

## B. S. in Technology & Applied Design - Management

(32 credits required for graduation with a minimum cumulative GPA of 2.00)

**NOTE:** This guide is not meant to replace the degree audit; it is subject to change and represents actions approved by Faculty to date. Students are encouraged to run their degree audit at the end of each term of enrollment. Please refer often to the *2019-2020 Online Catalog & Student Handbook* <http://catalog.berea.edu/en/current/catalog>, which will be updated with the most current information.

### GENERAL EDUCATION PROGRAM

*No single transfer course can meet more than one General Education requirement.*

#### **Core Courses**

*(Development math courses may be waived on basis of test scores.)*

MAT 010 Pre-Algebra  
MAT 011 Elementary Algebra  
MAT 012 Elementary Algebra II

GSTR 110 Writing Seminar I: Critical Thinking in the Liberal Arts *(Transfer students may waive if College Composition was taken as a degree-seeking student at another college and earned a grade of B or higher.)*

GSTR 210 Writing Seminar II: Identity and Diversity in the U.S.  
GSTR 310 Understandings of Christianity  
GSTR 410 Seminar-Contemporary Global Issues

#### **Scientific Knowledge and Inquiry**

GSTR 332 Scientific Origins **OR**

Two (2) approved science courses, from two different disciplines, one of which must be an approved lab course. The following courses have been approved to meet this requirement: ANR 110, BIO 100, 101, 110, CHM 113, 131, PHY 111, 127, 221

#### **Wellness & Fitness**

WELL 101 Principles of Wellness I

WELL 102 Principles of Wellness II

Two (2) ¼-credit HHP activity courses *(HHP 200 will satisfy both the SWIM requirement and one of the activity course requirements)*

#### **Practical Reasoning (PR & PRQ)**

Two (2) 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.

#### **Perspectives (Six areas required)**

One (1) course in **each** of the six areas is required. Individual courses may be approved to satisfy more than one perspective, but no single course may satisfy more than two perspective areas.

- 1) Arts
- 2) Social Science
- 3) Western History
- 4) Religion
- 5) African American/Appalachian/Women
- 6) International (choose one option):
  - A) Two (2) courses in the same non-English language, one of which may be waived through testing; **OR**
  - B) Two (2) world culture courses, one of which must be grounded in a non-western culture

#### **Active Learning Experience**

An approved experience, taken for credit or non-credit (e.g. internships, undergraduate research experiences).

### TAD MAJOR REQUIREMENTS

*A minimum GPA of 2.0 in the major is required for graduation.*

#### **Core Courses**

TAD 130 Design & Documentation  
TAD 140 Design & Production Tech in Woods  
TAD 180 Graphic Communication & Design  
TAD 245 Materials, Process & Testing  
TAD 265 Electricity & Electronics  
TAD 275 Energy & Power Technology

#### **Capstone**

TAD 488 Research in Technology

#### **Distribution Courses** (three total credits)

*Two (2) courses chosen from:*

TAD 330 Comp Aided Drafting & Design  
TAD 352 Quality Control  
TAD 455 Comp Integrated Manufacturing

*One (1) additional course chosen from:*

TAD 330 Comp Aided Drafting & Design  
TAD 340 Studio in Woods  
TAD 382 Advanced Graphics  
TAD 455 Comp Integrated Manufacturing  
TAD 460 Digital Electronics  
TAD 470 Advanced Power & Energy  
Other courses approved by TAD department

#### **Collateral Courses** (count outside major if not TAD rubric)

MAT 115 College Algebra with Modeling (or waiver) **OR**  
Higher math course

*Two (2) courses chosen from:*

ART 134 Intro to Fibers  
ART 135 Intro to Drawing & Painting  
ART 136 Intro to Printmaking  
ART 137 Intro to Sculpture  
BUS/CSC 114 Business Applications & Programming  
BUS/CSC 221 Management Information Systems  
CHM 101 Foundations of Chemistry **OR**  
CHM 131 Accelerated General Chemistry  
CSC 124 Building Better Apps  
CSC 126 Intro to Robotics  
PHY 217 General Physics I with Algebra **OR** higher  
Other TAD courses

*Three (3) courses chosen from:*

BUS 120 Accounting I  
BUS 240 Business Law  
BUS 315 Management  
BUS 363 Marketing  
BUS 364 Production & Operations Management  
ECO 101 Principles of Macroeconomics **OR**  
ECO 102 Principles of Microeconomics  
ECO 250 Applied Statistics

#### **ELECTIVES**

Twenty (20) credits outside the major.

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

***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.