



**UPM PUTRA**  
UNIVERSITI PUTRA MALAYSIA  
PERTANIAN UNTUK RAKYAT

**FAKULTI  
KEJURUTERAAN**  
FACULTY OF ENGINEERING  
فاكولتي كجوروتراين

**Master Programme by Coursework**  
Faculty of Engineering

# Master in Emergency Response and Planning

Scan Here for More Info

**Dr. Nur 'Atirah Muhadi**

+03- 9769 4665



[nuratirah@upm.edu.my](mailto:nuratirah@upm.edu.my)

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

Agriculture • Innovation • Life  
**With Knowledge We Serve**



# Introduction

Master in Emergency Response and Planning is designed for planning and responding to emergencies across various sectors. The core courses within the programme stress the principles and concepts of the emergency management cycle and consider technological advancements in addressing emergency situations. Through comprehensive coursework and practical field experience, students develop the skills needed to assess risks, plan strategically, and lead coordinated responses during crises. Graduates will be equipped with the knowledge and competencies required to operate confidently at all levels of emergency planning and response.

## Admission Requirements

1. Bachelor in the field of Engineering Technology with a CGPA of 2.75 or;
2. Bachelor in the field of Non- Engineering Technology with a CGPA of 3.00; or
3. Bachelor in any related field of with a CGPA of 2.50-2.99 with at least 3 years of working experience in relevant field.

## Language Requirements

English Language Requirement:

- o TOEFL (Internet-based Test): minimum 65 – 78; or
- o IELTS (Academic Training): minimum Band 6.0; or
- o MUET: minimum Band 4 (211 – 257); or
- o PTE: minimum 59 – 62; or
- o CIEP: minimum 109 (PTEST 110); or
- o CAMBRIDGE LINGUASKILL AT CALC UPM: minimum 169 – 175.

**Note: Candidates who do not meet the minimum score may receive provisional admission and must pass the University's English Placement Test.**

## 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 dissertation as follows:

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

**Note: EAB5988 - Dissertation is carried out over two consecutive semesters.**

## Course Synopsis

### Compulsory Courses

#### 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.

#### EAB5310 | Natural Resources Conservation | 3 credits

This course explores natural phenomena and climate change that cause hazards and disasters, emphasizing conservation laws and technical prevention methods.

#### EAB5401 | Hazard, Risk and Ethics | 3 credits

This course explores the link between hazards, risks, and ethics, focusing on hazard evaluation and ethical risk management.

#### EAB5403 | Disaster Recovery and Contingency Plan | 3 credits

This course analyzes various disasters and their impacts, emphasizing the development of contingency and recovery plans.

#### EAB5404 | Emergency Response and Planning Network | 3 credits

This course examines multi-agency emergency command systems, emphasizing coordination, communication, and effective evacuation planning.

#### EAB5407 | Incident and Crisis Management | 3 credits

This course examines incident and crisis management, emphasizing problem-solving, control strategies, and team-based plan implementation.

#### EAB5411 | Emergency Risk Management | 3 credits

This course explores emergency risks and management policies, emphasizing risk reduction strategies and effective management frameworks.

#### EAB5412 | Information Engineering | 3 credits

This course covers innovative information system management for decision-making and problem-solving in disaster management, emphasizing effective information techniques.

#### EAB5977 | Independent Study | 1 credit

This course focuses on evaluating literature in emergency response and planning, emphasizing the identification of research problems from incident and disaster reports.

#### EAB5988 | Dissertation | 6 credits

This course covers key research components, emphasizing methodology, data analysis, and ethical scientific writing.

### Elective Courses

Student must take at least three (3) elective courses out of the listed courses below

#### EAB5302 | Building Services | 3 credits

This course examines building services and their environmental relationships, focusing on performance evaluation and maintenance.

#### EAB5405 | Disaster Forecasting | 3 credits

This course covers the use of ICT, GIS, and Remote Sensing for disaster forecasting, emphasizing spatial modeling, multi-criteria evaluation, and data analysis techniques.

#### EAB5408 | Medical Response for Disaster | 3 credits

This course covers disaster medical operations, focusing on emergency medical team roles, key issues, and evaluation of disaster medical responses.

#### EAB5421 | Forensic Science | 3 credits

This course covers the application of forensic techniques in investigating disasters, industrial accidents, and fire incidents through physical evidence analysis, with emphasis on identifying causes and conducting forensic investigation procedures.

#### EAB5413 | Subsurface-Related Potential Disaster | 3 credits

This course covers land and water management for disaster risk reduction, emphasizing forensic techniques and best practices in restoration.

#### EAB5415 | Climate Change and Disaster Risk Management | 3 credits

This course explores climate change impacts, emphasizing disaster management, mitigation, modeling techniques, and risk reduction using modern technologies.

#### EAB5414 | Hazardous Materials Management | 3 credits

This course covers hazardous materials and their impacts, emphasizing safe handling, risk assessment, and industrial disaster management.

#### EMM5201 | Fire Safety Engineering and Regulations | 3 credits

This course covers fire safety principles and protection systems, emphasizing relevant laws, codes, and performance-based system evaluation.

### Fees

### Master Without Thesis

Fees	Master Without Thesis	
	Malaysian Student	International Student
Basic Fees (1 <sup>st</sup> semester)	RM 1,350	RM 2,400
Basic Fees (2 <sup>nd</sup> and subsequent semester)	RM 1,100	RM 2,150
Credit Fees – Subject to change	RM 370 / credit	RM 450 / credit