

SUSTAINABLE DEVELOPMENT

FRONT LINE OF DEFENSE

Sustainability, or supporting human life as we know it, is arguably the most important global issue our society faces today. No longer relegated to environmentalists or one particular sector, it will require a collective effort, transdisciplinary collaboration, and concentrated strategies to mitigate, or even eliminate, the negative impact of human consumption on our planet.

Three modern factors deplete the earth's resources at an alarming pace: an explosion in the urban population; hyper-consumption of non-renewable earth resources; and a changing global landscape — technologically, politically, economically, and environmentally.

In response to this global environmental crisis, forward-thinking cities all over the world are committing to sustainable solutions for everything from skylines to water sources. SMU Lyle presents a forward-thinking educational program to equip our front line of defense — planners, policy shapers, and decision makers.

With a global perspective and deep focus on the forces that shape local, state, and regional development, this certificate series prepares leaders and innovators to contribute effectively to sustainability, both personally and in the workplace, while minimizing this and the next generation's ecological footprint.



FACING ECONOMIC REALITY...

FORGING A PATH TO SUSTAINABLE DEVELOPMENT

To move beyond theory and into the practical applications of sustainable development, SMU Lyle faculty, along with guest lecturers from the city, regional, and state level, will explore solutions as they relate to the three pillars of sustainability: environmental, economic, and social.

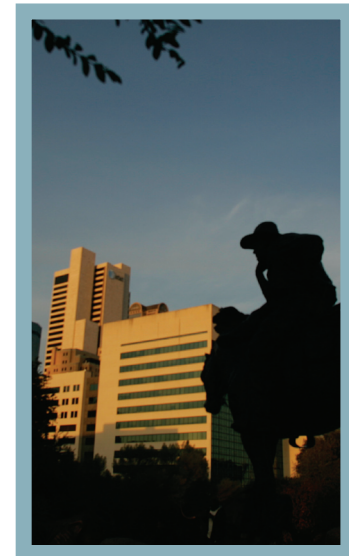
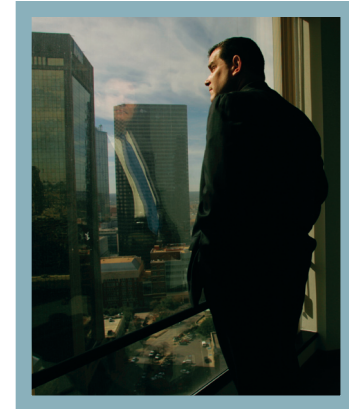
Deteriorating environmental conditions dictate a necessary response; however, economic constraints and policy roadblocks often deter social action. For this reason, Sustainable Development coursework focuses on three key subject areas — Urban Planning, Land Development, and Policies.

In profit-driven societies, economic reality can stymie sustainable urban design. Now you can learn about the practicality of financial projections and the implications of legal issues, municipal requirements, and regulations on a successful urban project. Explore connections between different factions driving urban development and move into a deeper understanding of local, state, regional, national, and global policy issues, both financial and environmental, that impact urban and rural communities. Each successive course focuses on sustainability in real-world developments.

ADMISSION AND COMPLETION REQUIREMENTS

Successful completion of the Certificate in Sustainability is a prerequisite for enrollment.

Students who complete the professional certificate in Sustainable Development and meet other admissions requirements can later apply for admission as a degree-seeking student in one of the graduate degree programs. For those students admitted to a graduate degree program, the courses taken to complete the professional certificate may count toward the graduate degree requirements. Students must complete the courses with a GPA of 3.00 on a 4.00 scale. Courses must be completed within three years of admission into the program.



IMPACTING URBAN PLANNING...

SUSTAINABLE DEVELOPMENT CERTIFICATE COURSES

The Sustainable Urban Plan

This course introduces the student to basic concepts in sustainable urban design and planning. Utilizing a group exercise, students are introduced to the factors shaping urban developments: financial projections, design concepts, marketability, public perception, and municipal incentives and requirements. Additional information will be provided by lectures, discussions of the text, and guest speakers from the real estate community. The effects of urban design theory meeting economic reality and the resulting options for sustainability will be thoroughly examined.

ENCE 8325

Prerequisites: ENCE 7328, ENCE 7329, ENCE 7330

Sustainable Development

A land development constructed for sustainability must work within multiple sets of existing regulations and then go beyond business as usual to address issues not commonly considered. This course will lead students through the combination of issues which lead toward sustainability within a project, including financial projections, legal issues and municipal regulations. The concept of a truly sustainable development will be examined and challenged. **ENCE 8326**

Prerequisites: ENCE 8325

Policy Impacts on Sustainability

The idea of a truly sustainable society is either encouraged or negated by its policies. This course will examine policies at multiple levels to assess their impact on our society's ability to become a sustainable one. Guest lecturers from the city, regional, and state level will be included, as well as examinations of policies at the national level from around the world. **ENCE 8327**

Prerequisites: ENCE 8325, ENCE 8326



PRESERVING RESOURCES...

A COLLABORATIVE CLASS FORMAT DESIGNED TO HELP YOU MAKE AN IMMEDIATE IMPACT

Small class sizes enhance the learning experience for students enrolled in Lyle certificate programs. Interactive sessions are delivered by knowledgeable instructors passionate about the subject matter and widely recognized by industry and peers. Sought-after guest lecturers often present case studies that bring theory to life with real-world applications and solutions.

Expect to be challenged in fast-paced, seminar-styled classes presented in an executive format. Designed to meet the needs of working professionals, curriculum unfolds in four alternating Saturdays for eight (8) hours each. Like all certificate programs offered by Lyle Engineering, the learning environment conforms to a strict set of criteria, adheres to the standards set by SMU for enhanced classroom instruction, and meets the guidelines set by our accrediting agencies.



Distinguish yourself as an authority in Sustainable Development when you apply now to join the debate and develop a transdisciplinary approach to sustainability that redefines “business as usual.”

For information on admission requirements, courses, costs, and detailed schedules, contact EngineeringLeaders@smu.edu or call 214-768-2002.

