

## BUTLER UNIVERSITY • DEPARTMENT OF ART

### B.A. IN ART + DESIGN PLUS A SECONDARY MAJOR IN SOFTWARE ENGINEERING

- The B.A. degree in Art + Design requires 126 credits.
  - 40 hours must be 300 or 400-level courses.
  - All art majors have Arts Event Attendance Requirements; for details, check <https://www.butler.edu/jca/for-current-students>.
- The double major of Art + Design and Software Engineering will fulfill the following Areas of Inquiry in the University Core Curriculum: Perspectives of the Creative Arts and Analytic Reasoning. In addition, the B.A. Art + Design curriculum fulfills the Indianapolis Community Requirement and the Social Justice and Diversity requirement of the Butler University Core Curriculum; art majors are exempted from the Butler Cultural Requirement because of the arts event attendance requirements for all arts majors.
- The student will be assigned a Software Engineering advisor in addition to their Art advisor.

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#### **Semester 1**

ART 105	Art History Survey 1	3
ART 107	Drawing 1	3
FYS 101	First Year Seminar	3
PWB _____	Physical Well-Being	1
CS 151	Foundations of Computing 1	3
Language Elective		3

#### **Semester 2**

ART 205	Art History Survey 2	3
ART 210	Professional Practices	3
FYS 102	First Year Seminar	3
SW _____	The Social World	3
CS 252	Foundations of Computing 2	3
Language Elective		3

*Explanation: 6 hours of the same language at the 200-level or higher are required.*

TOTAL Credit Hours:	16	18
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#### **Semester 3**

ART 308	Graphic Design 1	3
ART _____	Art Elective	3
GHS _____	Global and Historical Studies	3
CS 333	Database Systems	3
CS 351	Algorithms	3

#### **Semester 4**

ART _____	Art Elective	3
ART _____	Art Elective	3
GHS _____	Global and Historical Studies	3
CS 248	Obj-Orient Program & Data Str	5
SE 361	Intro to Software Engineering	3

TOTAL Credit Hours:	15	17
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#### **Semester 5**

ART _____	Art-Focused SJD Elective	3
ART _____	Art Elective	3
CS 321	Computer Organization	3
CS 485	Computer Ethics	1
MA 106*	Calculus & Anal. Geo. 1	4
SE 462	Modernizing Legacy Soft	3

#### **Semester 6**

ART _____	Art Elective	3
ART _____	Art Elective	3
CS 382/3-ICR	Epics 2 Service Learning	2-3
CS 452	Parallel Algor Des & Program	3
MA 107	Calculus & Anal. Geo. 2	4
SE 461	Managing Software Dev	3

TOTAL Credit Hours:	17	18-19
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*\*Math placement test required; the student may need to take MA 101 (Algebra, 3 cr.) and/or MA 102 (Precalculus, 3 cr.) prior to MA 106. Students get credit for MA 106 if they receive a 4 or 5 on the Calculus AB AP exam; they receive credit for both MA 106 and MA 107 if they receive a 4 or 5 on the Calculus BC AP exam with a 4 or 5 on the AB subscore.*

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**Semester 7**

ART 453-ICR	Internship	3
NW _____	The Natural World	5
CS _____	CS 435 or CS 441	3
MA 162	Elementary Statistics	3
SE 411	Internship Practicum	1
SE 412	Internship Reflection	2

TOTAL Credit Hours: 17

**Semester 8**

ART 411	Thesis	3
TI _____	Texts and Ideas	3
CS 311	Voc Exploration in Comp Sci	1
CS 341	Advanced Data Structures	3
SE 463	Testing & Quality Assurance	3
CS/SE _____	Elective	3

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## SUMMARY

### **REQUIRED ART COURSES:**

ART 105	Art History Survey 1	3
ART 107	Drawing 1	3
ART 205	Art History Survey 2	3
ART 210	Professional Practices	3
ART 308	Graphic Design 1	3
ART 411	Thesis	3
ART 451/2/3-ICR	Internship	3
Art-Focused Social Justice and Diversity course: Choose ONE:		3
ART 317-SJD	American Art and Visual Culture	
ART 319-SJD	World History of Photography	
ART 320-SJD	Race, Gender & Sexuality in Cont Art	

EIGHTEEN credits chosen from the following: 18 (maximum of 6 in Art History\*)

ART 207,307	Drawing 2,3	3,3
ART 303,313,323	Photography 1,2,3	3,3,3
ART 304	Depiction	3
ART 305	Animation + Video	3
ART 311	Function	3
ART 312*	Design: History and Theory	3
ART 314*	Art Museum Studies	3
ART 315*	Postmodernism in the Arts	3
ART 316*	Modernism in the Arts	3
ART 317-SJD*	American Art and Visual Culture	3
ART 318,328	Graphic Design 2,3	3,3
ART 319-SJD*	World History of Photography	3
ART 320-SJD*	Race, Gen & Sexuality in Cont Art	3
ART 322,332,342	Painting 1,2,3	3,3,3
ART 360	Sculpture	3
ART 380/1/2	Special Topics in Art and Visual Cult	1,2,3
ART 401/2/3	Independent Study	1,2,3
ART 499	Honors Thesis	3

**TOTAL 42**

### **UNIVERSITY CORE CURRICULUM:**

FYS 101,102	First Year Seminar	3,3
GHS _____	Global and Historical Studies	3,3
NW _____	The Natural World	5
SW _____	The Social World (if needed)	3
TI _____	Texts and Ideas	3
PWB _____	Physical Well-Being	1

**TOTAL 24**

### **COURSES REQUIRED FOR THE SOFTWARE ENGINEERING MAJOR:**

CS 151	Foundations of Computing 1	3
CS 248	Object-Oriented Prog & Data Structures	5
CS 252	Foundations of Computing 2	3
CS 311	Vocational Exploration in Computer Science	1
CS 321	Computer Organization	3

CS 333	Database Systems	3
CS 341	Advanced Data Structures	3
CS 351	Algorithms	3
CS 382/383-ICR	Epics 2 Service Learning	2-3
CS 452	Parallel Algorithm Design and Programming	3
CS 485	Computer Ethics	1
MA 106*	Calculus & Anal Geometry 1	4
MA 107	Calculus & Anal Geometry 2	4
MA 162	Elementary Statistics	3
SE 361	Introduction to Software Engineering	3
SE 411	Internship Practicum	1
SE 412	Internship Reflection	2
SE 461	Managing Software Development	3
SE 462	Modernizing Legacy Software	3
SE 463	Testing and Quality Assurance	3
ONE of the following, chosen from:		3
CS 435	Computer Networks	
CS 441	Organization of Programming Languages	
CS/SE _____	Elective numbered 300 or above	3
Language	6 hours of the same language at the 200-level or higher	
	<b>TOTAL</b>	<b>68-69</b>

*\*Math placement test required; the student may need to take MA 101 (Algebra, 3 cr.) and/or MA 102 (Precalculus, 3 cr.) prior to MA 106. Students get credit for MA 106 if they receive a 4 or 5 on the Calculus AB AP exam; they receive credit for both MA 106 and MA 107 if they receive a 4 or 5 on the Calculus BC AP exam with a 4 or 5 on the AB subscore.*