





Education in sustainable entrepreneurship at Sofia University, Bulgaria

The case in a nutshell

Sofia University "St. Kliment Ohridski" offers several study programmes at different degree levels that combine sustainability and entrepreneurship: A bachelor's programme in Biomanagement and Sustainable Development, a master's programme in Sustainable and Responsible Governance, and a continued education programme in sustainable leadership. The programmes respond to the United Nation's agenda to fulfil the Sustainable Development Goals as well as to the European Green Deal. They aim to train a new type of specialist in sustainable business development, corporate social responsibility as well as in the public and civil sectors. In the Master's programme, partnerships with business, governments, and the social sector allow students to gain in-depth practical experiences. While it was challenging to find educators who combine expertise in subjects such as management, finance, and law with sustainability, these specialised experts are now a strength of the programmes. The University expects graduates to have a profound impact on sustainability in the organisations in which they will become employed or to which they will return.

1. Background

Profile of Sofia University and its sustainable entrepreneurship offers

Sofia University "St. Kliment Ohridski" is the largest and oldest higher education institution in Bulgaria. It was founded in 1888, has approximately 19,000 students and offers a broad range of subjects in 16 faculties, from History via Economics and Business Administration to Physics, Biology, and Medicine. The mission of Sofia University is "to safeguard, enrich and carry through the centuries the spirit of knowledge and the aspirations of humanity to knowledge and truth". The University's strategy for 2022-2027 refers strongly to fulfilling the United Nation's Social Development Goals (SDGs) and to sustainability.¹

Entrepreneurship education plays an important role at the University's Faculty of Economics and Business Administration, specifically in terms of environmental sustainability. Three programmes are particularly relevant here: A Bachelor's programme in Biomanagement and Sustainable Development, a Master's in Responsible and Sustainable Governance as well as continued education for sustainable leadership at the ESG Academy – in the following called "the three programmes". All include major entrepreneurship components. Moreover, there is a programme in Energy Markets and Services that has minor entrepreneurship components. Last but not least, until the end of 2022, two PhD students will be dedicated to sustainable finance and innovations in the field of hydrogen.

This case study describes the curricula of these three programmes, their objectives, the drivers and barriers to implement and conduct them as well as their outputs and impact.

2. Objectives

Context and educational objectives

¹ See https://www.uni-sofia.bg/index.php/bul/universitet t/administrativna struktura/normativna uredba/strategii (in Bulgarian).





In the **context** of the UN SDGs and the European Green Deal, Sofia University considers business to play an active role in social transformation. The University sees a need to train for planning, implementation and reporting of activities and projects based towards the three pillars of sustainable development: economic growth, social welfare, and environmental protection. The necessary societal change requires a new, young generation of well-trained professionals and managers. However, the University realises that, as the Master's programme description states, "there are not enough functioning centres in the country, nor a history or ambition in the formal education of such specialists". Hence, the Master's programme and also the other programmes aim to "fill this extremely important niche" and to train leaders for academic, research, business, and governmental positions. The programmes aim "to prepare an entirely new [type of] specialists in sustainable business development, corporate social responsibility and their realisation within the Bulgarian public, business and civil sectors".

The three programmes mainly train for intrapreneurship, i.e., innovative activity as an employee in smaller or larger corporations or in public administration, which can be called "governpreneurship". While the three programmes have training for sustainable development in common, their profile is different. The Bachelor's programme has strong biological science components, the Master's programme focuses on governance, and the ESG Academy programme on leadership. Across all, teachers encourage students to think out of the box.

3. Activities

(1) Bachelor in Biomanagement and Sustainable Development

The Bachelor's programme is a four-year programme that started in the academic year 2016/2017. Hence, the first cohort of participants completed their studies in 2020.

Learning objectives

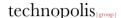
The programme's **educational objectives** are as follows: Firstly, provide broad fundamental training, adaptable to changing conditions, with theoretical knowledge, practical skills and competencies for independent professional work and teamwork. Secondly, build an entrepreneurial spirit and business attitude towards harmoniously using technologies and biotechnologies in the natural environment. Finally, build skills for the sustainable use and renewal of natural resources as well as for companies' environmental policies, environment protection and resource quality management in a wide range of production activities.

Curriculum

During the programme's **courses**, students acquire and apply knowledge and skills about biodiversity, basic laws of living systems, interrelation of natural and other sciences as well as fundamentals of management, bioeconomics, and sustainable development. More specifically, training covers environment protection and its economic aspects, management of bioresources in natural and production conditions and their rational use iwith regard to global problems. The curriculum combines natural and economic sciences. On the part of natural sciences, there are, for example, courses in biology, physics, ecology, and climatology. Economics courses include, for example, fundamentals of management, introduction to economics, business ethics, and creation of a new enterprise.

Teaching in this bachelor programme is aimed at providing theoretical knowledge, practical skills, and competences for carrying out independent professional work and teamwork.

(2) Master's in Responsible and Sustainable Governance







The Master's programme is a one-year programme that started in the academic year 2021/22 with 71 students. The Faculty plans to continue the programme with the same number of students.

Learning objectives

The programme's **learning objectives** relate to framework design, management, impact, and transversal skills. Framework design includes, for example, knowing relevant legal frameworks on a national and European level and being able to conceptualise governmental strategies, policies, and programmes. Management includes, for example, methods for risk management and innovation management when implementing transformational business models for a circular or solidarity economy. It also comprises management of personnel, procurement and customer management based on human rights. As regards impact, students learn how to assess the impact of sustainable leadership on companies, the economy, and society. Finally, students develop transversal skills such as the general ability to solve problems and to communicate effectively. In order to meet these objectives, the Faculty applies student-centred and practical methods.

Curriculum

The programme starts with two introductory **courses** on sustainable development. Some of the key courses are dedicated to sustainable leadership, social and environmental entrepreneurship, and sustainable finance. It also includes a module on "green and circular economy". Moreover, students can choose from courses in specialist topics such as social change and impact management as well as tools for operational business management. Course design ensures coverage of all major applications of sustainable development in practice: business modelling, corporate compliance, management of natural and human capital, investment, and reporting on social progress.

Teaching methods

As regards teaching **methods**, a considerable part of education in the Master's programme foresees solving practical problems. This includes structured assignments, practical work on a personal project as well as participation in critical analyses of specific company assignments. For example, students are asked to identify a company that seeks to fulfil a certain Social Development Goal and to advise that company on how to meet that goal. In such practical assignments, students peer-review their draft papers among themselves. Teachers also take students on site visits, for example to a mining company, where students learned about practical environmental management.

Challenges

Since the Master's programme is cross-disciplinary, it needs specialists with interdisciplinary competence. This induced **challenges**. For example, the Faculty had specialists in finance, but not in sustainable finance, which is a very important issue in the programme. They had experts in law, but not in human rights and business law. Specialists in change management, but not in social transformation. Specialists in business management, but not in business ethics. It turned out to be difficult to find such specialists, but the Faculty managed to do so. Moreover, the Master's programme is seeking to cooperate more with experts from the Faculties of Biology and Chemistry.. The aim is to ensure sufficient depth in natural science issues of environmental sustainability.

Output and impact

Impacts are already visible after the first study year. Graduates of the first cohort in autumn 2022 included several high-positioned professionals such as a vice president of a bank and chief financial officers. These experts may take their new knowledge to their organisations and trigger changes towards

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more sustainability. For example, graduates from banks may use their new competence to make finance more sustainable; representatives from enterprises and ministries may revise their organisation's strategies towards more sustainability.

Lessons learnt

Major **lessons learnt** include the fact that it is very important to work closely with business and the social sector, as the programme does. The programme benefits from experts with competences in specific sustainability issues who act as course leaders or guest lecturers. Partnerships with enterprises, governmental bodies, and civil society organisations enable the programme to engage students with practical work in consulting assignments, internships, and site visits.

(3) ESG Academy

The University's Faculty of Economics and Business Administration runs a facility for post-graduate education named ESG Academy. ESG stands for "environmental and social governance". The Academy offers continued education in social and environmental responsibility for professionals, training for sustainable leadership in the Certification Programme for CSR and Sustainability Specialists. The Academy conducted this programme for the first time in the second half of 2021.² The Faculty implements the Academy by attracting lecturers of the master programmes Responsible and Sustainable Governance, Energy Markets and Products as well as Finance, Investments and Fintech together with the Bulgarian Association of CSR Specialists.

For the first academic year, there were six editions in both Bulgarian and English, with more than 170 graduates. During the winter semester of 2022/2023, the Academy started four new editions with almost 100 participants, which were implemented by the end of December 2022.

Learning objectives

According to the programme brochure, the certification programme's main **objective** is "to deliver knowledge in the field of environmental and social business governance (ESG management), identification and management of the non-financial risks and attraction of sustainable investments through development of innovations in the field of social and low-carbon economy".

The programme's **target group** is "specialists in the field of corporate and social responsibility, human resources, health and safety, social work, education, legal compliance, finance, coming from business, central and local government and civil sector, science and researchers of the transition to green and social economy."

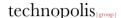
Curriculum

The programme conducts training on ESG-specific **subjects** related to business management, reporting and data requirements, energy and climate policy, climate adaptation and resilience, green, circular and social economy as well as sustainable finance. The programme comprises five modules that take place on five full days within two months.

Teaching methods

The certification programme takes place both online and in person. It includes modular training with information blocks tailor-made to the specific audience of corporate clients. The programme invites

See <a href="https://www.uni-sofia.bg/index.php/eng/the_university/faculties/faculty_of_economics_and_business_administration/news/the_first_esg_academy_organized_by_the_faculty_of_economics_and_business_administration_and_ubb_has_successfully_come_to_an_end_for_a news item.







speakers from Greece, Belgium, the Netherlands, and Bulgaria. At the end of each module, students self-assess their achievements.

Challenges

One of the challenges implementing and conducting the programme was to find appropriate experts. Another was to prioritise the knowledge covered and structure it in a modular format. The Academy defined priorities and structure in collaboration with the businesses that were interested in the topic. Moreover, the Academy looked for good practices from leading universities abroad that run comparable programmes for business leaders.

Output and impact

The Academy has already achieved considerable international outreach and attracted interest from business. For example, the Academy trains a large group from an international bank, covering their employees from ten different countries in Central and Eastern Europe. The Academy plans to continue developing such types of collaboration and produce tailor-made training offerings.

Lessons learnt

The Academy has learned much from working with and listening to the needs of businesses and the public sector. As regards methods, the Academy learned how to apply training formats best, for example considering online and offline modes as well as flexibility of hours. It has also refined its methodological approach, turning towards more practical workoriented towards skill development. Furthermore, the Academy has learned how to adapt training methods to a digital environment, for example through introducing new software and platforms to collaborate and interact such as Slido and Kahoot. As regards content, the Academy realised the need to teach about specific regulations from the European Commission.

4. Stakeholders

How the programmes involve stakeholders and how they contribute to the outcome

In order to operate the three education programmes, the Faculty engages in wide and deep partnerships with organisations from the public sector, business, and civil society organisations. These partnerships facilitate guest lectures, scholarships, and special training offers that allow students to gain in-depth practical experiences.

As regards the **public sector**, several United Nations organisations are particularly important: United Nations Global Compact (UNGC), a platform for knowledge exchange and dialogue with companies, other UN organisations, business associations, non-governmental organisations, and trade unions to promote corporate social responsibility and ethical business standards. Principles for Responsible Management Education (PRME), a UN-supported initiative that aims to increase the sustainability profile of universities around the world and to provide business students with sustainability understanding and ability. United Nations Sustainable Development Solutions brings together international leaders from science, business, politics, and civil society.

As regards **business** partners, the Faculty implements the programmes with guest lecturers from the Global Compact Network Bulgaria, the Bulgarian Association of CSR Specialists, the Bulgarian Stock Exchange, and the Association of Investor Relations Directors in Bulgaria. Leading, responsible companies from all industries support it. UniCredit Bulbank is an official partner of the programme.







Further partners include Enery (a renewable energy producer), WikiRate, and United Bulgarian Bank. The Faculty involves businesses through study visits to companies, open lectures of business professionals, cooperation on Master theses, and sponsorship of industry-based PhD theses.

In **civil society**, the programmes work closely with the Bulgarian Council of Women Leaders, Zonta International (the women empowerment organisation), and the Kauzi foundation (a Bulgarian organisation empowering young people, specifically entrepreneurs).

These organisations support the programmes through scholarships and special training offers.

5. Outputs, impacts, and lessons learned

The three programmes have received recognition at national level: In 2022, the Faculty received a business-to-business media award for its educational initiative as well as an award in the field of education for sustainable development and implementation of environmental and social policies.

Lessons learned across the three programmes include the following:

- How to manage success and fast scale-up: The Faculty realised that it had to create a pool of
 international speakers and guest lecturers in order to provide a broad array of examples and
 business cases that suits the various industries involved. It needed to involve more colleagues
 from administrative departments to find more lecturers. Moreover, the Faculty had to build a
 specific marketing strategy to reach target groups abroad
- Prioritise practical skills and transferable knowledge: During negotiations with various interested
 parties, the Faculty realised it had to define priorities for practical skills and knowledge to be
 taught, both for national and international audiences. Together with stakeholders from banks
 and industry, the Faculty put together and prioritised a long list or relevant topics
- Adapt internal processes to manage international relationships: National public universities and multinational corporations operate in very different manners. Hence, the Faculty had to adapt processes and systems in order to be able to collaborate coherently with corporations. This applies especially to the Academy

Sources

This case study was prepared by Dr. Stefan Lilischkis from empirica Gesellschaft für Kommunikationsund Technologieforschung mbH, Bonn, Germany, through collection and analysis of broad documentation about Sofia University and interviews with key representatives from the University.

The status of information provided in this case study is November 2022.

For a specific view of entrepreneurship education in the Master's programme in Sustainable Governance, see a related case study in the Final Report of the project "Promote education, training and skills across the bioeconomy", pp. 408 – 413. The report is available for download at https://op.europa.eu/en/publication-detail/-/publication/6a5f6dd4-3312-11ed-975d-01aa75ed71a1/language-en/format-PDF/source-266382552.

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Links

Bachelor's programme in Biomanagement and Sustainable Development: https://www.uni-sofia.bg/index.php/bul/universitet t/fakulteti/biologicheski fakultet2/specialnosti/bakalav rski programi/biologicheski fakultet/biomenidzhm nt i ustojchivo razvitie

Master's programme in Responsible and Sustainable Governance: <a href="https://www.uni-sofia.bg/index.php/eng/the_university/faculties/faculty_of_economics_and_business_administration/degree_programmes/master_s_degree_programmes/faculty_of_economics_and_business_administration/business_administration/master_s_degree_programmes_for_specialists/responsible_and_sustainable_governance.

ESG Academy brochure: https://www.uni-

sofia.bg/index.php/bul/content/download/255990/1685122/version/1/file/brosrura_esg_EN.pdf.