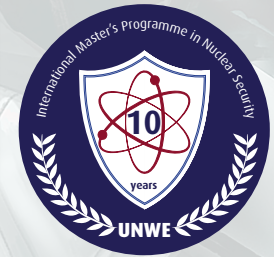




THE WORLD'S ONLY MASTER'S PROGRAMME IN NUCLEAR SECURITY AT UNWE, BULGARIA IN COOPERATION WITH THE IAEA



„Through the Master's Programme in NS we support the IAEA global priorities for capacity building in Nuclear Security“ Prof. Dr. D. Dimitrov
Rector of UNWE



The Rector of the UNWE Prof. Dr. D. Dimitrov at the graduation of the Nuclear Security Master Degree Students



Ms Karine Herviou
IAEA Deputy DG
Elena Buglova
Director of the IAEA's Division
of NS
Prof. Dr. S. Spassov

The world's only Master's Programme in Nuclear Security is a result of a long-term partnership in the field of education and scientific research between the University of National and World Economy (UNWE) and the International Atomic Energy Agency (IAEA). The programme aims to develop highly qualified experts equipped to address the increasing global needs and challenges in nuclear security.

The initial agreement for the establishment of the programme was signed in 2014 during the visit of then IAEA Director General Yukiya Amano to Bulgaria. It was renewed in 2019, and a third agreement is expected to be concluded by the end of 2025.

Launched in the 2015/2016 academic year, the Master's Programme has since become a benchmark in the field, attracting both Bulgarian and international students.

The 7th cycle of the Master's Programme in Nuclear Security began with the start of the 2025/2026 academic year in October 2025. In 2025, the programme also celebrates its 10th anniversary, marking a decade of excellence in education and international cooperation in the field of nuclear security. This year, the programme welcomes 20 new students – 13 from Bulgaria and 7 international participants from Sudan, Egypt, Burundi, Jordan, and Botswana – marking the beginning of a new academic cycle. The opening ceremony of the new cycle was led by Prof. Dr. Dimitar Dimitrov, Rector of UNWE; Assoc. Prof. Dr. Noncho Dimitrov, Head of the Department of National and Regional Security; and Prof. Dr. Svetoslav Spassov, Leader of the Master's Programme in Nuclear Security, Director of the Nuclear Security Support Centre, and Director of the Institute for Enhancing Research Capacity in the Field of Nuclear Industry and Nuclear Security.

Between 2015 and 2025, the Master's Programme in Nuclear Security at UNWE has hosted more than 80 students from Bulgaria, Serbia, Morocco, Algeria, Rwanda, Egypt, Vietnam, Indonesia, Iraq, Yemen, Libya, Somalia, Nigeria, Zambia, Lebanon, Jordan, Burkina Faso, the Democratic Republic of the Congo, Sudan, Mauritania, and Uganda. Many of them received IAEA scholarships and have continued their professional careers in national institutions and international organizations.

INSTITUTIONAL SUPPORT BY:

- IAEA (International Atomic Energy Agency)
- International Nuclear Security Education Network (INSEN)
- OECD
- European SMR Industrial Alliance
- Bulgarian Nuclear Regulatory Agency
- Ministry of Energy
- Ministry of Education and Science
- Ministry of Foreign Affairs
- Middlebury Institute of International Studies
- King's College London
- James Martin Center for Non-Proliferation Studies



If you are seeking a globally recognized Master's Programme that connects you with experts from leading institutions such as the IAEA, the European Commission, and the OECD, while providing opportunities to visit nuclear facilities and policy-making centres around the world, the Master's in Nuclear Security offers a truly unique international pathway.

The program contents three semesters and is designed for students who have completed a bachelor's degree or equivalent. It is structured in accordance with both national regulations for Master's programs and the International Atomic Energy Agency (IAEA) Nuclear Security Series No. 12 standards.

Additionally, female candidates may benefit from the Marie Skłodowska-Curie Fellowship and IAEA support programs.

PROGRAMME STRUCTURE

The Master's Programme in Nuclear Security is based on the educational framework, training materials and presentations developed within the International Nuclear Security Education Network (INSEN), coordinated by the International Atomic Energy Agency (IAEA). The curriculum is designed to combine theoretical knowledge with practical experience, ensuring that graduates are well-prepared to meet real-world challenges in the field of nuclear security.

Courses are delivered by a team of distinguished UNWE academic staff, as well as experts and practitioners from leading international organizations, governmental institutions, and the nuclear industry. This unique blend of academic and professional expertise provides students with both a strong conceptual foundation and valuable applied skills.



CURRICULUM OF THE MASTER'S DEGREE PROGRAMME

The curriculum includes courses such as:

- NS 1 Introduction to nuclear security
- NS 2 International and national legal framework
- NS 3 Nuclear energy, fuel cycle and applications
- NS 4 Methods and instruments
- NS 5 Effect of radiation safety & protection
- NS 6 Threat assessment
- NS 7 Physical protection design & evaluation
- NS 8 Physical protection technologies & equipment
- NS 9 Security in transport
- NS 10 Detection of criminal or unauthorized acts
- NS 11 Interdiction of, and response to criminal
- NS 12 Crime scenes investigation & forensics
- NS 13 Nuclear material accountancy and inventory
- NS 14 Vulnerability assessment of physical protection
- NS 15 Risk assessment and management
- NS 16(a) Physical protection systems
- NS 16(b) Physical protection systems
- NS 17 Import/export and transit control mechanism
- NS 18 Nuclear security at major public events
- NS 19 Nuclear forensics and attributions
- NS 20 Detection & response (unregulated)
- NS 21 Cooperation national and international
- NS 22 Information Security
- NS 23 Nuclear Security Management
- NS 24 Nuclear Security Culture

PROGRAMME DETAILS:

- Duration: 1.5 years (three semesters)
- Academic Year Start: October
- Language of Instruction: English



UNWE Nuclear Security Support Centre (NSSC)

The Nuclear Security Support Centre (NSSC) was established in 2016 as a service unit of the University of National and World Economy (UNWE), in accordance with Article 25, paragraph 3 of the Higher Education Act and Article 16, paragraph 1, item 1 of the UNWE Rules of Procedure.

The NSSC is a member of the European Industrial SMR Alliance and a partner in the U.S. Department of State's SMR Project Phoenix. It is also part of the International Network for Nuclear Security Training and Support Centres (NSSC Network) coordinated by the International Atomic Energy Agency (IAEA).

Main objectives of the Centre:

- Conducting scientific research in the field of nuclear security;
- Providing professional training for experts and students;
- Developing new knowledge and skills to enhance national and international capacity in nuclear security;
- Promoting and disseminating best practices and standards in research, training, and industry;
- Improving the qualifications of professionals in the field;
- Facilitating cooperation and knowledge transfer in nuclear security for higher education institutions at national and international levels.

The Centre works in close collaboration with the International Atomic Energy Agency (IAEA) and the International Nuclear Security Education Network (INSEN).

MAIN FUNCTIONS OF THE INSTITUTE:

- Providing an institutional platform for specialized training courses and international seminars;
- Supporting the development of national and international policies and regulatory frameworks in the field of nuclear security;
- Promoting scientific and technological research related to the nuclear industry;
- Enhancing Bulgaria's role as a regional hub for education, research, and innovation in nuclear security.



THE AIMS OF THE INSTITUTE:

- Growing demand for research and specialized training in nuclear security, cybersecurity, SMR (Small Modular Reactor) regulation, and radioactive waste management;
- Cooperation with the U.S. Department of State under the PHOENIX Project
- Strong and long-term partnership with the International Atomic Energy Agency (IAEA);
- Successful implementation of the internationally recognized Master's Programme in Nuclear Security;
- Active cooperation with international organizations and institutions such as the OECD, the European Commission;
- Cooperation with the Bulgarian Energy Holding (BEH), Kozloduy Nuclear Power Plant, National Electric Company (NEK), and other national key organizations;



UNWE Coordinators of the Master's Programme in Nuclear Security:

Professor Dr. Svetoslav Spassov: sspassov@unwe.bg – Leader of the Master's Programme in Nuclear Security, Director of the Nuclear Security Support Centre, Director of Institute for Enhancing Research Capacity in the Field of Nuclear Industry and Nuclear Security



Georgi Tasev: georgi.tasev@unwe.bg – Chief Expert, Directorate of the Rector's Office, Expert in Nuclear Security Support Centre

University of National and World Economy, 1700 Sofia, Bulgaria, 19 „Osmi Dekemvri“ Str.



Institute for Enhancing Research Capacity in the Field of Nuclear Industry and Nuclear Security

The Institute for Enhancing Research Capacity in the Field of Nuclear Industry and Nuclear Security was established by Decree No. 200 of 26 September 2025 of the Council of Ministers of the Republic of Bulgaria as an independent academic and research unit within the University of National and World Economy (UNWE).

Unlike the Nuclear Security Support Centre (NSSC), which focuses primarily on training and professional development, the Institute's mission is to advance scientific research, policy development, and international cooperation in the fields of nuclear industry and nuclear security.