The completed and signed proposal should be submitted by the Dean's Office to: curriculumplanning@asu.edu. Before academic units can advertise undergraduate concentrations or include them in their offerings as described in the university catalogs, they must be recommended for approval by the Senate Curriculum and Academic Programs Committee and approved by the Office of the University Provost.

Definition and minimum requirements:

A concentration is a formalized selection of courses within a major.

- A concentration requires a minimum of 15 semester hours of which at least 9 semester hours must be upper division. Specialized concentrations (e.g., BIS Concentrations) may have additional or different requirements.
- A concentration is offered by a single unit and is intended exclusively for students pursuing a particular major. If a concentration consists of courses from more than one college the approval of each college Dean is required.

College/School/Institute: Ira A. Fulton Schools of Engineering
Department/Division/School: Polytechnic
Proposing Faculty Group (if applicable): Human Systems Engineering
If this is an official joint degree program? No, this is not a joint degree program

If "Yes" List all the additional college(s)/school(s)/institute(s) that will be involved in offering the degree program and providing the necessary resources. Note: All units offering this program must have collaborated in the proposal development and completed the appropriate unit and college/school approvals.

Existing Degree and Major under which this concentration will be established: BS, Human Systems Engineering
Proposed Concentration Name: User Experience
What is the first catalog year available for students to select on the undergraduate application for this program? 2018-19
Delivery method: On-campus only (ground courses and/or iCourses)

Note: Once students elect a campus or On-line 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.

Campus/Locations:indicate all locations where this program will be offered.

<table>
<thead>
<tr>
<th>Campus/Locations</th>
<th>Polytechnic</th>
<th>West</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Downtown Phoenix</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phoenix Polytechnic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tempe</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thunderbird</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>West</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Name: Russell J. Branaghan
Phone number: 480-727-1390
Title: Associate Professor
Email: russ.branaghan@asu.edu

DEAN APPROVAL(S)

This proposal has been approved by all necessary unit and College/School levels of review. I recommend implementation of the proposed organizational change.

College/School/Division Dean name: [Signature] Date: 3/29/2017

College/School/Division Dean name: [Signature] Date: 1/20

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

A. Provide a brief description of the new concentration (including the specific focus of the new concentration, relationship to other concentrations in this degree program, etc).

User Experience focuses on the research, design, and validation of all system components an end user interacts with. This includes software user interfaces, documentation, help systems, user support, and the like.

B. Explain the unit’s need for the new concentration (e.g., market demand, research base, the direction of the discipline, and interdisciplinary considerations). How will the new concentration complement the existing degree program?

User Experience (UX) is the overall experience of a person using a product. It is a combination of design, psychology, and communication. It is a natural extension, and an important specialization, within human systems engineering (HSE). HSE focuses on understanding user needs, tasks, procedures, capabilities and limitations when using technology. User experience focuses on peoples' compatibility and satisfaction with those systems. UX is a rapidly growing field, as UX professionals work in virtually every industry. A search on Indeed.com for jobs related to user experience showed approximately 5500 results on 8/10/2016. While there are at least 210 job titles associated with User Experience, the most common title is, “User Experience Designer (Nielsen, 2014).” Job titles include UX Designer, User Researcher, Information Architect, Interaction Designer, User Interface Designer, Product Designer, and Front-End Developer.

2. Support and Impact

A. Provide a supporting letter from the chair of the academic unit verifying that the proposed concentration has received faculty approval through appropriate governance procedures in the unit and that the unit has the resources to support the concentration as presented in the proposal, without impacting core course resources. See attached

B. Identify other related ASU programs and outline how the new concentration will complement these existing ASU programs. (If applicable, statements of support from potentially-affected academic unit administrators need to be included with this proposal submission.)

Graphic Information Technology (GIT; Visual Design Technology) and TWC (Technical Communications)- The user experience concentration in HSE is related to proposed user experience concentrations in GIT and TWC. Students in all three concentrations will take courses offered by all three programs. This enables students from all three majors to learn the psychological, communications, design and technology aspects of user experience.

C. Provide a supporting letter from each college/school dean from which individual courses, or the entire concentration, are taken.

College of Integrative Sciences and Arts – Duane Roen
College of Integrative Sciences and Arts - Eva R. Brumberger, Associate Professor & Program Head
3. Academic Curriculum and Requirements

A. List the knowledge, competencies, and skills (learning outcomes) students should have when they complete this proposed concentration. Examples of program learning outcomes can be found at (http://www.asu.edu/oue/assessment.html).

Graduates of the User Experience concentration in Human Systems Engineering will be able to:
- Identify user needs through the application of user research
- Construct design criteria to capture and communicate prioritized user needs and design characteristics
- Prototype software user interfaces
- Conduct research to evaluate the usability of products and prototypes

B. Provide the admissions criteria for the proposed concentration. If they are identical to the admission criteria for the existing major and degree program under which this concentration will be established, please note that here.

University Admissions Criteria
C. Provide the curricular structure for this concentration. Be specific in listing required courses and specify the total minimum number of hours required for the concentration.

### Required Core Courses for the Degree/Major

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Number</th>
<th>Title</th>
<th>Is this a new Course?</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSE</td>
<td>101</td>
<td>Introduction to Human Systems Engineering</td>
<td>NO</td>
<td>3</td>
</tr>
<tr>
<td>HSE</td>
<td>223</td>
<td>Applied Biology of Human Behavior</td>
<td>NO</td>
<td>3</td>
</tr>
<tr>
<td>HSE</td>
<td>224</td>
<td>Applied Social Science</td>
<td>NO</td>
<td>3</td>
</tr>
<tr>
<td>HSE</td>
<td>225</td>
<td>Human Systems Integration</td>
<td>NO</td>
<td>3</td>
</tr>
<tr>
<td>HSE</td>
<td>230</td>
<td>Statistics for Human Systems Research I</td>
<td>NO</td>
<td>3</td>
</tr>
<tr>
<td>HSE</td>
<td>290</td>
<td>Experimental Methods for Human Systems Research</td>
<td>NO</td>
<td>3</td>
</tr>
<tr>
<td>HSE</td>
<td>323</td>
<td>Perceptual Systems</td>
<td>NO</td>
<td>3</td>
</tr>
<tr>
<td>HSE</td>
<td>324</td>
<td>Applied Cognitive Science</td>
<td>NO</td>
<td>3</td>
</tr>
<tr>
<td>HSE</td>
<td>325</td>
<td>Human-Computer Interaction</td>
<td>NO</td>
<td>3</td>
</tr>
<tr>
<td>HSE</td>
<td>390</td>
<td>Qualitative Research Methods</td>
<td>NO</td>
<td>3</td>
</tr>
<tr>
<td>HSE</td>
<td>430</td>
<td>Statistics for Human Systems Research II</td>
<td>NO</td>
<td>3</td>
</tr>
<tr>
<td>HSE</td>
<td>477</td>
<td>Human Systems Engineering Capstone Experience</td>
<td>NO</td>
<td>3</td>
</tr>
</tbody>
</table>

*Section sub-total: 36*

### Elective Concentration Courses (CHOOSE 7 CLASSES)

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Number</th>
<th>Title</th>
<th>Is this a new Course?</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>GIT</td>
<td>135</td>
<td>Graphic Communications</td>
<td>NO</td>
<td>3</td>
</tr>
<tr>
<td>GIT</td>
<td>210</td>
<td>Creative Thinking and Design Visualization</td>
<td>NO</td>
<td>3</td>
</tr>
<tr>
<td>GIT</td>
<td>215</td>
<td>Introduction to Web Authoring</td>
<td>NO</td>
<td>3</td>
</tr>
<tr>
<td>GIT</td>
<td>230</td>
<td>Digital Illustration in Publishing</td>
<td>NO</td>
<td>3</td>
</tr>
<tr>
<td>GIT</td>
<td>237</td>
<td>Web Content Design</td>
<td>NO</td>
<td>3</td>
</tr>
<tr>
<td>GIT</td>
<td>340</td>
<td>Information Design and Usability</td>
<td>NO</td>
<td>3</td>
</tr>
<tr>
<td>GIT</td>
<td>402</td>
<td>New Media Internet Technologies</td>
<td>NO</td>
<td>3</td>
</tr>
<tr>
<td>HSE</td>
<td>429</td>
<td>Product Design and Evaluation</td>
<td>NO</td>
<td>3</td>
</tr>
<tr>
<td>TWC</td>
<td>411</td>
<td>Principles of Visual Communication</td>
<td>NO</td>
<td>3</td>
</tr>
<tr>
<td>TWC</td>
<td>414</td>
<td>Visualizing Data and Information</td>
<td>NO</td>
<td>3</td>
</tr>
<tr>
<td>TWC</td>
<td>421</td>
<td>Principles of Web Authoring</td>
<td>NO</td>
<td>3</td>
</tr>
<tr>
<td>TWC</td>
<td>444</td>
<td>User Experience</td>
<td>NO</td>
<td>3</td>
</tr>
</tbody>
</table>

*Section sub-total: 21*

Total minimum credit hours required for concentration 57
D. A minimum residency requirement: How many hours of the concentration must be ASU credit? 30

E. Provide a brief course description for each new course.

Note: All new required courses should be submitted in Curriculum Changemaker and ready for Provost’s Office approval before this concentration is put on the CAPC agenda.

No new courses are required for this concentration.

4. Administration and Resources

A. How will the proposed concentration be administered (including admissions, student advisement, retention, etc.)?

Fulton Schools of Engineering, Polytechnic School

B. What are enrollment projections for the next three years?

<table>
<thead>
<tr>
<th></th>
<th>1st Year</th>
<th>2nd Year (Yr 1 continuing + new entering)</th>
<th>3rd Year (Yr 1 &amp; 2 continuing + new entering)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Students (Headcount)</td>
<td>10</td>
<td>25</td>
<td>50</td>
</tr>
</tbody>
</table>

C. What are the resource implications for the proposed concentration, including any projected budget needs? Will new books, library holdings, equipment, laboratory space and/or personnel be required now or in the future? If multiple units/programs will collaborate in offering this concentration, please discuss the resource contribution of each participating program. Letters of support must be included from all academic units that will commit resources to this concentration.

We have all necessary equipment and space to administer this concentration.
D. Please list the primary faculty participants regarding this proposed concentration. For interdisciplinary concentrations, please include the relevant names of faculty members from across the University.

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Area(s) of Specialization as they relate to proposed concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Russell Branaghan</td>
<td>Associate Professor</td>
<td>User Experience, Product Development</td>
</tr>
<tr>
<td>Nancy Cooke</td>
<td>Professor</td>
<td>Teamwork</td>
</tr>
<tr>
<td>Rob Gray</td>
<td>Associate Professor/Program Chair</td>
<td>Driving, Aviation</td>
</tr>
<tr>
<td>Erin Chiou</td>
<td>Assistant Professor</td>
<td>Healthcare User Experience</td>
</tr>
<tr>
<td>Susan Squire</td>
<td>Lecturer/Program Chair, GIT</td>
<td>User Experience</td>
</tr>
<tr>
<td>Christina Carasquilla</td>
<td>Lecturer</td>
<td>User Experience</td>
</tr>
<tr>
<td>Claire Lauer</td>
<td>Associate Professor</td>
<td>User Experience</td>
</tr>
<tr>
<td>Eva Brumberger</td>
<td>Associate Professor</td>
<td>User Experience</td>
</tr>
</tbody>
</table>

5. Additional Materials
   A. Prepare and attach a Major Map. Please use the "proposed map" function to create a Major Map in BAMM. This feature is explained in the training document available on help.asu.edu.

   B. **Complete and attach the Appendix document.**

   C. Attach other information that will be useful to the review committees and the Office of the University Provost.

<table>
<thead>
<tr>
<th>PROVOST OFFICE APPROVAL(S)</th>
</tr>
</thead>
<tbody>
<tr>
<td>This proposal has been approved by all necessary Provost office levels of review. I recommend implementation of the proposed organizational change.</td>
</tr>
<tr>
<td>Office of the University Provost</td>
</tr>
<tr>
<td>Signature</td>
</tr>
</tbody>
</table>

*Note: An electronic signature, email, or a PDF of the signed signature page is acceptable.*
Proposed Concentration Name: Human Systems Engineering (User Experience)

1. Program Description (150 words maximum)

The BS degree program in human systems engineering with a concentration in user experience combines topics in psychology, the Web, human factors, visual displays and technical communications to make products and services useful, usable and desirable. Students learn how to research customer needs, identify criteria for successful products and services, prototype those products and services, and refine them through usability testing and other user-centered methods.

Marketing Text (optional):

User experience skills are increasingly valued by industry yet are not typically covered in traditional psychology or engineering programs. Students who complete a concentration in user experience will enhance their employment potential.

2. Contact and Support Information

Office Location (Building & Room): WANER 240
Campus Telephone Number: 480-727-1874
Program email address: technology@asu.edu
Program website address: https://poly.engineering.asu.edu/hse/

3. Additional Program Description Information

A. Additional program fee required for this program? Yes ☑ No ☐
B. Does this program have a second language requirement? Yes ☐ No ☑

4. Delivery/Campus Information

Delivery
☑ On-campus only (ground courses and/or iCourses) (check campus(es)/locations below)
☐ ASU Online only (all courses online)*
☐ Both on-campus and ASU Online*

* Note: Academic units must obtain prior approval from the Office of the University Provost and Philip Regier (Executive Vice Provost and Dean) to offer programs through ASU Online.

Campus(es) and/or Locations Check all locations where the program will be offered.
☐ - Downtown ☑ - Polytechnic ☐ - Tempe ☐ - Thunderbird ☐ - West
☐ - Other (please specify)

Operational information:
Once students select a campus or On-line option, students will not be able to move back and forth between the on-campus the ASU Online option.
5. **Career Opportunities & Concentration(s)**
   Provide a brief description of career opportunities available for this degree program with the proposed concentration. Increasingly, companies are searching for professionals to help them make products and services more usable and desirable. In recent years, CNN, U.S. News & World Report and other news organizations have rated user experience (UX) as one of the top emerging careers, with benefits that include high pay, opportunity to telecommute, low stress and high job growth.

6. **Additional Admission Requirements**
   If applicable list any admission requirements (freshman and/or transfer) that are higher than and/or in addition to the university minimum undergraduate admission requirements.
   None

7. **Keywords**
   List all keywords used to search for this program. Keywords should be specific to the proposed program.
   APPLIPSYCH- Applied Psychology; DESIGNRES - Design Research; HUMCOMPINT-Human-Computer Interaction; HUMANFACT-Human Factors; INTERACDES-Interaction Design; INTERFACE-Interface Design; POLY polytechnic campus; PSYCHOLOGY-Psychology; USERCNTDSN-User-Centered Design; WEB-Web

8. **Advising Committee Code**
   List the existing advising committee code associated with this degree. UGESNA

   Note: If a new advising committee needs to be created, please complete the following form:
   Proposal to create an undergraduate advising committee

9. **Western Undergraduate Exchange (WUE) Eligible:**
   Has a request been submitted to the University Provost by the Dean to consider this degree program as eligible for WUE?
   No

   Note: *No action will be taken during the implementation process with regards to WUE until approval is received from the University Provost.*

10. **First Required Math Course**
    List the first math course required in the major map.
    MAT 170

11. **Math Intensity**
    a. List the highest math required on the major map. (This will not appear on Degree Search.) MAT 170
    b. What is the math intensity as indicated by the highest math required on the major map? Math intensity categorization can be found here: https://catalog.asu.edu/mathintensity Moderate
12. CIP codes
   a. Identify CIP codes that should be displayed on Degree Search. CIP codes can be found at:
      http://www.onetonline.org/crosswalk/CIP/.
      17-2112.01  13-1161.00
      15-1134.00  -------------------------
      15-1199.10  -------------------------
      11-3131.00  -------------------------
      19-3022.00  -------------------------
   b. Are any specific career codes (SOC/ONET codes) to be omitted from the CIP codes selected above?
      (i.e. “Omit 25-10312.00 Engineering Teachers, Postsecondary from CIP code 14.0501 Bioengineering and Biomedical
      Engineering.”)

13. Area(s) of Interest
   A. Select one (1) primary Area of Interest from the list below that applies to this program.
      ☐ □ Arts
      ☐ □ Health & Wellness
      ☐ □ Humanities
      ☐ □ Communications & Media
      ☐ □ Interdisciplinary Studies
      ☐ □ Computing & Mathematics
      ☐ □ Law, Justice & Public Service
      ☐ □ Education & Teaching
      ☐ □ STEM
      ☐ □ Engineering & Technology
      ☐ □ Science
      ☐ □ Entrepreneurship
      ☐ □ Social and Behavioral Sciences
      ☐ □ Expoloratory
      ☐ □ Sustainability
   B. Select any additional Areas of Interest that apply to this program from the list below.
      ☐ □ Arts
      ☐ □ Health & Wellness
      ☐ □ Humanities
      ☐ □ Business
      ☐ □ Interdisciplinary Studies
      ☐ □ Communications & Media
      ☐ □ Law, Justice & Public Service
      ☐ □ Computing & Mathematics
      ☐ □ STEM
      ☐ □ Education & Teaching
      ☐ □ Science
      ☐ □ Engineering & Technology
      ☐ □ Social and Behavioral Sciences
      ☐ □ Expoloratory
      ☐ □ Sustainability

The following fields are to be completed by the Office of the University Provost.

CIP Code:
Plan Code:
## 2017 - 2018 Major Map
### Human Systems Engineering (User Experience, (Proposed))

**School/College:**
SSKKMIC

### Term 1 0 - 14 Credit Hours

<table>
<thead>
<tr>
<th>Critical course signified by</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASU 101-TPS: The ASU Experience</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HSE 101: Introduction to Human Systems Engineering (SB)</td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>BIO 100: The Living World (SQ) OR BIO 181: General Biology I (SQ) OR BIO 182: General Biology II (SG) OR BIO 201: Human Anatomy and Physiology I (SG)</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: First-Year Composition</td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>MAT 170: Precalculus (MA)</td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
</tbody>
</table>

**Term hours subtotal:** 14

---

### Term 2 15 - 30 Credit Hours

<table>
<thead>
<tr>
<th>Critical course signified by</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSE 230: Statistics for Human Systems Research I (CS)</td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>EGR 101: Foundations of Engineering Design Project I OR EGR 104: Critical Inquiry in Engineering (L)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 101 or ENG 102: First-Year Composition OR ENG 105: Advanced First-Year Composition OR ENG 107 or ENG 108: First-Year Composition</td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>Humanities, Arts and Design (HU) AND Cultural Diversity in the U.S. (C)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natural Science - Quantitative (SQ)</td>
<td>4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Complete ENG 101 OR ENG 105 OR ENG 107 course(s).

Complete MAT 170 course(s).

**Term hours subtotal:** 16

---

### Term 3 31 - 45 Credit Hours

<table>
<thead>
<tr>
<th>Critical course signified by</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSE 223: Applied Biology of Human Behavior (SB)</td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>HSE 290: Experimental Methods for Human Systems Research (L)</td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>User Experience Concentration Course</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanities, Arts and Design (HU) AND Historical Awareness (H)</td>
<td>3</td>
<td></td>
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</tr>
<tr>
<td>Elective</td>
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</table>

**Term hours subtotal:** 15

---

### Term 4 46 - 60 Credit Hours

<table>
<thead>
<tr>
<th>Critical course signified by</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSE 224: Applied Social Science (SB)</td>
<td>3</td>
<td>C</td>
<td></td>
</tr>
</tbody>
</table>

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*An SAT, ACT, Accuplacer, IELTS, or TOEFL score determines placement into first-year composition courses*

*ASU Mathematics Placement Test score determines placement in Mathematics course*

*ASU 101 is required of all freshman students; Transfer students are required to take FSE 394.*

*Prep for success using the Freshman Guide.*

*Join a Fulton community.*

*Explore engineering and technical professions.*

*Create a Sun Devil CareerLink profile.*

*Get involved with EPICS, the Generator Labs, and the Fulton Start-Up Center.*

*Prep for success using the Sophomore Guide.*

*Consult the Resume, Presentation, and Resource Library for tips on how to create a technical resume, job shadow, do informational interviews and mentor with alumni.*
<table>
<thead>
<tr>
<th>Term 5 61 - 75 Credit Hours</th>
<th>Necessary course signified by</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSE 390: Qualitative Research Methods (L)</td>
<td>3</td>
<td>C</td>
<td>• Plan for success using the Junior Guide.</td>
<td></td>
</tr>
<tr>
<td>HSE 324: Applied Cognitive Science (SB)</td>
<td>3</td>
<td>C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>User Experience Concentration Course</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Global Awareness (G)</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Term hours subtotal:</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term 6 76 - 90 Credit Hours</th>
<th>Necessary course signified by</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSE 323: Perceptual Systems (SB)</td>
<td>3</td>
<td>C</td>
<td>• Research and prepare for graduate school.</td>
<td></td>
</tr>
<tr>
<td>HSE 325: Human-Computer Interaction</td>
<td>3</td>
<td>C</td>
<td>• Apply for an engineering 4+1 program.</td>
<td></td>
</tr>
<tr>
<td>User Experience Concentration Course</td>
<td>3</td>
<td></td>
<td>• Develop a professional profile online.</td>
<td></td>
</tr>
<tr>
<td>Complete 2 courses:</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper Division Elective</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Term hours subtotal:</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term 7 91 - 105 Credit Hours</th>
<th>Necessary course signified by</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSE 430: Statistics for Human Systems Research II (CS)</td>
<td>3</td>
<td></td>
<td>• Plan for success using the Senior Guide.</td>
<td></td>
</tr>
<tr>
<td>Complete 2 courses:</td>
<td>6</td>
<td></td>
<td>• Use the Sun Devil CareerLink to apply for full-time positions.</td>
<td></td>
</tr>
<tr>
<td>Upper Division User Experience Concentration Course</td>
<td>3</td>
<td></td>
<td>• Complete an in-person or practice interview.</td>
<td></td>
</tr>
<tr>
<td>Complete 2 courses:</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper Division Elective</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Term hours subtotal:</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term 8 106 - 120 Credit Hours</th>
<th>Necessary course signified by</th>
<th>Hours</th>
<th>Minimum Grade</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSE 477: Human Systems Engineering Capstone Experience</td>
<td>3</td>
<td>C</td>
<td>•</td>
<td></td>
</tr>
<tr>
<td>Upper Division User Experience Concentration Course</td>
<td>3</td>
<td></td>
<td>•</td>
<td></td>
</tr>
<tr>
<td>Complete 2 courses:</td>
<td>6</td>
<td></td>
<td>•</td>
<td></td>
</tr>
<tr>
<td>Upper Division Elective</td>
<td>3</td>
<td></td>
<td>•</td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Term hours subtotal:</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
• Students must take 7 classes from the list below.

<table>
<thead>
<tr>
<th>User Experience Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>GIT 135: Graphic Communications</td>
</tr>
<tr>
<td>GIT 210: Creative Thinking and Design</td>
</tr>
<tr>
<td>Visualization</td>
</tr>
<tr>
<td>GIT 215: Introduction to Web Authoring</td>
</tr>
<tr>
<td>GIT 230: Digital Illustration in Publishing</td>
</tr>
<tr>
<td>GIT 237: Web Content Design</td>
</tr>
<tr>
<td>GIT 340: Information Design and Usability</td>
</tr>
<tr>
<td>GIT 402: New Media Internet Technologies</td>
</tr>
<tr>
<td>HSE 429: Product Design and Evaluation</td>
</tr>
<tr>
<td>TWC 411: Principles of Visual Communication (L)</td>
</tr>
<tr>
<td>TWC 414: Visualizing Data and Information</td>
</tr>
<tr>
<td>TWC 421: Principles of Web Authoring (L)</td>
</tr>
<tr>
<td>TWC 444: User Experience</td>
</tr>
</tbody>
</table>

**General University Requirements Legend**

**General Studies Core Requirements:**
- Literacy and Critical Inquiry (L)
- Mathematical Studies (MA)
- Computer/Statistics/Quantitative Applications (CS)
- Humanities, Arts and Design (HU)
- Social-Behavioral Sciences (SB)
- Natural Science - Quantitative (SQ)
- Natural Science - General (SG)

**General Studies Awareness Requirements:**
- Cultural Diversity in the U.S. (C)
- Global Awareness (G)
- Historical Awareness (H)

**First-Year Composition**

General Studies designations listed on the major map are current for the 2017 - 2018 academic year.
From: Cindy Boglin <Cindy.Boglin@asu.edu>
Date: Thursday, March 9, 2017 at 9:05 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: BS in HSE(User Experience)

Hello,

Attached is the proposal and major map for the new User Experience concentration in HSE. I will secure a statement of support from Susan Squire. 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
From: Eva Brumberger  
Sent: Saturday, March 04, 2017 1:20 PM  
To: Russell Branaghan <Russell.Branaghan@asu.edu>; Susan Squire <Susan.Squire@asu.edu>  
Cc: Cindy Boglin <Cindy.Boglin@asu.edu>  
Subject: RE: Impact statement for HSE UX Concentration

Hi Russ,

I fully support this proposal.

Eva

Eva R. Brumberger  
Associate Professor & Program Head  
Technical Communication  
College of Integrative Sciences and Arts  
Arizona State University  
7271 E. Sonoran Arroyo Mall, 250D  
Mesa, AZ 85212-2780

Eva.Brumberger@asu.edu  
ph: 480.727.5981  
fax: 480.727.1529

From: Russell Branaghan  
Sent: Thursday, March 02, 2017 1:29 PM  
To: Eva Brumberger; Susan Squire  
Cc: Cindy Boglin  
Subject: Impact statement for HSE UX Concentration

Eva and Susan,

Attached is a proposal for the User Experience concentration in FSE’s Human Systems Engineering degree. Would each of you kindly provide an impact statement for this?

Thanks in advance,

Russ
From: Duane Roen  
Sent: Saturday, March 04, 2017 12:11 PM  
To: Russell Branaghan <Russell.Branaghan@asu.edu>  
Cc: Cindy Boglin <Cindy.Boglin@asu.edu>; Ian Moulton <IAN.MOULTON@asu.edu>; Eva Brumberger <Eva.Brumberger@asu.edu>; Kelli Haren <Kelli.Haren@asu.edu>  
Subject: RE: Letter of support for HSE UX concentration

The feeling is mutual, Russ.

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: Russell Branaghan  
Sent: Saturday, March 4, 2017 11:54 AM  
To: Duane Roen <Duane.Roen@asu.edu>  
Cc: Russell Branaghan <Russell.Branaghan@asu.edu>; Cindy Boglin <Cindy.Boglin@asu.edu>; Ian Moulton <IAN.MOULTON@asu.edu>; Eva Brumberger <Eva.Brumberger@asu.edu>; Kelli Haren <Kelli.Haren@asu.edu>  
Subject: Re: Letter of support for HSE UX concentration

Duane,

Thanks for your support. We look forward to working with CISA’s talented and dedicated faculty!

Sincerely,

Russ

---

On Mar 4, 2017, at 11:52 AM, Duane Roen <Duane.Roen@asu.edu> wrote:

Russ,

FSE’s proposed concentration in User Experience looks great. CISA fully supports your proposal.
CISA is also delighted that students in the program will take TWC 411, 414, 421 and 424.

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: Russell Branaghan
Sent: Thursday, March 2, 2017 1:35 PM
To: Duane Roen <Duane.Roen@asu.edu>
Cc: Cindy Boglin <Cindy.Boglin@asu.edu>
Subject: Letter of support for HSE UX concentration

Dear Duane,

Attached is a proposal for the User Experience concentration in FSE’s Human Systems Engineering degree. It would involve students taking the following classes as electives:

TWC 411, 414, 421 and 424.

Would you kindly provide a letter of support for this?

Thanks in advance,

Russ

<Undergrad HSE (User Experience).doc><HSE (UX) Proposed.pdf>