BEREA COLLEGE 2017-2018 CURRICULUM GUIDE B.S. in TECHNOLOGY AND APPLIED DESIGN: With an Engineering and Technology Education Concentration

(32 credits required for graduation)

NOTE: This guide is subject to change and represents actions approved by Faculty to date. Please refer often to the 2019-2020 Online Catalog & Student Handbook (www.berea.edu/cataloghandbook), which will be updated with the most current information.

GENERAL EDUCATION PROGRAM

NOTE: <u>No single college course transferred into Berea</u> can meet more than one General Education requirement.		
Core Courses	<u>Term</u> Credit	
MAT 010: Prealgebra ^a	NC	
MAT 011: Elementary Algebra I ^a	NC	
MAT 012: Elementary Algebra II ^a	NC	
GSTR 110: Writing Sem. I: Critical Thinking in	110	
the Liberal Arts ^b		
GSTR 210: Writing Sem. II: Identity and Divers	•	
in the United States	1	
GSTR 310: Understandings of Christianity GSTR 410: Sr. Sem. in Cont. Global Issues	1	
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Scientific Knowledge and Inquiry GSTR 332: Scientific Knowledge & Inquiry OR		
Two approved science courses, from two dif	ferent areas	
(BIO, ANR, CHM, PHY), one of which must b	e an approved lab	
course. At this time, only the following course	s have been	
approved to meet this alternative (all of which	meet the lab	
course stipulation): ANR 110, 130, BIO 100, ⁻ 113, 131, 134, PHY 111, 127, or 221	101, 110, CHM	
113, 131, 134, PHT 111, 127, 01 221		
Wellness & Fitness HLT 100: Introduction to Lifetime Wellness	.50	
OR	50	
WELL 101: Principles of Wellness I	.50	
AND Two activity courses:		
HHP 2:	.25	
HHP 2:	.25	
(if swimming proficiency test not passed, take	-	
Practical Reasoning Across the Curriculum Two courses—at least one firmly grounded in math		
the other can be an approved practical reasoning (P		
another PRQ course.	,	
;;	1	
;;	1	
Perspectives—Six Areas Required		
Students will satisfy each of the six areas by taking or through an approved experience. Individual cours	or waiving a course,	
approved to satisfy more than one Perspective, but i		
may satisfy more than two Perspective areas.	Ū	
1. Arts		
2. Social Science		
3. Western History 4. Religion		
5. Afr. Amer., Appal., Women's		
6. International (two courses either in area 6A	or area 6B):	
A) Same Non-English Language		
Same Non-English Language		
(one course may be waived by placement OR	exam)	
B) World Culture (Non-western)		
World Culture (Western/nen western)		
Active Learning Experience (ALE) An approved experience, taken for credit or as	noncredit.	

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MAJOR COURSES

Core Courses	<u>Term</u> Credit		
TAD 130: Design and Documentation	1		
TAD 140: Design & Production Tech in Woods	1		
TAD 180: Graphic Communication & Design	1		
TAD 245: Materials, Process, & Testing	1		
TAD 265: Electricity and Electronics	1		
TAD 275: Energy & Power Technology	1		
Capstone Course			
TAD 488: Research in Technology	1		
Distribution Courses (Required; count inside the Three (3) advanced courses chosen from the follow 340, 345 (also SENS), 352, 382, 455, 460, 470, or approved by the Program	<u>ing:</u> TAD 330,		
	1		
	1		
Collateral Courses (Required; count outside the	major)		
EDS150: Int-Ed: Thinking about Lrng, Tchg	1		
PHY 127 or higher	1		
MAT 115 or higher	1		
AND			
Two (2) courses chosen from the following: ART 11	0, CSC 111,		
CSC 124, CSC 126, SENS 100 or other TAD course	es		
:	1		
:	1		
AND			

<u>One (1) course chosen from the following:</u> ANR 130 or 140, BIO 100 or 110, CHM 101, EDS 228, or WGS 310 _______1

ELECTIVES (count in 20 credits outside the major, <u>unless</u> in TAD rubric)

<u>Dept. & No.</u>	<u>Title</u>	<u>Term</u> <u>Credit</u>
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:		
:		
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:		
:		
:		

NOTE: In addition to completing specified course requirements, each student must satisfy departmental standards for written and oral communication.

^aMay be waived on basis of test scores.

^bTransfer students might waive GSTR 110 if they took College Composition as a degree-seeking student at another college AND earned a grade of B or higher.

Learning Goal 1: Develop understanding and skills within the Discipline and throughout the Liberal Arts

<u>Learning Outcome 1.1:</u> Demonstrate critical thought, problem solving, analysis and synthesis

Learning Outcome 1.2: Demonstrate a desire for life-long learning and inquiry

<u>Learning Outcome 1.3:</u> Connect learning in technology and applied design across all disciplines

Learning Outcome 1.4: Demonstrate learning by addressing real world problems and challenges.

Learning Goal 2: Develop a contemporary, global understanding of Technology and Applied Design.

<u>Learning Outcome 2.1:</u> Demonstrate knowledge and understanding of the world of work.

Learning Outcome 2.2: Demonstrate appropriate skills and knowledge toward specific application(s) of technology and applied design.

<u>Learning Outcome 2.3</u>: Demonstrate an understanding of the impact of technology and applied design has on humans and our natural world.

Learning Goal 3: Preparation for Responsible Engagement

<u>Learning Outcome 3.1</u>: Demonstrate an awareness for individual action, ethical consciousness and a commitment to service.

<u>Learning Outcome 3.2:</u> Exhibit preparedness to live thoughtfully in our natural and human made environments. <u>Learning Outcome 3.3:</u> Demonstrate understanding of the importance of human collaboration and cooperation.