DOCTORADOS . UDP . CL

Engineering Sciences

udp UNIVERSIDAD DIEGO PORTALES

Comisión Nacional de Acreditación CNA-Chile

Universidad Diego Portales acreditada en nivel de **Excelencia** en todas las áreas

Gestión Institucional, Docencia de Pregrado, Docencia de Posgrado, Investigación y Vinculación con el Medio. Hasta noviembre de 2029.

INTRODUCTION

The Doctoral Program in Engineering Sciences aims to train researchers with the ability to develop, apply, and transfer advanced knowledge in engineering sciences through scientific and technological research.

The Doctor in Engineering Sciences from UDP will be a highly skilled researcher and expert in their field of specialization, capable of conducting original, autonomous, and rigorous research in the field of engineering sciences, within an ethical framework and integrating scientific and technological knowledge.

PROGRAM OBJECTIVES

1. To prepare researchers with the ability to develop, apply, and transfer advanced knowledge in engineering sciences through scientific and technological research.

2. To contribute to the advancement of knowledge in engineering sciences through research and the application of methodologies and technologies that address needs and challenges in the fields of science, technology, knowledge, and innovation (STKI).

3. To promote a multidisciplinary approach to doctoral training, enabling candidates to apply the knowledge acquired in academic and/or industrial contexts.

4. To foster an academic culture oriented toward rigorous scientific production, collaborative work, and participation in national and international research networks.

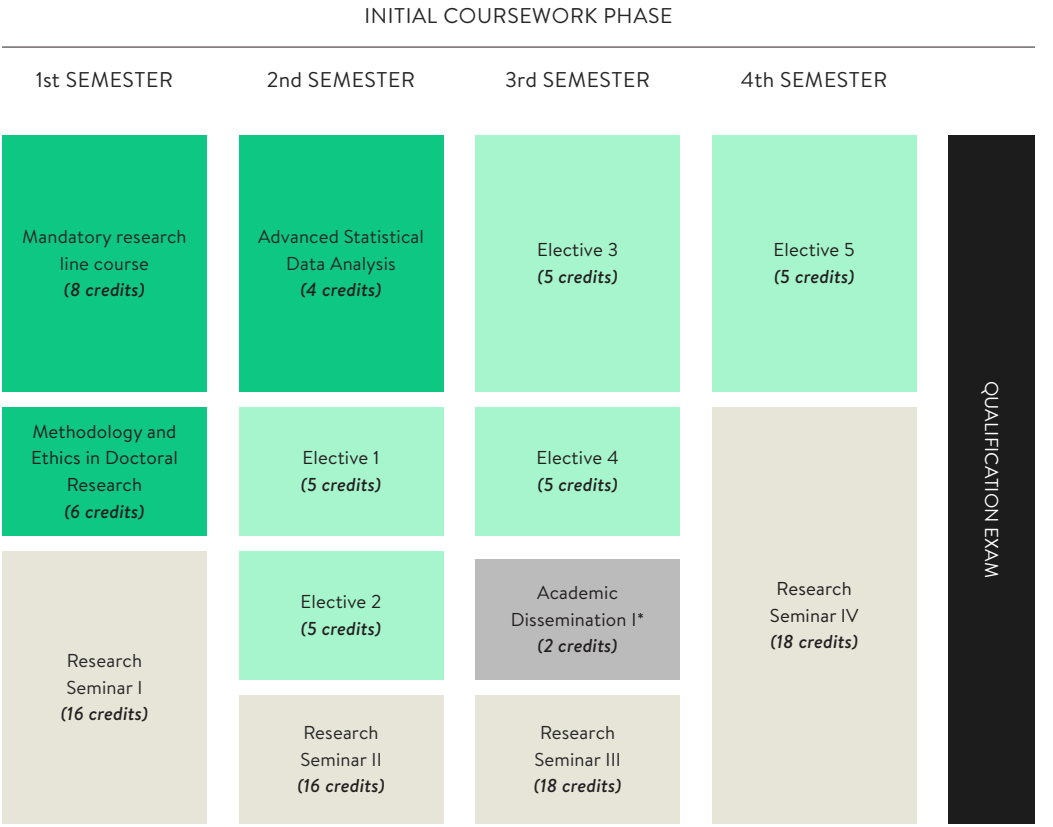
The program is structured around three priority research lines:

- **Intelligent systems, analytics, and operations management**
  Focuses on the convergence of data science, machine learning, operations management, and information and communication technologies (ICT) for the creation of intelligent systems that contribute to the effective and efficient development of society.

- **Climate, energy, and infrastructure resilience**
  Focuses on the study, development, and application of advanced solutions aimed at strengthening the structural, energy, and water resilience of infrastructures and critical systems in the face of natural hazards, environmental demands, and demanding operational conditions in sectors such as urban, rural, agricultural, and/or mining.

- **Advanced materials**
  This line is dedicated to the development, characterization, and optimization of advanced materials, which are fundamental for contemporary technological development.

CURRICULUM



* **Academic Dissemination I:** Activities involving conference presentations and publications in WoS-indexed journals

** **International Research Stay**: Mandatory international mobility period (according to program regulations).

FACULTY

PABLO PALACIOS

Electronic and Telecommunications Engineer, ESPOL, Guayaquil, Ecuador. Master's in Communication Networks Engineering, University of Chile. Doctorate in Electrical Engineering, University of Chile.

RAÚL PEZOA

Mathematical Civil Engineer and Master's in Engineering Sciences with a specialization in Transportation, University of Chile.

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Bachelor's in Mathematics and Master's in Science with a specialization in Mathematics, National University of Trujillo, Peru. Doctorate in Engineering Sciences with a specialization in Mathematical Modeling, University of Chile.

FELIPE GONZÁLEZ

Industrial Civil Engineer with a Diploma in Transportation Engineering, Pontifical Catholic University of Chile. Doctorate in Engineering Sciences, Development and Application of Models in Civil Engineering, University of Cantabria, Spain.

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Doctorate in Engineering Sciences with a specialization in Materials Science and Engineering, University of Santiago, Chile.

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VÍCTOR CONTRERAS

Civil Engineer, University of Chile. Master of Science and PhD in Civil Engineering with a specialization in Geotechnical Earthquake Engineering, University of California, Los Angeles (UCLA), USA.

KARINA VÉLIZ

Electrical Civil Engineer, University of Chile. Master's in Energy and Environment, and Ph.D. in Geography, Boston University, USA.

RODRIGO CÁCERES

Industrial Civil Engineer, Diego Portales University (UDP). Master's in Engineering Sciences, Diego Portales University (UDP). Ph.D. in Mechanical Engineering, Georgia Institute of Technology, USA.

ÁLVARO ESPEJO

Bachelor's in Physics, University of Santiago, Chile. Doctorate in Physics, University of Santiago, Chile.

PROSPECTIVE STUDENTS

The program is aimed at individuals with a background in engineering or related disciplines with a scientific and technological foundation, who wish to further their studies to pursue a research career in the field of engineering sciences.

APPLICATION REQUIREMENTS

To apply, applicants must submit the following documents to doctoradosingenieria@mail.udp.cl:

- Currículum Vitae.
- Statement of purpose for entering the doctoral program (maximum two pages).
- Research proposal specifying the research problem, justification, and methodological approach (2,000 words). In addition, a potential advisor from the doctoral faculty must be identified.
- Official transcripts of undergraduate and postgraduate studies, if applicable.
- Certificate of undergraduate graduation ranking.
- Degree certificates of Bachelor's and Master's (if applicable).
- Proof of English language proficiency
- Two letters of recommendation.

CONTACT

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Doctorado en Ciencias de la Ingeniería – Doctorados UDP

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ADMISSION 2026

MODALITY	ON-CAMPUS PROGRAM
APPLICATIONS	FROM MAY 15 TO SEPTEMBER 15, 2025
MORE INFO AT	doctorados.udp.cl / doctorados@udp.cl

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INGENIERÍA Y CIENCIAS