



**University Entrepreneurial Spirit in Spain**  
**GUESSS 2018**  
**Executive Report and Recommendations**

José Ruiz-Navarro, Antonio R. Ramos-Rodríguez & M. Paula Lechuga-Sancho  
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## Preface

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University entrepreneurship has a crucial economic and social impact on the knowledge-based society. With no doubt new ventures will create high economic, cultural and social value.

One way to insert universities into dynamic ecosystems that create value is to instill entrepreneurial spirit in their students. This entrepreneurial spirit begins with the intentions of higher education students since it has an impact on their behaviors.

The GUESSS Project (Global University Entrepreneurial Spirit Students' Survey) main aim is to measure and offer recommendations to boost this entrepreneurial spirit since 2003. The survey used in this report comes from the 2018 edition of the GUESSS in which more than 3000 universities from over 54 countries have participated. Spain is the country that has contributed the most to the international sample in the current edition.

# Executive report

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## Career choice intentions of Spanish university students and entrepreneurship

4.5% of Spanish university students intend to become entrepreneurs at the end of their studies. This percentage rises to 24.5% when this possibility is considered 5 years after the completion of their degree. This behavioral model of working for someone else before trying on their own is common in all the territorial areas studied.

Regardless of the time horizon in which the decision is made, Spain occupies a very low position in the ranking of countries due to the entrepreneurial intentions of its university students, something common to the vast majority of developed economies.

### Entrepreneurial intentions by gender

In Spain there are gender differences in career choice intentions among its university students, as is the case in the countries that are closer to us and in the total number of countries that have participated. However, the gender gap in entrepreneurial intentions is greater in our country (9.8 percentage points higher in men) than in the other territorial areas analyzed.

### Entrepreneurial Intentions per Course

The highest levels of entrepreneurial intentions occur among first-year students (29.4%) and these decrease as students advance through their curricular itinerary, 24.0% in fourth grade. This behavior has also been observed in the EU but not so clearly in the other countries that have participated.

### Entrepreneurial intentions by field of study

The highest percentages of students who want to be self-employed are reached in degrees such as Engineering and Architecture (32.2%) and Social and Legal Sciences (28.5%), while the lowest percentage is observed in Science students (16.5%).

## Index of entrepreneurial intentions of Spanish university students

In our country it can be made a relatively positive assessment of the entrepreneurial intentions of those students who are only studying and are not involved in any business activity. Thus, the rate of entrepreneurial intention of higher education students is slightly above the EU average (3.5 compared to 3.4), although in both cases it is lower than the average of the countries that have participated in this edition of the GUESSS project, which was right at the center of the scale (4.0).

## Direct determinants of entrepreneurial intention

### Attitude towards entrepreneurship

The average value on the scale of attitude towards entrepreneurship is similar to the average of the EU countries, but is below the average of the countries that have participated in this edition. In particular, it presents above-average values in the items related to the degree of satisfaction

that could be generated being entrepreneurs and, very importantly, with the one related to the opinion that if they had the opportunity and the resources they would become entrepreneurs .

### **Social, family and friends support**

If they decided to start their own business, Spanish university students perceive that their friends, fellow students and their closest family would approve their decision, highlighting the support of friends over other reference groups. The average value of this indicator is similar to that of the European Union countries but lower than the global GUESSS.

### **Self-confidence, competencies and entrepreneurial skills**

Spain obtains an average value of the scale of entrepreneurial self-efficacy that is slightly higher than the average of the EU countries (4.3 vs. 4.2), but below the average of the countries that have participated in this GUESSS edition (4,5). In particular, the indicator that obtains the highest score is that related to leadership and communication capacity, while two closely related indicators obtain the lowest scores, namely the ability to generate new products and services and the capacity to identify good business opportunities.

## **The university context**

### **Favorable climate towards entrepreneurship**

The average perception of entrepreneurial climate of Spanish university students (4.1) is slightly above the average of the European Union countries (4.0), in both cases well below the GUESSS average (4.4).

### **Reputation as an entrepreneurial university**

The entrepreneurial reputation indicator for Spanish universities is one percentage point below of the European Union countries (6.1 compared to 7.1) and is less than half of the percentage of students who choose their university in order to its entrepreneurial reputation in the other participating countries (13.0).

### **General training geared towards entrepreneurship**

The feeling of having received a general training oriented towards entrepreneurship at the Spanish university (3.8) does not reach the average value of the scale, although it is similar to the average of the European Union. In any case, it is well below the average of GUESSS countries (4.4).

### **Specific training in entrepreneurship**

62.3% of the Spanish university students participating in the study have never received specific training in entrepreneurship. It is a very high percentage, higher than the average of European countries (60.9%), and the average of all participating countries (51.9%). Also it is far from the value of countries such as China (24%).

## Nascent Entrepreneurship in Spain

### Nascent Entrepreneurship rate

Spain occupies a rather low position among the participating countries, with 15.2% of students trying to start a business or be self-employed. This value is very similar to that of the EU (15.5%) but almost half the average observed in the other participating countries (30.7%).

### Rising entrepreneurship rate by gender

In Spain more men than women are involved in a nascent initiative while they are studying (46.4% compared to the remaining 53.4%), although the gender gap is smaller than that observed in the rest of the countries that have participated in the study.

### Rising entrepreneurship rate by branches of knowledge

The highest percentages of nascent entrepreneurship are observed in Social and Legal Sciences (45.4%) and Engineering and Architecture degrees (25.1%), while Science students (6.9%) and those who are attending Health Science (9.6%) present the lowest rates.

## Active entrepreneurship Spain

### Active Entrepreneurship Rate

Spain occupies a rather low position in the classification of countries by rate of students who are entrepreneurs while studying, with 4.8%, below the EU average (5.2%), and very far from the rate observed in the rest of the GUESSS countries which reaches 11.2

### Active entrepreneurship rate by gender

In line with what has been observed in the EU countries, the rate of active entrepreneurship is again higher amongst men (47.6% vs. 52.4%). However, this difference is much greater in the average of GUESSS countries (38.6% of women compared to 61.4% of men).

### Active entrepreneurship rate by branches of knowledge

The highest percentages of business activity are observed in Social and Legal Sciences degrees, with a significant 45.9%, and in those of Engineering and Architecture, with 21.9%. The lowest percentages are Science (6.3%) and Health Sciences (10.0%) degrees.

## Recommendations

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The comparative analysis of the main indicators analysed in the report allows us to make the some recommendations for the main actors involved (students; academic authorities; and, professors) in regard to the promotion of a more innovative and dynamic entrepreneurial ecosystem in which the university should play a leading role.

### Students should...

1. The generalized behavior of “work first and then undertake” may be due to a lack of self-confidence in their knowledge and skills which is intended to be replaced by work experience. This behavior has an opportunity cost that can be reduced by improving the training process.
2. This opportunity cost is related to a misconception of entrepreneurial skills. They must be understood as the ability to act on problems, opportunities and ideas and transform them into cultural, social or economic value, and it must be assumed that they are increasingly required to obtain employment, intrapreneurship or to initiate an innovative project.
3. The acquisition of these skills should be a priority training objective and should be part of the training interests from the first courses and for all fields.
4. A special emphasis on the acquisition of such skills should be made for technical and scientific careers as seedbeds of technological opportunities.
5. The characteristics of the business and social environment recommend strengthening the social nature of the acquisition of entrepreneurial skills. In this direction, students should take advantage of the opportunities of their time at university to improve their relational capital, which will allow them to recognize or create opportunities with bachelor colleagues or, especially, complementing the knowledge of those of other fields.
6. The strength of entrepreneurial initiatives tend to grow if they are built on the diversity of the promoting teams. This includes the search for complementarities in knowledge and gender diversity in the promoter teams.

### Universities and public institutions should...

7. Entrepreneurship must be contemplated in the strategic plans of the universities and in those of their social councils with indicators that allow their governance, measurement, analysis of its evolution and make comparison with other universities.
8. The university must generate equal opportunities. For its achievement, an outstanding resource is to develop entrepreneurial skills throughout the university community.
9. The training of university students with knowledge and skills for entrepreneurship is a fundamental requirement for binding the university to a dynamic and entrepreneurial society.. To this end, subjects related to the acquisition of entrepreneurial skills (action-oriented entrepreneurship) must be offered in first years courses
10. The significant deficit of students who have never received entrepreneurship in Spain (62.3%) must be corrected, compared to countries, such as China (24%), which are aware of the importance of the challenge.

11. Training programs should include specific actions to motivate entrepreneurial intentions, provide training in this area and improve students' relational capital , with special attention to gender policies.

12. The improvement of relational capital has an important opportunity if university takes advantage of the experience of its graduates network.

13. It is essential to encourage active entrepreneurs to train in classrooms (currently only 4.8%; in China 36.9%). They can show the importance of the business function, improve the complementarities between entrepreneurial individuals, generate initiatives that are more linked to real problems and promote university-business relations.

14. Autonomous communities authorities should encourage and link the funding of universities to their results in entrepreneurship policies by establishing homogeneous indicators that are comparable with other territories.

15. The Conference of Rectors of Spanish Universities (CRUE) should use the information derived from the the GUESSS to identify good practices and exchange experiences among universities.

### Entrepreneurship scholars and academics should...

16. Scholars must incorporate into their training challenges the need to show students the need to be innovative and train them in entrepreneurial skills.

17. Teaching methods should be aligned with innovation and effectual methods in entrepreneurial training.

18. GUESSS indicators may guide the assessment of training actions in a more precise way taking into account the different fields of studies and subjects.19. Researchers in entrepreneurship and business should be able to disseminate more widely the importance of achieving an entrepreneurial university and show higher education students the importance of entrepreneurship.

## Universities and delegates of the GUESSS 2018 network in Spain

UNIVERSITIES	REGIONS	DELEGATES
Universidad de Almería	Andalucía	Carlos Cano Guillén
Universidad de Cádiz	Andalucía	Antonio R. Ramos Rodríguez y Paula Lechuga Sancho
Universidad de Córdoba	Andalucía	Librado Carrasco Otero
Universidad de Granada	Andalucía	María del Mar Fuentes
Universidad de Huelva	Andalucía	Juan Diego Borrego Sánchez
Universidad de Jaén	Andalucía	Juan Carlos Sánchez Rodríguez y María Jesús Hernández Ortiz
Universidad de Málaga	Andalucía	Rafael Ventura
Universidad de Sevilla	Andalucía	Francisco Liñán
Universidad Pablo de Olavide	Andalucía	Francisco Javier Ramos
Universidad de Zaragoza	Aragón	Lucio Fuentelsaz y Consuelo González
Universidad de Oviedo	Asturias	Beatriz Junquera Cimadevilla y Jesús Ángel del Brío González
Universidad de La Laguna	Canarias	Francisco García-Rodríguez e Inés Ruiz de la Rosa
Universidad de Las Palmas de Gran Canaria	Canarias	M <sup>a</sup> del Pino Medina y Rosa María Batista
Universidad de Cantabria	Cantabria	Ana Fernández-Laviada
Universidad de Burgos	Castilla y León	Juan Bautista Delgado García y Celia Díaz Portugal
Universidad de León	Castilla y León	Mariano Nieto, Nuría González
Universidad de Salamanca	Castilla y León	José Carlos Sánchez
Universidad de Valladolid	Castilla y León	Natalia Martín Cruz
Universidad de Castilla-La Mancha	Castilla-La Mancha	Juan José Jiménez
EAE Business School	Cataluña	Meysam Zolfaghari
Universidad Abierta de Cataluña	Cataluña	Laura Lamolla
Universidad Autónoma de Barcelona	Cataluña	David Urbano
Universidad de Barcelona	Cataluña	Esther Hormiga
Universidad de Gerona	Cataluña	Laura Vallosera Casanovas
Universidad de Lérida	Cataluña	Antonio Colom Gorgues
Universidad de Vich	Cataluña	Elisenda Tarrats
Universidad Politécnica de Cataluña	Cataluña	Jordi Olivella y Santiago Roca
Universidad Rovira i Virgili	Cataluña	Mercedes Teruel Carrizosa
Universidad Autónoma de Madrid	Comunidad de Madrid	Isidro de Pablo López
Universidad Carlos III de Madrid	Comunidad de Madrid	María José Sánchez Bueno y Fernando Muñoz Bullón
Universidad Complutense de Madrid	Comunidad de Madrid	María Ángeles Montoro Sánchez

<b>Universidad de Alcalá</b>	Comunidad de Madrid	Fernando Javier Crecente Romero y Rubén Garrido Yserte
<b>Universidad Francisco de Vitoria</b>	Comunidad de Madrid	Caridad Maylin y Ramón Fernández de Caleyá
<b>Universidad Rey Juan Carlos</b>	Comunidad de Madrid	Concepción de la Fuente Cabrero y Pilar Laguna Sánchez
<b>Universidad de Alicante</b>	Comunidad Valenciana	Diego Quer Ramón y Rosario Andreu Guerrero
<b>Universidad de Valencia</b>	Comunidad Valenciana	Lorenzo Revuelto Taboada
<b>Universidad Jaime I</b>	Comunidad Valenciana	María Ripollés
<b>Universidad Miguel Hernández de Elche</b>	Comunidad Valenciana	José María Gómez Gras y Marina Estrada De la Cruz
<b>Universidad Politécnica de Valencia</b>	Comunidad Valenciana	Elies Seguí Mas
<b>Universidad de Extremadura</b>	Extremadura	Juan Carlos Díaz
<b>Universidad de La Coruña</b>	Galicia	José Rodrigo Sanjurjo Amado
<b>Universidad de Santiago de Compostela</b>	Galicia	Isabel Neira Gómez
<b>Universidad de Vigo</b>	Galicia	Ana Gueimonde Canto y M <sup>a</sup> Isabel Diéguez Castrillón
<b>Universidad de las Islas Baleares</b>	Islas Baleares	Julio Batle Lorente y Jordi Llabrés Bordoy
<b>Universidad de La Rioja</b>	La Rioja	Pilar Vargas
<b>Universidad Pública de Navarra</b>	Navarra	Ignacio Contín y Martín Larraza
<b>Universidad del País Vasco</b>	País Vasco	Noemí Peña y María Saiz
<b>Universidad Católica San Antonio</b>	Región de Murcia	Rocío Arteaga Sánchez
<b>Universidad de Murcia</b>	Región de Murcia	Alicia Rubio
<b>Universidad Politécnica de Cartagena</b>	Región de Murcia	Mario Rosique Blasco

## More information and contact

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For more GUESS information , please visit <http://www.guesssurvey.org>. The full report in Spanish can be obtained at [http://www.guesssurvey.org/resources/nat\\_2018/GUESS\\_Report\\_2018\\_Spain.pdf](http://www.guesssurvey.org/resources/nat_2018/GUESS_Report_2018_Spain.pdf)

In Spain the project has been coordinated by the INDESS (Research Institute for Sustainable Development of the University of Cádiz).

The Spanish universities interested in participating in the 2021 edition, please contact Prof. Dr. José Ruiz Navarro ([jose.ruiznavarro@uca.es](mailto:jose.ruiznavarro@uca.es)).

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## Sponsors and collaborating associations

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### INTERNATIONAL



### NATIONAL

