Bachelor of Science Program of Study for (BS) Technology & Environmental Design Majors **Degree Code** 577 * Concentration 577 B **Building Sciences Non-Teaching** Architectural Technology and Design (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. (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 (4) Algebra & Elementary Functions (or higher) (Prerequisite: pass math placement or MAT 0010) MAT 1025 TEC 2029 (3) Society & Technology (Gen Ed: Local to Global Perspective) General Physics I (Corequisite: MAT 1025 or equivalent) (Gen Ed: Science Perspective) PHY 1103 (4) 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 Construction Technology & Building Codes TEC 1708 (3) TEC 1728 (3) Architectural Graphics & Computer Modeling (Pre/Corequisite: TEC 1708) TEC 2718 **Building Mechanical Systems** (3) TEC 2758 Surveying, Soils and Foundations (Prerequisite: MAT 1025) (3) **TEC 3038** (3) Commercial Construction Technology (WID) (Prerequisite: MAT 1025, TEC 1708 and TEC 2758; ENG 2001 or its equivalent) TEC 3039 (3) Materials Science INT 1001 Visual Literacy I (3) Visual Literacy II (Prerequisite: INT 1001) INT 1002 (3) 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_ Architecture and Design Internship Workshop (Prerequisite: completion of Freshman Portfolio Review or permission __(1) of the instructor) INT 4320 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) Architectural Design Studio IV (Prerequisites: TEC 3038, 3718, 3738, 4738) TEC 4748 (4) 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 History of Interior Design & Architecture I (Prerequisite: completion of Portfolio Review or permission of instructor) INT 2300 (3) Town, City and Regional Planning PLN 2410 (3) 3432 (4) Planning Techniques PLN Land Use Regulations PLN 3730 (3) Major requirements that may count toward Gen Ed: (1-3) Architectural Field Study MAT 1025 (4) Quantitative Literacy (fulfills) 3035 TEC (1-3) Construction Management Field Study PHY 1103 (4)Science Perspective TEC 3036 PHY 1104 (4) Science Perspective TEC 3037 (1-3) Sustainable Building Systems Field Study TEC 2029 (3) Local to Global Perspective (1-3) Instructional Assistant TEC 3520 TEC 3807 (1) Construction Safety Total Major Hrs: 88 Sustainable Building Design & Construction (Prerequisite: TEC 1708 TEC 4618 (3) Gen Ed: <u>-15</u> and TEC 2718) Net Major Hrs: 73 Other courses in the Dept. of Technology & Environmental Design (3) related to sustainability, planning, business or environmental topics approved by the program coordinator MINOR NOT REQUIRED - Recommended minor in Community and Regional Planning

FREE ELECTIVES (to total 122 sh for this major)

2 sh of free electives outside the major discipline are required