

INTERNATIONAL



**UPM**  
UNIVERSITI PUTRA MALAYSIA  
BERILMU BERBAKTI

# Faculty of Engineering

## Department of Biological and Agricultural Engineering

[www.eng.upm.edu.my](http://www.eng.upm.edu.my)

Master of Emergency Response and Planning



BERILMU BERBAKTI  
WITH KNOWLEDGE WE SERVE



## PROGRAMME REQUIREMENTS

### Introduction

This programme is designed for emergency response and planning in various fields. The core courses of the programme stress the principles and concepts, taking into account the development in technological field in facing emergency situations. Graduates from this programme will be able to form a network of Master of Science in the field of Emergency Response and Planning (ERP), equipped with engineering knowledge and concepts and an effective management system to be further viable in the evaluation and preparation of strategies at every level of emergency response and planning.

### Credit Requirements for Graduation

Students enrolling under this programme must fulfill 40 credits of course work to graduate. The credit distributions for compulsory courses, elective courses and projects are as follows:

Compulsory Modul	3 credits
Core and Elective Modul	27 credits
Dissertation	10 credits

### Compulsory Modul

Students must register all the listed compulsory courses:

EAB 5310	Natural Resource Conservation	3 credits
EAB5401	Hazard, Risk and Ethics	3 credits
EAB5412	Information Engineering	3 credits
EAB5403	Disaster Recovery and Contingency	3 credits
EAB 5404	Emergency Response Planning Network	3 credits
EAB 5990	Dissertation	10 credits
EAB 5405	Disaster Forecasting	3 credits
EMM5201	Fire Safety Engineering and Regulations	3 credits
EAB 5900	Research Methodology	3 credits

### Core and Elective Modul

Students must register five elective courses out of the listed courses:

EAB5609	Energy Sources	3 credits
EAB5411	Emergency Risk Management	3 credits
EAB5421	Forensics Science	3 credits
EAB5422	Public Safety and Security	3 credits
EAB5302	Building Services	3 credits

### Dissertation

Students are required to register EAB5900-Project for 4credits in the second semester and another 6credits in the third semester. This course is a project paper on a special topic that will be assigned to the students in the second semester. Students will be examined by a panel of examiners based on the submitted report and oral presentation at the end of third semester.





## Course Synopsis

EAB5401	Hazard, Risk and Ethics	3 credits	This course covers the comparisons and analyses between various types of hazard, risk associated with hazards and the ethics and efficiency aspects in facing and responding to the risk
EAB5302	Building Services	3 credits	This course covers basic building services such as ventilation systems, support systems for water supply and electricity, fire service and drainage
EAB5403	Disaster Recovery and Contingency	3 credits	This course covers discussion on various disasters and their impacts, contingency plans during critical time and prevention plan through database construction
EAB 5404	Emergency Response Planning Network	3 credits	This course covers organizational elements, professional network, leadership and disaster management
EAB 5310	Natural Resource Conservation	3 credits	This course covers conservation of natural resource through law, engineering information, and design and resource conservation concepts
EAB5609	Energy Sources	3 credits	This course discusses the issue of conventional and alternative energies, conversion technologies and contingencies
EAB5411	Emergency Risk Management	3 credits	This course gives an overview of the various type of emergency risks and the best practices and proper methodologies in strategic emergency risk management
EAB5412	Information Engineering	3 credits	This course covers methods to present information inputs by cognitive modeling and virtual reality exercises
EAB5421	Forensics Science	3 credits	This course covers investigation of disasters, industrial accidents, and risks of fire by analyzing physical evidences using forensic technique and witnesses' interviews
EAB5422	Public Safety and Security	3 credits	This course covers public defense system such as security management, internal and external defense system, asset and losses control system and case analysis
EAB5990	Dissertation	10 credits	This course is related to a research project whereby student will select one related topic and do literature review, data collection and analysis. The scope of research will be determined by the supervisor based on the discussion with the student. Students have to submit written report at the end of the semester. The students need to present the research results in front of the panels as a graduation requirement
EMM5201	Fire Safety Engineering and Regulations	3 credits	This course covers all aspects that can cause fire and the related systems, passive and active fire protection and related acts
EAB5900	Research Methodology	3 credits	This course covers best practices research such as research methodology, design and ethics, and thesis writing and oral presentation.
EAB5405	Disaster Forecasting	3 credits	This course covers the application of ICT tools and GIS science (Geographical Information System and Remote Sensing) in development of early warning system.

For further information  
Please contact :

Deputy Dean (Postgraduate Studies)  
Faculty of Engineering  
Universiti Putra Malaysia  
43400 UPM, Serdang  
Selangor Darul Ehsan  
Malaysia

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Programme Coordinator :

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### ADMISSION REQUIREMENTS

An applicant with a bachelor degree in engineering with CGPA 2.500/Second Class Lower and at least three (3) years working experiences in relevant field; or

An applicant with a bachelor degree in engineering with CGPA 2.750/Second Class Lower

An applicant with a bachelor degree in science with CGPA 3.000/Second Class Upper OR CGPA 2.750/Second Class Lower and at least three (3) years working experiences in relevant field

*Note:*

*\* When candidates with Bachelor's of Science or Technology degrees or their equivalents are admitted, prerequisite modules in Engineering must be offered to adequately prepare them for their advanced study.*

*\* Please refer to programme coordinator for more information on admission requirements*

### FEES

Fees	Master without thesis	
	Malaysian Student	International Student
Basic Fees (1 <sup>st</sup> semester)	1,206.00	2,206.00
Basic Fees (2 <sup>nd</sup> and subsequent semester)	950.00	1,950.00
Credit Fees * subject to change	250.00 / credit hour	350.00 / credit hour

### Language Requirement

- A Malaysian candidate must have obtained at least a credit in English at Sijil Pelajaran Malaysia level or have passed English courses conducted at the Diploma or Bachelor's Level.
- All international candidates from countries where English is not a medium of instruction must have obtained a minimum score of 550 for TOEFL or Band 6 for IELTS. This requirement is not applicable to candidates applying for admission into the Malay Language Studies.
- A candidate without the requisite minimum score for TOEFL or IELTS may be granted a provisional admission. Such candidate will be required to pass an English Placement Test conducted by the University.
- A candidate who has failed the English Placement Test will be required in the first semester to pass a prescribed English course. Should the candidate fail to obtain the prescribed minimum grade, the University may allow him to repeat the prescribed English course in the second semester.
- A candidate who fails after the second attempt will have his candidature suspended until he passes the English course before being allowed to continue with his Masters programme.

### Application For Admission

Please apply online via <http://www.sgs.upm.edu.my> and send your application supporting documents to the address below:

Dean  
School of Graduate Studies  
Universiti Putra Malaysia  
Zon 4, Off Jalan Stadium  
43400 UPM Serdang  
Selangor Darul Ehsan  
Malaysia

Tel. : (603) 8946 4218/4223/4228  
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Website : <http://www.sgs.upm.edu.my>