a required course) will be required to conduct a project in which they select, apply, and illustrate user experience design principles in a real client or fictitious client project.

Performance Criterion 3.1
At least 85% of the students will pass this assignment with a grade of B or better.

Measure 3.2
Student capstone (as part of their culminating experience) will be required to contain one section describing how user experience design guidelines were incorporated into their project.

Performance Criterion 3.2
At least 85% of the students will pass the capstone review with a grade of B or better.

Outcome 4:
Students will be able to create low fidelity (wireframe) and high fidelity software user interface prototypes.

Measure 4.1
Students in GIT 542 Foundations of Human Systems Engineering (a required course) will be assigned a project requiring students to develop low fidelity wireframes illustrating information architecture, followed by high fidelity software user interface prototypes.

Performance Criterion 4.1
At least 85% of the students will pass this assignment with a grade of B or better.

Measure 4.2
Students in TWC 544 User Experience (a required course) will go through the process of creating low-fidelity sketch boards to mockups to high fidelity click-through prototypes. They will learn how to select the format most beneficial to the stage of the project and how to select a software most helpful for their context.

Performance Criterion 4.2
At least 85% of students will pass the capstone review with a grade of B or better.

Measure 4.3
Student capstones will be required to contain at least one low fidelity (wireframe) and one high fidelity software user interface.

Performance Criterion 4.3
At least 85% of students will pass the capstone review with a grade of B or better.
Attached for your review is the following proposal:

Ira A. Fulton Schools of Engineering/College of Integrative Sciences and Arts
The Polytechnic School
Establishment of a Graduate Program
MS in User Experience

Best,

Sergio Z. Quiros
Specialist Senior, Academic and Student Affairs
Ira A. Fulton Schools of Engineering
Arizona State University
Tempe, AZ 85287-8109
Phone: 480/727-5770
Email: Sergio.Quiros@asu.edu
MOU

The user experience degree is by nature transdisciplinary. Indeed, it fits well into both the College of Integrative Sciences and Arts (CISA) and the Fulton Schools of Engineering (FSE). System constraints at ASU however force the degree to be managed by only one college. Because Fulton has more resources and bandwidth at this moment, we have decided that the degree will be administered by Fulton.

It is critical to recognize however that parties from Technical Writing and Communications (TWC), Graphic Information Technology (GIT), and Human Systems Engineering (HSE) have contributed equally to the development, direction and day to day success of this degree. Consequently, we agree to the following:

- CISA and FSE will share equally the credit for student credit hours.
- Admissions will be conducted by an admission committee composed of faculty from CISA and FSE.
- Marketing materials will appeal to students from writing, technology and social science backgrounds. Marketing will also indicate that this is a joint program between CISA and FSE.
- CISA and FSE will work together to share lab space.
- Advisors will be trained to recognize and communicate the transdisciplinary nature of this degree.
- Because UX is fast-developing discipline, both CISA and FSE will develop structures to help track and map the placement that students achieve, so that we can scale class and program offerings to match needs and successes.
- CISA and FSE will create and submit 3-year hiring plans to administrators to help match hiring decisions to course demands as the program grows in all three of the collaborating programs.
- The assessment for this program will be jointly to ensure that all contributing disciplines are providing the most current skills and student capacity development to match the need for advanced professionals in the burgeoning UX industry--locally, regionally, and nationally.
Approved. Please see email I forwarded from Duane. Ann

From: Cindy Boglin <Cindy.Boglin@asu.edu>
Date: Thursday, March 9, 2017 at 8:58 PM
To: Ann McKenna <Ann.McKenna@asu.edu>
Cc: Russell Branaghan <Russell.Branaghan@asu.edu>, Susan Squire <Susan.Squire@asu.edu>, Sergio Quiros <Sergio.Quiros@asu.edu>
Subject: MS User Experience

Hello,

Attached is the proposal for the MS in User Experience and the MOU. We will need to obtain a letter of support from CISA for this program. Please reply all if you approve this proposal.

Thank you,

Cindy

Cindy Boglin
Assistant Director | Advising Services Office
The Polytechnic School | Ira A. Fulton Schools of Engineering | Arizona State University
phone: 480-727-1874 | direct: 480-727-5213 | email: cindy.boglin@asu.edu
schedule an advising appointment | follow us on social media | student success resources
I approve this proposal,
Susan

---------
Susan Squire
Program Chair | Lecturer | Honors Faculty
Graphic Information Technology
Arizona State University Polytechnic Campus
Ira A Fulton Schools of Engineering
Technology Center #102A | 480-727-1325
Susan.squire@asu.edu

From: Cindy Boglin <Cindy.Boglin@asu.edu>
Date: Thursday, March 9, 2017 at 8:58 PM
To: Ann McKenna <Ann.McKenna@asu.edu>
Cc: Russell Branaghan <Russell.Branaghan@asu.edu>, Susan Squire <Susan.Squire@asu.edu>, Sergio Quiros <Sergio.Quiros@asu.edu>
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Cindy

Cindy Boglin
Assistant Director | Advising Services Office
The Polytechnic School | Ira A. Fulton Schools of Engineering | Arizona State University
phone: 480-727-1874 | direct: 480-727-5213 | email: cindy.boglin@asu.edu
schedule an advising appointment | follow us on social media | student success resources
From: Duane Roen <Duane.Roen@asu.edu>
Date: Saturday, March 11, 2017 at 8:44 AM
To: Ann McKenna <Ann.McKenna@asu.edu>
Subject: RE: MS UX proposal

Thanks for sending this, Ann, and thanks for all the good work that went into the proposal and MOU for the MS in UX.

Everything looks good to me. I’m glad that the faculty from FSE-TPS and CISA-TWC collaboratively developed such an exciting degree proposal and such an effective MOU.

I strongly support the proposal and the MOU, and I look forward to working with you and your faculty to offer the MS in UX.

Do you need anything else from me?

Please share my gratitude with your faculty.

Best,
Duane

Duane Roen
Vice Provost, Polytechnic campus
Dean, College of Integrative Sciences and Arts
Dean, University College
Arizona State University
College of Integrative Sciences and Arts | cisa.asu.edu
University College | universitycollege.asu.edu
Mail Code: 2780
7271 E Sonoran Arroyo Mall
Mesa, AZ 85212-6415
P: 480-727-6513

From: Ann McKenna
Sent: Friday, March 10, 2017 7:43 PM
To: Duane Roen <Duane.Roen@asu.edu>
Subject: MS UX proposal

Hi Duane,
We have the proposal ready to submit for the MS UX degree, please see attached. Also, I was sent the attached MOU, which I believe was drafted by the faculty to convey the overall intention of the joint nature of the degree. Please review the MOU and feel free to offer any suggestions you might have for modifications. If this looks ok, please let us know if you would be willing to provide a letter of support.
Thanks,
Ann
To Whom It May Concern:

The leadership of the Walter Cronkite School of Journalism and Mass Communication has reviewed the Master of Science in User Experience proposal developed by the Ira A. Fulton Schools of Engineering.

We support this proposal and do not anticipate negative impact to programs at the Walter Cronkite School of Journalism and Mass Communication. You can reach me with any additional questions at 602-496-2443 or rebecca.blatt@asu.edu.

Sincerely,

Rebecca Blatt
Assistant Dean
<Christopher.Callahan@asu.edu>
Cc: Ann McKenna <Ann.McKenna@asu.edu>, Cindy Boglin <Cindy.Boglin@asu.edu>, Duane Roen <Duane.Roen@asu.edu>, Russell Branaghan <Russell.Branaghan@asu.edu>, Andrew Mara <Andrew.F.Mara@asu.edu>, Paul LePore <Paul.Lepore@asu.edu>, Patrick Kenney <pkenney@asu.edu>

Subject: Re: Assessment of the Impact of a Master of Science in User Experience at The Polytechnic Campus

Dear Brad,

There is no conflict with the degree programs in the CLAS social sciences. Thank you for reaching out.

Libby

From: Bradley Rogers <BRADLEY.ROGERS@asu.edu>
Date: Friday, November 3, 2017 at 11:14 AM
To: Christopher Callahan <Christopher.Callahan@asu.edu>, Elizabeth Wentz <WENTZ@asu.edu>
Cc: Ann McKenna <Ann.McKenna@asu.edu>, Cindy Boglin <Cindy.Boglin@asu.edu>, Duane Roen <Duane.Roen@asu.edu>, Russell Branaghan <Russell.Branaghan@asu.edu>, Andrew Mara <Andrew.F.Mara@asu.edu>

Subject: Assessment of the Impact of a Master of Science in User Experience at The Polytechnic Campus

Christopher and Elizabeth

I am following up on an email from Duane Roen last summer requesting impact statements regarding a proposed Master’s degree in User Experience that, if approved, will be offered on The Polytechnic Campus. (The proposal is attached, and we are now ready to move forward.) Thank you very much for considering this request.

Brad

Brad Rogers
Associate Director, The Polytechnic School Ira A Fulton Schools of Engineering
ASU at the Polytechnic Campus
Mesa, AZ 85212
From: Cindy Boglin  
Sent: Wednesday, February 14, 2018 3:18 PM  
To: Sergio Quiros <Sergio.Quiros@asu.edu>  
Subject: FW: Brief impact statement for MS in User Experience

Thank you,

Cindy

Cindy Boglin  
Assistant Director | Advising Services Office  
The Polytechnic School | Ira A. Fulton Schools of Engineering | Arizona State University  
phone: 480-727-1874 | direct: 480-727-5213 | email: cindy.boglin@asu.edu  
schedule an advising appointment | follow us on social media | student success resources

From: Raghu Santanam  
Sent: Wednesday, February 14, 2018 3:17 PM  
To: Russell Branaghan <Russell.Branaghan@asu.edu>  
Cc: Cindy Boglin <Cindy.Boglin@asu.edu>; Susan Squire <Susan.Squire@asu.edu>  
Subject: Re: Brief impact statement for MS in User Experience

Russell

Based on the curriculum and information you sent to us, we do not see any impacts on our programs.

Thank you very much for seeking our input.

Best regards,

Raghu

Raghu Santanam  
McCord Endowed Chair of Business  
Professor and Department Chair  
Department of Information Systems | W. P. Carey School of Business | Tempe Campus  
Raghu.Santanam@asu.edu | (480) 965-8977 | Office: BA 301C