



12:00 - 12:55

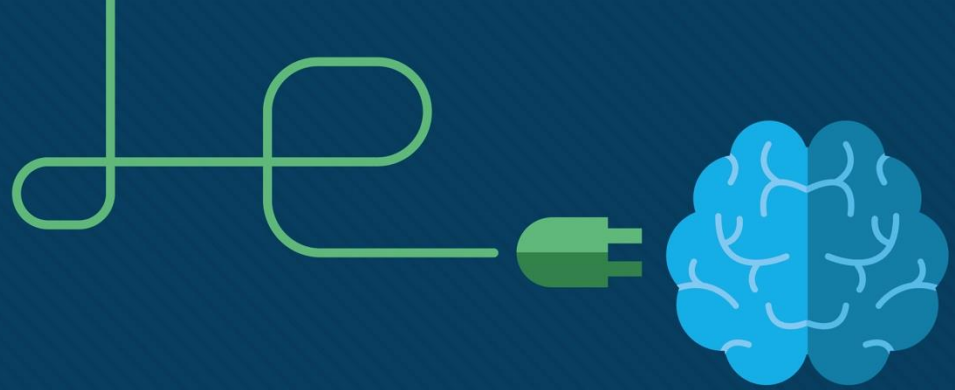
PONENCIA

Cisco Networking Academy

Digital disruption: Impulsando a la próxima generación de Global Problem Solvers

Karsten Simons, Strategic Operations Lead, Corporate Affairs Europe en Cisco Systems

David de San Benito, Responsable de Corporate Affairs en Cisco Iberia



The Digital Workforce

Digitization and a New Generation of Global Problem Solvers.

Karsten Simons, Regional Manager Europe, CIS, Russia & Israel, Cisco

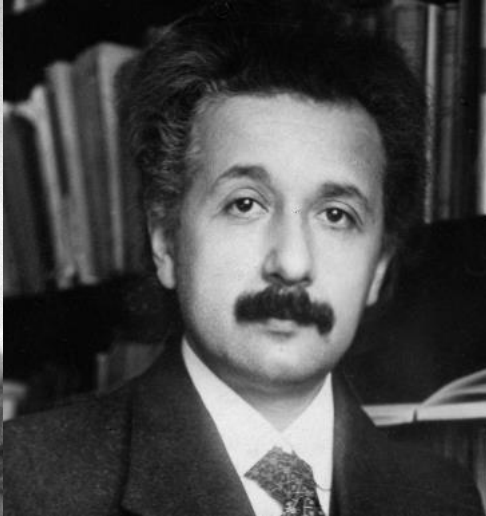
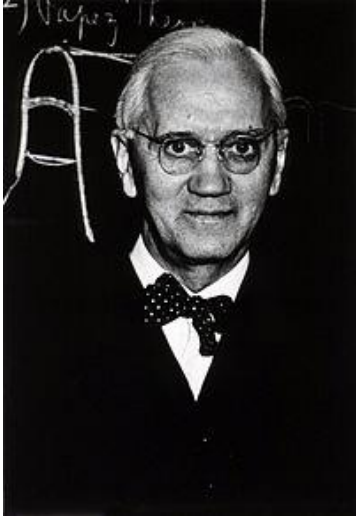
April 2017



A close-up photograph of a person in a dark suit tearing open their chest. The person's hands are pulling the suit apart, revealing a blue t-shirt underneath. On the t-shirt is the iconic Superman logo, a red shield with a yellow 'S' in the center. The background is dark and out of focus.

Global Problem

olver



Changing the Way We Live & Do Business



Food & Grocery



Music & Mobile



Banking



Telecomms

Digitization

Moving a company's entire operations, processes, and businesses onto a single digital operating model – transforming processes and business models



Digital Transformation

Transformative outcomes achieved when organizations fully leverage the changes and opportunities of digital technologies and their impact across society

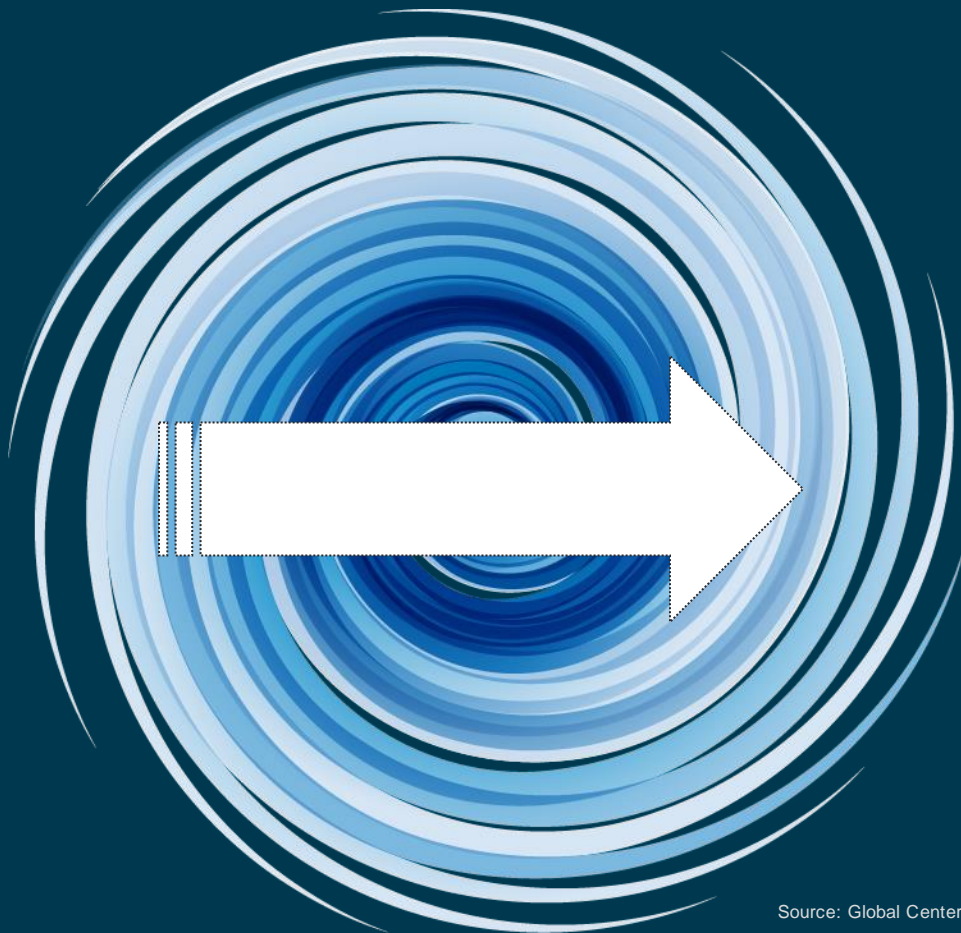
Digital Disruption

The change that occurs when new digital technologies and business models impact a company's value proposition and market position

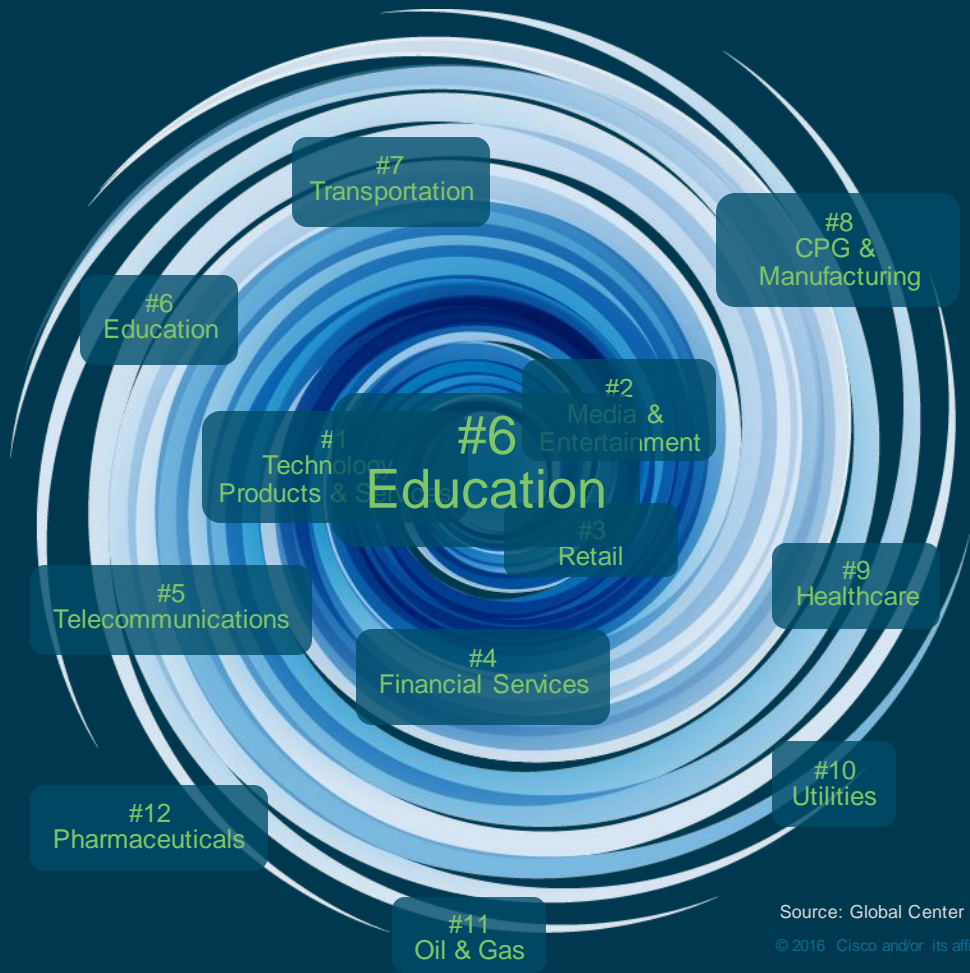
Digital disruption
= critical and
accelerating
forces
3 years

= Average
5 times to
disruption
investment

+
Partnership with
IMD



Only 1 in 4
Global Center
for Digital
Efficiency
Transformation
(DB Center)
digitization



Massive Unemployment

Growing Skills Shortage

Unprecedented Opportunity



70M+

Unemployed youth



72%

Of CEOs concerned about
the availability of key skills



\$24T

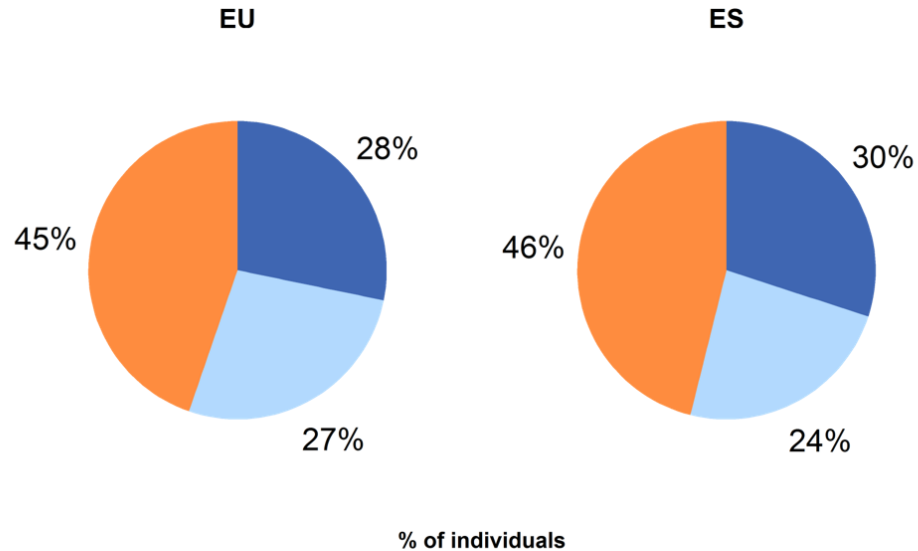
Private sector value
add by 2024

Human Capital: Digital Skills

In Spain 24% of citizens have basic digital skills (27% in the EU)
and 30% have above basic digital skills (28% in the EU)

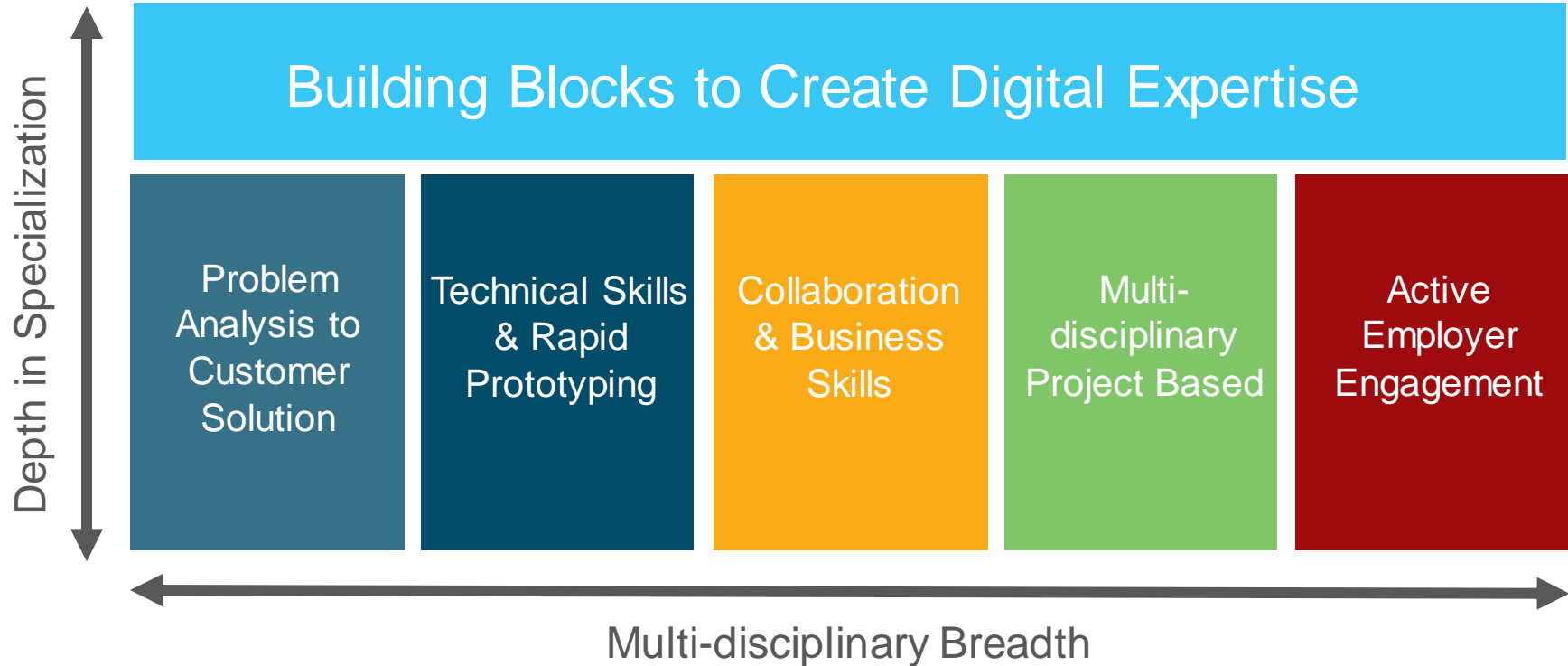
Digital Skills (2015)

■ Above basic digital skills ■ Basic digital skills ■ Low or no digital skills, or do not use the internet



Source: Eurostat - Community survey on ICT usage in Households and by Individuals

The Digital Workforce Transformation



Overwhelming Global Problems to Solve



Unemployment

197.1 million people
71 million young people



Barriers to Education

63 million adolescents (17% of
global population) not in school



Economic Inequality

767 million people live on
less than US\$1.90/day



Water Scarcity

1.8 billion people worldwide lack
access to safe water

What is a Global Problem Solver?



Innovate as a technologist

- Build networks
- Connect devices
- Develop apps
- Analyze data



Think as an entrepreneur

- Create
- Innovate
- Collaborate



Act as a social change agent

- Connect and inspire
- See challenges as opportunities
- Be socially conscious



How Cisco Empowers Global Problem Solvers

01

Early-Stage Investments

Technology Solutions

- Scalable
- Replicable
- Sustainable



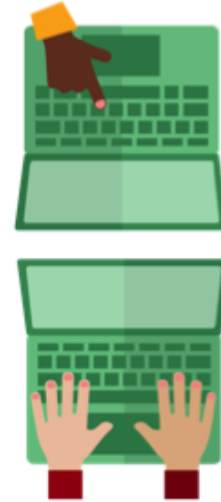
How Cisco Empowers Global Problem Solvers

02

Catalyzing an Entrepreneurial Ecosystem

Support Progress & Inclusive Growth

- Start-up support
- Prize money
- Business plan competitions



How Cisco Supports Global Problem Solvers

03

Build Digital Skills

Create Opportunities to:

- Innovate
- Test
- Expand Thinking



How to Get Involved

cisco.innovationchallenge.com



Login

Register

Cisco Global Problem Solver Challenge

Calling Students + Recent Grads - \$300,000 in Prizes

How can your new technology solution or service help benefit the economy, society or the environment?

APPLICATIONS OPEN UNTIL MAY 30, 2017

[Overview](#)

[FAQs](#)

[How to Participate](#)

[Eligibility](#)

[Rules](#)

[Judges](#)

[Resources](#)





*THERE'S
NEVER BEEN
A BETTER
TIME*

to be a global problem solver






Cisco Networking Academy

La experiencia de aprendizaje en Cisco Networking Academy

David de San Benito

Responsable RSC & Networking Academy Cisco España

PUE DAY, 26 de Abril 2017

A blue-tinted image of Earth from space, showing the curvature of the planet and the atmosphere. A bright sun flare is visible in the top left corner, casting rays across the scene. The text is overlaid on the left side of the image.

**50 mil millones de
objetos conectados
para 2020**



“Changing the
Way We Work,
Live, Play, and
Learn”

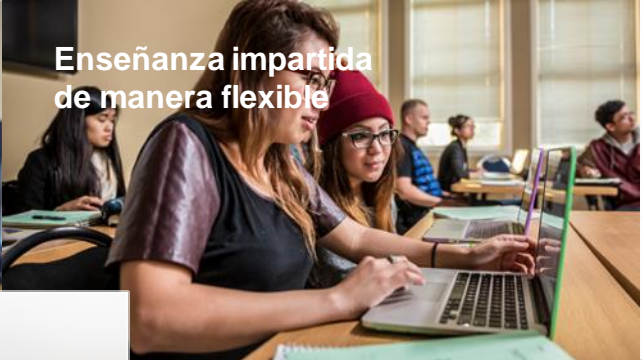
Comunidad global



Enseñanza práctica



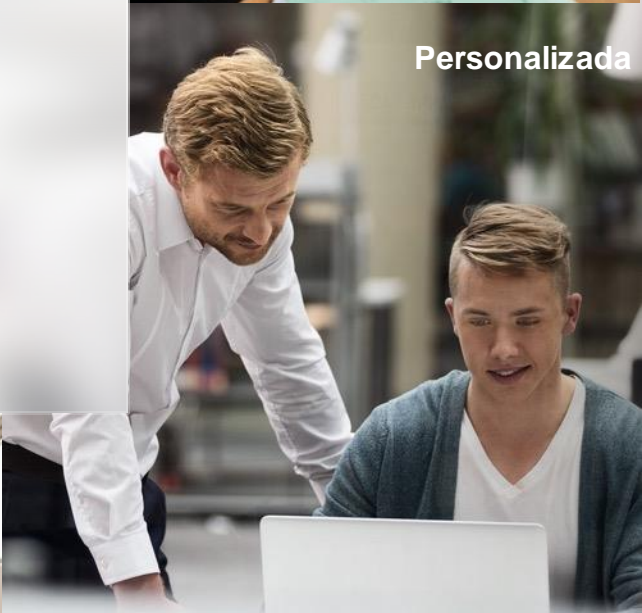
Enseñanza impartida de manera flexible



La experiencia de aprendizaje en Cisco Networking Academy

Crear la fuerza laboral que impulse la economía digital

Personalizada



Hackatones



Simulaciones



Cisco Networking Academy

Ventajas de ser un centro **Cisco Academy**

DA ACCESO

- Acceso a plataforma formativa y contenidos sobre tecnología de última generación

CAPACITA

- Formación que capacita a jóvenes respondiendo a demandas del Mercado laboral: seguridad, IoT, programación

CONVERTIRSE EN UNA MEJOR OPCIÓN (COMO CENTRO EDUCATIVO)

- Proceso constante actualización de contenido
- Alto % de cursos exploratorios en castellano

ACTUALIZA

- Comunidad internacional
- Acceso a Certificación Cisco con descuentos

PRESTIGIA

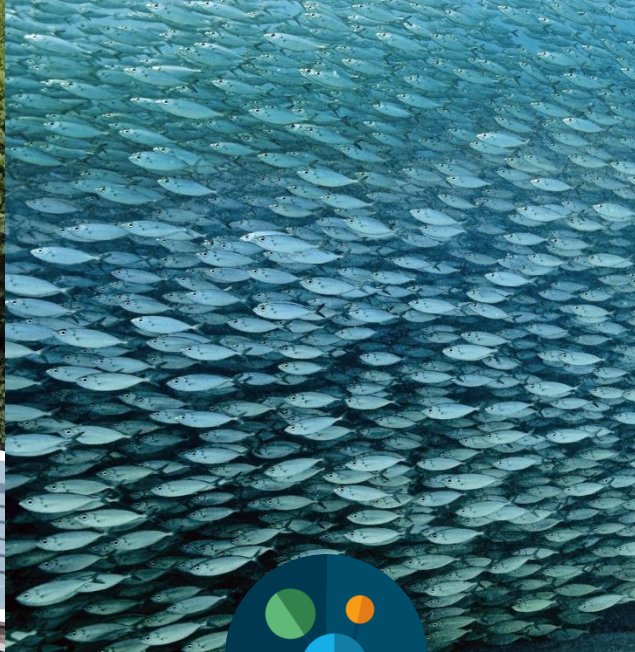
Nuestra cartera de cursos genera **interés y competencia**





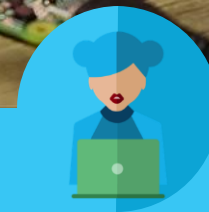
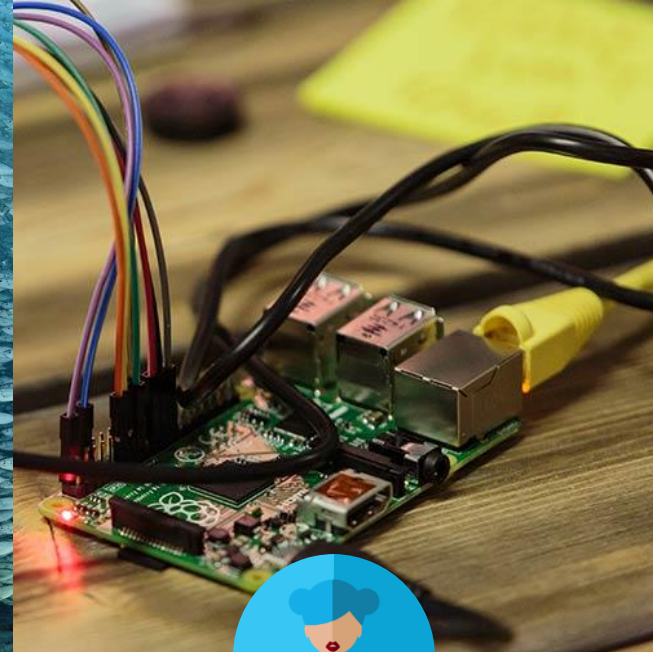
Seguridad

Cursos para descubrir el mundo de la seguridad informática y generar profesionales de la seguridad alineado con la certificación CISCO **CCNA Security**



Networking












Cursos para descubrir el mundo del Networking y generar profesionales de la redes de comunicación alineado con la certificación CISCO **CCNA Routing and Switching**



Programación

Cursos para descubrir el mundo de la programación y generar profesionales de la programación con foco en lenguajes de programación **LINUX y C++, Python** alineado con certificaciones de LPI y C++ Institute.

Learning portfolio

	Exploratory	Foundational	Career Ready
Digital Literacy & Business	Get Connected Be Your Own Boss	Entrepreneurship	
OS & IT	NDG Linux Unhatched	NDG Linux Essentials  IT Essentials 	NDG Linux I  NDG Linux II 
Networking		Mobility Fundamentals Networking Essentials	CCNA Routing & Switching (4)  CCNP Routing & Switching (3) 
Security	Introduction to Cybersecurity	Cybersecurity Essentials	CCNA Security  CCNA Cyber Ops 
IoT	Introduction to IoT	IoT Fundamentals (3)*	
Programming		CLA: Programming Essentials in C  CPA: Programming Essentials in C++  Python*	CPP: Programming in C++* 
Collaborate for Impact	Packet Tracer Packet Tracer Know How	Hackathons Regional IT Competitions	NetRiders Competition Internships

IoT Fundamentals Curriculum

Overview

IoT Fundamentals is a multi-disciplinary hands-on curriculum teaching **how to ideate, prototype and articulate the business value of an “end-to-end IoT Solution”**. The curriculum provides a strong skills and design-thinking foundation for IoT job families that exist today and in the future.

Career Prep

The skills developed in the curriculum is the starting point to prepare for **employer-validated** entry-level job families like:

- IoT Device Management
- IoT Product Manager
- IoT Data Analytics

Learning Components

- Connecting Things course
- Big Data & Analytics course
- Hackathon Playbook
- Cisco Prototyping Lab
- Cisco Packet Tracer (PT 7)

Features



Develop entrepreneurial and social impact mindset through highly engaging hands-on and simulated learning activities including Prototyping Lab and Packet Tracer 7.0 to develop:

- 21st Century Skills such as Creativity, Critical thinking, Collaboration and Communication
- Rapid prototyping with Sensors, Electronics and Arduino
- Use visual programming or Python to program a Raspberry PI
- Connect with Cloud Services using restful APIs
- Collect, store and visualize data from sensors in real time
- Apply analytics to gain insights from data
- Present IoT solutions and their business value

Connecting Things

Chapter 0

Course Introduction

Chapter 1

Things and Connections

Chapter 2

Sensors, Actuators, and Microcontrollers

Chapter 3

Software is Everywhere

Chapter 4

Fog Networks and Cloud Services

Chapter 5

Connecting the Unconnected

Section 1.0

Introduction

Section 1.1

What are Things?

Section 1.2

What are Connections?

Section 1.3

Summary

Topic 1.0.1

Welcome

Page 1.0.1.1

Chapter 1: Things and Connections



Cybersecurity Curriculum

Exploratory

Introduction to Cybersecurity



Course 1: Introduction to Cybersecurity

Objective:

- Create interest in cybersecurity
- Learn basics of being safe online
- Learn different types of cyber threats and attacks, and how organization can protect themselves
- Explore career options in cybersecurity

Audience: Upper secondary, Junior high school students, non-IT, public

Delivery: Self-paced & ILT

Length: 15 hours

Availability: June 2016

Foundational

Cybersecurity Essentials



Course 2: Cybersecurity Essentials

Objective:

- Learn foundational knowledge and essential skills in all security domains in the cyber world
- Learn security standards and frameworks (ISO27000, NIST)
- Learn basic security compliance, operations and policies.

Audience: High school, college students

Delivery: Self-paced & ILT

Length: 30 hours

Availability: Nov 2016

Career-Ready (Specialization)



Job Prospects



Job Prospect:
Network Security
Admin/ Engineer



Potential:
Other
specialized
skills in digital
security and
privacy

Corresponding
job prospects for
each
specialization.

Chapter 0
Course Introduction

Chapter 1
Cybersecurity - A World of Wizards,
Heroes, and Criminals

Chapter 2
The Cybersecurity Sorcery Cube

Chapter 3
Cybersecurity Threats, Vulnerabilities, and
Attacks

Chapter 4
The Art of Protecting Secrets

Chapter 5
The Art of Ensuring Integrity

Chapter 6
The Realm of Five Nines

Chapter 7
Fortifying the Kingdom

Section 3.0
Introduction

Section 3.1
Malware and Malicious Code

Section 3.2
Trickery

Section 3.3
Attacks

Section 3.4
Summary

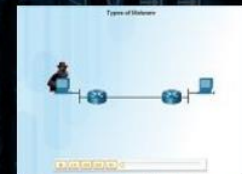
Topic 3.1.1
Types of Malware

Topic 3.1.2
Email and Browser
Attacks

What is Malware?



Page 3.1.1.2
Viruses, Worms, and
Trojan Horses



Page 3.1.1.3
Logic Bombs



Page 3.1.1.4
Ransomware



CPA: Programming Essentials C++

OVERVIEW

CPA: PROGRAMMING ESSENTIALS IN C++

- For beginners with little or no prior knowledge of programming.
- Designed to be a full semester course: 9 chapters, 16 quizzes and chapter assessments, 100+ lab exercises, pre-final and final tests.
- Accessed online with no special equipment or system requirements.
- Aligns to C++ Institute *CPA – C++ Certified Associate Programmer Certification*.
- Offered at no cost.



CPA: Programming Essentials C++

Learning Materials

The screenshot shows a learning interface for C++ programming. At the top left, a navigation bar contains a 'Show chapters' button and a dropdown menu currently set to '6.4.4 Static components'. Below this is a table of contents with chapters 0 through 8, where chapter 4 is highlighted. The main content area is split into two panes. The left pane shows a tree view of the current chapter's sections, with '5.4 Static components' selected. The right pane displays a C++ code snippet for a class named 'Class' with static and non-static members and a main function. At the bottom, there are navigation arrows and a copyright notice for '© Copyrights C++ Institute'.

```
#include <iostream>
using namespace std;
class Class {
public:
    static int Static;
    int NonStatic;
    void print(void) {
        cout << "Static = " << ++Static <<
            ", NonStatic = " << NonStatic << endl;
    }
};
int Class::Static = 0;
int main(void) {
    Class instance1, instance2;
    instance1.NonStatic = 10;
    instance2.NonStatic = 20;
    instance1.print();
    instance2.print();
    return 0;
}
```

Navigation

Left side of the screen: usually instructions, text, downloadable source code files, etc.

Right side of the screen: usually code snippets, examples, animations, etc.

Navigation arrows

outside the class definition.
Another rationale says that the definition has to be separate from the class body because static variables are not actually part of any object. In our program, we do this with a line of code between the *Class* body and the *main* function. Removing this line generates an error.

This program is correct and produces the following output on the screen:

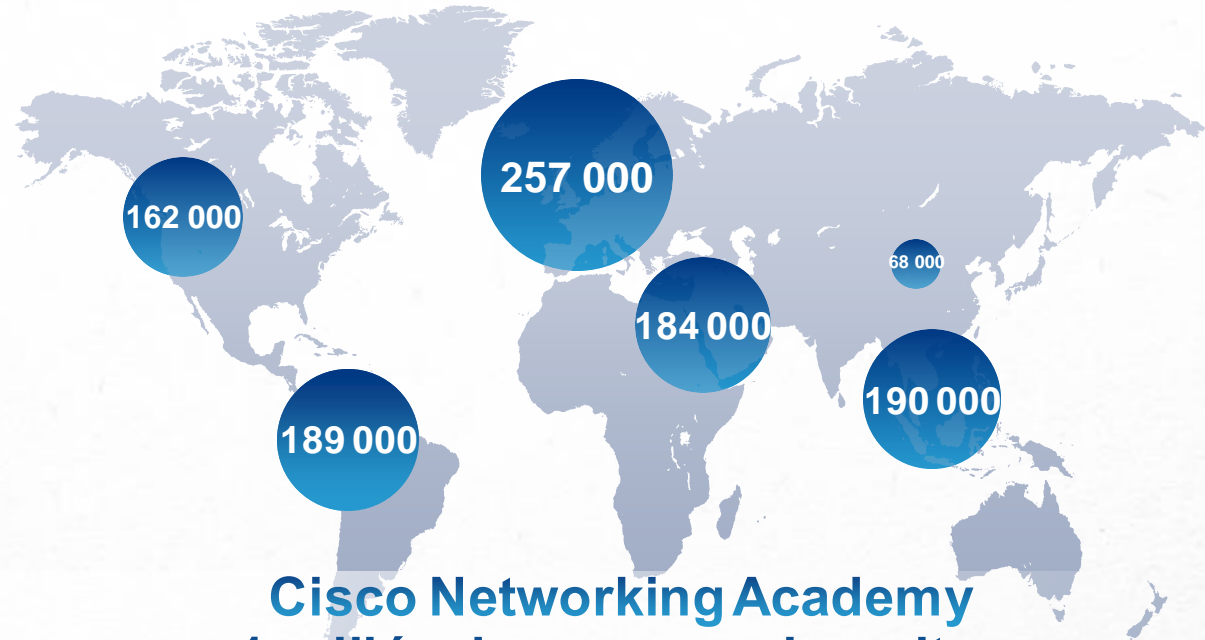
Cisco: líderes mundiales en TI

Más de 9500
academias

Más de 170
países

Más de 6 M
de estudiantes
atendidos

Más de
20 000
instructores



Cisco Networking Academy
1 millón de personas inscritas
actualmente en todo el mundo
Preparamos a los profesionales de TI desde 1997





Cisco Networking Academy

Cisco & PUE

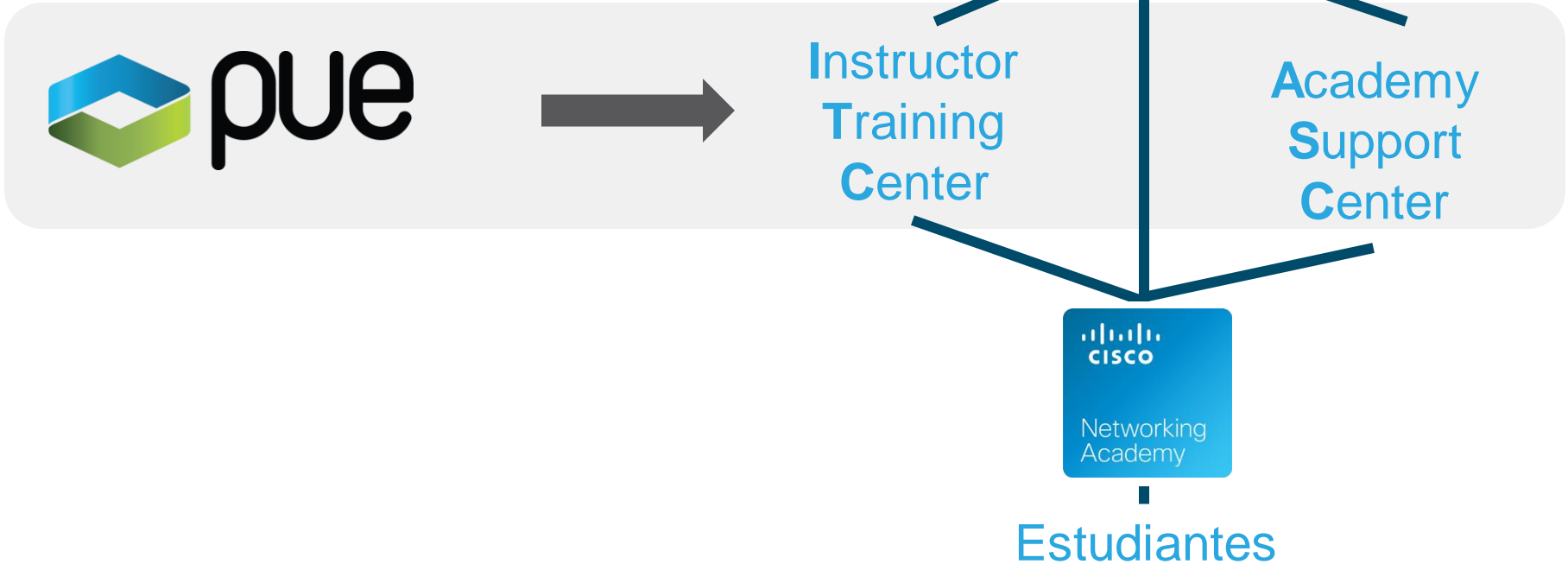


Javier Domínguez

CEO en PUE

PUE DAY, 26 de Abril 2017

Modelo de socios



PUE, ASC Premier+ Partner - 2016

PUE ha sido galardonado como **ASC Premier+ Partner** del programa Networking Academy, el mayor reconocimiento de Cisco a nivel mundial en lo que a su prestigioso proyecto educativo se refiere.

El premio reconoce a PUE en las labores de crecimiento y desarrollo del programa Networking Academy en España y el grado de satisfacción de sus centros Cisco Academy asociados.



PUE, en su labor de ASC, ofrece...



Difusión del proyecto



Localización de contenidos



Soporte continuado a los centros



Distribución de material docente
Cisco Press



Webinars



Iniciativas de interés para Cisco
Academies

PUE, en su labor de ITC, ofrece...

- Formación para instructores
- Soporte al docente
- Formación en todos los currículos disponibles
- Calendario activo a lo largo de todo el año

Formación de instructores

PUE dispone de un calendario anual de formación para instructores que incluye todos los currículos del programa Cisco Networking Academy.

<https://www.pue.es/educacion/cisco-networking-academy/formacion-de-instructores>



CCNA R&S



Internet de las
Cosas



IT Essentials



Linux Essentials



CCNA Security



CCNP

Nueva Certificación CCNA Routing & Switching

- Cisco anuncia la aparición de las nuevas certificaciones CCNA R&S
→ **17 de mayo de 2016**
- Cisco también publica las fechas de validez de las certificaciones existentes y la nueva correspondencia de exámenes.

Certificación	Nuevo Examen	Examen Anterior	Fecha fin Examen Anterior
CCENT	100-105 ICND1	100-101 ICND1	20 de Agosto 20 de 2016
ICND2	200-105 ICND2	200-101 ICND2	24 de Septiembre de 2016
CCNA R&S	200-125 CCNA	200-120 CCNA	20 de Agosto 20 de 2016

Cursos para preparar la certificación CCNA R&S

→ Cursos Desactualizados → No disponibles en Netacad desde Diciembre 2015

→ ~~CCNA DISCOVERY~~

→ ~~CCNA EXPLORATION~~

→ **Opción 1:**

✓ Curriculum CCNA R&S versión 5 (cuatro módulos en castellano)

+

✓ Curso CCNA Routing & Switching v6 Bridging course

→ Módulo complementario que incluye los objetivos actualizados de la nueva certificación (disponible en castellano)

→ **Opción 2:**

✓ Curriculum CCNA R&S versión 6

- Los instructores acreditados pueden impartir los nuevos curriculums.
- **No** es necesaria recertificación para pasar de Discovery/Exploration a CCNA R&S v5 (o v6)

Idiomas - CCNA R&S v6

- **CCNA R&S v6: Introducción a las redes**
 - Inglés y castellano → Disponible
- **CCNA R&S v6: Fundamentos de enrutamiento y conmutación**
 - Inglés y castellano → Disponible
- **CCNA R&S v6: Escalado de redes**
 - Inglés → Anunciado - Julio 2017
 - Castellano → Pendiente de anuncio
- **CCNA R&S v6: Interconexión de redes**
 - Inglés → Anunciado - Julio 2017
 - Castellano → Pendiente de anuncio

Material docente Cisco Press

PEARSON



Acuerdo entre PUE y Pearson para la distribución exclusiva de los libros de Cisco Press en castellano.

Alberto Sebastián, Higher Education & Institutional Sales Manager de Pearson Educación, y **Javier Domínguez**, CEO de PUE.

Material docente



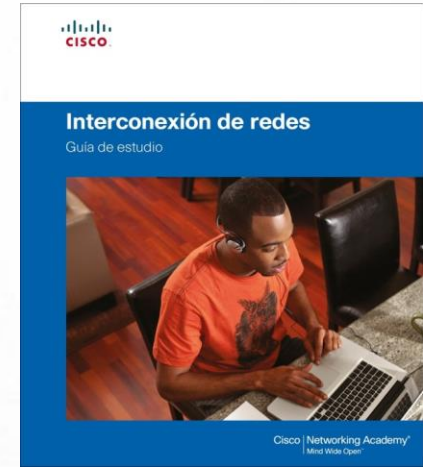
Fundamentos de tecnología de la información

Disponible en Castellano e Inglés

Alineado con la certificación CompTIA A+

<http://webstore.pue.es/it-essentials>

Material docente



Libros oficiales Cisco Press para el aprendizaje de cada uno de los módulos del curso CCNA R&S

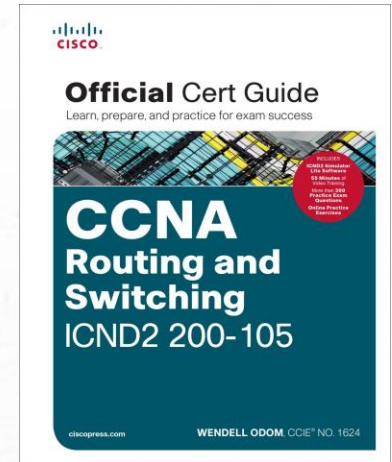
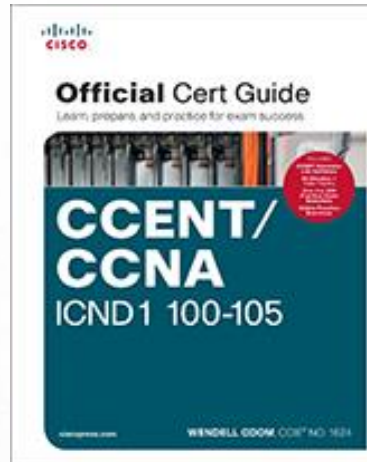
<http://webstore.pue.es/ccna-rs>

Material docente



Libros Cisco Press destinados a la preparación de la certificación CCNA R&S

Incluye tests de preparación,
planes de estudio, ejercicios y
cientos de preguntas de examen



<http://webstore.pue.es/ccna-rs>

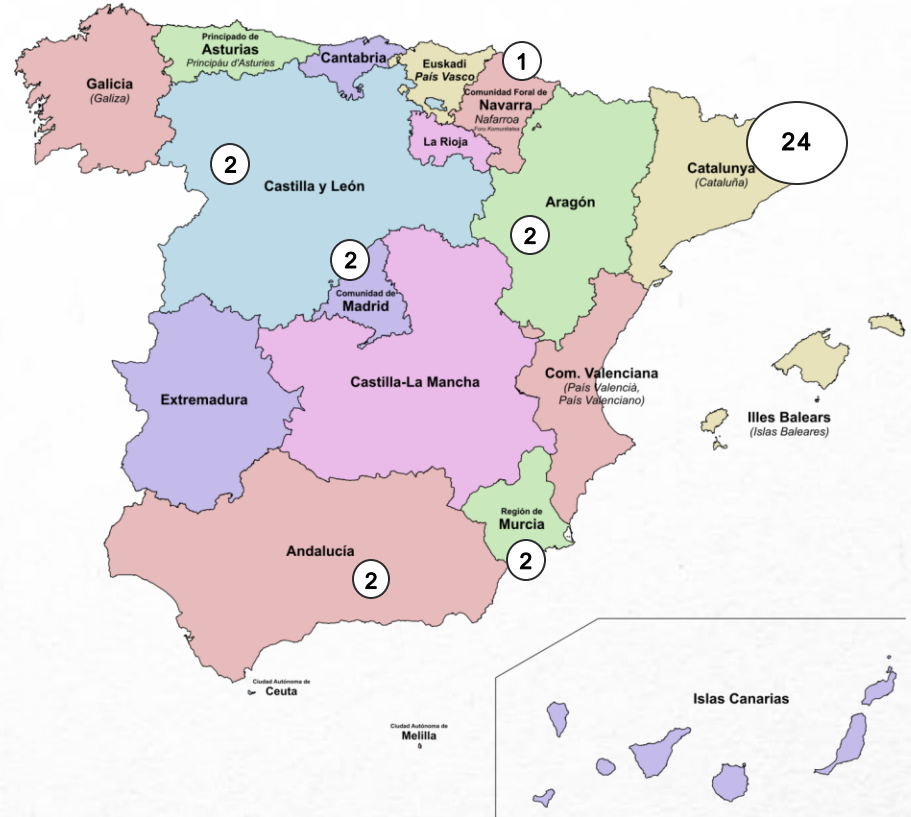
Suscripción al programa CNA

- Coste del alta de una nueva Cisco Academy: **1.502,00 €** (IVA Incluido), que incluye la formación de 2 instructores en CCNA o IT Essentials.
- Renovación anual: **900,00 €** (IVA Incluido). Se incluye la formación de un instructor en cualquiera de los currículums disponibles en el CNA.
- Altas en 2017, no renuevan hasta **enero 2019**
- El coste de suscripción al programa CNA incluye la formación ilimitada de alumnos por parte de la institución académica en los currículums oficiales disponibles en los que tenga docentes certificados.
- Más info: <https://www.pue.es/educacion/cisco-networking-academy>

Cisco Networking Academy en España

2001

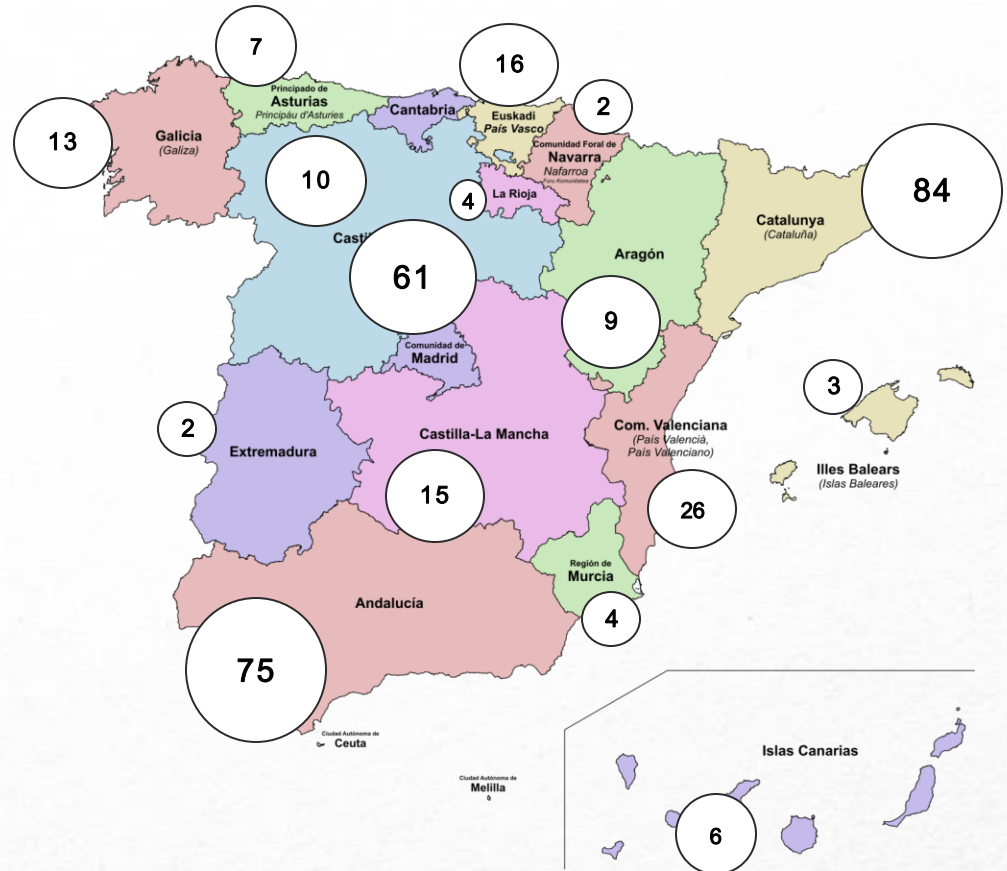
Cisco Academies
35
Estudiantes formados
3.471



Cisco Networking Academy en España

2014

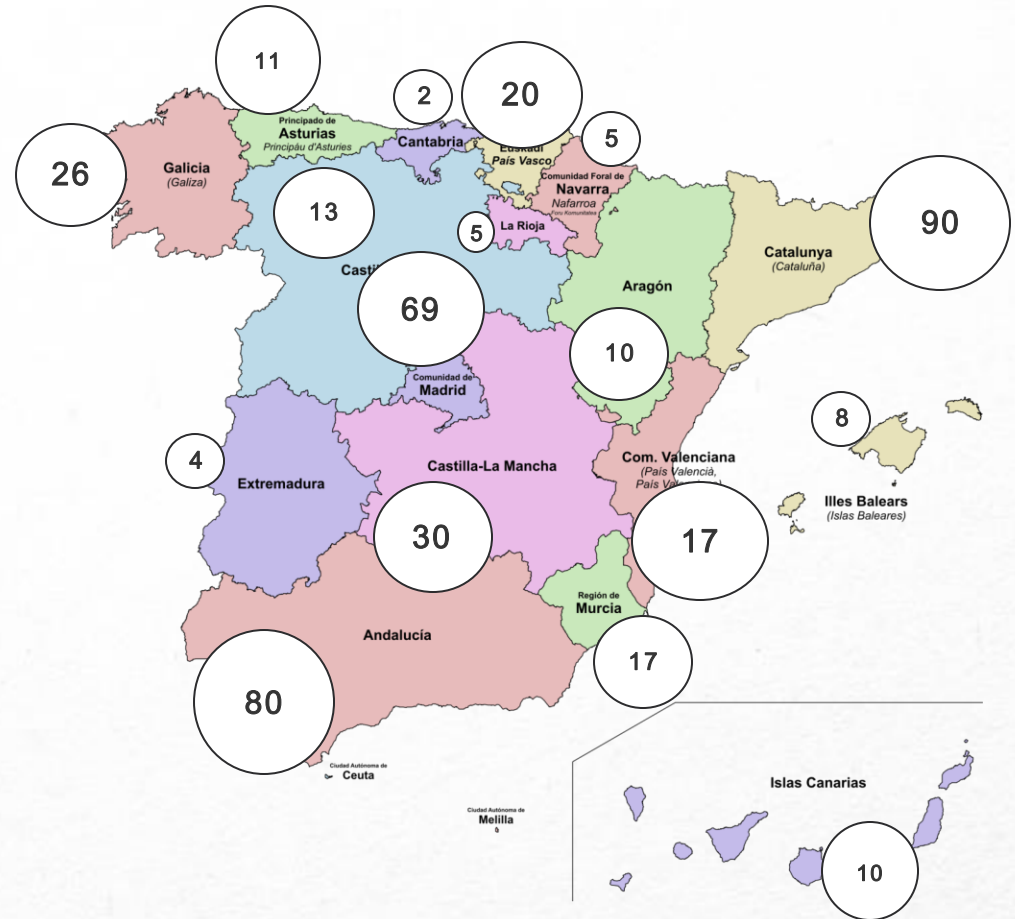
Cisco Academies
337
Estudiantes formados
108.000



Cisco Networking Academy en España

2017

Cisco Academies
413
Estudiantes formados
159.706



¡Gracias!

¿Qué te ha parecido la ponencia de Cisco?

Sólo te pedimos 2 minutos o menos para responder 3 preguntas



pue.es/e-pcisco

Tu opinión nos importa. 