The necessity of efficient energy sources will incrementally increase as long as the existence of mankind continues, production will continue too. Thus, analyzing energy issues from a single discipline’s perspective is not sufficient in today’s world. In both the sector and academic world, people have an interdisciplinary approach have started to replace others who were trained as experts in a single discipline. In this regard, Kadir Has University’s Energy and Sustainable Development graduate program stands out by assisting its students to embrace an interdisciplinary approach. The program offers courses from a variety of disciplines, but in fact complement each other in the field of energy. The program is also one of the best programs about energy in Turkey due to its focus on understanding energy issues beyond their classical context, with a specific focus on concepts like sustainability. I realize more every day that applying for this leading master’s program was one of the best choices I have ever made in my life.
ADVISORY COMMITTEE

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Ass. Prof. Dr. Uygar Çakmak, General4Trust, Part-time Instructor

Değer Boden, Boden Law Office, Part-time Instructor

Levent Umut Fevzi, Türk Khilan, Part-time Instructor

CURRICULUM

The Energy and Sustainable Development Master's Program, which was designed by taking the interdisciplinary nature of energy field into consideration, enables students to specialize in one of the four major tracks, including economics and markets, policy and geopolitics, sustainability and environment, and engineering and efficiency. The most important advantage of the program, which is open to students with bachelor degrees from different disciplines, is the opportunity provided to acquire expertise in energy and sustainable development, whose importance is continuously increasing. The program is designed to be conducted completely in English to increase the competitiveness of students in the careers they will pursue in Turkey or abroad. The program has thesis and non-thesis options to fulfill the varying needs of the students.

For the thesis track Master's degree in the Energy and Sustainable Development Program, students are required to complete 21 course credits, attend non-credit seminars and thesis courses and complete their Master's thesis in accordance with the procedures indicated in the university regulations and directives. 12 out of the 21 credits must be gained from compulsory courses and the other 9 credits from the elective courses.

On the other hand, for the non-thesis track Master's degree, students are required to complete 30 credits, and successfully complete their graduation project. 12 out of the 30 credits must be gained from compulsory courses and 18 credits from the elective courses.

SCHOLARSHIP AND TUITION FEES

KHAS has an extensive scholarship program to support well-qualified international students in their studies at KHAS. The scholarships offered for graduate studies may cover 25%, 50% and 100% of the tuition fee. Tuition waiver scholarships are available for all qualified applicants. The details are explained on the following website:

http://international.khas.edu.tr/27/tuition-fees

APPLICATION REQUIREMENTS

The criteria and requirements to be met to apply for graduate programs at Kadir Has University are stated comprehensively on the following website:

http://international.khas.edu.tr/28/application-requirements

Compulsory Courses

ESD 510 Energy Science and Engineering

ESD 520 Energy Markets and Economy

ESD 530 Sustainable Energy Policies and Management

ESD 540 Energy Security and Geopolitics

ESD 590 Seminar

ESD 598 Graduation Project

ESD 599 Thesis

Departmental Elective Courses

ESD 511 Advanced Renewable Energy Technologies

ESD 512 Energy Modelling, Simulation, and Optimization

ESD 523 Computational Tools in Energy Science and Engineering

ESD 514 Advanced Wind Energy

ESD 521 Energy Project Development and Financing

ESD 522 Energy Exchange Markets

ESD 523 Turkish Energy System

ESD 524 Energy Project Management and Law

ESD 525 Econometric Modelling for Energy Policy Evaluation

ESD 531 Energy Efficiency Management

ESD 532 Sustainable Energy and Society

ESD 533 Carbon Economy and Markets

ESD 541 Energy Security of Turkey

ESD 542 Energy Transportation and Logistics

ESD 543 Oil and Gas Pipelines

ESD 544 International Energy Policies

ESD 550 Special Energy Topics

Non-Departmental Elective Courses

IE 502 Engineering Project Management

IE 503 Engineering Optimization and Applications

IE 506 Financial Management

MS 533 Project Management

IR 545 Energy Politics

IR 546 Eurasian Security and Geopolitics

IR 548 Middle Eastern Politics

IR 645 Energy Politics

IR 646 Geopolitics of Eurasia

EC 522 Political Economy of Development

EC 526 International Economy

EC 540 Public Finance

EC 625 Economy of Growth

APPLICATION REQUIREMENTS

Prof. Dr. Volkan Ş. Ediger
Program Director

As a vital input of the economy, energy one of the most strategic tools for the sustainable development of countries. The present world energy system, which is about 90 percent dependent on fossil fuels, is not sustainable due to resource scarcity, local environmental problems, and global climate change. Another factor increasing the importance of energy is that in today’s world, where natural gas is used as a transition fuel on the path towards a low-carbon energy system, the geopolitical rivalry between major energy players continues to deepen. This rivalry accelerates the struggle for resources and causes global economic and political destabilization. These challenges are harder to tackle in developing countries than in the industrialized world. As one of the most important emerging markets, the Turkish energy system can be used as an example for similar developing countries. One of the most important features of Turkey’s energy system is high energy demand due to rapid development, which attracts the attention of the world as a rising market. Turkey’s energy supplied from its domestic sources is, however, not enough to meet its growing demand. To meet this demand, Turkey needs to import about three quarters of its energy and this dependence on foreign resources threatens its energy security as well as the national security of the country. In the 21st century, no economy can be sustainable under such energy dependence circumstances.

Even though a number of graduate programs on energy have been launched in various countries in recent years, these programs are far from meeting the needs of the sector due to their contextual and structural features. They generally focus on a certain aspect of energy, neglecting its interdisciplinary nature. It is expected that the Energy and Sustainable Development Thesis/Non-Thesis Master’s Program, which was launched in the 2016-2017 academic year at Kadir Has University in Istanbul, will fill the gap in this area as the program brings together several disciplines in social sciences, physical sciences and engineering. It is also important to point out that the program works in coordination with the Centre for Energy and Sustainable Development, and thus maintains strong ties with interdisciplinary research and practice.

The Energy and Sustainable Development Master’s Program enables international students to specialize in various areas of energy. Students are provided with a wide range of departmental and non-departmental elective courses in addition to the compulsory courses in four main areas: energy science and engineering, energy finance and economics, management and policies of sustainable development, and energy security and geopolitics. In addition to the theoretical knowledge provided by the courses, students are taught through real life practice in seminars given by experts in the field.