## 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: No single college course transferred into Berea
can meet more than one General Education requirement.

| Core Courses I | Term Credit |
| :---: | :---: |
| MAT 010: Prealgebra ${ }^{\text {a }}$ | NC |
| MAT 011: Elementary Algebra ${ }^{\text {a }}$ | NC |
| MAT 012: Elementary Algebra IIa GSTR 110: Writing Sem. I: Critical Thinking in the Liberal Arts ${ }^{\text {b }}$ | NC |
| GSTR 210: Writing Sem. II: Identity and Diversity in the United States GSTR 310: Understandings of Christianity GSTR 410: Sr. Sem. in Cont. Global Issues | 1 1 1 |
| Scientific Knowledge and Inquiry GSTR 332: Scientific Knowledge \& Inquiry OR |  |
| Two approved science courses, from two diff (BIO, ANR, CHM, PHY), one of which must be | ferent areas e an approve |
| course. At this time, only the following courses approved to meet this alternative (all of which course stipulation): ANR 110, 130, BIO 100, 101 113, 131, 134, PHY 111, 127, or 221 | have been meet the lab 01, 110, CHM |


| Wellness \& Fitness |  |
| :---: | :---: |
| HLT 100: Introduction to Lifetime Wellness | . 50 |
| OR |  |
| WELL 101: Principles of Wellness I | . 50 |
| AND Two activity courses: |  |
| HHP 2 | . 25 |
| HHP 2 | . 25 |
| (if swimming proficiency test not passed, tak |  |

Practical Reasoning Across the Curriculum (PR \& PRQ)
Two courses-at least one firmly grounded in math or statistics (PRQ); the other can be an approved practical reasoning (PR) course or another PRQ course.


## MAJOR COURSES

## Core Courses

| 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 major)
Three (3) advanced courses chosen from the following: TAD 330,
340, 345 (also SENS), 352, 382, 455, 460, 470, or other courses approved by the Program


Collateral Courses (Required; count outside the major) EDS150: Int-Ed: Thinking about Lrng, Tchg 1
PHY 127 or higher
MAT 115 or higher
AND
Two (2) courses chosen from the following: ART 110, CSC 111, CSC 124, CSC 126, SENS 100 or other TAD courses


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

ELECTIVES (count in 20 credits outside the major, unless in TAD rubric)


NOTE: In addition to completing specified course requirements, each student must satisfy departmental standards for written and oral communication.
${ }^{\mathrm{a}}$ May be waived on basis of test scores.
${ }^{\text {b }}$ Transfer 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

Learning Outcome 1.1: Demonstrate critical thought, problem solving, analysis and synthesis
Learning Outcome 1.2: Demonstrate a desire for life-long learning and inquiry
Learning Outcome 1.3: 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.

Learning Outcome 2.1: 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.
Learning Outcome 2.3: 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

Learning Outcome 3.1: Demonstrate an awareness for individual action, ethical consciousness and a commitment to service.
Learning Outcome 3.2: Exhibit preparedness to live thoughtfully in our natural and human made environments. Learning Outcome 3.3: Demonstrate understanding of the importance of human collaboration and cooperation.

