

Master of Science • Disaster Management and Environmental Impact Degree Plan

First Year 2019/2020 • Semester 1

MODULE 1 • Risk Identification	MODULE 2 • Risk Assessment	MODULE 3 • Disaster Modeling
Bioterrorism Principles of Environmental Assessment Resilience of Critical Infrastructure Principles of Key Concepts	Earthquake Geohazard and Geospatial sciences Major industrial incidents: Boilover BLEVE UVCE	Accidental Modeling Response and Mitigation
5 credits	4 credits	6 credits
MODULE 4 • Hazard Assessment	MODULE 5 • Crisis Management	MODULE 6 • Process safety and Chemical Hazards
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

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MODULE 7 • Preparedness	MODULE 8 • Disaster Management	MODULE 9 • Disaster Resilience	MODULE 10 • Disaster and Human Factors
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	4 credits	5 credits
MODULE 11 • Disaster Medicine	MODULE 12 • Health Engineering	MODULE 13 • Data Management and Decision	MODULE 14 • Intercultural Management 1
Serious Games Disaster Medicine Key principles	Humanitarian Actions and Quality Management	Data Preparedness and Decision Making Communication Strategies	Social Media International resources
3 credits	3 credits	4 credits	3 credits

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MODULE 15 • System Engineering	MODULE 16 • Intercultural Management 2	MODULE 17 • Oil and Gas Management 1	MODULE 18 • Oil and Gas Management 2
Organizations modeling Uncertainty Management Emergency Communication Systems	Intercultural Concepts International Management Healthcare Preparedness and Response	Oil & Gas Exploration and Production Main Characteristics of Oil and Gas Projects Work Breakdown Structure	Safety Management Concepts Safety Management System Safety Engineering
7 credits	8 credits	7 credits	8 credits

Second Year 2020/2021 • Semester 2

MODULE 19 • Internship 6 months in a company or laboratory

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 each semester
- Non contractual informations – March 2020