

# CABLE SYSTEMS FOR THE ENERGY TRANSITION

II Level Master Program



Palermo

I Edition | Nov 2026 – Oct 2027



# UNIVERSITÀ DEGLI STUDI DI PALERMO

The University of Palermo, founded in 1806, is **listed among the mega state universities in Italy** with over 40,000 students enrolled. Among students, professors, researchers, and administrative staff, the academic community is composed of almost 50,000 people. The university is a well-established center for teaching, research, and innovation.

The University is structured into multiple departments covering all major fields of knowledge and provides **more than 120-degree programs** across bachelor's and master's levels, as well as PhD courses and specialization programs. UNIPA is deeply rooted in the territory of Sicily and operates not only in Palermo, but also through branch campuses in Agrigento, Caltanissetta, and Trapani, ensuring a broad educational offer and strong regional impact.

The University promotes internationalization through a **wide network of partnerships, student mobility opportunities** and a growing number of courses taught in English, contributing to an increasingly global academic community. With its long academic tradition and its commitment to innovation, the University of Palermo represents a key reference point for higher education and research in the Mediterranean region.



# Prysmian

## ABOUT US

Prysmian is the **global leader in energy and in digital cable solutions**. Headquartered in Milan, Italy and listed on the Borsa Italiana, it was established as an independent business in 2005 but has a history spanning across three centuries.

Prysmian operates in **submarine and underground high voltage energy solutions**, power grid solutions, industrial and construction cables, as well as cables for end use applications, and in digital, fibre optic and telecommunication solutions.

Prysmian is **the world's decarbonisation powerhouse**, leading the way to reduce millions of CO<sub>2</sub> emissions each year, accelerating the electrification of the planet while making world a more connected, safer, and efficient place thanks to its focus on industry leading innovation.

Prysmian is evolving from a cable manufacturer to a world class solutions provider to meet the unprecedented demand and urgency driven by the energy transition and digitalization. **It is always committed to leave the planet, and people, in a better place.**





# Mission

The so-called **Energy Transition is a continuous worldwide development process** that tends to favor electrification of energy networks. As many say, there's "No Transition Without Transmission". These words have been also adopted in Prysmian to underline the **importance of transmission lines** and in particular those employing High Voltage and Extra High Voltage underground and submarine cables.

The main objectives of this Master's program are:

**Develop specific technical and scientific skills** in the field of cable systems throughout their entire life cycle: development, design, construction, and asset management. Develop soft skills needed to operate in a technical environment that is business-oriented, closely tied to customer/supplier relationships, with a strong tendency to innovation and teamwork.

**Develop high-level technical professionals** with a broad and cross-disciplinary vision of cable systems, including business scenarios arising from electrification and energy transition, and with knowledge of the various stakeholders and their roles. Strengthen the theoretical foundations and areas of expertise currently underserved in more traditional professional profiles in the technical areas of the organizations supporting the Master Program itself.

# Site

## University of Palermo

### Department of Engineering

The master's program and teaching activities will be primarily **delivered in-person with occasional lessons delivered from remote** depending on the specific modules. Lessons will be conducted entirely in English, with all teaching materials provided in English.

# Structure

The University Master's program requires a total commitment of 1,500 hours per student, leading to the acquisition of 60 University Educational Credits (ECTS). It will start in November 2026 and run until October 2027, combining

**39 ECTS**

**13 teaching modules**

**18 ECTS**

**Educational visits  
Internships/  
Traineeships**

**3 ECTS**

**Thesis project  
and final examination**

Teaching activities will be **delivered by a mixed faculty** composed of university professors and industry-recognized experts.

Module	Title	Hours	ECTS
1	Background Harmonization	50	5
2	Energy Transition and Cable Systems Context	20	2
3	Professional Skills for Engineering Projects	30	3
4	HVDC Transmission Systems and Grid Integration	30	3
5	Data Management and Cybersecurity for Infrastructure	30	3
6	Materials & Design Principles	50	5
7	Manufacturing, Testing and Qualification of Cable Systems	30	3
8	Installation and Construction of Cable System Projects	30	3
9	Commissioning & Performance Evaluation	20	2
10	Operation, Monitoring & Diagnostics	40	4
11	Maintenance, Repair & Upgrading	20	2
12	Life-Cycle Sustainability and Environmental Impact	20	2
13	BIM Methodology for Cable Systems	20	2
		<b>390</b>	<b>39</b>
<b>Educational visits and Internship</b>			<b>18</b>
<b>Thesis project and final examination</b>			<b>3</b>
			<b>60</b>

# Admission

The Master's program is reserved exclusively for candidates who, at the time of enrolment, hold a Master's Degree in:

- Physics
- Aerospace and Astronautical Engineering
- Chemical Engineering
- Automation Engineering
- Telecommunications Engineering
- Electrical Engineering
- Electronic Engineering
- Energy and Nuclear Engineering
- Management Engineering
- Mechanical Engineering
- Mathematics
- Mathematical-Physical Modelling for Engineering
- Materials Engineering

Equivalent qualifications as well as foreign degrees deemed suitable by the Scientific Committee, are also accepted. Certified English language proficiency at C1 level will be considered a preferential requirement for admission.

**The total number of admitted students ranges between 15 and 20.**





# Scholarship

For all admitted candidate's participation costs for the Master's program will be fully covered by Prysmian. In addition, admitted candidates will be awarded **scholarships of €12.000**, also funded by Prysmian.

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Applications  
must be submitted by  
4th of September 2026.

The selection process consists of three stages:

1. Pre-selection phase conducted by Uni Palermo
2. Written online tests conducted by Prysmian
3. Selection phase conducted by Prysmian

**The Master's program is scheduled to start in November 2026.**



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Prysmian  
Academy