4 QUALITY EDUCATION

Access to quality education is key to sustainable development worldwide. Özyeğin University embeds sustainability across its curriculum, offers diverse courses aligned with SDGs, and implements projects that foster inclusive and future-oriented learning, preparing students to be responsible global citizens and leaders

28	0.72	7	67
Scholarly Publications (2020-2024)	Citation Impact (FWCI)	Student-Led Activities	Funded Projects

Integrating Sustainability Across the Curriculum

ÖzÜ aims to help students internalize a sustainable lifestyle and act accordingly as individuals and professionals. The University recognizes that this goal can be achieved best through an academic culture that prioritizes sustainability. The academic curriculum offers a wide range of sustainability-related courses. As of the 2024-25 academic year, a total of 1,332 courses are offered, 513 of which are sustainability-related.

Özyeğin University has initiated a comprehensive process to map all academic courses to the United Nations Sustainable Development Goals (SDGs). This effort aims to identify how each course contributes to sustainability-related learning outcomes across disciplines and to strengthen the University's role in advancing the 2030 Agenda through education.

The mapping process involves collaboration among faculty members, program coordinators, and the Sustainability Platform, ensuring that both theoretical and applied courses — from engineering and law to business, architecture, and social sciences — are analyzed in terms of their alignment with specific SDGs.

This initiative increases transparency and accountability in sustainability education and guides curriculum development toward more interdisciplinary and impact-oriented learning experiences.

A comprehensive analysis was conducted to successfully match 2,187 courses opened since 2017 with SDGs. A special course analysis code was developed to scan course descriptions, objectives, and learning outcomes with keywords, assigning weighted scores to SDGs for each course. A total of 8,942 keywords were analyzed for 17 SDGs in both Turkish and English.

Building a Culture of Safety and Environmental Responsibility

Özyeğin University delivers comprehensive Health, Safety, and Environment (HSE) trainings in alignment with ISO 14001:2015 Environmental Management System, ISO 45001:2018 Occupational Health and Safety Management System, and ISO 50001:2018 Energy Management System standards, as well as relevant national regulations. These initiatives aim to strengthen the University's culture of safety, environmental stewardship, and preparedness.

All newly recruited staff members participate in orientation sessions conducted by occupational safety experts and physicians, followed by a mandatory four-hour online HSE course through the LMS Next platform, renewed every three years. Students receive HSE orientation training during their first semester, focusing on emergency procedures, sustainability practices, and environmental protection. Specialized training sessions such as first aid, search and rescue, and firefighting are also organized to ensure role-specific readiness for emergency response.

To reinforce continuous awareness, ÖzÜ regularly disseminates safety and sustainability messages through MyOzU, digital screens, and internal communication platforms. Annual fire, evacuation, and earthquake drills, along with scenario-based exercises including ambulance response and drowning simulations, further strengthen campus-wide preparedness. As part of the Earthquake Preparedness Project, comprehensive risk assessments have been completed across all facilities, and more than 500 participants have received practical training through the Earthquake Simulation Truck, gaining experience in correct sbehaviours such as the "Drop–Cover–Hold On" method.

A reward system encourages participation and recognizes outstanding contributions to safety and sustainability through monthly and annual awards and Rector-signed appreciation letters. Collectively, these initiatives advance Özyeğin University's alignment with SDG 4 by fostering lifelong competencies in health, safety, environmental responsibility, and disaster resilience.

Expanding Digital Learning Capacity

Launched in August 2024, the IEEE e-Learning Software License Program expanded Özyeğin University's digital learning capacity by enriching students' online education experience through globally recognized learning technologies. The transformation of the former LMS-Next platform into ÖzU.Next marked a major step toward creating an open, flexible, and accessible learning ecosystem that supports both university members and the wider community.

Through the coordination of the Office for Learning and Teaching Enhancement (OLTE), the initiative has integrated innovative tools for hybrid and HyFlex teaching, supported by purpose-built digital learning studios (B40 and B41) dedicated to content production and media-rich instruction. Continuous professional development remains at the core of this system, with faculty receiving extensive training supported by detailed, regularly updated user guides.

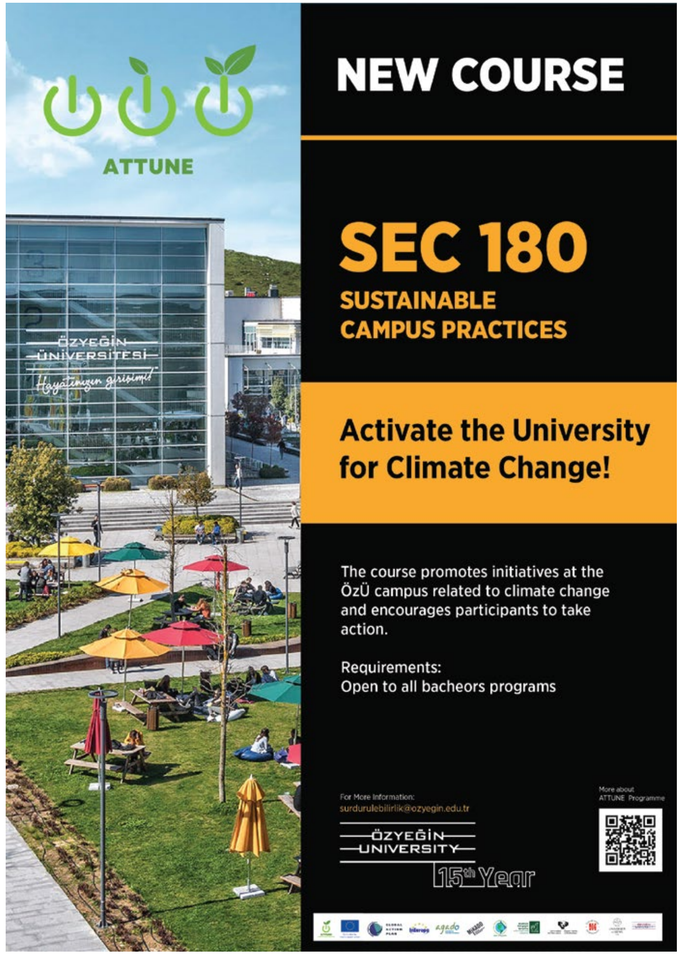
Capacity Building for Urban Climate Action

The Neutralpath 2030 program, in which EÇEM researchers Damla Kaleli, Ruken Karakuş, and Gökçe Tonuktulu participated, represents a significant professional development and continuing education initiative. The workshop held in Istanbul on May 24, 2024, in collaboration with Eurocities, provided intensive training on urban climate action planning, sectoral decarbonization strategies, and integrated sustainability approaches. This capacity-building program targeted professionals working in public administration, urban planning, and energy sectors, offering them advanced skills needed to implement ambitious climate goals by 2030.

The program emphasized the importance of cross-sectoral collaboration and systems thinking in addressing urban sustainability challenges. By providing this type of professional development opportunity, EÇEM contributes to building a skilled workforce capable of implementing Türkiye's climate commitments and advancing sustainable development across municipalities and regions.

ATTUNE: Activating Universities Against Climate Change

ÖzÜ implements a project called "Activate the University Against Climate Change" (ATTUNE). This education program directly addresses climate change on university campuses and is being conducted concurrently in Germany, Italy, Spain, Poland, and Türkiye as an Erasmus+ KA220-HED project. The first step is to register for the online learning platform, which provides learning materials on water, waste, energy, food management, and mobility. Participants complete pre- and post-assessment questions designed to evaluate sustainability literacy and knowledge.



Advancing Digital Transformation in Higher Education

Among the many projects carried out by the Office for Learning and Teaching Enhancement (OLTE) under the directorship of Prof. Dr. Cengiz Hakan Aydın, the Erasmus+ project titled "Designing an AI-Enriched HyFlex Learning Community for Higher Education Teachers" aims to enhance the HyFlex design and delivery skills of higher education instructors while developing the institutional capacity of higher education institutions for digital transformation. HyFlex, a hybrid-flexible learning model, enables students to participate in courses through various methods, including face-to-face, synchronous online, and asynchronous online formats. This model focuses on accessibility and diversity, granting learners the right to choose among equivalent instructional formats. The project also explores how artificial intelligence can increase engagement, personalize learning experiences, and facilitate teaching processes. Training will be provided for educators within the scope of the project, including content on the environmental impacts of artificial intelligence and its use to increase engagement.

The project "FORCE AI: Fostering Opportunities, Resources, and Capabilities in AI for Effective Management of Higher Education Institutions," also directed by OLTE, empowers universities to manage artificial intelligence integration strategically and responsibly. The project focuses on four main objectives: raising awareness about systemic AI integration in Higher Education Institutions; creating a transnational professional profile and micro-credential for AI Administrators; enhancing institutional capacity through AI administrator training; and providing an Open Educational Resources database. The training content, offered free of charge, includes AI's impact on environmental sustainability. One key learning outcome is "Guide the ethical, transparent, and sustainable implementation of AI systems by integrating legal, social, and environmental responsibility into institutional decision-making." ÖzÜ plays an active role in developing the dedicated module for this outcome.teaching processes. Training will be provided for educators within the scope of the project, including content on the environmental impacts of artificial intelligence and its use to increase engagement.

Enhancing Spatial Learning Through Innovative Game Design

The project "Research-Based Educational Game Design for Children" is a dynamic Erasmus+ initiative led by Dr. Gökçe Elif Baykal from the Faculty of Architecture and Design, investigates the potential impact of gesture-based interaction offered by hand tracking systems in virtual and augmented reality (VR and AR) technologies on spatial thinking skills and three-dimensional (3D) interaction experience. The consortium is led by Fachhochschule des Mittelstands (FHM, Germany) and includes contributions from several European institutions such as RISEBA (Latvia), University of Twente (Netherlands), Anadolu University (Türkiye), AKAD University (Germany), Özyeğin University (Türkiye), the European Association for Educational Technology in Higher Education (EDTECH-U), and the Advanced Information Society Association (AISA). The project aims to design accessible game prototypes for children from low-income groups. The research will identify the opportunities and constraints offered by hand tracking systems in VR and AR technologies for children's manipulative gestures, examine the relationship between gesture-based object interaction and children's spatial thinking processes, and design and evaluate gesture-based game prototypes that make the opportunities offered by AR and VR technologies accessible to children from low-income groups.