



Universidad Tecnológica
de Pereira

Faculty of Engineering

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MASTER'S DEGREE IN Electrical Engineering

CODE SNIES: 5329

Welcome
TO A WORLD
of endless
EXPERIENCES

To build **the electric** grid of the **future you** need research **and innovation** applied to the **generation, transformation processes** and the use of **electric power**

-Graduate program created by the Resolution No. 3742 of August 20, 1996 issued by the Ministry of National Education.
-Official Registration Renewal for 7 years, according to Resolution No. 5348 of May 10, 2013
-High Quality Accreditation for 6 years, according to Resolution No. 3229 of April 5, 2013.

Through its history, the Master's in Electrical Engineering has gained ground in the academic and business fields due to the excellent level of the alumni, the teacher's dedication and the relevance of the research areas. The alumni are the leaders, who understand the social dynamics and apply the critical sense and research capacity with ethics to interpret the issues where electric power is present so they can develop scientific and technical methods to get it, transform it and use it efficiently. The quality of the Program and the teacher's dedication to research, teaching and social projection, have made it the best Master's Degree in Electrical Engineering of the country since it has its High Quality Accreditation given by the Ministry of National Education (MEN).

CODE SNIES: 5329
OFFICIAL REGISTRATION:
Resolution N° 3229 / April 5 of 2013.

Our Goal

Is to train professionals in research and technological innovation on how to use electrical power more efficiently and how to benefit from it, as the main product of our society's development and the preservation of the environment.

The specific objectives of the program

During the Master's Program the student should be able:

- SOP 1.** To interpret engineering issues related with its areas of emphasis.
- SOP 2.** To critically analyze scientific literature to interpret and solve issues related to the line of research.
- SOP 3.** To wisely use the scientific research method in the development, management and direction of research projects.
- SOP 4.** To develop and use relevant methodologies to solve engineering problems.
- SOP 5.** To identify the ethical, moral and scientific rigor of the research work.
- SOP 6.** To evaluate the impact of engineering scientific solutions in the global context of society.
- SOP 7.** To integrate knowledge from other disciplines related to research carried out in the working areas.
- SOP 8.** To disclose the results of developing investigations in the professional exercise.



Master's Degree in Electrical Engineering



2 Years



Schedule

Full time – Monday to Friday from 2.00 p.m. to 10:00 p.m. and Saturdays from 8:00 a.m. to 12:00 noon.



Number of credits

50



Admisión

By Semesters



6.75 SMMLV (Minimum Monthly Legal Wage in Colombian Pesos)

Our Mission

Is to train highly qualified professionals, leaders in the electric sector who understand the dynamics of the power sector and use research to solve specific problems.

Our Vision

Is to be a well-known program nation and worldwide. We want to provide excellent professional researchers to the service of society, ethical, who are able to disclose their knowledge with a high commitment in solving problems that contribute with the socio-economic development of the country.

Career Profile

The Master's Program aim is to develop the following student's learning achievements (SLA):

SLA1. To develop and apply steady and transitory state analysis and planning methodologies for power systems in the fields of electric power generation, transmission and distribution.

SLA2. To make proposals of technological innovation that optimize the use of electric power and promote the use of alternative energies.

SLA3. To develop and apply methodologies for control, measurement, protection systems and automation processes.

SLA4. To develop and apply methodologies for measuring instruments of electrical and electronic variables and electrical installations.

SLA5. To develop and optimize maintenance activities keeping in optimal conditions systems related to electric power.

SLA6. To modify and implement new capabilities and applications for instruments of biomedical field.

SLA7. To design and develop electronic and computer systems oriented towards solving instrumental problems in the biological field.

SLA8. To solve problems in different areas of engineering, students have to deepen the knowledge of various optimization methodologies, for implementation.

SLA9. To solve problems in different areas of engineering, students must consider the economic, environmental, regulatory, ethical, social and innovative aspects.

SLA10. To implement strategies that promote research supported by ICTs, that enable autonomous action to solve engineering problems and possible solutions.

SLA11. To use critical thinking to enable judgments, allowing decisions to be taken.

SLA12. To acknowledge ethical and scientific rigor of research.

SLA13. To incorporate interdisciplinary knowledge to research.

What you need to join to the program

Our Master's Program is intended for professionals in the field of Electrical Engineering or of related areas, who do well on research in any research group that support the Program. Students should have good speech and writing skills, be able to work as a team, be good in Math and Science and in problem solving.

Teachers

We have a highly qualified group of 26 teachers with great academic excellence, 21 hold a Doctorate Degree and 5 a Master's Degree, which guarantees the quality of our program.

To know more about our teaching staff, visit our web page:
<https://ingenierias.utp.edu.co/maestrias/ingenieria-electrica/presentacion-del-programa.html>

Syllabus

Our syllabus includes seven elective courses, three research seminars and thesis work.



Live the UTP!

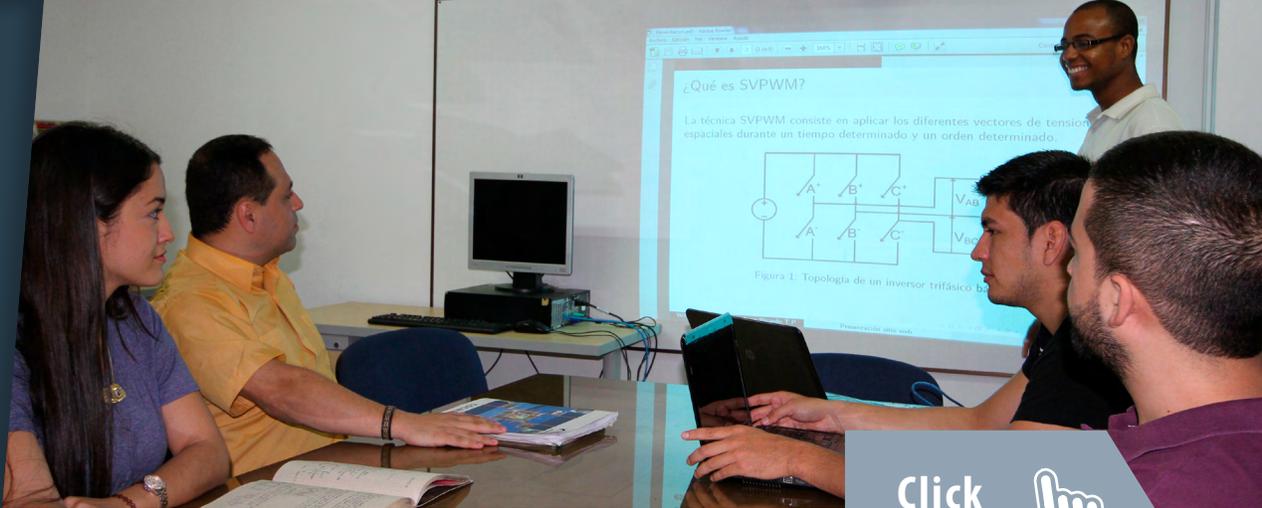
SYLLABUS

SEMESTER	Course Code	Courses	Number of total hours	Number of Credits
1	47100	Elective I	48	4
	47200	Elective II	48	4
	47300	Elective III	48	4
2	47400	Elective IV	48	4
	47500	Elective V	48	4
	47321	Research Seminar I	48	4
3	47600	Elective VI	48	4
	47700	Elective VII	48	4
	47331	Research Seminar II	48	4
4	470114	Research Seminar III	48	4
	472415	Thesis Work	48	10

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Official Registration 3229 / April 5 of 2013

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Sign up NOW!

Click
HERE



For more information about the program

Faculty of Engineering - UTP
Building N° 15 Block C Office number 15C - 104
Address: Cra. 27 10-01 Los Álamos - Pereira-Risaralda-Colombia
Program's web page: <https://ingenierias.utp.edu.co/maestrias/ingenieria-electrica/presentacion-del-programa.html>
Email: mie@utp.edu.co
Contact us: (57) (6)313 7154

Registration

Admissions, Registration and Academic Record's Office - Building 3 – UTP
Email: inscripcion@utp.edu.co
Tel: (57) (6) 313 71 39 - Switchboard (57) (6) 313 73 00
Exts: 7176 - 7177 - 7178 - 7179 - 7182 - 7183
UTP Address: Cra. 27 N° 10 - 02 Los Álamos - Pereira - Risaralda - Colombia

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Resolution 12220 of 2016

Information FASUT

Do you need financing to pay your tuition?

Visit: www.utp.edu.co/fasut
Email: fasututp@utp.edu.co - icetex@utp.edu.co
Tels: (57) (6) 321 0029 - 313 7405

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CRIE - UTP - Tels: 313 7140