

CENTRE FOR GRADUATE STUDIES (PPS)

Dean:	Professor Dato' Dr. Laily Bin Din, <i>BSc (UKMalaysia), PhD (Salf), AMIC, PMP.</i>
Deputy Deans:	Professor Dr. Jamaluddin Md. Jahi, <i>BA, PhD (UKMalaysia), MSc (Wales)</i> Professor Dr. Ismail Sahid, <i>BSc (UKMalaysia), PhD (Sheff)</i>

Research Degrees:

Master of Arts
Master of Environmental Management
Master of Philosophy
Master of Science
Doctor of Philosophy

Taught Programmes:

- Master of Environmental Management
- Master of Industrial Safety Management
- Postgraduate Diploma in Industrial Safety Management

Beside handling the general conduct of postgraduate programmes for the University, the Centre for Graduate Studies is also the focal point for a number of multi-disciplinary programmes of the university including those offered by two of the research institutes.

ENVIRONMENTAL MANAGEMENT PROGRAMME

This is a multi-disciplinary programme that incorporates the physical and social sciences.

- Master of Environmental Management
- Doctor of Philosophy

Both programmes are offered through research and the writing of a thesis.

RESEARCH AREAS

- Environmental Impact Assessment
- Management of Urban Industrial Areas
- Coastal Zone Management
- Environmental Management Systems (ISO 14000 series)
- Drainage Basin Management
- Pollution Management
- Law and the Environment
- Occupational Safety, Health and Environment

Master of Environmental Management (By Coursework)

STUDY DURATION AND REGISTRATION

This taught programme is carried out on a full time basis for a calendar year duration. It comprises lectures, practical or fieldwork, research projects, seminar and report writing. Registration is at the beginning of first and second semester.

PROGRAMME STRUCTURE

A candidate has to complete 36 units that comprise core courses, elective courses and a research project as follows:

Core Courses

Candidates are required to take six (6) core courses equivalent to 18 units during the first half-year of the programme.

The core courses which are worth three units each are as follows:

- Environmental Ethics
- Principles of Environmental Management and Administration
- Principles of Ecology
- Environmental Pollution Control
- Environmental Economics
- Research Methodology

Elective Courses

During the second half-year, candidates are required to choose four (4) elective courses and a research project which make up a total of 18 units.

The elective courses are offered in independent modules and for the purpose of specialization

candidates are advised to take enough courses from the chosen module. The remaining courses can be selected from any other modules.

The modules and the relevant elective courses are as follows:

Module One: Environmental Impact Assessment

- Basic Principles and Perspectives of Environmental Impact Assessment
- Environmental Impact Assessment Procedures

Module Two: Urban Ecosystems Management

- Urbanization and Urban Ecosystems
- Population, Policy and Urban Land use Planning

Module Three: Coastal Ecosystems Management

- Coastal Ecology and Resources
- Process, Planning and Coastal Zone Management

Module Four: Forest Ecosystems Management

- Tropical Forest Ecology
- Wild Life Management

Module Five: Environmental Management Systems

- Environmental Management Systems
- Environmental Audits

Module Six: Drainage Basin Management

- Process, Planning and Drainage Basin Management
- Environmental Hazards and Risk Management

Module Seven: Occupational Safety, Health and Environmental Management

- Principles of Occupational Safety, Health and Environmental Management
- Occupational Safety and Health Management System

Research Project

Candidates are required to carry out a research, which is equivalent to six units.

ACADEMIC STAFF

Programme Coordinator

Professor Dr. Md. Pauzi Abdullah - *Faculty of Science & Technology*

Professor

Abdul Aziz Bidin - *Faculty of Science & Technology*
Abdul Latiff Mohamad - *Faculty of Science & Technology*
Abdul Samad Hadi - *Senior Fellow of LESTARI*
Asmah Ahmad - *Faculty of Social Sciences & Humanities*
Ismail Bahari - *Faculty of Science & Technology*
Jamaluddin Md. Jahi - *Centre for Graduate Studies / Faculty of Social Sciences & Humanities*
Kamaruzzaman Sopian - *Faculty of Engineering*
Othman Hj. Ross - *Faculty of Science & Technology*
Rakmi Abdul Rahman - *Faculty of Engineering*
Sahrin Ahmad - *Faculty of Science & Technology*
Sukiman Sarmani - *Centre for Graduate Studies / Faculty of Science and Technology*
Zuriati Zakaria - *Faculty of Science & Technology*

Associate Professor

Abd Rahim Md Nor - *Faculty of Social Sciences and Humanities*

Ainon Hamzah - *Faculty of Science & Technology*
Hamdan Ariffin - *Faculty of Business Management*
Jamal Othman - *Faculty of Economics*
Maimon Abdullah - *Faculty of Science & Technology*
Mohd Jailani Mohd Nor - *Faculty of Engineering*
Zahedi Faisal - *Faculty of Engineering*

Lecturer

Abdul Hadi Harman Shah - *Faculty of Social Sciences and Humanities*
Azahan Awang - *Centre for Graduate Studies*
Kadaruddin Aiyub - *Faculty of Social Sciences and Humanities*
Kadir Ariffin - *Centre for Graduate Studies*
Muhammad Rizal Razman - *Centre for Graduate Studies*

INDUSTRIAL SAFETY MANAGEMENT PROGRAMME

Doctor of Philosophy
(By Research and Thesis)

Master of Industrial Safety Management
(By Coursework)

This programme is offered by the Centre for Graduate Studies in collaboration with the Centre for Educational Development Universiti Kebangsaan Malaysia. The programme is designed for professionals and safety and health managers.

PROGRAMME STRUCTURE

The programme emphasizes management, technical and research skills. Candidates are required to take six compulsory subjects, one research project and at least three strengthening subjects shown below:

COURSES OFFERED

Compulsory Courses

- Occupational Safety Management
- Industrial and Environmental Laws
- Principles of Hazard Identification and Effects Assessment
- Advanced Industrial Psychology and Organization
- Ergonomics
- Prevention of Fire, Explosion and Toxic Releases
- Research Project

Strengthening Courses

- Chemical and Radiation Safety Management
- Construction Site Safety Management
- Environmental Safety and Biological Hazard Management
- Electrical and Mechanical Safety Management

LECTURERS

To ensure academic and practical excellence, this programme will be conducted by lecturers from various faculties in Universiti Kebangsaan Malaysia, local universities, and experienced professionals from relevant government agencies and the private sector.

LECTURE SCHEDULE

Day and Time:
Saturdays (1500 - 2200)
Sundays (0900 - 1400)

Place: Centre for Educational Advancement, Universiti Kebangsaan Malaysia

Period of Study: One course year

ADDITIONAL ENTRANCE REQUIREMENT

- Possesses a Post-graduate Diploma from Universiti Kebangsaan Malaysia with CGPA \geq 3.00.
- Possesses a diploma accredited by the Senate of UKM and 7 years working experience in the field of occupational safety and health.

POSTGRADUATE DIPLOMA IN INDUSTRIAL SAFETY MANAGEMENT

The last decade has seen significant changes in how organizations view and manage occupational, health and safety issues. Increasingly, companies are capitalizing on the synergies between these three areas by managing them together and necessitating their professionals be cross-trained in all the three functions.

The Postgraduate Diploma in Industrial Safety Management programme at UKM trains students to apply safety principles in administrative practices and facility audits in the workplace and the community. The interdisciplinary nature of many of the courses teach students when to take charge and when to consult with other environmental and occupational professionals to prevent or reduce work and community related injuries, illnesses or discomfort.

SPECIAL ENTRY REQUIREMENT

- A Bachelor's degree from Universiti Kebangsaan Malaysia or other equivalent degree.
- A Diploma with a minimum of 5 years work experience in the area of Occupational Safety and Health.

DURATION OF STUDIES

This is an executive programme which runs for 1 ½ years or 3 semesters. Lectures are held on Sundays for about three times in a month.

PROGRAMME STRUCTURE

The postgraduate diploma programme in industrial safety management consists of 30 credit hours of graduate study. The curriculum consists of twelve courses (26 credits) and a research project (4 credits).

COURSES OFFERED

Module 1	Units
▪ Management of Industrial Safety Systems	3
▪ Industrial Legislation	2
▪ Non-Ionizing Radiation Safety Management	1
▪ Electrical Safety Management	2
Module 2	
▪ Industrial Psychology and Ergonomics	3
▪ Mechanical Safety Management	2
▪ Environmental Safety Management	2
▪ Occupational Health and Medicine	2
Module 3	
▪ Radiation Safety Management	3
▪ Fire Protection	2
▪ Management of Biohazards	1
▪ Chemical Safety Management	3
▪ Research Project	4

Successful graduates in this programme with CGPA above 3.00 are eligible to further their studies in the Master of Industrial safety Management Programme at UKM.

INSTITUTE FOR ENVIRONMENT AND DEVELOPMENT (LESTARI)

The Institute for Environment and Development (LESTARI) was established in October 1994. It is an independent body within the Universiti Kebangsaan Malaysia structure. The role of LESTARI is as a centre of excellence for research and training in the field of environment and development. In an efforts to handle and solve the complex issues concerning environment and development, holistic and multidisciplinary approach is adopted by LESTARI in its research programme.

RESEARCH AREAS

- Environment and Development
- Urban Ecosystems Management
- Conservation Biology
- Policy Research in Environment and Development

PROGRAMME

In line with LESTARI's vision, our research and development programme is divided into two; cross-sectoral and sectoral programmes.

Cross-sectoral Programmes

The cross-sectoral programme emphasizes on cross-sectoral, integrated and holistic research to develop the philosophy, policy and approach to implement the principles of sustainable development and natural resource

management based on the concept of ecosystems. There are two cross-sectoral programmes;

- *Sustainable Development Research Programme* - This research programme involves the sustainability model that view future development as a system that maintain the equilibrium between economic development with environmental conservation and social welfare.
- *Ecosystem Health Research Programme* - This research programme ventures into the latest approach of integrated system on landuse planning and development. The basin concept is applied to associates of several ecosystems. Research topics focus on the assessment of ecosystem health as indicators for planning and development.

Sectoral Programmes

The sectoral programmes provide information system to develop and support the cross-sectoral programmes. The focus of sectoral programmes includes three aspects, that is, social, economic and the environment, as follows:

- *Environmental Conservation* - This programme will develop the policy, approach and information regarding environmental conservation. Research focus includes conservation of biological resources, physical resources, geological and landscape resources, heritage resources and community culture.

- *Sustainable Utilization of Natural Resources* - This programme will develop policy, approach and information regarding the sustainable utilization of natural resources. Research focus includes management and utilization of resources such as forest, water, air, food and mineral.
- *Sustainable Urban Ecosystem* - Research will emphasize on development of policy, approach and information regarding sustainable planning and management of urban ecosystem. Research topics include integrated studies on issues such as transportation, human settlement, public facilities, urban culture and identity, community welfare, quality of urban environment, geohazard management and development of urban ecosystem health indicators.
- *Ethics, Legislation and Governance* - In this programme, research will involve the development of policy, principle, legislation and information on ethics, legislation and governance. Research will focus on the effectiveness of administration systems, development of environmental ethics among local community and integrated legislation and governance in existing legislation system.
- *Sustainable Economics* - The research focus of this programme includes studies on interrelationship between economic growth and development with environment, economic development and environmental degradation as well as resource depletion. Other studies include resource and environmental evaluation and economic instruments.
- *Sustainable Industry and Trade* - Research under this programme emphasizes on waste management and industrial pollution. Other research includes recycling of waste and, utilization and innovation of environmental technology.
- *Sustainable Community* - Major research thrusts encompass the aspect of social welfare emphasizing on efforts to prepare a knowledgeable and united society beamed with self-confidence, credibility, high morality and just.
- *Sustainable Development Information* - This programme support the cross-sectoral programmes and other sectoral programmes above in development, management and monitoring research data.

GRADUATE PROGRAMME

The graduate programmes offered by LESTARI (by research) are as follows:

Doctor of Philosophy, Master of Science and Master of Arts in Environment and Development.

- Environment and Development
- Urban Ecosystems Management
- Environmental Conservation
- Biodiversity Management
- Policy Studies on Environment and Development

FACULTY/INSTITUTE MEMBERS

Director

Professor Dr. Ibrahim Komoo,
BSc. Hons. (UKMalaysia); PhD (Strathclyde), FASC

Deputy Director

Associate Professor Dr. Mohd Raihan Taha,
BE (UTM), MS (Maryland), PhD (Louisiana State)

Senior Fellow

Professor Dr. Abdul Samad Hadi,
BA, MA (Cant.), Dip. Tchg (Christchurch), PhD (Flinders), DSNS, PPT.

Professor Chamhuri Siwar,
BA Hons. (UKMalaysia), MA (Leeds), MS (Iowa State)

Professor Dr. Hood Salleh,
BSc. Hons. (W. Aust), Dip. In Soc. Antrop., B. Litt., D. Phil (Oxon)

Associate Professor Dr. Mazlin bin Mokhtar,
BSc. (Tasmania); PhD (Queensland)

Research Fellow

Associate Professor Dr. Joy Jacqueline Pereira,
BSc. Hons. (UKMalaysia), MSc. (Leicester), PhD (Malaya)

Saiful Arif Abdullah,
BSc. Hons., MSc. (Malaya)

Ahmad Fariz Mohamed,
BSc. Hons. (Malaya); MSc (East Anglia)

Shaharudin Idrus,
BA Hons., M. Env. Mgmt. (UKMalaysia)

Sarah Aziz Abdul Ghani Aziz,
LL.B. Hons. (Nott. Trent), LL.M (London)

INSTITUTE OF MALAYSIAN AND INTERNATIONAL STUDIES (IKMAS)

The Institute of Malaysian and International Studies (IKMAS) was established in 1995 as a center for research and post-graduate research in the field of social sciences and humanities. IKMAS employs a multidisciplinary approach in research, focussing on three inter-related dimensions of globalisation and social transformation: economic, socio-political and cultural, as well as discursive. For the period 2001-2005, IKMAS has chosen as a general research theme, the question of the nation-state and its role in the transformations brought about by globalisation. In particular, it will focus on fundamental issues such as the role of national development in a regional and global economy and on competing notions of community. Following this general framework, three main research themes have been selected, that is:

- National Development in a Regionalising and Globalising Economy,
- Competing Notions of Community, and
- Governance, Transformation and Participation.

Graduate students in IKMAS are encouraged to choose their research topics in line with the research thrust of the Institute.

TYPES OF PROGRAMME

IKMAS offers research-based higher degree programmes leading to Master of Philosophy and Doctor of Philosophy.

PROGRAMME STRUCTURE

The research-based programmes of IKMAS are offered both on a part-time and full-time basis. The programme, however, does require students to follow the short-courses that are offered by the Institute to enhance their theoretical understanding as well as research and writing skills. The courses offered are:

- Research Methodology,
- Thesis Writing,
- Globalisation

The courses are conducted in a seminar/workshop format to encourage closer interaction between the students and Fellows of IKMAS.

SPECIAL PROGRAMME REQUIREMENTS

In addition to the requirements of the Centre for Graduate Studies in UKM, each graduate student is required to:

- Attend the short courses organized by IKMAS;
- Present publicly at least three times, his/her progress in research at the Graduate Students Seminar before the thesis can be submitted for examination. Each presentation marks a different stage in the research progress of the student. Thus at the first stage, students have to present their research proposal, based on a thorough review of the literature as well as clear understanding of the research issues that will be investigated over the course of their research. At the second stage, students have to report their empirical findings as well as an analysis of their findings. A summary of the thesis is then presented at the last presentation before it can be submitted for external examination.

Research Expertise at IKMAS

Since its establishment, the Institute has established research expertise in Poverty and Income-Distribution, Trade and Investment, Japanese Economic Activities in Malaysia, Middle Classes and the Nation-State, Social Movements and Political Change, International Migration and Labour Mobility, Democratisation, Multiculturalism, and Pluralism in Southeast Asia, as well as Islam and Globalisation. Post-graduate candidates will benefit from the various expertise that is available through supervision and/ or from interacting with the Fellows of IKMAS through the various intellectual activities of the Institute.

IKMAS FELLOWS

Director

Professor Dr. Ragayah Haji Mat Zin, *PhD (Vanderbilt)*

Deputy Director

Norani Othman, *M.Phil. (Hull)*

Principal Research Fellows

Abdul Rahman Embong, *PhD (Malaya)*

Gan Khuan Poh, *PhD (Duke University)*

Lee Poh Ping, *PhD (Cornell)*

Senior Research Fellows

Diana Wong, *PhD (Bielefeld)*

Tham Siew Yean, *PhD (Rochester)*

Research Fellow

Sumit K. Mandal, *Ph.D (Columbia)*

Associate Fellow

Rashila Ramli, *PhD (Northern Arizona)*

Saliha Hj. Hassan, *MA (Michigan State)*.

INSTITUTE OF MICROENGINEERING AND NANO-ELECTRONICS

The Institute of Microengineering and Nanoelectronics was established on November 1, 2002. The institute deals with the development of nanotechnology and strategic application systems. It concentrates on six major research themes :

- MEMS technology
- High frequency technology for telecommunication
- VLSI system
- Photonics
- Organics electronics
- Nanoelectronics

TYPES OF PROGRAMME

IMEN offers research-based higher degree programmes leading to Master of Science and Doctor of Philosophy.

IMEN FELLOWS

Director

Professor Dr. Burhanuddin Hj. Yeop Majlis, *BSc (UKMalaysia), MSc (Wales), PhD (Durham), MMSST, MIEEE*

Principal Research Fellows

Professor Dr. Mohamad Mat Salleh, *BSc, Drs (ITB), PhD (London)*

Professor Dr. Sahbudin Hj. Shaari, *BSc (UKMalaysia), MSc (Essex), PhD (Wales), MMSST, MIEEE, MSPIE*

Professor Dr. Masuri Othman, *BSc (UKMalaysia), MSc (Essex), PhD (Southampton), MIEEE*