

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

Program of Study for
Technology & Environmental Design Majors
Building Sciences
Architectural Technology and Design

I. GENERAL EDUCATION **44**
 (PHY 1103 & 1104 for the major fulfills Science Perspective. MAT 1025 fulfills Quantitative Literacy. TEC 2029 may count toward Gen Ed. if completing a theme).

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)

- MAT 1025 _____ (4) Algebra & Elementary Functions (or higher) (Prerequisite: pass math placement or MAT 0010)
- TEC 2029 _____ (3) Society & Technology (Gen Ed: Local to Global Perspective)
- PHY 1103 _____ (4) General Physics I (Corequisite: MAT 1025 or equivalent) (Gen Ed: Science Perspective)
- PHY 1104 _____ (4) General Physics II (Prerequisite: PHY 1103 or equivalent) (Gen Ed: Science Perspective)

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

- TEC 1728 _____ (3) Architectural Graphics & Computer Modeling (Pre/Corequisite: TEC 2708)
- TEC 2708 _____ (3) Construction Technology & Building Codes

**** Upon completion of TEC 1728 and TEC 2708, students will take the Building Science Competency Exam (a minimum grade of 70 in each part is required before taking Advanced Coursework).**

- 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 2708 and TEC 2758; ENG 2001 or its equivalent)
- TEC 3039 _____ (3) Materials Science (Prerequisites: PHY 1104 and TEC 2708)
- INT 1001 _____ (3) Visual Literacy I
- INT 1002 _____ (3) Visual Literacy II
- 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 2708, 3038, knowledge of word processing & spreadsheets)
 - TEC 3728 _____ (3) Architectural Design Studio I (Prerequisites: TEC 1728, 2708 or permission of the instructor)
 - TEC 3738 _____ (3) Statics & Strength of Structures (Prerequisite: MAT 1025, PHY 1104, TEC 1728, 2708, 2758, 3039)
 - TEC 3748 _____ (3) Building Science (Prerequisite: TEC 2708, 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 2708, 2718, 3038, 3718)
- OR
- TEC 4768 _____ (3) Construction Administration (Prerequisite: MAT 1025 or higher, TEC 2708, 2718, 3038, 3718 Co/Prerequisite TEC 4758)
 - 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 3807 _____ (1) Construction Safety
- TEC 4618 _____ (3) Sustainable Building Design & Construction (Prerequisite: 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)	Local to Global Perspective	
Total Major Hrs:		88	
Gen Ed:		-15	
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**