

**I. GENERAL EDUCATION** ..... 44  
 (MAT 1025 taken for the major fulfills Quantitative Literacy. TEC 2029, S D 2400, & PHL 2015 fulfill Local to Global: Sustainability & Global Change for a 9 sh theme).

**II. MAJOR REQUIREMENTS** ..... 74 – 78  
 An overall 2.0 GPA is required in the major. 18 semester hours must be completed at Appalachian.

Junior Writing in the Discipline (WID) \_\_\_\_\_ & Senior Capstone Experience (CAP) \_\_\_\_\_ must be met.

\* MAT 1025 \_\_\_\_\_ (4) Algebra and Elementary Functions (or higher) (Prerequisite: must pass the math placement or MAT 0010)

**Introductory Technology Coursework (27 sh)**

- \* TEC 2029 \_\_\_\_\_ (3) Society & Technology (Gen Ed: Local to Global Perspective; Sustainability & Global Change)
- TEC 3601 \_\_\_\_\_ (3) Energy Issues & Technology (Gen Ed: Local to Global Perspective)

**And select 7 courses from the following:**

- GRA 1012 \_\_\_\_\_ (3) Graphic Communications I
- GRA 2102 \_\_\_\_\_ (3) Electronic Prepress (Prerequisite: GRA 1012)
- IND 2012 \_\_\_\_\_ (3) Product Design
- IND 2120 \_\_\_\_\_ (3) Materials and Processes I
- IND 2201 \_\_\_\_\_ (3) Design Drawing I
- IND 3120 \_\_\_\_\_ (3) Materials and Processes II (Prerequisites: IND 2120, IND 2901)
- TEC 1023 \_\_\_\_\_ (3) Introduction to Electronics (Prerequisite: MAT 0010 or placement test)
- TEC 1728 \_\_\_\_\_ (3) Architectural Drafting (Prerequisite or Corequisite: TEC 2708)
- TEC 2708 \_\_\_\_\_ (3) Construction Technology & Building Codes
- TEC 2718 \_\_\_\_\_ (3) Building Mechanical Systems
- TEC 3039 \_\_\_\_\_ (3) Materials Science (Prerequisites: PHY 1104 and TEC 2708)
- TEC 3728 \_\_\_\_\_ (3) Residential Architecture (Prerequisites: TEC 1728, 2708 or permission of the instructor)

Major requirements that may count in Gen Ed:			
MAT 1025	(4)	Quantitative Literacy	
TEC 2029	(3)	L to G Perspective: Sustainability	
S D 2400	(3)	L to G Perspective: Sustainability	
PHL 2015	(3)	L to G Perspective: Sustainability	
Total Major Hrs:		74-78	
Gen Ed – up to:		- 13	
Net Major Hrs:		61-65	

**Interdisciplinary Coursework (9-11 sh from any 3 courses)**

- ANT/SD 4570 \_\_\_\_\_ (3) Sustainable Development in the Modern World System
- BIO 3312 \_\_\_\_\_ (3) Environmental Studies
- ECO 2620 \_\_\_\_\_ (3) Environmental & Resource Economics (Gen Ed: Local to Global Perspective)
- MGT 3010 \_\_\_\_\_ (3) Survey of Management
- \* PHL 2015 \_\_\_\_\_ (3) Environmental Ethics (Gen Ed: Local to Global Perspective; Sustainability & Global Change)
- PHY 3140 \_\_\_\_\_ (3) Environmental Physics (Prerequisite: PHY 1104 or PHY 1151)
- PLN 2410 \_\_\_\_\_ (3) Town, City and Regional Planning
- \* S D 2400 \_\_\_\_\_ (3) Principles of Sustainable Development (Gen Ed: Local to Global Perspective; Sustainability & Global Change)
- S D 3100 \_\_\_\_\_ (4) Principles of Agroecology
- S D 4100 \_\_\_\_\_ (4) Agroecology Practices, Systems & Philosophies (Prerequisite: S D 3100 or permission of the instructor)
- \_\_\_\_\_ \_\_\_\_\_ (3) Other courses in Sustainability, geography & planning, business or environmental topics approved by an advisor

**Technical Specialization (19-21 sh from any 7 courses)**

- TEC 3520 \_\_\_\_\_ (1) Instructional Assistance (Prerequisite: Junior or Senior standing, Approved contract required)
- TEC 4604 \_\_\_\_\_ (3) Sustainable Transportation
- TEC 4605 \_\_\_\_\_ (3) Sustainable Resource Management
- TEC 4606 \_\_\_\_\_ (3) Sustainable Water and Wastewater Technology
- TEC 4607 \_\_\_\_\_ (3) Wind and Hydro Power Technology (Prerequisite: TEC 3601 or permission of the instructor)
- TEC 4608 \_\_\_\_\_ (3) Photovoltaic System Design & Construction (Prerequisite: TEC 3601 or permission of the instructor)
- TEC 4618 \_\_\_\_\_ (3) Sustainable Building Design & Construction (Prerequisite: TEC 2708 or permission of the instructor)
- TEC 4628 \_\_\_\_\_ (3) Solar Thermal Energy Technology
- TEC 4700 \_\_\_\_\_ (3) Biofuels Technology
- TEC 4708 \_\_\_\_\_ (3) Building Science (Prerequisites: TEC 2708, MAT 1020 or higher, or permission of the instructor)
- TEC 4711 \_\_\_\_\_ (3) Computer Modeling of Renewable Energy Systems (Prerequisite: TEC 3601)

**Senior Project/Thesis (3 sh)**

- TEC 4638 \_\_\_\_\_ (3) Contemporary Problems in Appropriate Technology (CAP) (“C” minimum required) (Prerequisite: TEC 4608 or permission of the instructor)

**Internship/Electives (12 sh)**

- TEC 4900 \_\_\_\_\_ (3-6) Internship (CAP)

And/Or

TEC Electives or courses from Interdisciplinary Coursework above not already being used elsewhere in the major.

\_\_\_\_\_ (3) \_\_\_\_\_ (3) \_\_\_\_\_

\_\_\_\_\_ (3) \_\_\_\_\_ (3) \_\_\_\_\_

**III. MINOR NOT REQUIRED**

**IV. FREE ELECTIVES (to total a minimum of 122 sh for this major)** ..... 2 – 17  
 2 sh of free electives outside the major discipline are required. 122