

Number of Courses/Subjects Related to Sustainability Offered

Master Degree Programs	Courses	Link	Detail and reference
Master in Project Management	Financial Management in Popular and Solidarity Sector Entities: Popular and Solidarity Finances. Business and Banking: Personal and Business Finances Financial Risk Management Solidarity Sector Entities: Social Balance Business and Banking: Financing and Investment Mechanism	https://www.utpl.edu.ec/maestrias/proyectos	This master's degree is associated with sustainability, since its principles can be integrated throughout the entire life cycle of projects, from planning to execution and closure. The principles include: Sustainable and Responsible Investments, Green Finance, Climate Risk Management, Financial Innovation for Sustainability, and Financial Policies and Sustainability.
Master in International Cooperation for Sustainable Development	Natural Resource Management and Adaptation to Climate Change	https://www.utpl.edu.ec/maestrias/cooperacion	The focus of this master's degree is to train professionals who can address global challenges in terms of sustainable development through international cooperation. Its courses address sustainable development issues that include environmental protection, Global Sustainability Policies such as climate change mitigation, Sustainable Project Management that respects environmental regulations, promotes the use of natural resources and fosters a positive social impact.
Masters in Finance	Investment Analysis and Evaluation Techniques Business Valuation Financial Engineering and Risk Management	https://www.utpl.edu.ec/carreras/finanzas	It is related to sustainability through several key approaches, which integrate sustainability principles into financial management and responsible investment, for example: Sustainable Investments, Environmental and Social Risk Management, Green Finance, Corporate Social Responsibility and Sustainability in financial decision-making.
Master in Local Development with a mention in Public Policies	Local Economic Development I Local Initiatives for the Promotion of Development Formulation, Evaluation and Management of Investment Projects Local Economic Development II	https://www.utpl.edu.ec/maestrias/sites/default/files/brochures%20maestria%20desarrollo%20local%20cooperacion%281%29.pdf	This master's degree is closely related to sustainability by focusing on how public policies can promote equitable, responsible and sustainable development at the local level. Among the aspects that promote sustainability in its courses are: Sustainable Development at the Local Level, Policies for Environmental Sustainability, Social Equity and Reduction of Inequalities, Inclusive Economic Development, Sustainable Urban Planning, Citizen Participation in Sustainability, and Impact Assessment of Public Policies.
Master of Constitutional Law	Constitutional Interpretation Theory of Constitutional Law Constitutionalization of Administrative Law Constitutionalization of Private Law Constitutional Process Law	https://www.utpl.edu.ec/maestrias/constitucional	This master's degree is related to environmental sustainability through the legal and constitutional framework that guarantees environmental protection and sustainable development. Among the associated topics are: Environmental Rights in the Constitution, Constitutional Interpretation for Sustainability, Constitutional Control of Environmental Policies, Strategic Environmental Litigation, Constitutional Justice and Climate Change, Citizen Participation and Transparency, and International Environmental Standards and Constitutional Law.
Territorial Planning	Development, Economy and Territory Conceptual basis of territorial planning and management Population and interurban and intraurban systems Territorial Planning Territorial Management	https://www.utpl.edu.ec/maestrias/territorio	Its focus is on land use planning in such a way that natural resources are optimized and ecosystems are protected. The associated themes are Sustainable Urban Planning, Ecosystem Protection, Climate Change Management, Natural Resource Management, Sustainable Rural Development, Citizen Participation and Environmental Governance and Compliance with SDGs, especially 11 (Sustainable Cities and Communities) and 13 (Climate Action).
Master in Energy Systems Management	Energy and environment Sustainable architecture Energy efficiency in electrical installations I Analysis and evaluation of energy data Energy efficiency in electrical installations II Energy audit in installations Energy qualification and certification Energy management systems	https://www.utpl.edu.ec/maestrias/sites/default/files/sistemasenergeticos.pdf	This master's degree is directly related to environmental sustainability, as its focus is on the optimization and management of energy resources in an efficient and responsible manner. Some of the topics that teachers consider in their courses are: Renewable energy, Energy efficiency, Energy transition, Sustainable energy systems, Energy policies and regulations, Technological innovation for sustainability, and Reducing the carbon footprint. SDGs 7 and 13 are considered.

Master's Degree in Construction Techniques for Sustainable Buildings	Principles of sustainability and building context Reduction, reuse and recycling in construction Conditioning techniques Intervention techniques in existing buildings Advanced construction materials	https://www.utpl.edu.ec/maestrias/sites/default/files/malla%20tecnicas%20edificaciones%20sostenibles%20utpl.pdf	It is based on the construction of buildings that minimize the impact on the environment and promote the efficient use of resources. Among the topics considered are Sustainable materials, Energy efficiency, Efficient water management, Bioclimatic design, Waste reduction, Environmental regulations and certifications (LEED or BREEAM), Positive impact on the environment.
Master's Degree in Industrial Safety with a specialization in Occupational Risk Prevention	Legal regulations on occupational health and safety Occupational health and safety management systems Major risks and emergency plans	https://www.utpl.edu.ec/maestrias/seguridad	Its relationship with environmental sustainability through the creation of safe and sustainable work environments that not only protect workers, but also the environment. Criteria such as Prevention of environmental risks, Management of waste and hazardous substances, Compliance with environmental regulations, Reduction of the carbon footprint in industrial environments, Integrated management systems and Promotion of sustainable practices are considered.
Master's Degree in Health Institution Management	Bioethics Health policy and legislation Health administration and planning Health service quality Health economics and financing	https://www.utpl.edu.ec/maestrias/gerencia	Through the implementation of practices and policies that seek to minimize the environmental impact of health institutions, considering the management of health waste, Efficiency in the use of resources (water, energy, materials, among others), Implementation of sustainable technologies, Environmental and health policies, Sustainable purchases of supplies, and Environmental management systems in health.
Master of Business Administration with a major in Innovation	Business environment Entrepreneurship and foundations for innovation Strategic management of innovation Business sustainability and ethics in business Technology applied to business innovation	https://edes.utpl.edu.ec/oferta-academica/maestrias/mba-presencial	This master's degree trains professionals capable of integrating sustainable practices in business management, promoting innovation with a focus on environmental responsibility, considering topics such as Sustainable Innovation, Green Entrepreneurship, Efficient Resource Management, Compliance with environmental regulations such as ISO 14001, and Sustainable Technological Innovation.
Undergraduate Programs	Courses	Link	Detail and references
Law	Legal ethics Legal pluralism Alternative means of conflict resolution Environmental law and socio-environmental conflicts. Human rights	https://www.utpl.edu.ec/carreras/derecho	These courses promote the training of ethical and responsible lawyers, capable of addressing socio-environmental conflicts, protecting human rights, and respecting the legal frameworks of local communities. Thus, teaching these subjects contributes to training professionals who promote social and environmental justice, key elements for sustainable development.
Public administration	Administrative Theory National Reality Constitutional Law Introduction to Economics Microeconomic Theory Identify and characterize public institutions in Ecuador Public Administrative Management Administrative Law Entrepreneurship	https://www.utpl.edu.ec/carreras/publica	These courses provide students with a comprehensive understanding of the country's administrative and economic systems, promoting public management that integrates principles of sustainability. Understanding public administration and law enables future administrators to implement policies and programs that protect natural resources and foster sustainable practices. Economic theory and entrepreneurship provide the tools to drive initiatives that promote sustainable economic development, while the study of the national reality allows an understanding local environmental challenges and designing solutions appropriate to the Ecuadorian context.
Tourism	Protected Areas	https://www.utpl.edu.ec/carreras/turismo	This subject aims to provide students with basic knowledge about the importance of biodiversity for human beings and, specifically, how an ecosystem service derived from biodiversity, such as tourism, can be used for the benefit of human beings. Protected areas are the spaces where the largest proportion of biodiversity is found and, therefore, they are the spaces that can offer the greatest opportunity for the development of ecotourism. This subject is the only one in this degree that addresses issues related to biodiversity and nature in general, therefore, it complements the training of students.
Tourism	Natural heritage and biodiversity	https://www.utpl.edu.ec/carreras/turismo	Natural Heritage and Biodiversity is a very important subject for the professional training of the student, which provides knowledge and skills to manage the good use of natural heritage, from a sustainable approach, allowing them to

			<p>develop in their work field as bioconscious and responsible entities with the environment that surrounds them. The contents of this subject have been chosen in such a way that the student can interpret them quickly and so that they are useful in their profession. This subject is part of the knowledge-integrating project: "Valuation of Cultural and Natural Heritage in Ecuador with a Tourist approach", which will be developed in the present academic cycle, which complements the subjects of the Practicum 1 and Cultural Heritage, and reaffirms the importance of the valorization of resources to strengthen the competence of the knowledge of the valorization of the tourist resource.</p>
Tourism	Cultural heritage management	https://www.utpl.edu.ec/carreras/turismo	<p>Cultural Heritage Management is an instrument that contributes to the recognition of cultural wealth, allows us to understand the ways of life of our ancestors through tangible and intangible assets, a legacy that constitutes our heritage and that many of them remain latent in their practice individually or collectively, has the purpose of valuing the cultural heritage of the country by knowing its importance in the population and tourism activity as a sign of identity and reflection of culture.</p> <p>Cultural Heritage Management, being part of the integrative knowledge project: "Assessment of cultural and natural heritage in Ecuador with a tourism approach" which covers the subjects of Practicum 1 and Natural Heritage and Biodiversity, reaffirms its importance in the study of cultural management.</p>
Environmental Engineering	<p>Introduction to Environmental Engineering Geology and Geomorphology Microbiology Topography and Cartography Environmental Legislation 1 Geographic Information Systems Environmental Legislation 2 PRACTICUM 1 Environmental Pollution PRACTICUM 2 Environmental Toxicology Hydrology Itinerary 1A: Hydrogeochemistry Itinerary 1B: Climatology Itinerary 1C: Mitigation and Adaptation to Climate Change PRACTICUM 3 Atmospheric Pollution Water Quality and Treatment Environmental Economics Soil Pollution and Remediation Itinerary 2.A: Sustainable Mining Itinerary 2.B: Limnology Itinerary 2.C: Bioenergy PRACTICUM 4.1 Advanced Water Treatment Technologies Environmental Biotechnology Solid Waste Management Environmental Assessment Itinerary 3A: Environmental Modeling and Simulation Itinerary 3B: Integrated Watershed Management Itinerary 3C: Ecotechnology PRACTICUM 4.2 Mining and Environment Bioremediation Project Formulation and Evaluation Territorial Planning and Management Environmental Audits Alternative Energies</p>	https://www.utpl.edu.ec/carreras/ingenieriaambiental	<p>The Environmental Engineering program at UTPL is oriented towards the training of professionals capable of developing sustainable solutions to contemporary environmental problems. From its curricular approach, it promotes a deep understanding of natural systems and the impact of human activities on them, seeking to mitigate adverse effects through innovative and sustainable strategies. Training in this career allows students not only to analyze and evaluate environmental components and processes, but also to design, implement and optimize solutions that integrate sustainability principles in areas such as water use, waste treatment, soil conservation and emissions reduction. Throughout the course, competencies are fostered for the responsible use of natural resources, environmental remediation and the use of alternative energies, all aligned with legal and ethical frameworks that promote sustainable development in different contexts. This educational approach seeks to create professionals committed to the responsible management of the environment, prepared to contribute significantly to environmental and social well-being.</p>
Administración de empresas	Sostenibilidad empresarial	https://www.utpl.edu.ec/carreras/empresas	<p>The Business Administration program includes Business Sustainability to prepare professionals to apply sustainable practices. Students gain knowledge in Corporate Social Responsibility, sustainability strategies, resource management, and the Sustainable Development Goals. This practical course equips future managers to make strategic, sustainable decisions that enhance economic, environmental, and social outcomes, positioning them as change agents in business.</p>
Agribusiness	<p>1. Community Development and Social Management 2. Food Security and Food Sovereignty 3. Biodiversity and Agroecology 4. Good Agricultural and Forestry Practices 5. Good livestock and aquaculture practices</p>	https://www.utpl.edu.ec/carreras/agronegocios	<p>The Agribusiness program at our institution trains professionals committed to sustainability and rural development. With a comprehensive approach that combines knowledge in economics, natural resource management and social responsibility, the program trains students to implement sustainable practices in the agricultural sector. Through a solid training in responsible production strategies</p>

	6. Popular and solidarity economy 7. Environmental economics 8. Agricultural Economy 9. Strategic planning and sustainable agribusiness management. 10. Circular Bioeconomy 11. Certification and Corporate Social Responsibility		and sustainable business management, future professionals are prepared to face the challenges of food security, biodiversity conservation and the promotion of fairer and more resilient rural economies.
Courses/Subjects Related to Sustainability at UTPL, Loja, Ecuador.			

Description:

The Universidad Técnica Particular de Loja (UTPL) has courses that are associated with topics related to sustainability and the environment; academic proposals are currently being validated to confirm the incorporation and identification of courses associated with these topics.

INTRODUCCIÓN

In the current context of global environmental challenges and the growing awareness of the need for sustainable development, UTPL recognizes the crucial importance of integrating these issues into its academic work. Aware of its role as an agent of change and trainer of committed professionals, UTPL has incorporated courses and programs that directly address sustainability and the environment. This initiative responds to the urgency of understanding and solving problems such as climate change, biodiversity loss, and responsible resource management, preparing its students to lead initiatives that promote a more equitable and environmentally healthy future for the society of the southern region and the country.