2022-2023 B. S. in Engineering Technologies & Applied Design – Technology 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 often. Please refer to the *2022-2023 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
ETAD 130 Design & Documentation
ETAD 140 Design & Production Tech in Woods
ETAD 180 Graphic Communication & Design
ETAD 245 Materials, Process & Testing
ETAD 265 Electricity & Electronics
ETAD 275 Energy & Power Technology

Capstone
ETAD 488 Research in Technology

Distribution Courses (one total credit)
One (1) 300 or 400-level ETAD course.

Collateral Courses (four total credits - count outside major)

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

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
ECO 102 Principles of Microeconomics
ECO 250/HHP 264/MAT 438 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

<u>Learning Outcome 1.1:</u> Demonstrate critical thought, problem solving, analysis and synthesis
<u>Learning Outcome 1.2:</u> 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
<u>Learning Outcome 1.4:</u> 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.
<u>Learning Outcome 2.2:</u> 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.