



SCHOLARSHIP CALL

II INTERNATIONAL COURSE
DATA SCIENCE FOR PUBLIC POLICY
ONLINE EDITION - 2024

Available at <https://www.agci.cl>
Chilean Agency for International Cooperation and Development - AGCID

GENERAL INFORMATION

I. NAME OF THE PROGRAM:

Data Science for Public Policy Course (hereinafter referred to as the Course).

II. INTERNATIONAL DEVELOPMENT COOPERATION

This second version of the course is part of the international cooperation program that Chile has promoted over the last thirty years, a sign of the country's commitment to cooperation with third countries through the training and formation of high-level human capital in different areas for the development and innovation of relevant public policies.

To this end, South-South Cooperation promotes the exchange of technical and professional knowledge, which seeks to promote the development of countries according to their own characteristics and needs, aligned with the fulfillment of the Sustainable Development Goals and the 2030 Agenda. In this area, AGCID has led the Chilean initiative, together with various institutions of higher education, as well as other agencies, to generate an offer of academic and technical cooperation that is directly related to the needs and different realities of our partner countries.

Given the above, this academic program has been developed in collaboration between the Chilean Agency for International Development Cooperation (AGCID) and the University of Chile, with the aim of making available to Africa the knowledge and technical experience that Chile has achieved in this area. This facilitates processes in which public decisions adequately incorporate the evidence available in each country.

III. SUPERIOR GOAL:

To enable participants to acquire, at the end of the course, a comprehensive and updated understanding of the various aspects and fundamental concepts of Data Science, applied to decision making process within the public sector. In addition, participants are expected to understand the social, political and economic implications inherent to the implementation and use of these new technologies, thus preparing them to comprehensively address the challenges and opportunities that arise in modern government management.

IV. COURSE DESCRIPTION:

- The course "Data Science for Public Policy" offers a comprehensive introduction to the world of Data Science applied to the field of public policy. Participants will be immersed in the essential fundamentals of Data Science, from understanding key concepts such as Big Data and Data Mining, to the application of methodologies such as CRISP-DM. They will explore how data is transforming management and public policy, analyzing relevant cases and examining the crucial role of ethics and transparency in data analysis in the public sector.

- In addition, modern analytical techniques such as exploratory data analysis and predictive modeling will be explored in depth, preparing participants to face current and future challenges in the use of data for informed decision making processes in the public sector, including the potential biases that exist in the data.

V. EXPECTED RESULTS:

At the end of the course, participants will acquire the following competencies:

- An understanding of the fundamental concepts and techniques of Data Science applied to the public policy context, which will enable participants to effectively analyze data to support informed decision making in the public sector.
- Ability to identify and address specific challenges and opportunities that arise when using data in the public policy arena, including the ability to recognize and mitigate inherent biases in data sets, as well as implement ethical and transparent practices in data analysis.
- Preparation to apply modern analytical techniques, such as exploratory data analysis, regression and time series models, and predictive models, in order to extract meaningful information to support the formulation, implementation and evaluation of public policies based on scientific evidence and solid data.

VI. PROGRAM DESCRIPTION:

The following is a brief description of the contents of each of the four modules that make up the course:

Module 1: Introduction to Data Science

In this initial module, participants will be introduced to the world of Data Science. It will explore the basic concepts, the importance of data in decision making process and provide an overview of the tools and techniques used in this constantly evolving field.

The specific contents to be covered will be:

- Motivation: The future of work
- What is Data Science?
- Key Concepts: Big Data, Data Mining, KDD and CRISP-DM Methodology.
- The data cycle
- Gartner's Four Analytics Capabilities

Module 2: Data Science in the Public Sector

This module focuses on understanding how Data Science is transforming public policy and management. It will examine relevant case studies and discuss the specific opportunities and challenges faced by public sector practitioners in using data to inform decision making process.

The specific contents to be covered will be:

- Analogical Government, e-Government and Digital Government

- OECD Digital Policy Model
- Data Driven Government
- Digital Transformation in the Public Sector

Module 3: Analytical Models

In this module, participants will delve into the analysis and interpretation of data in the context of public policy. It will explore various analytical techniques, such as exploratory data analysis and data modeling, and will teach how to apply these tools to extract meaningful information to support informed decision making.

The specific contents to be covered will be:

- Exploratory Data Analysis
- Data diagnostic models
- Regression and time series
- Predictive Models

Module 4: Data Biases

Finally, this module will address a critical issue in data use: biases. Participants will learn how to identify and mitigate biases inherent in data sets, as well as how to implement ethical and transparent practices in data analysis and interpretation in the public sector.

The specific contents to be covered will be:

- Bias
- Bias Mitigation Strategies
- Algorithmic Transparency
- AI Responsible

VII. DURATION:

The course will be held in the year 2024 in 100% *On-line* mode. The course has a duration of 21 chronological hours, which include 18 hours of lectures, workshops and synchronous group activities (real time) and 3 hours for voluntary weekly tutorials. At the same time, each student must have 8 hours for autonomous work.

Classes, workshops and tutorials will be spread over three weeks, between Monday, October 21 and Friday, November 8, 2024.

Date	Day	Schedule	Activity
Monday	October 21	9:00 a.m. to 12:00 p.m. (Chilean time)	Session 1
Wednesday	October 23	9:00 a.m. to 12:00 p.m. (Chilean time)	Session 2
Friday	October 25	9:00 to 10:30 a.m. (Chilean time)	Tutorial N°1
Monday	October 28	9:00 a.m. to 12:00 p.m. (Chilean time)	Session 3
Wednesday	October 30	9:00 a.m. to 12:00 p.m. (Chilean time)	Session N°4
Monday	November 04	9:00 a.m. to 12:00 p.m. (Chilean time)	Session N°5
Wednesday	November 06	9:00 a.m. to 12:00 p.m. (Chilean time)	Session N°6
Friday	November 08	9:00 to 10:30 a.m. (Chilean time)	Tutorial N°2

The program modality will be virtual and requires dedication of 6 hours per week for synchronous activities (sessions of 3 hours each twice a week, and 1.5 hours for asynchronous tutoring), in addition to the student's personal and autonomous work hours.

Students must participate via Zoom in the activities on the dates and times established in the calendar above.

VIII. METHODOLOGY:

This academic program will be taught under an *online* methodology, which combines lectures and group activities carried out synchronously through the Zoom platform, with personal and autonomous work of the students, which will be facilitated by the teaching support platform of the University of Chile, through the use of forums, online tests, among other features.

Students will have defined spaces to consult with the course professor (during the established tutoring hours) and with the support of tutors, who will be available to resolve doubts and queries, in order to guide the autonomous work of the participants.

The conditions for approval of the course will be associated with attendance and participation in classes and the delivery of assignments and evaluations assigned by the professor. The course requires a minimum of 70% attendance to the mandatory sessions for its approval.

Lecturer: The course will be taught by **Professor Jerko Juretić**, Industrial Civil Engineer and MBA from the University of Chile. Executive Certificate in Strategy & Innovation, MIT Sloan School of Management, and Diploma in Artificial Intelligence from UC Chile. Executive Secretary of Analytics Day 2022-2023. Member of the Institute of Engineers of Chile and member of the Harvard Business Review Advisory Council.

He has served as a senior consultant in strategic management, innovation, digital transformation and artificial intelligence. He has worked in several industries nationally and internationally, leading the design and implementation of strategic plans and organizational modernization processes. He has participated in projects with Entel, CORFO, Sabesp (Brazil), Judiciary, AGCID, SQM, Subtel, Ministry of

Finance, Felix Bulnes Hospital, Government Laboratory, Budget Office, UNICEF, United Nations, Transvip, CODELCO, ENEL, SKRETTING, and the Chilean Energy Efficiency Agency, among others.

He is currently Academic Director of the Diploma in Digital Business Transformation, the Diploma in Analytics for Professionals and the Diploma in Management and Automation of Business Processes, all from the Faculty of Economics and Business at the University of Chile.

IX. LANGUAGE:

The course will be conducted entirely in English.

X. FINANCING:

The Program will fund¹ :

- Tuition and program fees.
- Digital Diploma of the Course "Data Science for Public Policy", certified by the Department of Industrial Engineering of the Faculty of Physical and Mathematical Sciences at the University of Chile.

XI. REQUIREMENTS TO APPLY:

The course is aimed at people who meet the following requirements:

- Professional experience in the area of management and public policies and who have a Bachelor's degree and/or a Professional Degree.
- The courses are aimed at public officials from different levels of government, as well as researchers from universities and research centers, professionals from NGOs, international organizations and in general professionals working in the field of public policies and their management.
- It is desirable that they work in institutions related to the subject matter of the course and that they have institutional sponsorship.
- Be appointed by their respective governments in accordance with the procedure indicated in section XIV.
- To have access to internet network at least 7.5 hours per week for the development of *on-line* classes on the dates and times established for the course.
- Be a citizen of the country in question and be a resident of that country.
- Be fluent in spoken and written Spanish.

XII. INVITED COUNTRIES AND/OR ORGANIZATIONS:

The governments of the following countries will be invited to nominate applicants for the Course: Algeria, Egypt, Ethiopia, Ghana, Kenya, Morocco, South Africa and Tunisia.

¹ No additional items other than those mentioned above will be financed. Personal expenses must be covered by each participant.

Finance, Felix Bulnes Hospital, Government Laboratory, Budget Office, UNICEF, United Nations, Transvip, CODELCO, ENEL, SKRETTING, and the Chilean Energy Efficiency Agency, among others.

He is currently Academic Director of the Diploma in Digital Business Transformation, the Diploma in Analytics for Professionals and the Diploma in Management and Automation of Business Processes, all from the Faculty of Economics and Business at the University of Chile.

IX. LANGUAGE:

The course will be conducted entirely in English.

X. FINANCING:

The Program will fund¹ :

- Tuition and program fees.
- Digital Diploma of the Course "Data Science for Public Policy", certified by the Department of Industrial Engineering of the Faculty of Physical and Mathematical Sciences at the University of Chile.

XI. REQUIREMENTS TO APPLY:

The course is aimed at people who meet the following requirements:

- Professional experience in the area of management and public policies and who have a Bachelor's degree and/or a Professional Degree.
- The courses are aimed at public officials from different levels of government, as well as researchers from universities and research centers, professionals from NGOs, international organizations and in general professionals working in the field of public policies and their management.
- It is desirable that they work in institutions related to the subject matter of the course and that they have institutional sponsorship.
- Be appointed by their respective governments in accordance with the procedure indicated in section XIV.
- To have access to internet network at least 7.5 hours per week for the development of *on-line* classes on the dates and times established for the course.
- Be a citizen of the country in question and be a resident of that country.
- Be fluent in spoken and written Spanish.

XII. INVITED COUNTRIES AND/OR ORGANIZATIONS:

The governments of the following countries will be invited to nominate applicants for the Course: Algeria, Egypt, Ethiopia, Ghana, Kenya, Morocco, South Africa and Tunisia.

¹ No additional items other than those mentioned above will be financed. Personal expenses must be covered by each participant.

XIII. TOTAL NUMBER OF PARTICIPANTS:

The number of participants from invited countries will not exceed 60 students in total. There is no pre-established quota per country.

XIV. APPLICATION PROCESS:

The application and selection process consists of the following stages:

1. **Scholarship Application:** Process carried out by the applicant before the Focal Point of the respective country.

Scholarship Application: Process carried out by the applicant.

The following documents must be submitted to the Focal Point in their respective country:

- Certificate of degree(s) or previous academic degrees.
- Background of work and professional experience.
- Application Form (Annex I), with a record of all the information requested, duly completed and signed by both the applicant and a representative of the sponsoring institution.
- Applicant Engagement Letter (Annex II).
- Employment Certificate (Annex III).
- English language proficiency (advanced level in reading, writing and oral expression). The Chilean Embassy in the applicant's country may certify such knowledge.

Candidates must submit their application with a record of all the information requested in digital format to the Focal Point in their country of origin (Annex IV) for pre-selection and officialization.

Applicants should inquire about the closing date of the call for applications at the Focal Point in their respective country.

RELEVANT DATES

Stage	Dates
Attention Applicants Scholarship application deadline at the Focal Point in each country	Until September 27, 2024
Scholarship Selection Committee	October 7 to 9, 2024
Publication of results	October 10, 2024
Notification to selected and creation of UChile accounts	From October 11, 2024

TO CONSIDER:

- Only applications officially submitted by the Focal Point will be considered for selection. No applications submitted directly by the applicant will be considered.
- It is the applicant's responsibility to carefully read the call for applications with all its requirements, application procedures and all the attached documents, as well as to submit his/her application in compliance with the professional requirements specified in each offer.
- The information provided in the application form and its respective annexes is a sworn statement. Therefore, in the case of having falsified, adulterated, concealed or submitted inaccurate information with the purpose of obtaining the scholarship, the applicant will assume the respective administrative, civil and criminal penalties, in accordance with the regulations of his/her country of origin. Likewise, the applicant will be disqualified from applying for future scholarships indefinitely. This must be reported by the committee formed for the implementation of the scholarship.

XV. SELECTION:

The selection will be made by a technical committee based on the following criteria: eligibility, priority of the Focal Point, degree to which it meets the profile, professional experience in the area of the Course, curricular consistency and possibility of impact, among other elements that the Committee considers relevant.

The Universidad de Chile will contact each selected candidate by e-mail, according to the contact information provided in the application form, in order to coordinate the corresponding arrangements for his/her participation.

In addition, the results of the selection process will be published on the AGCID website, www.agci.cl for the information of all interested parties. **NOTE:** only those selected will be notified by e-mail.

Both the awarding of the scholarship are exclusive resolutions of the Department of Industrial Engineering of the Universidad de Chile and the Selection Committee respectively. Both decisions are unappealable and the entities are not obliged to inform about the criteria of the decision.

XVI. OBLIGATIONS OF THE PARTICIPANT

- Applicants are responsible for submitting current contact information (Annex I: Application Form) and for periodically checking their e-mail accounts, in case of requests and official notices from the coordinating team, according to the dates described in section XIII.
- Participants will adhere strictly to the course program. Requests for changes or alterations to the initially established course program will not be accepted (except for emergency reasons, duly justified).

- The course will be held exclusively in a non-attendance mode for this edition. A minimum of 70% attendance to classes and workshops is required for its approval.
- Complete all the necessary formalities for their participation in the program, including authorization from the head of the program.
- Participants must pay for any personal expenses during the course or that are not specified in the FINANCING section.

CONTACTS

Universidad de Chile - Department of Industrial Engineering- Faculty of Physical and Mathematical Sciences

Beauchef 851, Santiago, Chile

Mail: seleccioncursos.mgpp@gmail.com

Phone number: (+56 2) 2978 4043

Chilean Agency of International Cooperation for Development (AGCID)

Teatinos 180, 8th Floor. Santiago, Chile

Mail: agencia@agci.gob.cl

Phone number: (+56 2) 2827 5700

ANNEXES

- Annex I: Application form.
- Annex II: Applicant Engagement Letter.
- Annex III: Work Certificate.
- Annex IV: List of Focal Points.

**ANNEX I
APPLICATION FORM
II INTERNATIONAL COURSE
DATA SCIENCE FOR PUBLIC POLICY**

OFFICIAL APPLICATION

(To be signed and confirmed by the highest authority of the institution)

COUNTRY

NAME OF THE INSTITUTION TO WHICH THE CANDIDATE BELONGS

This organization recommends this application in accordance with the regulations of the South-South Cooperation Scholarship Program, AGCID - University of Chile, according to the call and its corresponding general information. In case of being selected, the candidate is authorized to participate and dedicate part of their working day on the dates determined by the executors of the International Course. Upon completion of the academic program, the organization provides the necessary support for an adequate application and transfer of the knowledge received.

Name of Supervisor		Official seal
Position		
E-mail		
Date	Signature	

PART A: INSTITUTION INFORMATION

1. Institution profile

a) Name of the organization

--

b) Type of organization

(place an "x" in the corresponding option)

Government	<input type="checkbox"/>	Academic	<input type="checkbox"/>	Private	<input type="checkbox"/>	International	<input type="checkbox"/>	Other*	<input type="checkbox"/>
------------	--------------------------	----------	--------------------------	---------	--------------------------	---------------	--------------------------	--------	--------------------------

* In case of "other", specify:

--

c) Mission of the organization

--

d) Link with international cooperation

(place an "x" in the corresponding option)

Japan	<input type="checkbox"/>	Chile	<input type="checkbox"/>	Other sources	<input type="checkbox"/>	None	<input type="checkbox"/>
-------	--------------------------	-------	--------------------------	---------------	--------------------------	------	--------------------------

If there is any form of cooperation, briefly describe the main activities:

--

PART A: INSTITUTION INFORMATION

1. Institution profile

a) Name of the organization

--

b) Type of organization

(place an "x" in the corresponding option)

Government	<input type="checkbox"/>	Academic	<input type="checkbox"/>	Private	<input type="checkbox"/>	International	<input type="checkbox"/>	Other*	<input type="checkbox"/>
------------	--------------------------	----------	--------------------------	---------	--------------------------	---------------	--------------------------	--------	--------------------------

* In case of "other", specify:

--

c) Mission of the organization

--

d) Link with international cooperation

(place an "x" in the corresponding option)

Japan	<input type="checkbox"/>	Chile	<input type="checkbox"/>	Other sources	<input type="checkbox"/>	None	<input type="checkbox"/>
-------	--------------------------	-------	--------------------------	---------------	--------------------------	------	--------------------------

If there is any form of cooperation, briefly describe the main activities:

--

2. Objective of the application

- a) Describe the strategic objectives of your institution linked to the SUBJECT OF THE INTERNATIONAL COURSE.

- b) Briefly describe how the training will support achieving the aforementioned objectives.

- c) Briefly describe the specific actions the institution will develop to achieve and/or complement the aforementioned objectives.

- d) Briefly describe the reasons why the candidate has been selected, referring to: 1) course requirements, 2) capacity/position or responsibility in the institution, 3) action plans or others.¹

¹ In case of presenting more than one candidate, indicate the order of priority when submitting the documentation to the scholarship platform.

PART B: APPLICANT INFORMATION

1. Personal Information.

Surnames*				
Names				
Nationality				
Date of birth				
Sex	Male		Female	
Passport number				
Passport expiration date				
Personal address				
City				
Contact phone number				
E-mail**				

* Provide information as it appears in the passport.

** All the information will be sent to this email address if selected. Please provide an email that you check constantly.

2. Academic information

(From now on provide university studies only)

Degree obtained	Institution	Country	Term	
			From	To

--	--	--	--	--

Other courses and training

(Only studies related to the subject of the International Course)

Course	Institution	Country	Term	
			From	To

Have you been a recipient of AGCID scholarships before?

Yes _____ No _____

If "Yes" please specify:

Scholarship	Country where the studies were carried out	Program completed

3. Professional information

1) Current position (Position and institution)

--

2) Description of functions

--

--

3) Professional experience

Position* (from the most recent to the oldest)	Institution	Country	Term	
			From	To

*Briefly describe functions.

4) I have an advanced level of English in reading, writing and speaking

_____ Yes

_____ No

STATEMENT

(to be signed by the applicant)

I declare that I have read the call with all its instructions and corresponding annexes and that the information provided in this form is completely true and corresponds to all that requested.

NAME	DATE	SIGNATURE

ANNEX II
APPLICANT ENGAGEMENT LETTER
South – South Cooperation Scholarship Program
AGCID - University of Chile

As an applicant for the II INTERNATIONAL COURSE DATA SCIENCE FOR PUBLIC POLICY, to be carried out by the University of Chile:

I _____
Name of the applicant

FROM _____
Country of origin

I declare that all the information presented is true, correct and complete and in case of obtaining the scholarship, I promise to respect the following rules:

- a) Rigorously comply with the International Course Program.
- b) Accept all the conditions stipulated in relation to the Course.
- c) Respect the instructions given during the course.
- d) Do not interrupt the International Course except in the case of a serious illness that determines the inability to continue the training.
- e) Carry out knowledge transfer activities and implement my project at the end of the academic program for the completion of the Course.
- f) In case of desisting from participating in the International Course, once selected, notify the AGCID Point of Contact at least 10 days before the start of the Course and indicate the reasons of force majeure that oblige that decision.

At _____, on _____, _____, _____.
(Place) (Month) (Day) (Year)

Signature of the applicant

ANNEX III
EMPLOYMENT CERTIFICATE

The undersigned certifies that Mr./Mrs _____, Identification Number _____, is currently working at the institution _____, in the specific functions that are detailed below, during the time indicated..

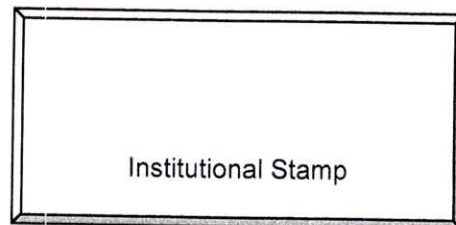
FUNCTION (indicate in detail the responsibilities exercised during the period and in the event that personnel had been in charge, indicate the amount of collaborators)	From month/day/year	To month/day/year

In case of being selected by the AGCID – University of Chile South - South Cooperation Scholarship Program, the candidate is authorized to participate and dedicate part of their working day on the dates determined by the organizers of the International Course. At the end of the academic program, the institution undertakes to provide the necessary support for an adequate application and transfer of the knowledge received.

(Signature)

SUPERVISOR'S NAME

Identification Number
 (Position)
 Institution
 Contact Phone Number



Place, date _____

**ANNEX IV
FOCAL POINTS**

PAÍS	NOMBRE	APELLIDO	CARGO	INSTITUCIÓN	DIRECCIÓN	CIUDAD	EMAIL	TELÉFONO
ALGERIA	Cristóbal	Sandoval	Tercer Secretario	Embajada de Chile en Argelia	N° 43, Rue des frères Benali, ex Parmentier Hydra, Alger.	Argel	csandoval@minrel.gob.cl	+213.23.47.43.40/ +213.23.47.43.40
EGYPT	Jacqueline	Rodríguez	Tercera Secretaria	Embajada de Chile en Egipto	1 El-Saleh Ayoub, 3° piso, Zamalek	El Cairo	jrodriguez@minrel.gob.cl	+20 2 27358711
ETHIOPIA	Isaac	Ramírez	Cónsul	Embajada de Chile en Etiopía	Bole Sub-City, Woreda 05, House number 950/46, P.O. Box 46286	Adis Abeba	iramirez@minrel.gob.cl	251-(0)116441684
GHANA	Jorge	Valdés	Encargado de negocios a. i.	Embajada de Chile en Ghana	No. 25, Sir Arku Korsah Street, Airport Residencia	Accra	msilva@minrel.gob.cl	+233 302797942/3
KENYA	Alejandro	Montero	Tercer Secretario	Embajada de Chile en Kenia	49 Gigin Court, Off UN Crescent	Nairobi	amontero@minrel.gob.cl	(254) (20) 445-2950 / (254) (20) 445-2951
MOROCCO	Maximiliano	Jara	Segundo Secretario	Embajada de Chile en Marruecos	66, rue Beni Arouss et rue Ain Seghrouchen – Souissi – 10170 –	Rabat	mjarap@minrel.gob.cl	+212 (5- 37) 636 065 / +212 (5- 37) 636 066
SOUTH AFRICA	Alejandra	Godoy	Segunda Secretaria	Embajada de Chile en Sudáfrica	333 Main Str Waterkloof Pretoria 0145	Pretoria	agodoyd@minrel.gob.cl	
TUNISIA	Cristóbal	Sandoval	Tercer Secretario	Embajada de Chile en Argelia	N° 43, Rue des frères Benali, ex Parmentier Hydra, Alger.	Argel	csandoval@minrel.gob.cl	+213.23.47.43.40/ +213.23.47.43.40