



**INSEN**  
International  
Nuclear Security  
Education Network

# Nuclear Security Education in Morocco

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## Importance of Nuclear Security Education

- Mass expansion of nuclear power programs worldwide .
- Increased use of radiological and nuclear technologies
- Increased need for well qualified experts and specialists in nuclear security:
- Need of Training Programme: Fill gaps between the actual performance of personnel and the required competencies and skills needed to meet the international requirements relating to nuclear security.
- Educationnal Programme: Transfer in-depth nuclear security knowledge and support its sustainability in States and foster nuclear security culture.

## INSEN: International Nuclear Security Education Network

- The INSEN is defined as a partnership between the IAEA and educational and research institutions, and competent authorities.
- Mission – to enhance global nuclear security by developing, sharing, and promoting excellence in nuclear security education.
- INSEN Membership: Develop peer-reviewed textbooks, computer based teaching tools and instructional material, including exercises and materials for laboratory work
- Faculty assignment and development through faculty exchanges and/or joint development and implementation of in-depth nuclear security educational programmes
- Joint research and development of activities to share scientific knowledge and infrastructure
- Student exchange programs to foster international cooperation and exchange of information.

## International Partnerships

- International Atomic Energy Agency
- International Nuclear Security Education Network (INSEN)
- US-Department of State Partnership for Nuclear Security (PNS)
- CRDF-Global
- World Institute for Nuclear Security (WINS)
- Brandenburg University-Institute for Security and Safety
- Oak Ridge National Laboratory, USA
- University of Tennessee, USA
- Idaho State University, USA
- University Gadga Mada, Indonesia
- Institute of Nuclear Material Management (INMM)

## Nuclear Security Efforts in Morocco

- Morocco has made substantial progress in nuclear Security field:
- Supports the efforts and activities of IAEA
- Promotes NS under international initiatives
- Continues to undertake actions aiming at strengthening capacity building in nuclear security
- Established its Nuclear Security Support Centre in 2011
- Treaty on the Non-Proliferation of Nuclear Weapons (1970)
- Convention on Early Notification and Assistance in case of Radiation Emergency (1993)
- Convention on Safety of spent fuel management and Safety of radioactive waste management (2001)
- Convention on the Physical Protection of Nuclear Materials (2002) and its Amendment (2011)
- Convention for the suppression of Acts of Nuclear Terrorism (2006) and ratified in 2010
- Adoption of Code of conduct on the Safety and security of radioactive sources
- Adoption of Law N° 142-12 related to the creation of the National Nuclear and Radiation Safety and Security Agency.

## Nuclear Security Education in Morocco

- Development of nuclear security programs at Moroccan universities.
- University of Ibn Tofail is currently chairing the INSEN Working Group II
- Nuclear Safety, Security and Safeguards modules accredited at the Faculty of Sciences, University of Ibn Tofail.
- Security of critical installations: case of nuclear facilities module introduced in the Master on Information Security at the National School of Applied Sciences-Kenitra.
- University of Ibn Tofail conducted several nuclear security workshops at national and regional levels to rise awareness of the importance of nuclear security education to foster and sustain nuclear security culture.
- Participation of UIT at the Annual Meetings of the Institute of Nuclear Material Management 2012, 2013, 2014 & 2015 by sharing their experiences in building nuclear security culture in Morocco.
- Collaboration between University of Ibn Tofail and Brandenburg University to develop IT/Cyber Security PDC in the framework of INSEN.
- University of Ibn Tofail Students' achievements in the field of nuclear security:
- Establishment of the Institute of Nuclear Material management-University of Ibn Tofail Student Chapter in 2014.
- Defense of four master' students their thesis in nuclear security subjects related topics in 2015.
- Fruitful collaborations between University of INMM- Ibn Tofail and INMM-University of Tennessee and INMM University Gadgah Mada: Publication of papers on nuclear security culture in 2015
- Participation of PhD students to IAEA-ICTP International School on Nuclear Security and Nuclear Knowledge Management, 2014, Trieste, Italy.
- Participation of UIT at Three Nuclear Security Insider Threats Table Top Exercises to build capabilities to conduct this exercise for UIT INMM students.