Admission Requirements

i. Bachelor in the field of Engineering or Engineering Technology with a CGPA of 2.750 or;
ii. Bachelor in the field of Non-Engineering or Non-Engineering Technology with a CGPA of 3.000; or
iii. Bachelor in any related field of with a CGPA of 2.500-2.999 with at least 3 years of working experience in relevant field.

Language Requirements

International candidates are required to fulfill English language requirement as follows:

a) 550 for TOEFL Paper-based Test (Academic Version); or
b) Band 6.0 for IELTS (Academic Training); or
c) 79-80 for TOEFL Internet-based Test (Academic Version).

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.

Fees

Fees	Master without thesis	
	Malaysian Student	International Student
Basic Fees (1st semester)	RM 1,250	RM 2,300
Basic Fees (2nd and subsequent semester)	RM 1,000	RM 2,050
Credit Fees * subject to change	RM 250 / credit	RM 400 / credit

APPLICATION

Please apply online via:

http://sgsportal.upm.edu.my:8080/sgsportal
www.sgs.upm.edu.my/prospective_students-2964

For further information, please contact :

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MASTER OF EMERGENCY RESPONSE AND PLANNING

Department of Biological and Agricultural Engineering
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INTRODUCTION

This programme is designed for planning and responding to emergencies in various fields. The core courses within the programme stress on the principles and concepts in the emergency management cycle and consider technological advancement in facing emergency situations. Graduates from this programme is expected to be equipped with the tools and knowledge required for evaluating and preparing strategies at all levels of emergency response and planning.

PROGRAMME REQUIREMENTS

Credit Requirements for Graduation
Students enrolling under this programme must fulfill 40 credits of courses to graduate. The credit distributions for compulsory courses, elective courses and project are as follows:

- Compulsory Courses 25 credits
- Elective Courses 9 credits
- Dissertation 6 credits

Compulsory Courses
Students must take all the listed compulsory courses;

EAB5100	Research Methodology	3 credits
EAB5310	Natural Resources Conservation	3 credits
EAB5403	Disaster Recovery and Contingency Plan	3 credits
EAB5404	Emergency Response and Planning Network	3 credits
EAB5407	Incident and Crisis Management	3 credits
EAB5411	Emergency Risk Management	3 credits
EAB5412	Information Engineering	3 credits
EAB5977	Independent Study	1 credits
EAB5988	Dissertation	6 credits
EMM5201	Fire Safety Engineering and Regulations	3 credits

Note : EAB5988 - Dissertation is carried out over two semesters

Elective Courses
Students must take only two elective courses (3 credits) out of the listed

EAB5302	Building Services	3 credits
EAB5401	Hazard, Risk and Ethics	3 credits
EAB5405	Disaster Forecasting	3 credits
EAB5408	Medical Response for Disaster	3 credits
EAB5421	Forensic Science	3 credits
EAB5422	Public Safety and Security	3 credits
KOM5327	Crisis Communication	3 credits

Course Synopsis

EAB5100 | Research Methodology | 3 Credits
This course covers best practices in research such as research methodology, design and ethics as well as academic writing and oral presentations.

EAB5302 | Building Services | 3 Credits
This course covers topics related to various building services, ventilation systems, support systems for water supply and electricity, fire service and drainage. Emphasis is given on the relationship between environmental factors and building services, the evaluation on the effectiveness of building services and the identification of the need for repair of building services.

EAB5310 | Natural Resources Conservation | 3 Credits
The subject will cover the cause and effect of natural phenomena that is at risk of becoming a hazard and disaster to human lives, including the effect of climate change. Emphasis is given on acts related to natural resource conservation, prevention methods by technical means such as forest conservation, sustainable conservation system and post-disaster debris management.

EAB5401 | Hazard, Risk and Ethics | 3 Credits
This course covers the relationship between hazards, risks and ethics. Emphasis is given on the measurement, analyses and comparisons between various types of hazard, risks associated with hazards, and the aspect of ethics and efficiency in facing and responding to risks. This course also covers the topic of occupational hazards and risks.

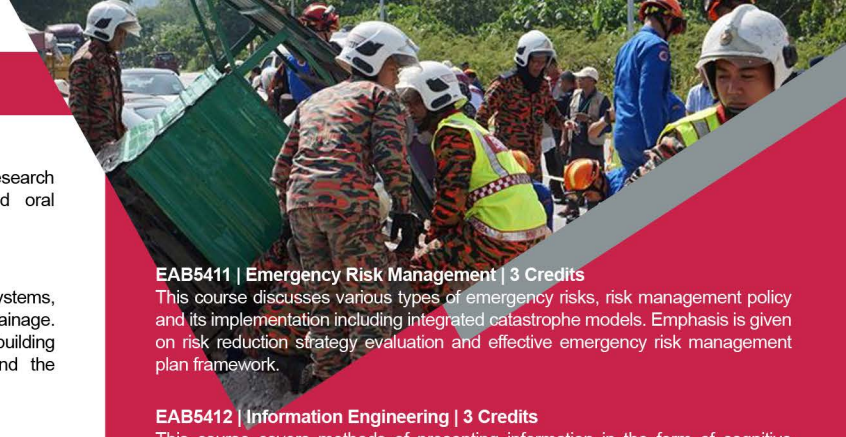
EAB5403 | Disaster Recovery and Contingency Plan | 3 Credits
This course covers various types of disaster and their impacts. Emphasis is given on the measurement of the effects of disasters, and the preparation of contingency plans during critical time, prevention plans through the database application as well as recovery plans suitable for human needs.

EAB5404 | Emergency Response and Planning Network | 3 Credits
This course covers the concept of organizational network within the emergency command systems of multiple agencies. Emphasis is given on organizing emergency command systems and communication for evacuation plan.

EAB5405 | Disaster Forecasting | 3 Credits
This course discusses the application of ICT tools and GIS science (Geographical Information System and Remote Sensing) for forecasting natural and man-made disasters. This will cover the comparisons and analysis between various types of susceptibility, hazard, vulnerability and risk associated with disasters. Emphasis will be given on the concept of application and techniques such as spatial model development for a particular hazard prediction, multi criteria evaluation, statistical and datamining approaches.

EAB5407 | Incident and Crisis Management | 3 Credits
This course covers the concept of incident and crisis management. Emphasis is given on solving problems involving factors that leading to a crisis, stages of crisis, and methods of crisis control, as well as forming a team to execute a crisis management plan.

EAB5408 | Medical Response for Disaster | 3 Credits
This course covers medical operation for disasters and its components, the role of emergency medical team, as well as key issues related to medical assistance during disaster. Emphasis is given on the evaluation of emergency medical operation for natural and man-made disasters.



EAB5411 | Emergency Risk Management | 3 Credits
This course discusses various types of emergency risks, risk management policy and its implementation including integrated catastrophe models. Emphasis is given on risk reduction strategy evaluation and effective emergency risk management plan framework.

EAB5412 | Information Engineering | 3 Credits
This course covers methods of presenting information in the form of cognitive models, geospatial information engineering and virtual reality exercises. Emphasis is given on concepts related to information engineering management and information management techniques, as well as their importance in managing disasters.

EAB5421 | Forensic Science | 3 Credits
This course covers the utilization of forensic techniques for investigating disasters, industrial accidents and fire risks by analyzing physical evidence. The witness interview technique is also included. Emphasis is given on evaluating the need for forensic investigation of an incident, identifying the cause of a disaster and organizing a forensic investigation procedure.

EAB5422 | Public Safety and Security | 3 Credits
This course discusses public safety and security management system. Emphasis is given on key issues related to public and national security, the effectiveness of crisis response mechanism, disaster management, as well as the concept of total defense.

EAB5977 | Independent Study | 1 Credits
This course deals with selected innovation and engineering design fields according to current development. The studies will be based on topics that are determined by the appointed lecturer. The course emphasises knowledge seeking pertaining to the topic and producing technical report in terms of writing and oral: individually and/or in group.

EMM5201 | Fire Safety Engineering and Regulations | 3 Credits
This course covers basic principles of fire safety, and active and passive fire protection systems. Emphasis is given on Uniform Building by Law 1984 and the Fire Services Act 341, 2006 and other Code of Practice (COP), the evaluation on fire safety systems and performance based fire safety system.

KOM5327 | Crisis Communication | 3 Credits
This course covers concepts of crisis, crisis management, and crisis communication; crisis management approaches and crisis communication theory; steps in crisis prevention, preparation, recognition, containment and recovery; Planning crisis communications plan for managing organizational crisis.

EAB5988 | Dissertation | 6 Credits
This course involves a research or study by a student on a specific topic. It covers literature review, methodology, data collection and analysis under a supervision of a lecturer. A proposal report needs to be prepared at the beginning of the study. At the end of the project, the student will submit a complete dissertation and research output for evaluation. The student is also required to present the findings of the study to a panel of assessors.