BUTLER UNIVERSITY • DEPARTMENT OF ART

B.A. IN ART + DESIGN *PLUS* A SECONDARY MAJOR IN DATA SCIENCE

• The B.A. degree in Art + Design requires 120 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 Data Science 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 of the Butler University Core Curriculum; art majors fulfill the Butler Cultural Requirement because of the arts event attendance requirements for all arts majors.

• The student will be assigned a Data Science advisor in addition to their Art advisor.

Semester 1			***Semester 2***		
ART 105	Art History Survey 1	3	ART 205	Art History Survey 2	3
ART 107	Drawing 1	3	ART 210	Professional Practices	3
FYS 101	First Year Seminar	3	FYS 102	First Year Seminar	3
CS 151	Foundations of Computing 1	3	CS 252	Foundations of Computing 2	3
MA 106*	Calculus & Anal. Geo. 1	4	MA 107	Calculus & Anal. Geo. 2	4
TOTAL Credit Hours:		16			16

**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.*

Semester 3			***Semester 4***		
ART 308	Graphic Design 1	3	ART ____	Art Elective	3
ART ____	Art Elective	3			
GHS ____	Global and Historical Studies	3	SW ____	The Social World	3
MA 162	Elementary Statistics	3	CS 248	Object-Orient Prog & Data Str	5
Language Elective		3	MA 310	Linear Algebra	3
			Language Elective		3
TOTAL Credit Hours:		15			17

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

Semester 5			***Semester 6***		
ART ____	Art Elective	3	ART ____	Art Elective	3
ART ____	Art Elective	3	ART ____	Art Elective	3
WB ____	Well-Being	1	GHS ____	Global and Historical Studies	3
CS 333	Database Systems	3	CS 341	Advanced Data Structures	3
CS 351	Algorithms	3	MA 320	Big Data Ethics, Gov & Beyond	3
MA 360	Probability Theory 1	3	MA 361	Statistical Theory	3
TOTAL Credit Hours:		16			18

Semester 7			***Semester 8***		
ART 453-ICR	Internship	3	ART 411	Thesis	3
ART ____	Art Elective	3			
NW ____	The Natural World	5	TI ____	Texts and Ideas	3
CS 485	Computer Ethics	1	CS 445	Artificial Intelligence	3
MA 362	Linear Regress & Time Series	3	MA 369	Multivariate Statis Methods	3
			MA 468	Predict Analy & Data Mining	3
TOTAL Credit Hours:		15			15

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
TWENTY-ONE credits chosen from the following:		21 (maximum of 9 in Art History*)
ART 207,307	Drawing 2,3	3,3
ART 303,313,323,423	Photography 1,2,3,4	3,3,3,3
ART 304	Depiction	3
ART 305	Animation + Video	3
ART 306	Cyanotype	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 321*	Art of Asia	3
ART 322,332,342	Painting 1,2,3	3,3,3
ART 330*	Art of Africa	3
ART 360	Sculpture	3
ART 370	Studio Practicum	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
NW 216-ART	Science and Photography	5
	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	3
TI ____	Texts and Ideas	3
WB ____	Well-Being	1
	TOTAL	***24***

COURSES REQUIRED FOR THE DATA SCIENCE MAJOR:

CS 151	Foundations of Computing 1	3
CS 248	Object-Oriented Prog & Data Structures	5
CS 252	Foundations of Computing 2	3
CS 333	Database Systems	3
CS 341	Advanced Data Structures	3

CS 351	Algorithms	3
CS 445	Artificial Intelligence	3
CS 485	Computer Ethics	1
MA 106*	Calculus and Anal Geometry 1	4
MA 107	Calculus and Anal Geometry 2	4
MA 162	Elementary Statistics	3
MA 310	Linear Algebra	3
MA 320	Big Data Ethics, Governance, and Beyond	3
MA 360	Probability Theory 1	3
MA 361	Statistical Theory	3
MA 362	Linear Regression and Time Series	3
MA 369	Multivariate Statistical Methods	3
MA 468	Predictive Analytics and Data Mining	3
Language	6 hours of the same language at the 200-level or higher	
	TOTAL	***62***

**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.*