

MASTER IN ROAD SAFETY MANAGEMENT (MANSER)

Main Language of Instruction:

French English Arabic

Campus Where The Program Is Offered: CST

OBJECTIVES

The Master in Road Safety Management (MANSER) aims to train students capable of the following:

- Mastering real multidisciplinary expertise in the field of road safety management and being called upon to work in national, international and specialized organizations.
- Possessing the capacity to implement a policy of actions aimed at tackling the root causes of road insecurity.
- Pursuing higher education.

PROGRAM LEARNING OUTCOMES (COMPETENCIES)

- Identify, formulate and resolve complex problems around road safety by applying the principles of engineering, psychology, economics and communication.
- Analyze road risks and implement strategies to mitigate them.
- Manage traffic by mastering the planning and implementation of efficient traffic systems to improve fluidity and road safety.
- Identify emerging technologies such as driver assistance systems, intelligent signaling, etc.
- Formulate and implement regulations related to road safety to effectively enforce them.
- Plan, coordinate and implement initiatives to improve road safety.
- Analyze and evaluate public policies and offer recommendations to reinforce road safety.
- Develop campaigns to educate drivers, pedestrians and cyclists on road safety.
- Identify and prepare answers to emergency situations on the roads, such as major accidents.
- Include sustainable practices in road safety planning and management.

ADMISSION REQUIREMENTS

Candidates are selected based on their application file. Admission is granted to the first semester of the Master for engineering graduates and Master 1 holders.

COURSES/CREDITS GRANTED BY EQUIVALENCE

Students admitted to this Master's program must hold at least a Baccalaureate +4. Accordingly, 60 credits are granted by equivalence, corresponding to the first year of the Master's program.

PROGRAM REQUIREMENTS

120 credits: upon completion of the program, students must have earned a total of 120 credits, including 60 credits granted by equivalence and 60 credits completed during the program.

Required Courses (60 Cr.)

Behavior of Road Users (2 Cr.). Economics of Road Safety (2 Cr.). Road Environment and Traffic Management (2 Cr.). Epidemiology and Statistics Applied to Road Safety (2 Cr.). Management of Transport Fleet (2 Cr.). Management of Road Accident Scenes (2 Cr.). Introduction to Intelligent Transport Systems, New Generation of Vehicles and Road Safety (2 Cr.). Laws, Codes and Roles of Road Safety Forces (2 Cr.). Research Thesis on Road Safety (30 Cr.). Mobility and Road Safety in Urban Areas (2 Cr.). Road Safety Policy and Plans (2 Cr.). Road Safety Integration Seminar (2 Cr.). Road Safety Practical Internship (2 Cr.). ISO 39001 Vehicle Safety and Road Safety Management System (2 Cr.). Information Systems - Database (2 Cr.). Communication Techniques and Road Safety Awareness (2 Cr.).

SUGGESTED STUDY PLAN

Semester 1

Code	Course Name	Credits
433SR71M1	Behavior of Road Users	2
433SR73M1	Road Environment and Traffic Management	2
433SR72M1	Epidemiology and Statistics Applied to Road Safety	2
433SR76M1	Management of Transport Fleet	2
433SR77M1	Management of Road Accident Scenes	2
433SR74M1	Introduction to Intelligent Transport Systems, New Generation of Vehicles and Road Safety	2
433SR80M1	Laws, Codes and Roles of Road Safety Forces	2
433SR79M1	Mobility and Road Safety in Urban Areas	2
433SR75M1	Road Safety Policy and Plans	2
433SR81M1	ISO 39001 Vehicle Safety and Road Safety Management System	2
433SR22M2	Information Systems - Database	2
433SR70M1	Communication Techniques and Road Safety Awareness	2
Total		24

Semester 2

Code	Course Name	Credits
433SR82M2	Economics of Road Safety	2
433SR85M2	Research Thesis on Road Safety	30
433SR26M2	Road Safety Integration Seminar	2
433SR98M2	Road Safety Practical Internship	2
Total		36

COURSE DESCRIPTION

433SR71M1 Behavior of Road Users 2 Cr.

This course covers the principles and practices of psychology. It aims to study the different facets of the behavior of individuals on the roads, with emphasis on road safety, regulations and psychological factors. The course studies the psychological variables linked to the behavior of road users and the performance of vehicle drivers.

433SR73M1 Road Environment and Traffic Management 2 Cr.

This course presents the components of the road environment and their impact on traffic. It analyzes the basic principles of traffic management and road infrastructure planning, examines technological innovations related to traffic management, assesses environmental and societal factors influencing road design, and explains the application of modeling techniques to predict and improve road traffic.

433SR72M1 Epidemiology and Statistics Applied to Road Safety 2 Cr.

This course defines epidemiological concepts applied to road safety, including incidence, prevalence and health determinants. It explains and trains in the collection and analysis of statistical data from sources such as accident reports, field surveys and government databases. The course also analyzes road safety epidemiological patterns to assess risk factors, analyze temporal and spatial trends, and understand patterns of road accident injuries.

433SR76M1	Management of Transport Fleet	2 Cr.
This course aims to develop skills for implementing plans and programs in order to manage the safety of transport fleets involving all the components concerned. This discipline covers route planning, vehicle maintenance, driver management and the monitoring of associated costs.		
433SR77M1	Management of Road Accident Scenes	2 Cr.
This course aims to explore the management of road accident scenes by examining the protocols, best practices and skills needed to ensure effective intervention in these critical situations.		
433SR74M1	Introduction to Intelligent Transport Systems, New Generation of Vehicles and Road Safety	2 Cr.
This course introduces students to the fundamental concepts of intelligent transport systems, new generation of vehicles and their impact on road safety.		
433SR80M1	Laws, Codes and Roles of Road Safety Forces	2 Cr.
This course aims to provide an in-depth understanding of the laws, codes and essential roles of road safety forces, which are fundamental elements in ensuring safety on the roads. The goal is to gain a complete perspective on how road safety forces contribute to traffic management, accident prevention and enforcement of driving rules.		
433SR79M1	Mobility and Road Safety in Urban Areas	2 Cr.
This course aims to explore the dynamics of mobility and road safety in urban areas. With a focus on specific challenges encountered in urban environments, students will gain rigorous knowledge on traffic management strategies, infrastructure design and the best practices to ensure efficient and safe mobility in urban environments.		
433SR75M1	Road Safety Policy and Plans	2 Cr.
This course provides an in-depth examination of road safety policies and strategic plans. Focusing on government initiatives and long-term approaches, it aims to develop a comprehensive understanding of measures designed to reduce accidents, promote responsible driving, and enhance transportation infrastructure.		
433SR81M1	ISO 39001 Vehicle Safety and Road Safety Management System	2 Cr.
This course focuses on the practical application of the ISO 39001 standard relating to road safety management systems. The objective is to explore the principles, methods and best practices for establishing an effective vehicle safety management system, by highlighting the prevention of accidents, the reduction of risks and the promotion of road safety.		
433SR22M2	Information Systems - Database	2 Cr.
This course introduces the fundamental principles of information systems with particular emphasis on the design, management and use of databases. Students will explore theoretical concepts and practical applications of databases in the context of modern information systems.		
433SR70M1	Communication Techniques and Road Safety Awareness	2 Cr.
This course explores communication techniques in order to increase awareness of and promote road safety. Students will gain practical skills in designing and implementing awareness campaigns, communicating key messages and mobilizing the community to encourage responsible behavior on the road.		
433SR82M2	Economics of Road Safety	2 Cr.
This course explores the economic aspects of road safety, with emphasis on accident cost analysis, investments in		

prevention, and economic strategies aimed at improving road safety. Students will gain an in-depth understanding of the financial implications of road safety and the economic approaches to reduce crashes.

433SR85M2	Research Thesis on Road Safety	30 Cr.
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This course covers the application of research approaches and methods, as well as thesis writing techniques.

433SR26M2	Road Safety Integration Seminar	2 Cr.
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This seminar aims to bring together students around key themes in the field, thus promoting a thorough understanding of the issues, best practices and current challenges in road safety. It also offers a platform for exchange, collaboration and networking between actors involved in this field.

433SR98M2	Road Safety Practical Internship	2 Cr.
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This internship aims to allow students to apply the theoretical knowledge acquired during their training in a real road safety environment. Interns will have the opportunity to work on concrete projects, collaborate with professionals in the sector and gain a significant practical experience in the road safety field.