RBPF - Residential Bldg Performance

RBPF 100 Res Build Perf Seminar: 1 Credits (1 Lec)
Taught in a discussion format, students learn critical thinking skills and explore issues in building science. Students will research career paths and industry certifications. This course serves as an orientation to MSU and the degree with a short, optional field experience. Intended for students in the Residential Building Performance program.

RBPF 103 Wx Installer Tech Fund: 2 Credits (2 Lec)
This course provides an overview of weatherization measure, standards, and residential building performance practices including building science basics and the house as a system. Additionally, it introduces basic health safety issues and heating systems and mechanical codes.

RBPF 104 Weatherization Installer Tech: 2 Credits (2 Lec)
PREREQUISITE: RBPF 100. This course provides an overview of weatherization measures, standards, and residential building performance practices including building science basics and the house as a system.

RBPF 110 App Energy Effic Math: 1 Credits (1 Lec)
Students in this course will learn about topics in applied mathematics (heat transfer, air changes per hour, HVAC sizing, etc.) directly connected to weatherization and energy efficiency.

RBPF 116 Energy App Health & Safety: 2 Credits (2 Lec)
Energy Application Health and Safety provides students with a knowledge of energy-related hazards, combustion gas, building tightness, lead-based paint, asbestos and other risks associated with improving the energy of existing homes.

RBPF 121 Insulation Sys & App: 2 Credits (2 Lec)
The student will learn types, performance, and applications of interior and exterior residential insulation systems.

RBPF 124 Res Green Design Build: 2 Credits (2 Lec)
This course provides an overview of energy-efficient residential building concepts including building design, composition, materials, and orientation. The purpose of the course is to provide a foundation for understanding green building systems and processes.

RBPF 129 Manufactured Home Weather: 2 Credits (2 Lec)
PREREQUISITE: RBPF 100. This course provides an overview of mobile home weatherization measures, standards, and practices. This is a required course for the Residential Building Performance Program.

RBPF 134 Single Family Energy Audit: 2 Credits (2 Lec)
PREREQUISITE: RBPF 100. This course covers basic guidelines for Energy Auditors in Single Family Homes as well as math basics, building assessment strategies, and work order procedures.

RBPF 140 Heat Sys Engry Aud & Inspectors: 2 Credits (2 Lec)
PREREQUISITE: RBPF 100. This course covers basic guidelines for evaluating heating systems as an Energy Auditor. Low pressure boilers, forced air furnaces, and sealed combustion system analysis are the main focus of this course.

RBPF 160 Building Performance Software: 2 Credits (2 Lec)
PREREQUISITE: RBPF 100. This course provides an overview of various options for Energy Audit and Building Performance Software concentrating on evaluating homes and gathering required data for input.

RBPF 170 Renewable Energy Concepts: 2 Credits (2 Lec)
PREREQUISITE: RBPF 100. This course provides an overview of installation and maintenance of renewable energies including wind, solar (PV), geothermal, and solar hot water.