Terms and Conditions
Santander Tech Scholarships | Reskilling in Data Analytics – Ubiqum
2021/2022 Edition

Geneva Business School Spain S.L. has implemented the Scholarship Programme "Santander Tech | Reskilling in Data Analytics – Ubiqum", alongside **Banco Santander, S.A. ("Santander")**, to help people over 18 years old, resident in Spain, Portugal, the United Kingdom, Germany and Poland, to take a qualitative leap in their professional trajectory to improve their employability.

I. Objectives

The programme "**Santander Tech Scholarships | Reskilling in Data Analytics – Ubiqum**" (the "Programme") will enable people over 18 years old as at the date of publication of the Programme, and resident in Spain, Portugal, the United Kingdom, Germany or Poland, to take part in this programme during the 2021/2022 academic year.

The main objective of the Programme is to enhance employability by developing Data Analysis skills.

II. Recipients

People over 18 years old at the date of publication of this edition of the Programme and who are resident in or nationals of Spain, Portugal, the United Kingdom, Germany, or Poland will be eligible for this Programme, provided they satisfy the selection criteria set out below.

Obtaining a free place on one of the Programme's training courses will be compatible with any other aid other than that concerning this Programme, whether public or private, which may be available to any participant (the "Participant", and in plural the "Participants") who obtains the scholarship under this Programme.

III. Features of the Programme and available places

The initial edition of the Programme comprises two phases:

1) **INITIAL INTRODUCTORY COURSE to Data Analytics:** 200 places ("**Places**") available on the introductory course to Data Analysis (the "**Course**") delivered by the Supplier. Of these Places, 100 will be for the course delivered in English and 100 for the course delivered in Spanish.

   The aforementioned Course will be delivered on the Supplier's platform (www.ubiqum.com), its duration will be six (6) weeks in asynchronous remote

mode on a part-time basis (between 28 June and 3 August 2021, both inclusive), and will be delivered in both Spanish and English.

The Course will have a duration of 120 hours, and will address the basic concepts of Data Analytics and the tools, technologies and practices used to minimise integration time in other working environments in which digital competences are widely used.

An assessment will be conducted of the performance of the best participants, which will serve as a selection criterion to assign the 50 scholarships for the BOOTCAMP PHASE.

The participants selected and those not selected will receive a certificate accrediting the basic knowledge acquired in Data Analysis.

The **admission requirements that must be met by Participants to earn a scholarship for the Course** are as follows:

(i) Be a user of the Santander Scholarship platform (www.becas-santander.com) and have enrolled on the programme

(ii) Be over 18 years of age

(iii) Have the nationality of or reside in Spain, Portugal, the United Kingdom, Germany, or Poland

(iv) Complete the aptitude test on the Supplier platform (www.ubiqum.com)

(v) Sufficient level of English to understand the training material in this language

2) **BOOTCAMP PHASE – Data Analysis**: 50 scholarships will be awarded for Places to the best performers in the introductory course to Data Analytics ("**Scholarships**"). Of these scholarships, 25 Scholarships will be for the Data Analytics Bootcamp (the "**Bootcamp**") delivered in English, and 25 Scholarships for the Bootcamp delivered in Spanish. Both Bootcamps will be carried out in parallel, and the beneficiaries will be selected from among the 25 best Places for the Course in Spanish, and the 25 best Places for the Course in English. Those awarded the scholarships will be the highest rated individuals in accordance with the assessment criteria described below.

The Bootcamp will be carried out on the Supplier's platform (www.ubiqum.com), its duration will be twenty-five (25) weeks (between 15 September 2021 and 25 March 2022, both inclusive), and it will be delivered in Spanish and English.

The Bootcamp will be composed of asynchronous and synchronous activities based on an experiential learning model (learning by doing).

The Bootcamp is structured in the following modules in accordance with the Ubiqum methodology, known as project-based learning:

Module – 01: Use of Python in a customer default scenario. Here the students will work for Credit One, a credit institution.

Their work as data scientists will be to identify which customer attributes relate significantly to customer default rates and build a predictive model that Credit One can use to better classify potential "risk" customers, in comparison with the models implemented previously. They will use automatic-learning regression methods in Python for this task.

Skills to be developed:
- Prior data processing (e.g. function engineering, processing of missing data)
- Using data-mining tools and different classifiers to implement predictive models.
- Using the Numpy package for scientific information with Python
- Applying automatic learning techniques to classification problems
- Using the open-code Panda library for Python
- Optimising the classifiers and adjusting and testing the parameters of the classifiers
- Using the Matplotlib Python 2D tracing library
- Applying cross-validation methods
- Assessing the predictive performance of classifiers by examining key error metrics
- Using the Sci-Kit Learn automatic learning library for Python
- Comparing and selecting different predictive models. Applying predictive models to test sets

Module – 02: Using R to analyse the shopping basket and a product recommendation system. Students will work for Blackwell Electronics, a consumer electronics chain of stores.

Their work will involve the use of data mining to develop predictive models using R. Automatic learning methods will be applied to predict what type of IT products Blackwell customers prefer in accordance with the demographic customer data compiled during a marketing survey, and determining the associations between products that will be used to boost sales, using a recommendation system such as that used by Amazon and other e-commerce sites.

Skills to be developed:
- Applying data mining to e-commerce
- Predicting profitability
- Customer segmentation

- Product selection strategy
- Using the statistical programming language R
- Using the intercalation package for R
- Pre-processing of data for data mining
- Applying filters
- Addressing missing data
- Detecting atypical values
- Using data-mining tools and different classifiers to implement predictive models
- KNN
- Decision trees: GBT, random forest, C50
- Applying automatic learning techniques to classification and regression problems
- Optimisation of the classifiers, adjusting and testing classifier parameters
- Applying cross-validation methods
- Assessing the predictive performance of classifiers by means of the key error metric examination
- Comparing and selecting different predictive models
- Applying predictive models to test sets. Presenting the data mining results to management

Module – 03: In this module, the student works for a company operating in Internet of Things technology that wishes to use Data Analytics to resolve two problems in the physical world.

Specifically, the student will work on two projects:

- **Optimum use of energy**: a model of energy use behaviours by time of day and days of the year, at a home where the electrical system is monitored by sub-meter multiples.
- **Positioning in indoor spaces**: determining the physical position of a person in an indoor space of several buildings using the digital WiFI print. Learners will use the R statistical programming language to view information and subsequently generate descriptive statistics and predictive models using regressive techniques of statistical time-based and classificatory series.

Skills to be developed:
- Defining the commercial proposition of a data-analysis project and drawing up a realistic analysis plan
- Exploring data through the use of viewing and descriptive statistical techniques in R
- Selecting and assessing classification modelling techniques in R
- Selecting and assessing regression modelling techniques in R

- Analysing data from time series
- Interpreting performance metrics
- Running error analyses and presenting results of the mining of highly technical engineering-related data

For **Participants to earn a scholarship for the Bootcamp**, they must rank within the 25 best Participants for the Course delivered in English and within the 25 best Participants for the course delivered in Spanish, as per the assessment criteria described below.

A maximum of 50% of the total number of Places for the initial phase —Data Analysis initiation course— will be reserved for employees of Banco Santander, S.A. and/or its subsidiaries ("Santander Group"). These Places will be assigned to Participants who meet the eligibility requirements for these scholarships and who are also Santander Group employees.

IV. Criteria for admission and assessment of applications by Participants

The following process will be used to assign the Scholarships to Participants under each phase of the Programme:

i. Enrolment

First, Participants must register on [www.becas-santander.com,](www.becas-santander.com) where, in addition to filling in the form, they must use the Supplier's link to access an aptitude test to appraise the minimum level requirements in relation to descriptive statistics, calculation of probabilities, linear algebra and basic programming. This test will be completed on the Supplier's premises.

With the data obtained from the aptitude test, the Supplier shall pre-select the 500 best Participants, and will ask them for their CVs, professional profile on LinkedIn (www.linkedin.com) and a motivation letter.

ii. Introductory Course to Data Analytics

From among the 500 pre-selected Participants to have submitted the documentation described above, a short-list will be made of the 200 Participants who will be awarded Places on the Course. This means that 100 Participants will be accepted for the Course in Spanish, while the other short-listed Participants will be accepted for the Course in English.

iii. BOOTCAMP PHASE – Data Analytics

A total of 25 of the 50 Scholarships for the Bootcamp will be assigned to the 25 best performers on the Course in English, and the other 25 to the best performers on the Course delivered in Spanish. Scores will be awarded as per the grades obtained on the examination for the Course, with a pass considered as a grade equal to or higher than 70%, and as per the score awarded by the Parties to each Participant on the Course.

Ubiqum shall award the scholarships and confirm compliance with the requisites set out above in each of the phases.

A working and monitoring group (the "Group") will be set up, with two members from **Santander** and two from Ubiqum, to enable the Programme to benefit the greatest possible number of Participants. If, at any time, it is believed that the intended scholarships will not be assigned, or if there is overdemand for them, the Group may decide to apply other admission requirements for awarding scholarships and may even extend the deadline for learners to apply.

Moreover, if any scholarships assigned have not been accepted by the Participants, the Group may assign these to other Participants who meet the above admission requirements, or to any other persons that the Group considers suitable so that no scholarships remain unclaimed.

V. Management

To be eligible for a scholarship, applicants must register for the Programme on the Santander Scholarships platform created for this purpose at www.becas-santander.com. The award of the scholarship will be notified through the management system on that platform.

Participants must enrol between 22 March 2021 and 26 May 2021, by 23.59 GMT+1 (Madrid time zone) and the period for **carrying out the aptitude test** provided on the Ubiqum platform (www.ubiqum.com) will run **from 22 March 2021 to 26 May 2021**. The Group may change the deadlines.

VI. Allocation of places among Participants

The 200 Scholarships for Participants on the Data Analytics Initiation Course will be awarded on **22 June 2021.**

The award will be notified to Participants on **22 June 2021** and they will have **7 calendar days** from the date and time of communication to accept their Scholarship on the website www.becas-santander.com. When the deadline has expired, if any Places assigned have not been accepted by the Participants, the Selection Forum will assign these to

other Participants who meet the above admission requirements, or to any other persons that the Group considers suitable so that no scholarships remain unclaimed.

Once the Data Analytics initiation course has been completed, Ubiqum will announce, between **3 August and 10 August** 2021, the award of the 50 Scholarships for the Bootcamp for the 50 Participants with the best score, as per their performance on the Course reflected in the results of the assessment test made available on the Ubiqum platform (www.ubiqum.com). When the deadline has expired, if any Scholarships assigned have not been accepted by the Participants, the Selection Forum shall assign these to other Participants who meet the above admission requirements, or to any other persons that the Group considers suitable so that no Scholarships remain unclaimed.

VII. Tax on the Programme

The Scholarships will be liable for any and all applicable taxes and, specifically, for personal income tax, which may require Geneva Business School Spain S.L. to make the corresponding withholdings, and for beneficiary of the scholarship to add the relevant amounts to their annual tax return (the beneficiaries alone must ensure compliance with their tax obligations).

VIII. Data protection

The processing of personal data under the Programme is governed by the Policies on the Santander Scholarships platform at www.becas-santander.com/es/legal/privacy.

IX. Modification of the Terms and Conditions of the Programme

Applying for this Programme implies the acceptance by Participants of its Terms and Conditions and of the decisions ultimately issued, which cannot be appealed. Applying also implies the waiver of any kind of claim relating to any aspect of same, including, without limitation, aspects such as the award, selection and admission criteria applied.

Banco Santander, S.A. and Geneva Business School Spain S.L. reserve the right to modify the Terms and Conditions of the Programme partially or fully at any time so as to ensure and protect the social impact sought by Banco Santander, S.A. and Geneva Business School Spain S.L. in this Call, and will provide Participants with information on the changes made on the website www.becas-santander.com.