



ME7: GROUND VEHICLES

Track 7

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ME7: Skills you will acquire...

After graduating, you will have developed numerous **advanced technical skills**. For example, you will be able to:

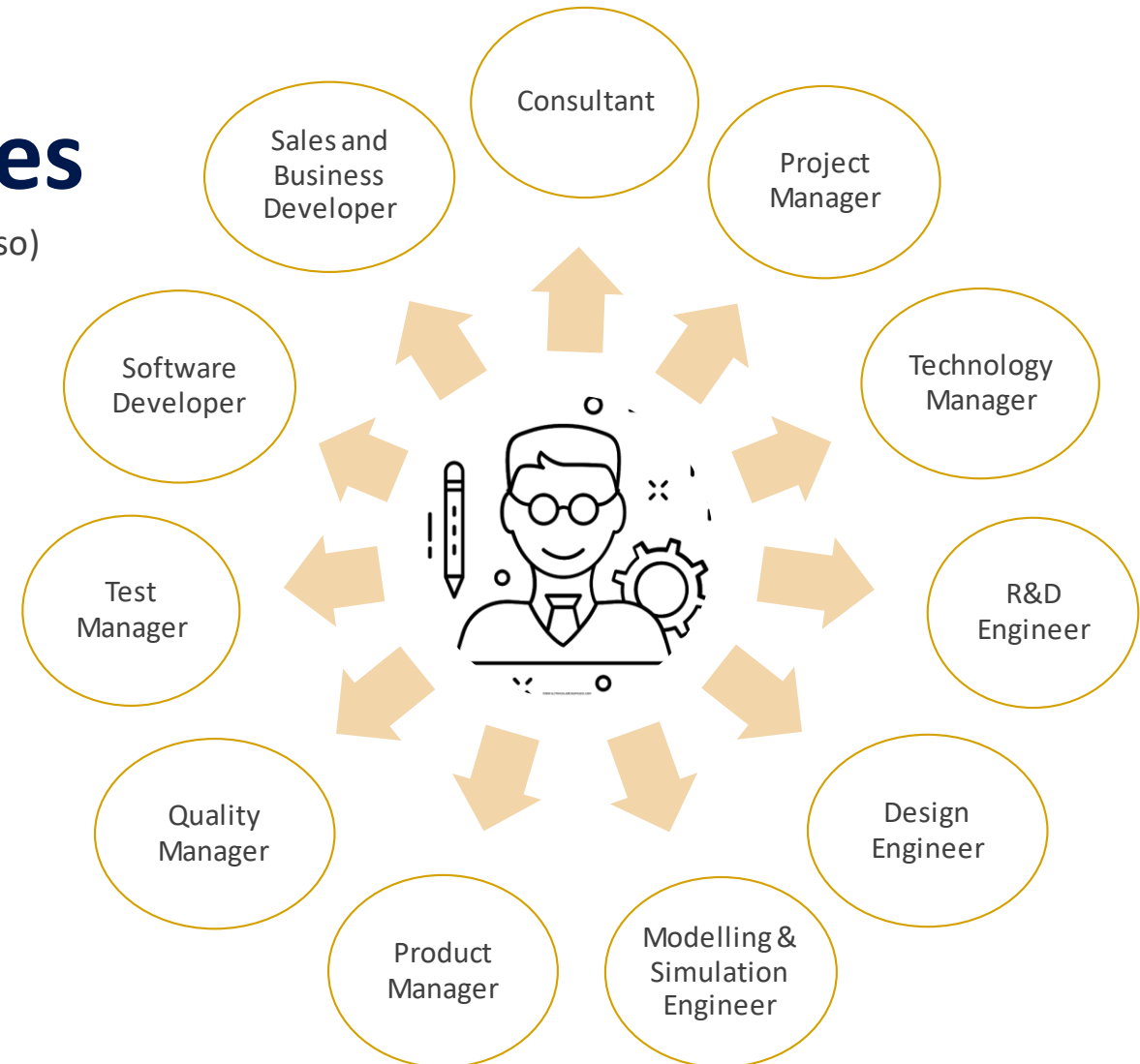
- **Model and simulate vehicles and vehicle systems;**
- **Design electric vehicles and their components;**
- **Perform optimal design of vehicle systems and components for lightweight and durability;**
- **Run driving simulator to develop Human-Machine Interface systems;**
- **Use numerical methods such as Multi-body and FEM for complex mechanical systems;**
- **Perform and coordinate measures and testing on vehicle systems and components.**



ME7: Career Opportunities

After graduating, you will be able to pursue your career (not only, but also) in:

- **Automotive engineering;**
- **Railway engineering;**
- **Automated, Autonomous and Connected vehicle eng.**
- **Motorsport engineering;**
- **Modelling and Simulation;**
- **Industry 4.0 digital transformation;**
- **Intelligent Transportation Systems (ITS);**
- **Big Data analytics;**
- **Artificial Intelligence;**
- **R&D, testing**
- **Consulting.**



ME7: Track Mandatory and Elective Courses

38 ECTS

Track Mandatory Courses
20 ECTS

Track Elective Courses
18 ECTS

COURSE TITLE	SEM	ECTS
Vehicle Dynamics and Control A	1	10
Ground Vehicle Engineering A	2	10
Track Elective Courses I		6
Hybrid and Electric Vehicle	1	6
Mechanical Systems Reliability	1	6
Vehicle Design (Optimal Design)	2	6
Track Elective Courses II (2 out of 24 courses available)		12
...	1-2	6
...	1-2	6
...	1-2	6
...	1-2	6
Max. 1 course to be chosen from Group OPEN	1-2	6

For further information click here:

https://www8.ceda.polimi.it/manifesti/manifesti/controller/extra/RegolamentoPublic.do?jaf_currenWFID=main&EVN_DEFAULT=evento&aa=2020&k_corso_la=483&lang=EN

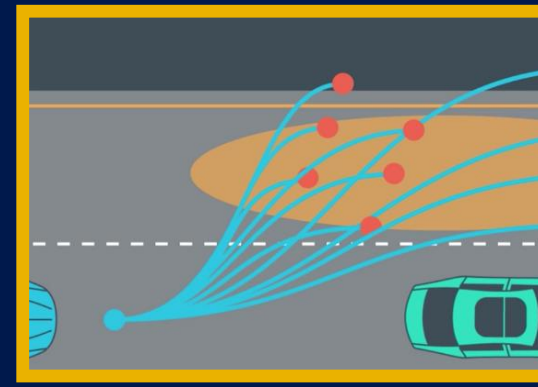
ME7: Examples of Master's Thesis



Indoor testing of electric vehicles



Design and testing of F1 brakes



Optimal trajectory for autonomous driving



Control of vehicle dynamics through torque vectoring

ME7: Partners

Universities & Research Centres



Companies & Organisations

