NSE

NUCLEAR SCIENCE ENGINEERING

MALAYSIAN NUCLEAR AGENCY, BANGI

CEP AELB

HRDF CLAIMABLE

Organised by

KEMENTERIAN SAINS, TEKNOLOGI DAN INOVASI

NUKLEAR MALAYSIA

Recognition

MOF DOUBLE DEDUCTION INCENTIVE

AELB ATOMIC ENERGY LICENSING BOARD

HRDF KERAJAAN 0023

(MOHR) DEPARTMENT OF SKILLS DEVELOPMENT

MY06/0164 MY06/00734

ISO 9001:2015 since July 2018

MOH

www.nuclearmalaysia.gov.my

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NUCLEAR SCIENCE
ENGINEERING

Nuclear safety is defined by the International Atomic Energy Agency (IAEA) as the achievement of proper operating conditions, prevention of accidents or mitigation of accident consequences, resulting in protection of workers, the public and the environment from undue radiation hazards. The IAEA defines nuclear security as the prevention and detection of and response to, theft, sabotage, unauthorized access, illegal transfer or other malicious acts involving nuclear material, other radioactive substances or their associated facilities. This covers all nuclear facilities, the transportation of nuclear materials, and the use and storage of nuclear materials for medical, power, industry, and military uses.

Nuclear materials and technologies find various peaceful applications like radiation therapy, food processing, and industrial applications. However nuclear materials and other radioactive substances can harm the people and the environment if used by non-authorized persons as this would be a serious threat for the world security.

KEMENTERIAN SAINS, TEKNOLOGI DAN INOVASI
MINISTRY OF SCIENCE, TECHNOLOGY AND INNOVATION

NUKLEAR MALAYSIA

CEP (AELB-2 Points)

INTRODUCTION

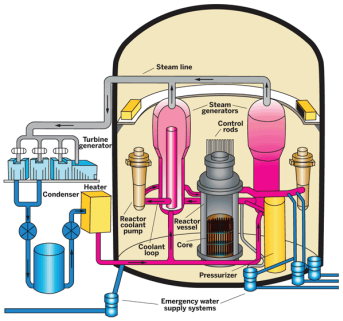
The engineering of nuclear systems has a key concepts such as neutron flux and diffusion to demonstrate multiplication and criticality in nuclear reactor. Various reactor shapes are analysed and the use of reflectors is discussed. The neutron life cycle in thermal reactors is described along with fast and delayed neutron production. Effects such as doubling times, reactivity feedback mechanisms, power and temperature coefficients and Xenon poisoning are included in the course.This course is designed to provide understanding on the key elements of nuclear reactor physics. Participants will be able to perform analyses on simple reactor geometries and describe the main reactivity feedback mechanism, and their significance on reactor design and control.

Basics of Reactor Technology

Kursus Asas Reaktor Nuklear

LEARNING OBJECTIVES

1) To understand basics of nuclear reactor
2) To understand the principle of nuclear energy system
3) To enhance the capabilities, improve skills and knowledge in nuclear reactor



COURSE OUTLINE

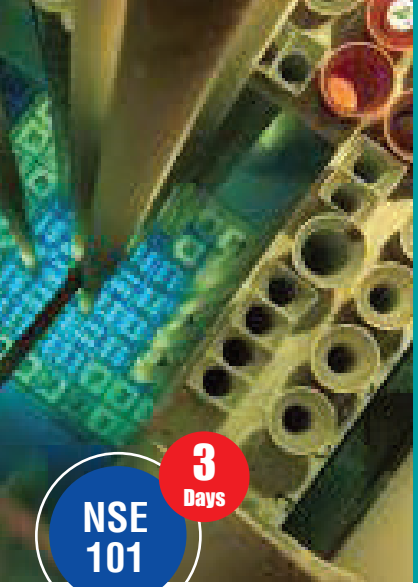
Module	Topics	Methodology
Module 1	Basics of Nuclear Physics	Classroom
Module 2	Basics of Nuclear Thermodynamic	Classroom
Module 3	Nuclear Reactor System	Classroom
Module 4	Management of Nuclear Safety	Classroom
Module 5	Experiments on Nuclear Shielding Material	Practical
Module 6	Experiments on Radiation Safety	Practical
Module 7	Tour to PUSPATI TRIGA Reactor	Facility Visit

TARGET AUDIENCE

University students, lecturers, nuclear operators, regulator, radiation safety officers, radiation protection officers from the operating organization, regulatory body, academia, research institute.

FEES	PAYMENT	RM
	Single Registration per pax. After IPTN.	~~RM1000.00~~ RM950.00
	Team Registration. After IPTN. (2 or more registration from the same organization	~~RM950.00~~ RM905.00

**IPTN = Incentive for Nuclear Technology. Discount 5%. An incentive scheme given to client who applied the nuclear technology at their respective organizations.*



NSE 101

3 Days

INTRODUCTION

This course provides participants with an overview of the contemporary nuclear energy technology with emphasis on nuclear fission as an energy source. Starting with the basic physics of the nuclear fission process, the course includes discussions on reactor control, thermal hydraulics, fuel production and spent fuel management for various types of reactors as well as analysis using computer code modelling exercise.This course is designed to provide nuclear reactor engineering education to participants who have minimal knowledge and background in nuclear subjects especially for those who has interested in certain area of nuclear reactor engineering and need to acquire additional information in this area of studies.

Introduction to Reactor Nuclear Safety

Pengenalan kepada Keselamatan Teknologi Reaktor

LEARNING OBJECTIVES

1) To introduce the philosophy of nuclear reactor engineering and safety
2) To understand the nuclear energy technology
3) To enhance the capabilities, improve skills and knowledge in nuclear reactor engineering studies

TARGET AUDIENCE

University students, lecturers, nuclear operators, regulator, radiation safety officers, radiation protection officers from the operating organization, regulatory body, academia, research institute.

COURSE OUTLINE

Module	Topics	Methodology
Module 1	Radiation Physics	Classroom
Module 2	Radiation Shielding	Classroom
Module 3	Handling of Survey Meter	Practical
Module 4	Nuclear Reactor Physics	Classroom
Module 5	Nuclear Reactor Kinetics	Classroom
Module 6	Reactor Thermal Hydraulics	Classroom
Module 7	Material Engineering	Classroom
Module 8	Nuclear Fuel Cycle	Classroom
Module 9	Radioactive Waste Management	Classroom
Module 10	Nuclear Plant Safety	Classroom
Module 11	Nuclear Reactor Experiments	Practical
Module 12	Computer Code Modeling Exercise	Practical

FEES	PAYMENT	RM
	Single Registration per pax. After IPTN.	~~RM1400.00~~ RM1330.00
	Team Registration. After IPTN. (2 or more registration from the same organization	~~RM1330.00~~ RM1270.00

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NSE 201

5 Days

CEP (AELB-7 Points)

INTRODUCTION

The course develops an understanding of the atomic nucleus based on macroscopic and microscopic models. Assessing success and limitations of various models used to describe the many facets of atomic nuclei as well as their excitations and decays is a key learning outcome of the course.

Generic quantum mechanical concepts are being exemplified on behalf of atomic nuclei. Supported by the experimental part, participant will understand the origin and relevance of nuclear radiation and detection in science and society.

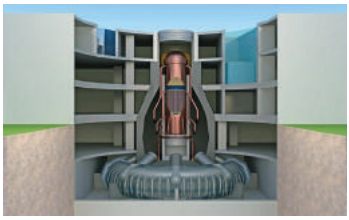
This 3-days course is designed to Nuclear Physics and Reactor Application to participants who have minimal knowledge and background in nuclear subjects especially for those who has interested in certain area of reactor engineering and need to acquire additional information in this area of studies.

Nuclear Reactor Technology Application

Aplikasi Teknologi Reaktor Nuklear

LEARNING OBJECTIVES

1) To understand basics of nuclear physics.
2) To understand the principle of nuclear reactors and its associated systems.
3) To enhance the capabilities, improve skills and knowledge in nuclear physics and reactor application.



COURSE OUTLINE

Module	Topics	Methodology
Module 1	Nuclear physics	Classroom
Module 2	Reactor kinetics	Classroom
Module 3	Reactor thermodynamics	Practical
Module 4	Nuclear fuel & material engineering	Classroom
Module 5	Radioactive waste	Classroom
Module 6	Probabilistic safety assessment	Classroom

TARGET AUDIENCE

University students, lecturers, nuclear operators, regulator, radiation safety officers, radiation protection officers from the operating organization, regulatory body, academia, research institute.

FEES	PAYMENT	RM
	Single Registration per pax. After IPTN.	~~RM1400.00~~ RM1330.00
	Team Registration. After IPTN. (2 or more registration from the same organization	~~RM1330.00~~ RM1270.00

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CEP (AELB-8 Points)

INTRODUCTION

The course is held at the Reactor TRIGA PUSPATI which is operated by Malaysian Nuclear Agency. The education and training within the model is oriented to the reactor physics, dosimetry, nuclear safety, and operation of nuclear reactor. The participants actively take part in all experiments, and independently evaluate acquired data. Principles of neutron detection, importance of delayed neutrons and their properties, reactor neutronics and dynamics are studied and demonstrated during various reactor experiments and measurements. An understanding of the reactor instrumentation and control and safety aspects of reactor operation are gained through hands-on reactor control.

The objective of the course is to provide hands-on reactor experiment using current research reactor experiment using current research reactor as an introduction to reactor physics in nuclear engineering curriculum to university students, lecturers, nuclear operators, regulator, radiation safety officers, and radiation protection officers.

Nuclear Reactor Engineering Experiments

Eksperimen Kejuruteraan Reaktor Nuklear

LEARNING OBJECTIVES

1) To experience TRIGA reactor operation.
2) To hands-on the reactor physic experiments.
3) To enhance the capabilities, improve skills and knowledge in nuclear physics and reactor application.

TARGET AUDIENCE

University students, lecturers, nuclear operators, regulator, radiation safety officers, radiation protection officers from the operating organization, regulatory body, academia, research institute.

COURSE OUTLINE

Module	Topics	Methodology
Module 1	Reactor Start-up Operational Procedures	Classroom / Practical
Module 2	Core Excess and Shutdown Margin	Classroom / Practical
Module 3	Reactor Shutdown Procedures	Practical
Module 4	Control Rod Calibration	Practical
Module 5	Power Calibration	Practical
Module 6	Reactor Simulator – Normal Operation	Practical
Module 7	Reactor Simulator – Case Study	Practical
Module 8	Dose Measurement	Practical
Module 9	Neutron Flux / Spectrum Measurement	Practical

FEES	PAYMENT	RM
	Single Registration per pax. After IPTN.	~~RM2200.00~~ RM2090.00
	Team Registration. After IPTN. (2 or more registration from the same organization	~~RM2090.00~~ RM1990.00

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CEP (AELB-15 Points)

INTRODUCTION

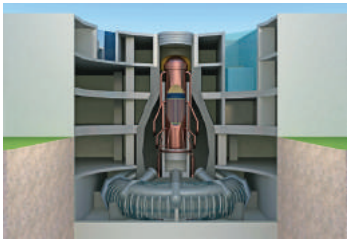
Nuclear communications are a specialized field that provides communicators the knowledge on how poorly managed communications contribute to lower level of safety and to an antagonistic environment in which nuclear professionals lose their most important resource in the trust of their constituents, including political authorities and the public. Communicators will be able to use a variety of specialized media, including various forms of writing, speaking to the public, media relations, publishing and community relations. The training course also aimed to facilitate collaboration and cooperation between the various government agencies tasked to respond in case a nuclear or radiological emergency in the country especially to communicators who have interested in certain area of nuclear communications and need to acquire additional information in this area of studies.

Nuclear Communication for Radiation Protection Officer

Komunikasi Nuklear untuk Pegawai Perlindungan Sinaran

LEARNING OBJECTIVES

1) To understand why public communication is important.
2) To describe the range of public communication and information activities on nuclear safety.
3) To deal with the public, media and community relations.



COURSE OUTLINE

Module	Topics	Methodology
Module 1	Basic Radiation	Lecture
Module 2	Nuclear/Radiological Incidents	Lecture
Module 3	Nuclear Safety Culture	Lecture
Module 4	Risk Communication	Lecture
Module 5	Building A Public Communication Program	Lecture
Module 6	Conducting Press Conferences	Practical
Module 7	Choosing and Training Agency Spokepersons	Lecture
Module 8	Handling Interviews	Practical
Module 9	Writing Press Releases	Practical

TARGET AUDIENCE

University students, lecturers, nuclear operators, regulator, radiation safety officers, radiation protection officers from the operating organization, regulatory body, academia, research institute.

FEES	PAYMENT	RM (Pen. Malaysia)	RM (Sabah/Sarawak)
	Single Registration per pax. After IPTN.	~~RM1400.00~~ RM1330.00	~~RM1560.00~~ RM1485.00
	Team Registration. After IPTN. (2 or more registration from the same organization	~~RM1330.00~~ RM1270.00	~~RM1485.00~~ RM1410.00

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NSE 102

1 Day

CEP (AELB-7 Points)

INTRODUCTION

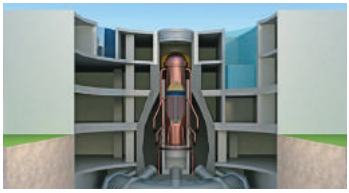
The purpose of this introductory course is to familiarize participants with nuclear security measures that address insider threats, including the unauthorized removal of nuclear and radioactive materials (theft) and sabotage at facilities containing nuclear and radioactive material.

Insider Threats at Nuclear and Associated Facility

Ancaman Dalaman di Fasiliti Nuklear

LEARNING OBJECTIVES

1) To describe the importance of studying the insider.
2) To describe the responsibility of the government, competent authority and licensee with regards to insider protection.
3) To raise awareness for the participants regarding to the potential insider threat.



COURSE OUTLINE

Module	Topics	Methodology
Module 1	Insider Definition and Motivation	Lecture
Module 2	National and international legal framework for nuclear security	Lecture
Module 3	Insider characterization	Lecture
Module 4	Preventive measure	Lecture
Module 5	Protective measure	Lecture
Module 6	Contingency plan	Lecture

TARGET AUDIENCE

Researcher, Regulator, Lecturer, Policy Maker, OBTL, RPO, RPS and Radiation Workers

FEES	PAYMENT	RM
	Single Registration per pax. After IPTN.	~~RM580.00~~ RM550.00
	Team Registration. After IPTN. (2 or more registration from the same organization	~~RM550.00~~ RM520.00

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NSE 103

3 Days

CEP (AELB-15 Points)

INTRODUCTION

The purpose of this course is to provide a basic understanding on the nuclear security which is fundamental in the management of nuclear technologies and in its applications where the radioactive materials is used or transported. It also gives guidance for developing and implementing applicable system for ensuring the secure management, use and storage of radioactive source.

Radiological Security Plan Programme

Program Pelan Sekuriti Radiologikal

LEARNING OBJECTIVES

1) To understand the new requirement for the preparation of Radiological Security Plan.
2) To create awareness on nuclear security culture in practice.
3) To implement applicable system for ensuring the secure management, use and storage of radioactive source.
4) To develop physical protection concepts and principles at premise level.

TARGET AUDIENCE

Safety officer, RPO, RPS, radiologist, manager, supervisor, lecturer, technologist, and those who are involved and interested in the application of ionising radiation in various sectors-industry, engineering, petroleum and gas, medical, manufacturing, etc and those who are responsible for the safe use of ionising radiation in various activities.

COURSE OUTLINE

Module	Topics	Methodology
Module 1	Radiation of Radiation Protection	Lecture
Module 2	Defining the Threat	Lecture
Module 3	Radioactive Source Location	Lecture
Module 4	Security of Radioactive Materials and Radiation Sources	Lecture
Module 5	Radioactive Source Security Plan Requirement Under Atomic Energy Licensing Act 1984	Lecture
Module 6	Security Control at Premise (General, Storage, Usage & Field Work)	Lecture
Module 7	Interface between Safety and Security	Lecture
Module 8	Radiation Detection Equipment and Demonstration	Lecture
Module 9	Physical Protection System (PPS) Principles	Lecture
Module 10	Transport Security	Lecture
Module 11	Hypothetical Facility for the Evaluation of Physical Protection System	Lecture
Module 12	Site Survey and Target Folder	Lecture
Module 13	Intrusion Detection and Assessment	Lecture
Module 14	Tabletop Exercise on Response Assessment	Exercise

FEES	PAYMENT	RM (Pen. Malaysia)	RM (Sabah/Sarawak)
	Single Registration per pax. After IPTN.	~~RM1485.00~~ RM1410.00	~~RM1560.00~~ RM1485.00
	Team Registration. After IPTN. (2 or more registration from the same organization	~~RM1410.00~~ RM1339.00	~~RM1485.00~~ RM1410.00

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CEP (AELB-15 Points)

INTRODUCTION

This course introduces nuclear security guidance for protection of radioactive material, associated facilities and associated activities. Course content also stresses the importance of nuclear security culture and the impact of human factor on nuclear security effectiveness. Participants examine legal and regulatory elements, roles and responsibilities, recommendations for theft and sabotage at facilities.

The main objective of this course is to provide participants with up-to-date information on Security of Radioactive Material in Use and Storage.

Security of Radioactive Material in Use and Storage

Keselamatan Bahan Nuklear dan Radioaktif dalam Penggunaan dan Penyimpanan

LEARNING OBJECTIVES

1) To understand the basic nuclear security concept
2) To understand proper step/ mechanism to develop nuclear security system and management
3) To establish Inventory of Radioactive Material
4) To update current nuclear security risk management & planning

TARGET AUDIENCE

Radiation Protection Officer (RPO), Radiation Supervisor, Scientists, HSE, Radiation workers, Environmental managers, facilities managers, program managers, and all personnel who are involve with the radioactive waste management activities.

COURSE OUTLINE

Module	Topics	Methodology
Module 1	Nuclear Security Overview (Roles and Responsibility)	Lecture
Module 2	Legislative and Regulatory Framework	Lecture
Module 3	Regulations for Security of Radioactive Material	Lecture
Module 4	Malaysia's Status on Radioactive Source Security	Lecture
Module 5	Risk Management	Lecture
Module 6	Nuclear Security Culture	Lecture
Module 7	Establishing Inventory of Radioactive Material	Lecture
Module 8	Identifying And Assessing Threats	Lecture
Module 9	Functions of Security	Lecture
Module 10	Developing of Physical Protection System	Lecture
Module 11	Security Measures for Mobile Source	Lecture
Module 12	Physical Protection System Design Concept	Lecture
Module 13	Security Management	Lecture
Module 14	Introduction to Exercise	Exercise
Module 15	Group Presentations & Disscussions	Group Exercise & Discussion

FEES	PAYMENT	RM (Pen. Malaysia)	RM (Sabah/Sarawak)
	Single Registration per pax. After IPTN.	~~RM1150.00~~ RM1100.00	~~RM1560.00~~ RM1485.00
	Team Registration. After IPTN. (2 or more registration from the same organization	~~RM1092.00~~ RM1045.00	~~RM1485.00~~ RM1410.00

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NSE 203

2 Days

CEP (AELB-11 Points)

INTRODUCTION

The purpose of the course is to discuss in theory and practical the Cyber Security aspect of Nuclear Security and industry good practices on protecting information, computers including industrial controls systems (ICS), and corresponding networks in nuclear and other radioactive material facilities, as well as associated facilities, with focus on sabotage and the insider threat.

Workshop on Cyber Security for Nuclear and Associated Facilities

Bengkel Sekuriti Siber untuk Fasiliti Nuklear

LEARNING OBJECTIVES

1) To raise awareness of the importance of information and computer security interfaces with other elements of nuclear security.
2) To assist practitioners identify threats and risks associated with information and computer systems that are relevant to nuclear and associated facilities.
3) To guide organizations refine their information and computer security goals, policies and programme implementation.
4) To identify and promulgate international best practices specific to facilities that handle nuclear and other radioactive material, as well as to associated facilities.

COURSE OUTLINE

Module	Topics	Methodology
Module 1	Computer Security Rules, Law and Regulation	Lecture
Module 2	Industrial Control System (ICS) Overview	Lecture
Module 3	Threat and Consequence Awareness	Lecture
Module 4	Cyber Threat Scenarios	Lecture
Module 5	Threat Assessment	Lecture
Module 6	Detection of Computer Security Incident and Containment	Practical
Module 7	Analysis of Computer Security Incidents	Practical
Module 8	Computer Security Incident Response Planning	Practical
Module 9	Conducting Computer Security Exercises	Practical

TARGET AUDIENCE

Engineers, Researchers, Regulators, IT Personnel, O&M Operators, Plant Managers.

FEES	PAYMENT	RM
	Single Registration per pax. After IPTN.	~~RM850.00~~ RM810.00
	Team Registration. After IPTN. (2 or more registration from the same organization	~~RM810.00~~ RM760.00

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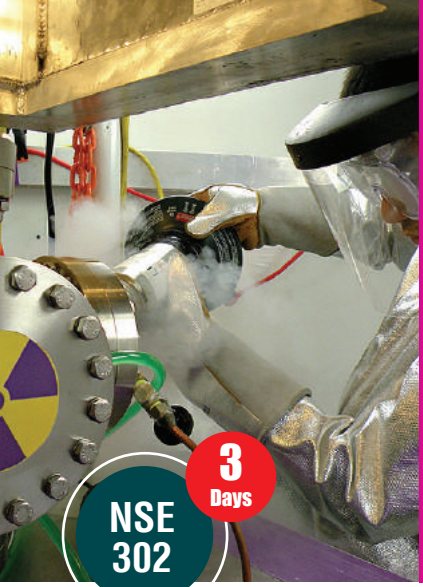

NSE 302

3 Days

CEP (AELB-15 Points)

INTRODUCTION

This course develops an awareness of the planning and regulations related to nuclear safety and security. Participants will gain an understanding of theories and practical skills necessary to be responsible for the design, analysis and evaluation of Nuclear Safety and Security systems.

Safety, Security & Safeguards *Keselamatan, Sekuriti & Kawalselia*

LEARNING OBJECTIVES

1) To identify and understand the interfaces and synergies between the three areas of safety, security and safeguards as well as the challenges involved (i.e. possible conflicting requirements).

2) To provides an overview of the basic principles, relevant international legal instrument, and the implementation of nuclear safety, security and safeguards and allow participants to improve their knowledge of various interfaces.

TARGET AUDIENCE

Researchers, Regulators, Lectures, Policy Makers RPO, RPS and Radiation Workers.

COURSE OUTLINE

Module	Topics	Methodology
Module 1	Legal & Regulatory Framework for Safety, Security and Safeguards	Lecture
Module 2	Overview of Physical Protection Systems (PPS)	Lecture
Module 3	Facility Characterization	Lecture
Module 4	Target Identification	Lecture
Module 5	Overview of Safety Concepts	Lecture
Module 6	Threat Assessment	Lecture
Module 7	Design of PPS	Lecture
Module 8	Sabotage Consequences & Protection (Case Study)	Case Study
Module 9	Detect, Access Delay & Response	Lecture
Module 10	Communication on security level	Lecture
Module 11	The interface between Safety, Security and Safeguards	Lecture
Module 12	Nuclear non-proliferation	Lecture
Module 13	Physical Protection System Effectiveness Evaluation (participant presentation)	Practical

FEES	PAYMENT	RM (Pen. Malaysia)	RM (Sabah/Sarawak)
	Single Registration per pax. After IPTN.	~~RM1400.00~~ RM1330.00	~~RM1560.00~~ RM1485.00
	Team Registration. After IPTN. (2 or more registration from the same organization	~~RM1330.00~~ RM1270.00	~~RM1485.00~~ RM1410.00

**IPTN = Incentive for Nuclear Technology. Discount 5%. An incentive scheme given to client who applied the nuclear technology at their respective organizations.*

NSE 400

2 Days

CEP (AELB-Points)

INTRODUCTION

Understanding where safety, security and safeguards intersect is critical to nurturing an overarching culture of harmonized security, safety and safeguards. It is identifiable that all three disciplines (safety, security, and safeguards) intersect on nuclear materials. Both safety and security restrict physical access to nuclear materials, but the safeguards require access to nuclear materials, so conflicts do arise. At the same time, however, safety and security may synergistically benefit from the joint sharing of information collected during access to material for safeguards purposes obtained from nondestructive and destructive analyses, seals, cameras, or remote radiation monitoring. Passive and inherent mechanisms could satisfy both security and safety objectives, and sharing nuclear facility process data systems could enhance the efficiency of safeguards and safety.

International Conference on Radiation Protection & Nuclear Security (ICORPNS)

Persidangan Antarabangsa Keselamatan Sinaran & Sekuriti Nuklear

LEARNING OBJECTIVES

1) To exchange information and experience in the field of occupational radiation protection and nuclear security

2) To review advances, challenges and opportunities in the field of radiation protection and nuclear security

3) To formulate conclusions and recommendations on radiation protection and nuclear security.

TARGET AUDIENCE

Regulatory bodies, workers and employers involved in the use of radiation sources and in the operation of installations containing or handling radioactive materials, radiation protection experts, researchers, persons responsible for occupational monitoring services, and manufacturers of radiation emitting apparatus and other radiation sources, emergency workers/emergency response organizations as well as other interested parties.

CONFERENCE SCOPE
International Legally and Non-Legally Binding Instruments for Nuclear Security
National Nuclear Security Regimes
Regulatory Oversight for Nuclear Security: Practices and Challenges
Fostering a Culture of Nuclear Security
Emerging Technologies
Nuclear Safety and Security Interface
Education and Training on Nuclear Security
International Cooperation Success Stories
Capacity Building, Human Resource Development and Enhancements for Nuclear Security

FEES	PAYMENT	RM
	Single Registration per pax. After IPTN.	~~RM900.00~~ RM850.00
	Team Registration. After IPTN. (2 or more registration from the same organization	~~RM850.00~~ RM800.00

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Others Training

Agency Based Programme

Kesemua kursus boleh dijalankan sebagai kursus asas agensi direka bentuk mengikut keperluan organisasi.
All courses can be conducted as in company basis tailored to meet specific needs.

INCOMPANY FEES

PROGRAMME (No. of Days)	FEES / RATES	CERTIFICATE
1	RM 3,600.00	Statement of Attendance
2	RM 6,800.00 @ RM 3,400 per day	Statement of Attendance
3	RM 9,600.00 @ RM 3,200 per day	Certificate of Attendance
Above 3 days	RM 3,200 per day	Certificate of Attendance

Bench Fees of RM750 per day are charges for course conducted in Nuklear Malaysia

Programme conducted outside Nuklear Malaysia, additional cost for accomodation, food and travelling should be added

Fees must be paid in advance through bank draft/ money order / company cheque / local order (LO) payable to: DIRECTOR GENERAL MALAYSIAN NUCLEAR AGENCY

Consortia

Konsortia merupakan versi terbitan program asas agensi direka bentuk untuk sekumpulan syarikat dengan mendapat manfaat program reka khas berdasarkan prinsip perkongsian kos.
A derived version of in-company programme, designed for a small group companies that provide the benefit of customized programme and based on cost-sharing principles.

Online Training

Adalah merupakan sistem atas talian yang membolehkan peserta mendapatkan latihan dengan konsep 'setiap ketika, dimana jua'. Pelanggan boleh belajar mengikut kesesuaian masing-masing secara "live" mahu pun sesi tayangan video, menduduki ujian serta mendapatkan sijil secara serentak.
Is an online system that allows participants to get training with the concept of 'anytime, anywhere'. Customers can study according to their suitability in "live" or video screening sessions, sit for tests and obtain certificates simultaneously.

Julia Binti Karim

A Research Officer with more than 15 years of working experience in research reactor operation & maintenance, core & fuel management, reactor physics calculation and experiment. Experience in High Performance Computing System. Her academic backgrounds are Doctor of Engineering in Nuclear Engineering from Tokyo Institute of Technology, Japan, MSc. in Applied Physics from University of Malaya and BSc. (Hons) in Computational Physics & Electronics from University of Malaya. Other experience and responsibilities Project Leader for Research Reactor Utilization in FNCA, appointed in 2019. Malaysia Focal Point for Nuclear Energy Cooperation Sub-sector Network (NEC-SSN) in ASEAN, appointed in 2019. Project Leader of Brain Gain Malaysia: Feasibility Study of RTP Power Upgrading Project, 2010. Lecturer for various training courses and workshops such as Reactor Engineering Training Course and Radiation Protection for Officer Training Courses

Hasfazillah Binti Hassan

Currently hold position as a Manager Nuclear Security Group. Hold a Bachelor's Degree, B.Sc (Nuclear Science), UKM, Bangi and Master of Science (Radiation and Nuclear Safety), UKM, Bangi. Speaker and course instructor for Nuclear Security courses, Radiation Protection Officer course and many more. Professional Qualifications are Malaysian Nuclear Safety and Health Officer recognized by the Department of Safety and Health Jobs (DOSH), AELB-recognized Radioactive Material Leak Tester, Radiation Operators recognized by AELB, Radiation Protection Officer Consultant recognized by AELB Field of Instruction / NORM / TENORM / Radiation Facility

Syed Asraf Fahlawi Wafa Bin Syed Mohd Ghazi

Currently hold position as Head of the Radiation Safety for Radioisotope Production Facility in Nuclear Malaysia. Responsible for ensuring compliance with all regulations pertaining to nuclear and radiological safety. Involved in establishing the Radiation Protection Program for the facility as well as developing and promoting a safety culture among the radioisotope production group and other groups related to GMP. In addition he is also a member of the Quality Assurance team for radioisotope production. Other duties and responsibilities include Radiation Protection Supervisor for Nuclear Malaysia TRIGA PUSPATI Research Reactor, Head of Logistic Squad for Nuclear Malaysia Emergency Committee and trainer/ lecturer for Radiation Protection Course for Officer Course and Lecturer for IAEA Postgraduate Educational Course in Radiation Protection & the Safety of Radiation.

Muhammad Khairul Ariff bin Mustafa

A research officer at Malaysian Nuclear Agency, Selangor. Experienced as a Safety & Health Officer (2007) certified by National Institute of Occupational Safety and Health (NIOSH). Hold a MEng. Mechanical from UKM and graduated with BSc. Nuclear Science from UKM. His field of interest are Neutronics Analysis and Reactor Experiments in TRIGA Reactor, Reactor and Shielding Calculation, TRIGA Reactor Core and Fuel Management Nuclear Design of Fuel and Reactor Core for NPP. Involved as a training instructor/speaker for Nuclear Reactor Experiments course for UTM.

SPEAKER'S PROFILE

Mohd Fazlie Bin Abdul Rashid

Currently hold position as Lead Radiation Protection Supervisor. Other task and responsibilities are Lead On-Scene Commander for Emergency Response and Preparedness, Perform radiation protection consultancy services, Coordinate, monitor, and analyze the area monitoring for radiological and nuclear safety. He also manages, coordinate and involve as a training instructor for radiation safety and health, radiological/nuclear security and emergency preparedness. Hold a MSc in Radiation and Nuclear Safety from UKM and BSc in Nuclear Science (Hons.)

Sabariah Binti Kader Ibrahim

Graduated with BSc (Hons) in nuclear science from Universiti Kebangsaan Malaysia (UKM) in 2004. She obtained her MSc. in Nuclear Safety from Korea Advance Institute of Science and Technology (KAIST), South Korea in 2012. At present, she is heading the International Training and Nuclear Science & Engineering Sector of Nuclear Malaysia Centre of Excellence. Involves in development of national strategy for education and training in Radiation Transport and Waste Safety. Currently involve as Academic Coordinator for IAEA Postgraduate Educational Course in Radiation Protection and The Safety of Radiation Sources (PGEC). Her research interest includes emerging technology in nuclear security, security culture and geospatial analysis. She is also actively involved in promoting radiation safety and security in the country and the region covering of lectures, workshop, seminar and public engagement.

Malyagus Bin Tagi

Currently hold position as Security Officer in managing Physical Security. Previously work as a Chief Security Officer of the Government of Malaysia managing Protective Security at Complex C,D & E in Putrajaya. Experienced and courses related to Protective Security and Physical Protection of Nuclear Material & Nuclear Security, Physical Protection of Facilities Holding Nuclear or Radioactive Materials. One of the speaker for Safety, Security and Safeguards course.

Raymond Yapp Tze Loong

A research officer at Malaysian Nuclear Agency, Selangor. Hold a Master Degree in Radiation and Nuclear Safety from UKM and graduated with BSc. Nuclear Science from UKM. His field of expertise are Radiation Protection for Officer, Nuclear and Radiological Emergency Preparedness (NREP), Nuclear Security, Occupational Radiation Protection in High Exposure Situation, Environmental Sampling and Leak Test. Involved as a speaker for Nuclear Security and Radiation Protection courses.

Azimawati Binti Ahmad

A research officer at Malaysian Nuclear Agency, Selangor. Hold a Master Degree in Radiation Protection from UKM and graduated with BSc. Nuclear Science from UKM. Attended training and workshop such as Train the trainer for radiation safety 2014, Radiation protection safety course 2015, Nuclear and radiological emergency, ITC 2012, Fundamental of Nuclear Security Workshop 2018, International Response Training (IRT) course 2015, IAEA Seminar for Senior Official Level Officers on Nuclear Security Training: Management Ownership and Technical meeting on security of Nuclear and other radioactive material in transport 2016. Involved as a speaker for Nuclear Security and Radiation Protection courses.

Saaidi Bin Ismail

A research officer in Information Technology (IT) at Malaysian Nuclear Agency, Selangor. Responsible in ICT Infrastructural and Services Planning, Operation and Maintenance, Security Awareness Program, evaluation of IT products, feasibility study on systems and Opensource. Hold a Master Degree in Information Technology Information System from UKM. Attended training and workshop such as Certified Ethical Hackers (CEH) Course, 2009, RTC on Computer Security for Nuclear Facilities Korea 2010, RTC for on Preventive and Protective Measure against Insider Threats , India 2013 & 2014, WatchGuard Administration Technical Training Kuala Lumpur 2014, IDC Regional Training Computer Security Indonesia 2015, Regional Workshop on the Development of National Training Programmes for Advanced Topics in Computer Security, Vietnam 2017, Log Analysis Fundamental / Advance – MAMPU- Cybersecurity 2017, T.Meeting/Wshop on Conducting Computer Security Exercises for Nuclear Security IAEA and Microsoft Server 2016 Administration Kuala Lumpur 2020.

Mohd Dzul Aiman Bin Aslan

A Research Officer and ICT Security Officer at Malaysian Nuclear Agency, Selangor. His responsibilities are to Plan, manage, implement and enforce IT Security programme in Nuklear Malaysia. Involve in activities and reporting to stakeholders such as MOSTI, NC4,Cybersecurity Malaysia, IAEA and others. Hold a Master Degree in Computer Science from UPM and graduated with B.Eng Computer Engineering from UTM. His qualification are Certified Ethical Hacker (CEH) – EC-Council, Certified Penetration Tester Specialist (CPTS) – Mile2, Certified Professional Requirement Engineering (CPRE) –IREB and Certified Information Security Awareness Manager (CISAM)
– Cybersecurity Malaysia Certified Cyber Defender Associates (CCDA) - UIAM

Siti Nurbahyah Binti Hamdan

A Research Officer and hold position as Head of Application Group at Malaysian Nuclear Agency, Selangor. Her responsibilities are plan, manage and analyse IT development project , implement and assess IT security safeguards, coordinate the implementation of Information security managements System (ISMS) based on ISO 27001:2013 including ICT Risk Assessments and Security Awareness Program, coordinate ICT Disaster Recovery Activities (DRP- BCMS) Hold a Master Degree in Computer Science from UPM and graduated with Bachelor in Information System from UKM. Attended training and workshop such as ITC protecting Computer Based in Nuclear Security IAEA Daejeon Korea, Technical Meeting on Managing Nuclear Safety Knowledge – Approaches and National Experiences IAEA 2017, National Workshop on Knowledge Management and on the National Nuclear Safety Knowledge platform (IAEA, 2016), International Training Course on Preventive and Protective Measures against Insider Threats IAEA (Tokai, Japan, 2014)

How to Register

Easy Way to Register

Please send us the complete registration form or participant's detail (Name, I/C, Company Name, Preferred Course and Date, Contact info) via:

Address

Director General
Malaysian Nuclear Agency
(Nuclear Malaysia)
Bangi, 43000 Kajang
(Attn: Centre of Nuclear Excellence)

Fax

03.8911.2180

Email

sabariah_ibrahim@nuclearmalaysia.gov.my
ibrahim_nahar@nuclearmalaysia.gov.my
shawani@cc.nuclearmalaysia.gov.my

Online Registration

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Further Information

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(Please photocopy for additional participants)

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(as in I.C) /
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(To be printed on certificate)

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Meal Restriction (Special Diet) : .....
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The registration fee of RM..... money order / cheque / bank draf / local order payable to **Director General Malaysian Nuclear Agency** is enclosed herewith

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Position : .....
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Signature : .....
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