

Master in Digital Solutions Development

SHAPE THE DIGITAL FUTURE



"My experience at BTS is happy, successful, and productive!"

Polina Severina Russia, BTS Student. Web Developer - Accenture



"Definitely recommended, the teachers are really qualified, the program is really solid"

Andrea Amorosi Italy, BTS Student. Web Developer - Accenture



"BTS has been enlightening. It has opened a whole new door for me"

Franco Bonifetto Argentina, BTS Student. Growth Hacking - Barcelona Tech



"A dynamic and hands-on Masters compared to other programs"

Sereen Masri U.S., BTS Student. Product Owner - Nuvolar



"BTS will give you the broadest skills you can get"

Damien Dupont France, BTS Former Student. Traffic Manager - Splendia



"The knowledge we gain is very applicable to real life"

Rebecca Li Wing China, BTS Former Student. Front End Developer - Naturitas

Master awarded by Barcelona Technology School and the University of Barcelona





Shape the Digital Future

Master in Digital Solutions Development

Build digital products. The most advanced master for the next generation of developers and entrepreneurs. Talent ready to work for International high-growth Internet & digital technology sectors.

Welcome to BTS

Enabling people to shape the digital future

If you're passionate for technology and want to contribute to drive the digital transformation, Barcelona Technology School is your place.

The digital ecosystem in Barcelona is now warmer than ever. The strategic alignment of the government, the industry and educational institutions like BTS, are mixing the best ingredients to boost the European capital of innovation.

The result of Barcelona's digital strategy is excellent: international companies are landing in Barcelona to relocate their digital and tech headquarters and open professional opportunities for those who are ready.

Josep Clotet

General Manager





University of Barcelona Ranked #1 in Spain



Countries. Student International Diversity



Tech & Business Background Participants





Women Gender Diversity



Student Employability rate Double degree programs:



Strategic Advisory Board



Sudha Jamthe Silicon Valley



C. Mastrodonato London



Marko Gargenta San Francisco



Angel Garcia Barcelona



Ricardo Baeza Silicon Valley



Aleix Valls Barcelona

The members of the BTS Strategic Advisory Board are industry leaders with wide experience managing strategic digital projects in companies such as Ebay, Twitter, Yahoo, Mobile World Capital, Konica Minolta or StartupBootCamp.

This Team helps Barcelona Technology School to take care of the quality and contents of the programs.

Academic Directors



Sandro Mancuso Brazil



Marie Glad Sweeden



Eduard Gil Spain



Ravi Daswani UK

Lead Professors



Marie Glad User Experience



Marc Planagumà Big Data



Ravi Daswani Digital Business



Richard Lagrand Entrepreneurship



Víctor Pascual Data Visualization



David Laniado Big Data



Liana Napalkova Data Science Foundations



José Luis Muñoz Big Data Legal & Security



Lali Soler Data Driven Business



Miquel Rodríguez Agile



Liesner Acevedo Real-time Data Analysis



Andrea Gelsomino Web Development



Pablo Sordo Mobile Development



Pablo Quintano Creative Technology



Sara Hajian Classical Data Analysis



Daniel Cesario Cloud Computing

3D Learning Methodology

Barcelona Technology School has developed its own practical, active and participatory methodology with emphasis on "learning by project" where participants generate their own digital solutions.



This methodology reflects digital industry demand for new professionals with skills such as:

Technical Skills

Web Development Mobile Development User Experience Big Data Machine Learning Cloud Computing Internet of Things Cyber Security Software Craftsmanship Blockchain

Business & Innovation Skills

Digital Transformation Digital & Mobile Business Creative Technology Innovation Entrepreneurship FinTech Legal Tech Change Management Digital Talent & Culture

Core Skills

Empathy & Communication International Scope Flexibility Collaboration & Network Transversal Vision Curiosity Compromise & Responsibility



BTS Ecosystem

Industry Immersion

Barcelona Technology School has assembled an ecosystem of companies that supports BTS programs, providing industry exposure and bringing professional experience to the students through internships and job opportunities.

Project Mentors

Real & experienced professionals will mentor your digital projects

Digital Companies

Get professional orientation for your digital career

University of Barcelona

Ensures academic accreditation, quality and certification

Academic Board

High qualified instructors and well-known professionals

Career Mentors

Visit and learn from the tech leaders

Entrepreneurs & Incubators

Inspire your own projects and new disruptive digital business

Digital Labs &I+D+i

Digital Labs & innovation projects exposure

SHAPE THE DIGITAL FUTURE

Some of the companies that support BTS and enroll our students:



Professional Experience

Digital companies need your talent

Tech industry is exploding and the key digital companies need your talent. Barcelona Technology School connects your career with the digital sector while offers you the most demanded digital knowledge & skills.

Digital Talent Gap

Need of talent ready to shape the digital future



By **2024** there will be **4.500.000** unfilled digital jobs worldwide

Source: Bureau of Labor Statistics' Occupational Outlook, Handbook and Career Guide to Industries.

PAID INTERNSHIPS & JOB OPPORTUNITIES

Your Talent



Digital Industry

My Digital Impact

Having a purpose for professional happiness

A Team of mentors will help you to define your own purpose according to what you love, what you are good at, what can you be paid for and how you can improve the world with such amazing skills.

This ensures you focus your energy on a job you really love, which is the best way you can drive a great digital impact.



We help Barcelona Technology School students to achieve their professional goals and find happiness in life doing what they love the most.

This is driven by a japanese concept called IKIGAI, which describes the secrets for a long and meaningful life. To achieve this goal you have to identify your reason for being and your own purpose.

BTS will help you to find your IKIGAI and a Team of mentors will advice you during this exciting journey that will boost your digital impact on the society.

My Digital Impact Mentors

BTS mentors are generous people that believe in the power of sharing. They will be happy to offer you their vision and wide experience as digital leaders in top global tech companies. Get advice from digital sages that will help you to drive your purpose and develop a great career in the digital industry.

Get advise from international digital leaders



Sudha Jamthe Silicon Valley



C. Mastrodonato London



Charles Ikem Verona



Susanna Maier Berlin



Marti Escursell Barcelona



Ravi Daswani London



Saul Tessler New York

2017 - 2018 Mentors. A Team of professionals with experience leading digital projects in companies such as:













All the BTS students enrolled into a Master program have free access to one of the best sport clubs in the city which is located right in front of the beach. Enjoy indoor and outdoor swimming pools, gym and lead classes, spa, paddle courts and much more. Play sports, make friends or simply take a relaxed bath on the sea.



Club activities:











Global Chapters

New York · Shanghai · San Francisco · Silicon Valley

The Global Chapters programs are an international experience for students & entrepreneurs that want to discover the epicenters of the world's digital ecosystems.



This experience exposes students to how business is done in those ecosystems and creates long lasting relationships between students, companies, and business leaders.

Sample Week Itinerary:

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY			
Visit large digital corporations	Tour in Silicon Valley	Entrepreneurship culture immersion	Visit the Palo Alto Research Center	Network building	Private VC and Startup parties	Free			
Meals with digital leaders									

Students visit companies like:





Master in Digital Solutions Development

The most advanced Master for the next generation of developers.

Master in Digital Solutions Development

The main goal of MDSD is to help you develop the skills that will permit you to participate in the digital transformation. This program is focused on the development of digital solutions, providing you a wide vision and understanding of the most influential knowledge and technologies.



Contents

Master in Digital Solutions Development



Web Development

During this course, students will learn Front-End (HTML, JavaScript), Back-End (SQL, Java) and some new frameworks, currently used in the market, to be able to develop a responsive web application.



Software Craftsmanship

The subject will introduce students to the software craftsmanship movement and practices associated with it from a very hands-on perspective. It will touch on TDD, Clean code, refactoring and other essential topics to a software craftsman.



Mobile Development

This module will mainly focus on Android, one of the most popular mobile OS nowadays. Students will acquire solid foundations on this particular platform and will also obtain a specific mindset which will allow them to focus their attention in any other mobile framework in the future.



User Experience

Students will learn how to create roadmaps, apply a set of user research techniques, create work flow, structure content, design prototypes, wireframes and detailed layout. They will also learn how to define a brand's tone of voice and content messaging, as well as iterate solutions. At the end of this subject they will be able to manage design projects with focus on user needs.



Agile

The students will be immerse in the Agile mindset by experimenting the Agile management practices. At the end of this subject they will be able to practice Scrum, understand Kanban, develop and idea from Vision to Deployment from an Agile perspective and define requirements with User Stories.



Big Data

This subject is an introduction on Big Data analytics. Students will learn what is Big Data and what it is not. They will learn the main tools and analytics techniques, to be able to work in an end to end analytics project.



Digital Business

Students will understand the impact of the digital transformation on the economy. They will learn to think strategically about how to analyse trends and how to market any business in the digital world. They will develop and execute digital marketing plans effectively.



Mobile Business

Students will learn the concept of profitability, create a dashboard of metrics for every specific business model and use appropriate technology to do it. They will calculate the KPIs related with revenue stream and with costs, like the CAC (Client acquisition cost) and LTV (life-time value).



Entrepreneurship

Students will learn to shape opportunities, provide leadership and build the Team to create economic and social value. They will create and develop business models for start-ups based on customer development and continuous validation, managing financial metrics and dealing with investors.



Creative Technology

Students will experience the process of discovery, interpretation and ideation. They will learn techniques to identify opportunities and understand customer needs. They will integrate the process of conceptualization and creative design that will help them design innovative digital solutions.



Cloud Computing

Students will learn what are the main cloud providers and their respective strengths. They will get an in-depth view of at least one of them (Amazon Web Services) and understand how to support web-scale projects.



Project

Students work during all the program on a final project with the aim to build a real digital product.

Summary Master in Digital Solutions Development

ТҮРЕ	LOCATION	DURATION	LANGUAGE
Full Time Master degree	Barcelona, Spain	9 months (1 academic year)	English
ACCREDITATION	CREDITS	INTAKE	FEES
Barcelona Technology School and University of Barcelona	60 ECTs	October	17.000€

Paid Internships & Digital Jobs:

BTS offers paid internships in leading digital companies to their students. Take advantage of the BTS ecosystem and get a professional experience during & after the program.





Master awarded by Barcelona Technology School and the University of Barcelona, ranked best university in Spain by:



Academic Ranking of World Universities. 2017



QS World University Rankings, WUR. 2017



Center for World University Rankings. 2017



Best Global Universities. 2017

Pre-Course

Introduction to Software Development

For entry students without technical background that want to enroll the Master in Digital Solutions Development.

ТҮРЕ	STARTS	DURATION	FEES				
Full time	September	4 weeks	2.200€				
Technology background is not mandatory							

Contents

Introduction to relational Database & SQL

- 1. Introduction to relational database
- 2. Data management language
- 3. SQL (Structured Query Language)
- 4. Data definition language

Introduction to Object-oriented programming

- 1. Introduction to software development lifecycle
- 2. Fundamentals of programming
- 3. Object-oriented programming

Introduction to Java

- 1. Java basics
- 2. Flow of control
- 3. Composition and inheritance
- 4. Interfaces

My first development project

1. Hands on work

The aim of this course is to provide the base knowledge that any student needs to enroll the Master in Digital Solutions Development.

How to apply

Master in Digital Solutions Development

If you are passionate about Software Development and you would like to access to job opportunities, develop the best digital talent and have a master experience in Barcelona... we just need from you:

1 Application Form

www.barcelonatechnologyschool.com

2 Motivation Letter & CV

Send the admissions office your CV as well as a motivation letter explaining how you think the digital industry will be in the next five years and how you could contribute to the digital transformation.

You can submit this documentation directly by email.

info@barcelonatechologyschool.com

3 Assessment

Our Admission Board, as well as the director of the program, will analyze your candidature and if you meet the profile of Barcelona Technology School, we will call you to have a chat.

Admissions Office:

"Dynamic and hands-on Masters compared to other programs"

Sereen Masri U.S., BTS Student. Product Owner - Nuvolar





Programs awarded by Barcelona Technology School and the University of Barcelona, ranked #1 university in Spain.



98% Student employability rate



Ecosystem of top digital companies & tech labs. International environment of digital leaders from all over the world.



Development of the most demanded digital skills.



Beach & sports club, located on the beachfront of Barcelona.



Full Health Coverage Insurance

Great opportunities are waiting for BTS graduates













Information and admissions info@barcelonatechnologyschool.com (+34) 93 304 17 21

Location

Barcelona. Almogàvers 119 Barcelona's Technological district (22@)