

**Master of Science • Disaster Management and Environmental Impact DAMAGE
Degree Plan**

FIRST YEAR 2021/2022 • SEMESTER 1

<i>MODULE 1 • Risk Identification</i>	<i>MODULE 2 • Risk Assessment</i>	<i>MODULE 3 • Disaster Modeling</i>
Bioterrorism Environmental Assessment Resilience of Critical Infrastructure Principles of Key Concepts of Disaster Risk reduction	Earthquake Geohazard and Geospatial sciences Major industrial incidents: Boilover BLEVE UVCE	Accidental Modeling Response and Mitigation
5 credits	4 credits	6 credits

<i>MODULE 4 • Hazard Assessment</i>	<i>MODULE 5 • Crisis Management</i>	<i>MODULE 6 • Process safety and Chemical Hazards</i>
Atmospheric Dispersion Forest fire • command and control, ERCC Risk Analysis Method/Lessons Learnt Flash Flood Computer vision	Cybersecurity Critical Infrastructure Protection CBRNE Threat Resilience engineering	Crisis in Oil & Gas Industry Inherently Safer Design
4 credits	5 credits	6 credits

FIRST YEAR 2021/2022 • SEMESTER 2

<i>MODULE 7 • Preparedness</i>	<i>MODULE 8 • Disaster Management</i>	<i>MODULE 9 • Disaster Resilience</i>	<i>MODULE 10 • Disaster and Human Factors</i>
Logical Logistics in a Disaster Response Context Humanitarian Emergencies Response to a Health Crisis	Epidemiologic Measures and Outbreak Investigation Ethical Issues Water Crisis Management	Risk Prevention Flood and Human Factor Disaster Management, Large- scale Operations	Disaster Resilience and Societal Impact Human Factor and Disaster Resilience
4 credits	4 credits	3 credits	5 credits

<i>MODULE 11 • Disaster Medicine</i>	<i>MODULE 12 • Health Engineering</i>	<i>MODULE 13 • Data Management and Decision</i>	<i>MODULE 14 • Intercultural Management 1</i>
Serious Games Disaster Medicine Key principles	Humanitarian Actions and Quality Management Healthcare Preparedness and Response	Data Preparedness and Decision Making Communication Strategies	Social Media International resources
3 credits	3 credits	4 credits	2 credits

MODULE 15 • Internship

A 6 weeks in a company or laboratory

2 credits

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SECOND YEAR 2022/2023 • SEMESTER 1

<i>MODULE 16 • System Engineering</i>	<i>MODULE 17 • Intercultural Management 2</i>	<i>MODULE 18 • Oil and Gas Management 1</i>	<i>MODULE 19 • Oil and Gas Management 2</i>
Organizations modeling Uncertainty Management Emergency Communication Systems	Intercultural Concepts International Management	Oil & Gas Exploration and Production Main Characteristics of Oil and Gas Projects Work Breakdown Structure	Safety Management Concepts Safety Management System Safety Engineering
8 credits	7 credits	7 credits	8 credits

SECOND YEAR 2022/2023 • SEMESTER 2

MODULE 20 • Internship

A 4 to 6 months in a company or laboratory

30 credits

Brief observations regarding the program:

- A credit is about 8-12 hours.
- All courses are mandatory
- The order of classes can change based on the availability of professors
- Free French courses are offered once a week for the first year.
- A case study is included for every two modules.

Non contractual document-January 2022