Course Descriptions for Related Training  
(Green Technology)

Course G1: **Your Role in the Green Environment**  
8 Assignments  
2 Continuing Ed Credits  
Course Fee: $275  
The construction industry is changing. In this new era, the green environment is an important consideration. As a construction craft worker or contractor, you must understand how your daily activities at work and at home affect the green environment. With this knowledge, you can make smart choices to reduce your impact. This text explains how the things you do each day can make a difference. You will learn to measure your carbon footprint and find ways to reduce it. You will also learn how the buildings you construct affect the green environment and how to apply the principles of a green building rating system.

Course G2: **Green Awareness**  
3 Assignments  
1 Continuing Ed Credit  
Course Fee: $275  
This advanced text covers key areas that are being considered by today’s builders. The text introduces the contractor/student to ways of reducing a project’s carbon footprint, renewable and sustainable energy, energy audits, heat/cooling loads, and life cycle cost analysis. Topics also covered are HVAC, Electrical, and Plumbing options that will help our environment through more energy efficient appliances and products that reduce our carbon footprint on our environment. Discussed are comparisons between existing products and updated versions that are less harmful to our environment.

Course G3: **The Green Home**  
7 Assignments  
2 Continuing Ed Credits  
Course Fee: $275  
This text takes a fresh look at the issues of what makes a green building, how we can achieve energy efficiency in buildings and what is meant to have sustainable construction. This text will equip the reader with the concepts of a green building and the premise of constructing a sustainable home or building. The Green Home is a guide for the individual, and our society as a whole.
Course G4: **Residential Energy Conservation**
9 Assignments
2 Continuing Ed Credits
Course Fee: $275
This course covers the basics of residential and commercial energy savings concepts. An evaluation of the over building and the buildings systems are discussed. Ideas on energy savings, energy audits, money saving ideas, and comparisons on appliances, lighting, heating, cooling, windows and doors, insulation, and making your home safer are discussed at length in this text.

Course G5: **Reducing Energy Losses in Building Structures**
5 Assignments
1 Continuing Ed Credit
Course Fee: $275
This course covers physical laws of heat transfer and how they apply to building heat losses. It discusses the effects of sun, wind, and shade on energy consumption in buildings, and examines characteristics of different types of walls, roofs, windows, and flooring. The course demonstrates how different forms of insulation can improve thermal resistance, and gives sample applications of energy conservation measures, illustrating how to determine cost and payback periods.

Course G6: **Energy Conservation Basics**
5 Assignments
1 Continuing Ed Credit
Course Fee: $275
This course covers energy sources and the history of energy usage. It examines alternative energy sources and their feasibility, and current energy usage patterns and places where energy can be conserved. The course explains how to recognize energy waste, and includes sample corrective measures. It also explains how to conduct an energy survey.

Course G7: **Green topics for HVAC**
5 Assignments
1 Continuing Ed Credit
Course Fee: $275
This text is divided into four modules that explore methods and opportunities for increasing the efficiency of energy use and the quality of the air that we breathe. Included are discussions on air quality equipment, indoor air quality, energy conservation equipment, and alternative heating and cooling systems.

Course G8: **Mechanical Energy Conservation**
5 Assignments
1 Continuing Ed Credit
Course Fee: $275
This course covers the causes and effects of friction and the importance of lubrication. It includes a discussion of efficient operation of materials handling systems, elevators, and escalators. It examines ways to conserve energy by reducing vibration and explains the importance of good maintenance of pumps, blowers, and compressors. It includes information on vehicle efficiency, with emphasis on tune-ups, lubrication, and other energy-saving maintenance practices.

Course G9: **Increasing Heating/Cooling Efficiency**
5 assignments
This course covers the measurement of various
environmental factors and their effect on human comfort. It introduces the concept of zones and covers ventilation requirements and savings possible by reducing air flow. It examines energy waste vs. conservation measures relating to furnaces, boilers, air conditioners, and refrigeration equipment.

Course G10: **Electrical Energy Conservation**

This course covers electrical energy consumers in typical commercial and industrial facilities. It investigates utility rate structures and relates cost to load management, and examines power factors, including how they are calculated and how they affect energy usage. The course shows methods of conducting lighting surveys and how lighting fixture and lamp selection can impact electrical costs.