

**Bachelor of Science (BS)**  
**Degree Code 577 \***  
**Concentration 577 B**  
**Non-Teaching**

**Program of Study for**  
**Dept. of Sustainable Tech & the Built Env**  
**Building Sciences**  
**Architectural Technology and Design**

- I. GENERAL EDUCATION** ..... **44**  
 (PHY 1103 & 1104 for the major fulfills Gen Ed: Science Inquiry. MAT 1025 for the major fulfills Quantitative Literacy. TEC 2029 may count in Gen Ed: ILE).
- II. MAJOR REQUIREMENTS** ..... **88**  
 (An overall 2.0 GPA is required in the major. 18 semester hours must be completed at Appalachian. Laptop computers are required).

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

**Foundation Coursework (15 sh) Minimum grade of “C-” in each course required**

- MAT 1025 \_\_\_\_\_ (4) Algebra & Elementary Functions (or higher) (Prerequisite: pass math placement or MAT 0010)
- TEC 2029 \_\_\_\_\_ (3) Society & Technology (Gen Ed: ILE: Sustainability & Global Resources; Social Sciences Designation)
- PHY 1103 \_\_\_\_\_ (4) General Physics I (Corequisite: MAT 1025 or equivalent) (Gen Ed: Science Inquiry)
- PHY 1104 \_\_\_\_\_ (4) General Physics II (Prerequisite: PHY 1103 or equivalent) (Gen Ed: Science Inquiry)

**Introductory Coursework (27 sh) Minimum grade of “C” in each course required**

- TEC 1708 \_\_\_\_\_ (3) Construction Technology & Building Codes
- TEC 1728 \_\_\_\_\_ (3) Architectural Graphics & Computer Modeling (Pre/Corequisite: TEC 1708)
- TEC 2718 \_\_\_\_\_ (3) Building Mechanical Systems
- TEC 2758 \_\_\_\_\_ (3) Surveying, Soils and Foundations (Prerequisite: MAT 1025)
- TEC 3038 \_\_\_\_\_ (3) Commercial Construction Technology (WID)** (Prerequisite: MAT 1025, TEC 1708 and TEC 2758; RC 2001 or its equivalent)
- TEC 3039 \_\_\_\_\_ (3) Materials Science
- INT 1001 \_\_\_\_\_ (3) Visual Literacy I
- INT 1002 \_\_\_\_\_ (3) Visual Literacy II (Prerequisite: INT 1001)
- INT 2310 \_\_\_\_\_ (3) History of Interior Design & Architecture II (Prerequisite: completion of Portfolio Review or permission of instructor)

**Advanced Coursework (35 sh) Minimum grade of “C” in each course required**

- INT 3001 \_\_\_\_\_ (1) Architecture and Design Internship Workshop (Prerequisite: completion of Freshman Portfolio Review or permission of the instructor)
- INT 4320 \_\_\_\_\_ (2) Professional Practices in Design (Corequisite: INT 4110 or permission of the instructor)
- TEC 3718 \_\_\_\_\_ (3) Construction Estimating (Prerequisite: MAT 1025 or higher, TEC 1708, 3038, knowledge of word processing & spreadsheets)
- TEC 3728 \_\_\_\_\_ (3) Architectural Design Studio I (Prerequisites: TEC 1708, 1728 or permission of the instructor)
- TEC 3738 \_\_\_\_\_ (3) Statics & Strength of Structures (Prerequisite: MAT 1025, PHY 1104, TEC 1708, 1728, 2758, 3039)
- TEC 3748 \_\_\_\_\_ (3) Building Science (Prerequisite: TEC 1708, 2718, MAT 1020 or higher, or permission of the instructor)
- TEC 3758 \_\_\_\_\_ (3) Architectural Design Studio II (Prerequisite: TEC 3728)
- TEC 4738 \_\_\_\_\_ (4) Architectural Design Studio III (Prerequisites: TEC 3748, 3758)
- TEC 4748 \_\_\_\_\_ (4) Architectural Design Studio IV (Prerequisites: TEC 3038, 3718, 3738, 4738)
- TEC 4758 \_\_\_\_\_ (3) Planning and Scheduling (Prerequisite: MAT 1025 or higher, TEC 1708, 2718, 3038, 3718)
- OR
- TEC 4768 \_\_\_\_\_ (3) Construction Administration (Prerequisite: MAT 1025 or higher, TEC 1708, 2718, 3038, 3718)
- TEC 4900 \_\_\_\_\_ (6) Internship (CAP)**

**Major Electives (11 sh from the following)**

- IND 2012 \_\_\_\_\_ (3) Product Design
- IND 2120 \_\_\_\_\_ (3) Materials and Processes I
- IND 2201 \_\_\_\_\_ (3) Design Drawing I
- INT 2300 \_\_\_\_\_ (3) History of Interior Design & Architecture I (Prerequisite: completion of Portfolio Review or permission of instructor)
- PLN 2410 \_\_\_\_\_ (3) Town, City and Regional Planning
- PLN 3432 \_\_\_\_\_ (4) Planning Techniques
- PLN 3730 \_\_\_\_\_ (3) Land Use Regulations
- TEC 3035 \_\_\_\_\_ (1-3) Architectural Field Study
- TEC 3036 \_\_\_\_\_ (1-3) Construction Management Field Study
- TEC 3037 \_\_\_\_\_ (1-3) Sustainable Building Systems Field Study
- TEC 3520 \_\_\_\_\_ (1-3) Instructional Assistant
- TEC 3807 \_\_\_\_\_ (1) Construction Safety
- TEC 4618 \_\_\_\_\_ (3) Sustainable Building Design & Construction (Prerequisite: TEC 1708 and TEC 2718)
- \_\_\_\_\_ \_\_\_\_\_ (3) Other courses in the Dept. of Technology & Environmental Design related to sustainability, planning, business or environmental topics approved by the program coordinator

|  |     |                                  |
|--|-----|----------------------------------|
| Major requirements that may count toward Gen Ed: |     |                                  |
| MAT 1025   | (4) | Quantitative Literacy (fulfills) |
| PHY 1103   | (4) | Science Perspective              |
| PHY 1104   | (4) | Science Perspective              |
| TEC 2029   | (3) | Integrative Learning Exp         |
| Total Major Hrs: 88                              |     |                                  |
| Gen Ed: <u>-15</u>                               |     |                                  |
| Net Major Hrs: 73                                |     |                                  |

- III. MINOR NOT REQUIRED – Recommended minor in Community and Regional Planning**
- IV. FREE ELECTIVES (to total 122 sh for this major)** ..... **2 - 5**  
**2 sh of free electives outside the major discipline are required** **122**