UC Berkeley Extension Professional Program in Sustainability and Transportation

REQUIRED COURSE DESCRIPTIONS

Introduction to Sustainable Transportation Design Plan – *Required*
X497 (1 semester unit in Civ. & Env. Engineering)

Review basic principles of transportation design that promote sustainable alternatives and minimize environmental impact. Examine additional design considerations such as end-user preferences, stakeholder perspectives, ease of implementation, ongoing facilities operation, and maintenance concerns. Understand terminologies, concepts, and challenges of sustainable growth and learn essential skills for implementing successful design and managing planning programs. You are encouraged to attend a local city council meeting (self-arranged) and turn in an optional report.

Energy for Sustainability: Technology, Planning, and Policy – *Required*
X436 (1 semester unit in Natural Resources)

Review the environmental impact of global energy systems, energy-use life cycle, and alternative options. Learn strategies from energy efficiency, conservation, renewable energy sources, green buildings, environmental responsibility, and emerging clean tech innovations. Study the financial impact these strategies have on our economy and their effect on global climate change. Evaluate policies, regulations, and legislations at local and state level. Learn how energy strategies impact residential, commercial sectors, corporations, and government. Examine issues in science, technology, policy, law and business.

Transportation Sustainability: Life Cycle Assessment – *Required*
(0.6 ceu)

Learn the significant and often overlooked impact of transportation activities on people and the environment. Study materials consumption, waste generation, land use, and human health effects from passenger and freight transportation. Examine and understand thoroughly the comprehensive approach of life cycle assessment method and how current tools are being effectively applied to the transportation sector in evaluating environmental, technological, social, and economic policies and decisions. Review the latest and most relevant federal (e.g., AB 32) and state legislation (e.g., SB 375) and policies on transportation and land-use planning issues.

Introduction to Sustainability Management – *Required*
(0.7 ceu)

Examine the paradigm of sustainability in the context of environmental, economic, and social forces that shape emerging policies and management decisions. Investigate the possibility of creating a common set of sustainability principles that apply to industries, institutions, and individuals. Understand how these principles affect diverse global demographic groups and create challenges for local and regional managers. Learn basic information, concepts, methods, and tools for assessing, implementing, and managing sustainability initiatives to build a foundation for a sustainable future.

Climate Change and Law AB 32: What It Means for You – *Required*
(0.7 ceu)

After decades as a scientific and political issue, climate change now emerges as the basis for statutory compliance requirements and market-driven economic activities. California has been a leader in this transition for a number of years, and recently enacted AB 32 to establish statewide emission limits and enforceable standards to meet those limits. Learn requirements set forth in AB 32 and other laws and gain a solid understanding of related issues.

Courses subject to change.