



UCAM

UNIVERSIDAD CATÓLICA
DE MURCIA

UCAM SHORT COURSES

MURCIA, SPAIN 🇪🇸 • 2018/19



learn.
do.
live.



Welcome to UCAM, Universidad Católica San Antonio de Murcia



José Luis Mendoza Pérez
President of UCAM

Our campus is strategically located in Murcia, south-east Spain. With more than 16,000 students and over 1,000 professors we are continually expanding worldwide to make one of our main objectives a reality: to promote a human and high quality university education, with representative presence in all continents.

UCAM has a friendly and international environment in a wonderful Mediterranean framework, and is proud of having representatives in all five continents. The University's international vocation propels us to collaborate with universities from all across the world at every educational level: research, exchange of students and professors, and the creation of international bachelor's and master's degrees in all specialties.

At UCAM you will experience the dynamism and enthusiasm of the university community, the first-class teaching facilities, the picturesque surroundings of the Jerónimos Monastery, and a sports structure including 21 elite teams competing at top international level. The Catholic and universal ethos of our campus provides a great opportunity for self-development and practice of personal responsibility.

Welcome to Spain, welcome to UCAM.



UCAM Short Course Program

Short courses have gained prestige in Education as exceptional opportunities to learn about a specific subject in a short period of time. UCAM short courses program includes a wide range of courses in several fields and help students to acquire new competencies and skills or to enhance the existing skills.

Courses consist of 60 teaching hours over a three week period and are taught using a dual learning method which combines theoretical and practical insights.

UCAM short courses are focused on “just in time” and “just enough” teaching in order to meet student needs and to match the requirements of the labour market in terms of knowledge and skills.

Reasons to Enroll in a Short Course

- To learn about other fields of study.
- To pursue further studies in those fields.
- To enhance existing skills and abilities.
- To expand career paths.

Minimum Enrollment

The minimum number of students to offer a course is 10. UCAM reserves the right to cancel the course when the minimum number of students is not reached.

Venue: UCAM Campus (Murcia)

Duration: 3 or 2 weeks (selected programs)

Credits: 6 ECTS

Teaching hours: 60 hours

Timetable: 09.30-13.30 (with 30 minutes break and lunch after classes), Mondays to Fridays

Dates: 3 WEEKS (2-20 July 2018)
2 WEEKS (18-29 June 2018 / 2-13 July / 16-27 July / 10-21 September)

Please note that Non-EU students in Spain are not entitled to medical coverage. A private medical insurance is obligatory for entire length of stay.

The courses schedule and professors may be subject to change.

Course Fee Includes

- ✓ 1 Professor/tutor for free
- ✓ Accommodation (triple or double room upon availability)
- ✓ Breakfast and lunch (excluding weekends)
- ✓ Card for city bus or tram travel (Murcia city)
- ✓ Teaching materials
- ✓ UCAM welcome pack
- ✓ Murcia city guided tour
- ✓ 20 hours teaching per week plus UCAM Course Completion Certificate
- ✓ 1 company visit per week

Big Data Fundamentals and Applications in Bioinformatics



Objectives

- To explore techniques and tools for interpreting and analysing large volumes of data.
- To study and analyse different hardware architectures in Big Data environments.
- To analyse and understand different strategies for cleaning, modeling and analysing data from the Big Data perspective.
- To learn security and privacy techniques applied to Big Data.
- To learn about real problems where the problem of large volumes of data is present, especially in Bioinformatics.

Teaching Staff

Andrés Muñoz

Senior lecturer in the Technical School at the Catholic University of Murcia (UCAM), Spain. He obtained his PhD in Computer Science in 2011 at the University of Murcia, Spain. He has worked on several research projects in artificial intelligence and education. His main research interests include argumentation in intelligent systems, Semantic Web technologies and Ambient Intelligence.

José L. Abellán

He received the B.S., M.S. and Ph.D. degrees in Computer Science and Engineering from the University of Murcia, Spain, in 2007, 2008 and 2012, respectively. From 2012 to 2014, he was a post-doctoral researcher at Boston University, USA. He is currently an Assistant Professor of the Computer Science Department, Catholic University of Murcia (UCAM), Spain. His research interests include GPU architectures, networks-on-chips, high performance computing and emerging silicon photonics and wireless-on-chip technology.

José M. Cecilia

He received his B.S. degree in Computer Science from the University of Murcia, Spain, his M.S. degree in Computer Science from the University of Cranfield, United Kingdom (2007), and his Ph.D. degree in Computer Science from the University of Murcia, Spain (2011).

Raquel Martínez España

Assistant Professor of the Computer Science Department, Catholic University of Murcia, Spain. She received her B.S. M.S. and Ph.D. degrees in Computer Science and Engineering from the University of Murcia, Spain, in 2009, 2010 and 2014, respectively.

José Pedro Cerón-Carrasco

He earned his Ph.D. at the University of Murcia, Spain (2009). He joined the University of Namur, Belgium (2009), the University of Nantes, France (2011), and the University of Murcia, Spain (2013) during his postdoctoral training supported by Fundación Séneca and the European FP7 Marie Curie program.

Joaquín Lasheras

Associate Professor in the Technical School at the Catholic University of Murcia (UCAM), Spain. He had previously obtained his BSc and MSc degrees (computer science) in 2003 and 2005 respectively at the University of Murcia. He obtained his PhD in 2011 at the same university.

Francisco Arcas

Assistant Professor of the Computer Science Department, Catholic University of Murcia (UCAM), Spain. He received his B.S., M.S. and Ph.D. degrees in Computer Science and Engineering from the University of Murcia, Spain, in 1991, 1993 and 2008, respectively.

Horacio Pérez Sánchez

He earned his Ph.D. at the University of Murcia, Spain (2006). He joined the Forschungszentrum Karlsruhe, Germany (2007), Karlsruhe Institute of Technology, Germany (2009), during his postdoctoral training supported by German Ministry of Science and FP7 Marie Curie programme.

Business Partners



2 Weeks Schedule

1st WEEK

	SESSION 1	SESSION 2	SESSION 3	SESSION 4	SESSION 5
9:30	"Tour in UCAM + Course Introduction"	"Big Data Technologies (Dr. Andrés Muñoz)"	"Hands-on session on Big Data Tech. (Dr. Andrés Muñoz)"	"Addressing the Challenge of Securing Big Data (Dr. Fernando Terroso)"	"Towards data processing in Big Data (Dra. Raquel Martínez)"
11:30	BREAK	BREAK	BREAK	BREAK	BREAK
12:00	"Introduction to Big Data (Dr. Andrés Muñoz)"	Hadoop, Spark, Latest technologies	Lab Session	Interface and Costs of Big Data	Introduction to Intelligent Data Analysis
14:00	LUNCH	LUNCH	LUNCH	LUNCH	LUNCH
17:00 - 20:00	Murcia: Cultural Tour				

2nd WEEK

	SESSION 1	SESSION 2	SESSION 3	SESSION 4	SESSION 5
9:30	"The Landscape of HPC Platforms for the Big data challenge (Dr. José Luis Abellán)"	"Graphics supercomputer for big data era (Dr. José María Cecilia)"	"Lexical analysis and sentiment analysis I (Dr. Francisco Arcas)"	"Introduction to Big Data in Structural Bioinformatics and Drug Discovery (Dr. Horacio Pérez Sánchez)"	"Company Visit: Answare and Visualitis (Dr. Andrés Muñoz / Dr. Joaquín Lasheras)"
11:30	BREAK	BREAK	BREAK	BREAK	
12:00	Future Trends in developing computer architectures	Application Examples	"Lexical analysis and sentiment analysis II (Dr. Francisco Arcas)"	"Introduction to Big Data in Structural Bioinformatics and Drug Discovery II (Dr. José Pedro Cerón Carrasco)"	
14:00	LUNCH	LUNCH	LUNCH	LUNCH	LUNCH



Fundamentals of 3D Digital Design and Additive Manufacturing (3D Printing)



Objectives

- Get a global vision of the additive manufacturing process: from the digital modeling of an object to its final 3D printing.
- Know the basics of 3D design through advanced CAD tools such as Solid Works.
- Focus the design process to additive manufacturing.
- Obtain digital models through digitizing techniques such as scanning.
- Understand the basics of 3D printers: electronics, mechanics, etc.
- Control the maintenance and operation of 3D printers.
- Know the properties of the most common materials used for 3D printing.
- Manage a full additive manufacturing project.
- Get in contact with the 3D printing industry and entrepreneurs.

Teaching Staff

Rafael Melendreras Ruiz

Vice-Dean of the degree of Telecommunications Systems Engineering. He received the M.S. degree in Telecommunications Engineering at the Technical University of Valencia, Spain (2000) and his Ph.D. at the Catholic University of Murcia (UCAM), Spain, in the area of Digital Television (2012). His area of research is Remote Sensing and Digital Television Systems.

Ángel J. García Collado

Secretary of the degree of Telecommunications Systems Engineering. He received the M.S. degree in Telecommunications Engineering at the Technical University of Valencia, Spain (1997) and his Ph.D. at the University of Murcia, Spain in the area of Metamaterials. CoFounder of the 3D Printing and VR Lab at UCAM, his area of research is Antennas and Quiral Medium.

Germán Meoro Avilés

Coordinator of the Industrial Design department of the Regional Metal Federation. Received the title of Graduated in Engineering of Industrial Design at the University Cardenal Herrera de Valencia CEU, Spain (2002). Founder of the Microfusion and 3D Printing Laboratory at FREMM, his research area is Industrial design, modeling, manufacturing processes, microfusion and 3D printing.

Darío García

Graduated in Biology from the University of Murcia, Spain. Master in Clinical and Applied Research in Oncology from the CEU San Pablo University and National Center for Oncology Research (CNIO). Member of the Multidisciplinary Oncology Research Group at the Catholic University of Murcia (UCAM), Spain. Member of the Gastrointestinal Cancer Unit at CNIO. Doctorate in 3D printing in oncology, at the Catholic University of Murcia (UCAM), Spain. General Director of Cella Medical Solutions. National Brightest Idea National Award of Spain 2015. AshokaBoehringer National Award Making more health 2016.

Ginés Estrada

Engineer T. Industrial by the Polytechnic School of Cartagena, Spain (1982). He has worked as a project engineer, director of works and manufacturing in numerous companies. Since 2014, he has been dedicated to the design, construction and commercialization of numerical control milling machines and 3d printers. He also has teaching experience in 3D printing.

José Antonio Acosta Martínez

He obtained his Degree in Biology from the University of Murcia, Spain. Mr. Acosta is a researcher with a doctoral contract in the Faculty of Health Sciences and member of the research group of Biomaterials and Regenerative Medicine of the Catholic University of Murcia (UCAM). Also, he obtained the title of Industrial design technician with Autodesk, Inventor by SEAS. Expert in Innovation, 3D scanning, additive manufacturing (3D printing) and subtractive. Inventor.

Pedro García Trenza

Industrial Engineer by the Polytechnic University of Cartagena, Spain, and Technical Engineer of Telecommunication by the Catholic University of Murcia (UCAM). Founding members of Dronica S.L. a company dedicated to aerial filming and photography, works monitoring, surveying services, precision agriculture and industrial inspections.

Business Partners



3 Weeks Schedule

1st WEEK

3D Design (Part I)

SESSION 1

- 9.30 "Tour in UCAM + Course Introduction"
 11.30 **BREAK**
 12.00 "Basic Concepts of Solidworks (Mr. German Meoro-Avilés)"
 14.00 **LUNCH**
 17:00-
 20:00 Murcia: Cultural Tour

SESSION 2

- 9.30 "Introduction to the sketch I (Mr. German Meoro-Avilés)"
 11.30 **BREAK**
 12.00 "Introduction to the sketch II (Mr. German Meoro-Avilés)"
 14.00 **LUNCH**

SESSION 3

- 9.30 "Basic part modeling: Extrusion I (Mr. German Meoro-Avilés)"
 11.30 **BREAK**
 12.00 "Basic part modeling: Extrusion II (Mr. German Meoro-Avilés)"
 14.00 **LUNCH**

SESSION 4

- 9.30 "Basic part modeling: Revolution I (Mr. German Meoro-Avilés)"
 11.30 **BREAK**
 12.00 "Basic part modeling: Revolution II (Mr. German Meoro-Avilés)"
 14.00 **LUNCH**

SESSION 5

- 9.30 -
 12.00 "Company Visit: Cella Medical Solutions (Mr. Darío García-Calderón and Mr. Ginés Estrada)"
 14.00 **LUNCH**

2nd WEEK

3D Design (Part II)

SESSION 1

- 9.30 "Basic model of parts: Sweep I (Mr. German Meoro-Avilés)"
 11.30 **BREAK**
 12.00 "Basic model of parts: Sweep II (Mr. German Meoro-Avilés)"
 14.00 **LUNCH**

SESSION 2

- 9.30 "Configuration of starting formats I (Mr. German Meoro-Avilés)"
 11.30 **BREAK**
 12.00 "Configuration of starting formats II (Mr. German Meoro-Avilés)"
 14.00 **LUNCH**

SESSION 3

- 9.30 "Drawings and plans I (Mr. German Meoro-Avilés)"
 11.30 **BREAK**
 12.00 "Drawings and plans II (Mr. German Meoro-Avilés)"
 14.00 **LUNCH**

SESSION 4

- 9.30 "Assembly and Sub-assumptions I (Dr. Rafael Melendreras- Ruiz and Dr. Angel J. García-Collado)"
 11.30 **BREAK**
 12.00 "Assembly and Sub-assumptions II (Dr. Rafael Melendreras- Ruiz and Dr. Angel J. García-Collado)"
 14.00 **LUNCH**

SESSION 5

- 9.30 -
 12.00 "Company Visits II: CEEIC - Drónica and Fluid 3D (Mr. Jesús Trenza and Mr. Antonio Saura)"
 14.00 **LUNCH**

3rd WEEK

3D Manufacturing

SESSION 1

- 9.30 "Basic model of parts: Sweep I (Dr. Ángel J. García-Collado & Dr. Rafael Melendreras-Ruiz)"
 11.30 **BREAK**
 12.00 "Basic model of parts: Sweep II (Dr. Ángel J. García-Collado and Dr. Rafael Melendreras-Ruiz)"
 14.00 **LUNCH**

SESSION 2

- 9.30 "Configuration of starting formats I (Dr. Ángel J. García-Collado and Dr. Rafael Melendreras-Ruiz)"
 11.30 **BREAK**
 12.00 "Configuration of starting formats II (Dr. Ángel J. García-Collado and Dr. Rafael Melendreras-Ruiz)"
 14.00 **LUNCH**

SESSION 3

- 9.30 "Drawings and plans I (Dr. Ángel J. García-Collado and Dr. Rafael Melendreras-Ruiz)"
 11.30 **BREAK**
 12.00 "Drawings and plans II (Dr. Ángel J. García-Collado and Dr. Rafael Melendreras-Ruiz)"
 14.00 **LUNCH**

SESSION 4

- 9.30 "Assembly and Sub-assumptions I (Mr. José Antonio Acosta-Martínez)"
 11.30 **BREAK**
 12.00 "Assembly and Sub-assumptions II (Mr. José Antonio Acosta-Martínez)"
 14.00 **LUNCH**

SESSION 5

- 9.30 -
 12.00 Graduation Ceremony - Farewell Event
 14.00 **LUNCH**

2 Weeks Schedule

1st WEEK

3D Design

SESSION 1

- 9.30 "Tour in UCAM + Course Introduction"
 11.30 **BREAK**
 12.00 "Basic Concepts of Solidworks (Mr. German Meoro-Avilés)"
 14.00 **LUNCH**
 17:00-
 20:00 Murcia: Cultural Tour

SESSION 2

- 9.30 "Introduction to the sketch I (Mr. German Meoro-Avilés)"
 11.30 **BREAK**
 12.00 "Introduction to the sketch II (Mr. German Meoro-Avilés)"
 14.00 **LUNCH**

SESSION 3

- 9.30 "Basic part modeling: Extrusion I (Mr. German Meoro-Avilés)"
 11.30 **BREAK**
 12.00 "Basic part modeling: Extrusion II (Mr. German Meoro-Avilés)"
 14.00 **LUNCH**

SESSION 4

- 9.30 "Basic part modeling: Revolution I (Mr. German Meoro-Avilés)"
 11.30 **BREAK**
 12.00 "Basic part modeling: Revolution II (Mr. German Meoro-Avilés)"
 14.00 **LUNCH**

SESSION 5

- 9.30 -
 12.00 "Company Visit: Cella Medical Solutions (Mr. Darío García-Calderón and Mr. Ginés Estrada)"
 14.00 **LUNCH**

2nd WEEK

3D Manufacturing

SESSION 1

- 9.30 "Basic model of parts: Sweep I (Dr. Ángel J. García-Collado and Dr. Rafael Melendreras-Ruiz)"
 11.30 **BREAK**
 12.00 "Basic model of parts: Sweep II (Mr. German Meoro-Avilés)"
 14.00 **LUNCH**

SESSION 2

- 9.30 "Configuration of starting formats I (Dr. Ángel J. García-Collado and Dr. Rafael Melendreras-Ruiz)"
 11.30 **BREAK**
 12.00 "Configuration of starting formats II (Dr. Ángel J. García-Collado and Dr. Rafael Melendreras-Ruiz)"
 14.00 **LUNCH**

SESSION 3

- 9.30 "Drawings and plans I (Dr. Ángel J. García-Collado and Dr. Rafael Melendreras-Ruiz)"
 11.30 **BREAK**
 12.00 "Drawings and plans II (Dr. Ángel J. García-Collado and Dr. Rafael Melendreras-Ruiz)"
 14.00 **LUNCH**

SESSION 4

- 9.30 "Drawings and plans I (Dr. Ángel J. García-Collado and Dr. Rafael Melendreras-Ruiz)"
 11.30 **BREAK**
 12.00 "Drawings and plans II (Dr. Ángel J. García-Collado and Dr. Rafael Melendreras-Ruiz)"
 14.00 **LUNCH**

SESSION 5

- 9.30 -
 12.00 "Company Visits II: CEEIC - Drónica & Fluid 3D (Mr. Jesús Trenza y Mr. Antonio Saura)"
 14.00 **LUNCH**

Intelligent Management for The Tourism Industry



Affiliate Member of:



Objectives

- To know how to apply the acquired knowledge and to develop problem-solving skills in the fields of tourism, marketing and innovation.
- Acquire initiative and entrepreneurial spirit to launch projects related to innovation and marketing in the tourism sector.
- Acquire skills through the teaching-learning process that allow students to continue their self-training in the fields of innovation and marketing.

Nicolás González Gallego

PhD in Business Sciences. Main areas of activity: project manager of European and national projects linked to innovation in different areas; institutional and communication assistance; and teaching in business and tourism masters programmes.

Nick Montgomery

Graduated from the École Hôtelière de Lausanne, Switzerland. He has been involved in the hospitality sector 28 years holding managerial positions in 12 hotels in 9 different countries over 3 separate continents. Presently, he is one of the most important consultants in the hospitality sector. He is a professor at the Master in Hospitality Management program at UCAM.

Business Partners



Teaching Staff

Andrés Muñoz

Senior lecturer in the Technical School at the Catholic University of Murcia (UCAM), Spain. Prof. Mr. Muñoz obtained his PhD in Computer Science in 2011 at the University of Murcia.

Pilar Barra Hernández

Lecturer in the Faculty of Legal Science and Business at the Catholic University of Murcia (UCAM), Spain. She holds a PhD in Economics from the Universidad de Alicante and a Master in Communication from the Universitat Oberta de Catalunya.

Margarita Capdepón

Lecturer in the Department of Tourism at the Catholic University of Murcia (UCAM), Spain. She obtained her PhD in Tourism Geography in 2013 at the University of Alicante.

Jorge López Carratala

Lecturer in the Department of Tourism at the Catholic University of Murcia (UCAM), Spain. He obtained her PhD in Tourism Geography in 2014 at the University of Valencia.

María Dolores Gil Quiles

Lecturer in the Department of Tourism at the Catholic University of Murcia (UCAM), Spain. She obtained her PhD in Tourism in 2014 at the Catholic University of Murcia.

3 Weeks Schedule

1st WEEK: NEW REALITY FOR THE TOURISM INDUSTRY

	SESSION 1	SESSION 2	SESSION 3	SESSION 4	SESSION 5
9:30	"Tour in UCAM + Introduction to tourism system"	"Tourism demand: towards a new tourist?"	International tourism scenario	"Tomorrow's tourism: Perspectives and tourism towards 2030. International tourism trends; ICTs, demographic changes, increased mobility."	Company Visit I
11:30	BREAK	BREAK	BREAK	BREAK	
12:00	"Basic tourism principles. Tourism supply: services, products & destinations."	Case study and discussion	"Current tourism overview. Why is tourism so important? Study case & discussion"	"Global tourism risks and challenges: climate change and sustainability, safety, new economic order. Study case and discussion"	
13:30	LUNCH	LUNCH	LUNCH	LUNCH	LUNCH
17:00 - 20:00	Murcia: Cultural Tour				

2nd WEEK: INNOVATION MANAGEMENT IN THE TOURISM SECTOR

	SESSION 1	SESSION 2	SESSION 3	SESSION 4	SESSION 5
9:30	"Introduction to innovation: Innovation. Concept and types. Innovation management."	"Innovation applied to tourism business models introduction. Innovation within a tourism company: Generating business models in tourism. Creating value propositions in tourism companies."	"Innovation and creativity applied to the generation of values: Creative process Creative solutions"	"Big Data applied to tourism & marketing: What is Big Data? Datification The value of data Big Data examples and success stories"	Company Visit II
11:30	BREAK	BREAK	BREAK	BREAK	
12:00	"Current trends of innovation in Tourism. Case study & discussion."	"Tourism services based on IT innovation and shared economy. Developing new value propositions based on apps, gaming and VR. Sustainable tourism and green innovation. Introducing smart destinations. Case study and discussion."	"Stages/ phases of creative solution: Systems & interpretation of heritage Tourism and creative industries. Case study and discussion."	"Big Data Visualization Big data & marketing: trends & opportunities. Big data & tourism: A case of study"	
14:00	LUNCH	LUNCH	LUNCH	LUNCH	LUNCH

3rd WEEK: POSITIONING, BRANDING & MARKETING STRATEGIES FOR THE TOURISM INDUSTRY

	SESSION 1	SESSION 2	SESSION 3	SESSION 4	SESSION 5
9:30	"Characteristics of tourism marketing: Introduction to marketing in the tourism industry. Understanding the marketplace and the customer needs."	"Strategic marketing planning: Key aspects of strategic planning. The role of marketing in strategic planning."	"Positioning and Branding in the tourism industry: Tourism destination image."	"Managing tourism marketing: Steps in developing an effective tourism marketing strategy. Marketing mix for the tourism industry."	Graduation Ceremony
11:30	BREAK	BREAK	BREAK	BREAK	
12:00	"Building customer loyalty. Case study and discussion"	"Strategic planning challenge in the tourism industry. Case study & discussion."	"Positioning & branding in the age of social media. Branding of destination and tourism products. Case study & discussion."	"Online marketing: new approaches to build customer relationships. Case study & discussion."	Farewell Event
14:00	LUNCH	LUNCH	LUNCH	LUNCH	LUNCH

Media and Communications



Objectives

- To explore the field of Communication from different perspectives in order to get an holistic view.
- To study Communication Basics from Storytelling to Visual Communication from a classical point of view to a contemporary digital perspective..
- To analyze Institutional Communication offering a cross cultural context in order to understand nowadays Corporate Communication.
- To understand Personnel Communication learning the basis of leadership and talent communication skills, together with Public Speaking abilities.

Teaching Staff

Beatriz Peña-Acuña

Associate Professor accredited by Spanish Quality Agency ANECA (2015). She teaches in the Department of Business Administration and Management, in the Master in Marketing and Communication and in Postgraduate Studies at Catholic University of Murcia (UCAM), Spain. She leads the international and multidisciplinary group called "Personal Development" composed by 33 academic members. Scientific production is prolific in several languages.

Laura Cortés-Selva

International PhD in Media and Associate Professor (ANECA, 2015). Since 2003 she is lecturer and researcher at the media department at the Catholic University of Murcia (UCAM), Spain. Her main research interests are: media production, educational innovation and methodology. She has published several book chapters in prestigious editorials as well as papers in impact journals such as *El profesional de la Información*, *Historia y Comunicación Social*, *Opción*, *Zer*, *Doxa Comunicación* o *Index Comunicación*.

Marta Pérez-Escolar

Ph.D. student at the Faculty of Social Science and Communication at the Catholic University of Murcia (UCAM), Spain. Her main lines of research are cyber-activism, political participation, civic participation, network movements and transmedia activism.

Prof. Dr. Pablo S. Blesa-Aledo

Vice rector of International Relations at the Catholic University San Antonio de Murcia (UCAM), Spain since 2006 and Vice rector of International Relations and Communication since 2009; Dean of the Faculty of Social Sciences and

Communication since March 2010, where he teaches Political Sciences to second year students of journalism and media studies.

Pablo López-Guardiola

Chief Creative Officer at Catholic University of Murcia (UCAM), Spain. Holds a Bachelor in Audiovisual communication by Catholic University of Murcia (UCAM), Spain. Following his studies he had experiences at Stanford University, College of Charleston and University of Gloucestershire. He also had different experiences at a wide variety of countries like: Moçambique, USA, UK, Brazil, Perú, Turkey, The Netherlands, Indonesia, Malaysia, Thailand, Italy, etc.

Pedro Luís Pérez-Díaz

Master of Advanced Studies in Communication from the Catholic University of Murcia (UCAM), Spain, where he develops his research career focusing on participatory forms of digital life. He has performed his teaching and research activities in several international centers as Stanford University, USA and the University of Florida, USA. Currently, he teaches in Communication and Tourism programs at UCAM.

María Pilar Barra Hernández

Lecturer in the Faculty of Legal Science and Business at the Catholic University of Murcia (UCAM), Spain. She holds a PhD in Economics from the Universidad de Alicante, Spain and a Master in Communication from the Universitat Oberta de Catalunya, Spain.

José Manuel Noguera-Vivo

Associate Professor of Technology and Social Media in Journalism and Head of Department of Communication Sciences at the Catholic University of Murcia (UCAM), Spain.. He has close to fifty publications about convergence of social media, journalism and society. He has been researcher in Mexico, Canada and Sweden, as well as key speaker about social media and society in several conferences.

Josep Martínez-Polo

PhD student at the Faculty of Social Science and Communication at the Catholic University of Murcia (UCAM), Spain. He teaches Interactive Advertising and Digital Marketing at the Catholic University of Murcia (UCAM), Spain. His main lines of research are sharing economy and collaborative consumption but he is also interested in open education, digital marketing and understanding life online.

Business Partners



3 Weeks Schedule

1st WEEK: COMMUNICATION BASICS

	SESSION 1	SESSION 2	SESSION 3	SESSION 4	SESSION 5
9:30	"Tour in UCAM + Course Introduction (Dra. Laura Cortés Selva)"	"Elements of storytelling & visual communication (Dra. Laura Cortés Selva & Dra. Marta Pérez Escolar)"	Storytelling and visual communication as branding concepts	Digital Skills I	Company Visit I
11:30	BREAK	BREAK	BREAK	BREAK	
12:00	"Storytelling and Visual Communications (Dra. Marta Pérez Escolar)"	"Storytelling and visual communication as branding concepts (Dra. Laura Cortés Selva & Dra. Marta Pérez Escolar)"	"Storytelling and visual communication as communication tools. (Dra. Laura Cortés-Selva & Dra. Marta Pérez-Escolar)"	"Digital Skills II (Dr. José Manuel Noguera-Vivo, D. Josep Martínez-Polo, PhD student & D. Pedro Luis Pérez, PhD student)"	
13:30	LUNCH	LUNCH	LUNCH	LUNCH	LUNCH
17:00 - 20:00	Murcia: Cultural Tour				

2nd WEEK: INSTITUTIONAL COMMUNICATION

	SESSION 1	SESSION 2	SESSION 3	SESSION 4	SESSION 5
9:30	"Cross-Cultural Communication I (Dra. Pilar Barra Hernandez)"	"Cross-Cultural Communication III (Dra. Pilar Barra Hernandez)"	"Corporate Communications I (Prof. Pablo López-Guardiola)"	"Corporate Communications III (Prof. Pablo López-Guardiola)"	Company Visit II
11:30	BREAK	BREAK	BREAK	BREAK	
12:00	"Cross-Cultural Communication II (Dra. Pilar Barra Hernandez)"	"Cross-Cultural Communication IV (Dra. Pilar Barra Hernandez)"	"Corporate Communications II (Prof. Pablo López-Guardiola)"	"Corporate Communications IV (Prof. Pablo López-Guardiola)"	
14:00	LUNCH	LUNCH	LUNCH	LUNCH	LUNCH

3rd WEEK: PERSONNEL COMMUNICATION

	SESSION 1	SESSION 2	SESSION 3	SESSION 4	SESSION 5
9:30	"Talent & Leadership I (Dra. Beatriz Peña-Acuña)"	"Talent & Leadership III (Dra. Beatriz Peña-Acuña)"	"Media training for Public Speaking I (Dr. Pablo Blesa-Aledo)"	"Media training for Public Speaking III (Dr. Pablo Blesa-Aledo)"	Graduation Ceremony Farewell Event
11:30	BREAK	BREAK	BREAK	BREAK	
12:00	"Talent & Leadership II (Dra. Beatriz Peña-Acuña)"	"Talent & Leadership IV (Dra. Beatriz Peña-Acuña)"	"Media training for Public Speaking II (Dr. Pablo Blesa-Aledo)"	"Media training for Public Speaking IV (Dr. Pablo Blesa-Aledo)"	
14:00	LUNCH	LUNCH	LUNCH	LUNCH	LUNCH

Sports Management



Objectives

- To respond to the current needs of the sports phenomenon, amongst which includes the specialization of sports management professionals in each of the specific sport areas.
- To acquire the knowledge, applied foundations and necessary skills for the correct development of associated marketing in sport organizations.
- To achieve a knowledge of strategic planning for the successful development of a sport organization.
- To acquire knowledge in the areas of economic management, financing, information systems and the creation of strategies in sport organisations.
- To acquire knowledge through studying different case studies and through personal experience of the elite professors.
- To acquire the knowledge, applied foundations and necessary tools for correct management processes, quality policies and sustainability in sports facilities.

Teaching Staff

José Moya

- Former General Director of Elche C.F.
- Former Marketing Director of U.D. Salamanca
- Professor of MBA Sports Management

Francisco de Paula

- General Manager of Pınatar Arena Football Center
- Former Executive President of FC Cartagena
- Professor of MBA Sports Management

Miguel Rodríguez

- Digital Business Responsible at BMN
- Co-founder Spain Startup Factor
- Professor of MBA and MBA Sports Management

Pablo López-Guardiola

- Global Chief Creative Officer at UCAM
- Professor of MBA Sports Management

José Miguel Garrido

- Director of Commercial and Marketing at UCAM Basketball (Liga Endesa)
- Professor of MBA Sports Management

Alejandro Santos

- General Director of UCAM CF (LaLiga123)

Pedro Pemartin

- Coordinator UCAM Sports Management University
- Euroleague Basketball Delegate
- Professor of MBA Sports Management

Juan Antonio Sánchez

- Professor of the Faculty of Sports Science
- Professor of the Máster en Dirección y Gestión de Entidades Deportivas

Business Partners



3 Weeks Schedule

1st WEEK

Marketing

SESSION 1

- 9.30 "Tour in UCAM + Course Introduction"
- 11.30 BREAK
- 12.00 Management of LaLiga Team
- 13.30 LUNCH
- 17:00-
- 20:00 Murcia: Cultural Tour

SESSION 2

- 9.30 New age in LaLiga I
- 11.30 BREAK
- 12.00 New age in LaLiga II
- 13.30 LUNCH

SESSION 3

- 9.30 Corporate Communication, case of study: UCAM I
- 11.30 BREAK
- 12.00 Corporate Communication, case of study: UCAM II
- 13.30 LUNCH

SESSION 4

- 9.30 Creative Thinking and Innovation in Sport: "Mexico 68" Study case
- 11.30 BREAK
- 12.00 Creative Thinking and Innovation in Sport: "Mexico 68" Study case
- 13.30 LUNCH

SESSION 5

- 9.30-
- 12.00 "UCAM CF (Mr. Alejandro Santos)"
- 13.30 LUNCH

2nd WEEK

Management/ Sport Facilities

SESSION 1

- 9.30 Redefinition of sport concept as a product and its exchange through the internet" I
- 11.30 BREAK
- 12.00 Redefinition of sport concept as a product and its exchange through the internet" II
- 14.00 LUNCH

SESSION 2

- 9.30 "Workshop Pınatar Arena (Mr. Fran de Paula)"
- 11.30 BREAK
- 12.00 "Workshop Pınatar Arena (Mr. Fran de Paula)"
- 14.00 LUNCH

SESSION 3

- 9.30 "Create a Sport company I (Miguel Rodríguez)"
- 11.30 BREAK
- 12.00 "Create a Sport company II (Miguel Rodríguez)"
- 14.00 LUNCH

SESSION 4

- 9.30 "Management and Marketing in Basketball Workshop I (José Miguel Garrido)"
- 11.30 BREAK
- 12.00 "Management and Marketing in Basketball Workshop II (José Miguel Garrido)"
- 14.00 LUNCH

SESSION 5

- 9.30-
- 12.00 "Company Visit II: Pınatar Arena (Mr. Fran de Paula)"
- 14.00 LUNCH

3rd WEEK

Sport Events

SESSION 1

- 9.30 Sports Events Organization from inside
- 11.30 BREAK
- 12.00 Study Case
- 14.00 LUNCH

SESSION 2

- 9.30 Sport Tourism I
- 11.30 BREAK
- 12.00 Sport Tourism II
- 14.00 LUNCH

SESSION 3

- 9.30 Sport Event Organization and Promotion
- 11.30 BREAK
- 12.00 Study Case
- 14.00 LUNCH

THURSDAY

- 9.30 "Match Day of a Football Team (Mr. Fran de Paula)"
- 11.30 BREAK
- 12.00 "Workshop (Mr. Fran de Paula)"
- 14.00 LUNCH

FRIDAY

- 9.30-
- 12.00 Graduation Ceremony - Farewell Event
- 14.00 LUNCH

2 Weeks Schedule

WEEK 1

Business Plan & Football Industry

SESSION 1

- 9.30 "Tour in UCAM + Course Introduction"
- 11.30 BREAK
- 12.00 "Business Plan for a Sport Company (Prof. Miguel Rodríguez)"
- 14.00 LUNCH
- 17:00-
- 20:00 Murcia: Cultural Tour

SESSION 2

- 9.30 "Management of LaLiga team (Prof. José Moya)"
- 11.30 BREAK
- 12.00 "Workshop (Prof. José Moya)"
- 14.00 LUNCH

SESSION 3

- 9.30 "New age in LaLiga (Prof. Pedro Pemartin)"
- 11.30 BREAK
- 12.00 "Workshop (Prof. Pedro Pemartin)"
- 14.00 LUNCH

SESSION 4

- 9.30 "Business Plan for a Sports Company I (Prof. Miguel Rodríguez)"
- 11.30 BREAK
- 12.00 "Business Plan for a Sports Company II (Prof. Miguel Rodríguez)"
- 14.00 LUNCH

SESSION 5

- 9.30-
- 12.00 "UCAM CF (Mr. Alejandro Santos)"
- 14.00 LUNCH

WEEK 2

Branding, Sports Events and Facilities

SESSION 1

- 9.30 "Corporate communication (Prof. Pablo Guardiola)"
- 11.30 BREAK
- 12.00 "Case of Study: UCAM (Prof. Pablo Guardiola)"
- 14.00 LUNCH

SESSION 2

- 9.30 "Management of a professional basketball team I (Prof. José Miguel Garrido)"
- 11.30 BREAK
- 12.00 "Management of a professional basketball team II (Prof. José Miguel Garrido)"
- 14.00 LUNCH

SESSION 3

- 9.30 "International organization sport events (Prof. Antonio Saez)"
- 11.30 BREAK
- 12.00 "International organization sport events - Workshop (Prof. Antonio Saez)"
- 14.00 LUNCH

SESSION 4

- 9.30 "International sport events: Volvo Ocean Race, La Heroica, Mongolia bike race (Prof. José Moya)"
- 11.30 BREAK
- 12.00 "International sport events: Workshop (Prof. José Moya)"
- 14.00 LUNCH

SESSION 5

- 9.30-
- 12.00 "Company Visit II: Pınatar Arena (Mr. Fran de Paula)"
- 14.00 LUNCH

Video Technology and Applications in Events



Objectives

- Introducing the backgrounds of video signals and interfaces
- Studying the different technologies of cameras and video editing devices
- Analysing the most used technologies for projecting video in events
- Comparing the amateur and professional video equipment
- Applying the previous knowledge to real video projects

Business Partners



Teaching Staff

Rafael Melendreras-Ruiz

Vice-Dean of the degree of Telecommunications System Engineering. He received the M.S. degree in Telecommunications Engineering at the Technical University of Valencia, Spain (2002) and his PhD. at the Catholic University of Murcia (UCAM), Spain in the area of Digital Television (2012). His research area is remote sensing and digital television.

Rafael Berenguer-Vidal

Assistant-Manager of the degree of Telecommunications Systems Engineering. He received the M.S. degree in Telecommunications Engineering at the Technical University of Valencia, Spain (1998). He obtained his PhD at the Technical University of Cartagena, Spain, in the area of image processing (2013). His research area is in the field of Signal processing (image and multidimensional data).

Jorge Hernández-Bellot

UCAM TV Studio Coordinator. He received the B.S. degree in Telecommunications Engineering at the Technical University of Valencia, Spain, (2002). He obtained the M.S. degree in Advertising from the University of Murcia, Spain (2012). Finally he received the M.S. degree in Telecommunications Engineering at the Technical University of Valencia, Spain, (2013).

3 Weeks Schedule

1st WEEK: VIDEO BASIC LEVEL

	SESSION 1	SESSION 2	SESSION 3	SESSION 4	SESSION 5
9:30	"Tour in UCAM + Course Introduction"	"Digital Cameras Video Mixer (Prof. Jorge Hernández Bellot)"	"Displays, Projectors & Digital Conference Platforms (Dr. Rafael Melendreras Ruiz)"	Laboratory exercises I & II	Company Visit I
11:30	BREAK	BREAK	BREAK	BREAK	
12:00	"Video Signal, Standards, formats & Interfaces (Dr. Rafael Berenguer Vidal)"	"Video Editing (Prof. Jorge Hernández Bellot)"	"Displays, Projectors & Digital Conference Platforms (Dr. Rafael Melendreras Ruiz)"	Laboratory exercises III	
13:30	LUNCH	LUNCH	LUNCH	LUNCH	LUNCH
17:00 - 20:00	Murcia: Cultural Tour				

2nd WEEK: VIDEO INTERMEDIATE LEVEL

	SESSION 1	SESSION 2	SESSION 3	SESSION 4	SESSION 5
9:30	"Video Signal, Standards, formats & Interfaces II (Dr. Rafael Berenguer Vidal)"	"Digital Cameras Video Mixer II (Prof. Jorge Hernández Bellot)"	"Displays, Projectors & Digital Conference Platforms II (Dr. Rafael Melendreras Ruiz)"	Laboratory exercises I & II	Company Visit II
11:30	BREAK	BREAK	BREAK	BREAK	
12:00	"Video Signal, Standards, formats & Interfaces II (Dr. Rafael Berenguer Vidal)"	"Video Editing II (Prof. Jorge Hernández Bellot)"	"Displays, Projectors & Digital Conference Platforms II (Dr. Rafael Melendreras Ruiz)"	Laboratory exercises III	
14:00	LUNCH	LUNCH	LUNCH	LUNCH	LUNCH

3rd WEEK: VIDEO ADVANCED LEVEL

	SESSION 1	SESSION 2	SESSION 3	SESSION 4	SESSION 5
9:30	"Video Signal, Standards, formats & Interfaces III (Dr. Rafael Berenguer Vidal)"	"Digital Cameras Video Mixer III (Prof. Jorge Hernández Bellot)"	"Displays, Projectors & Digital Conference Platforms III (Dr. Rafael Melendreras Ruiz)"	Laboratory exercises I & II	Graduation Ceremony Farewell Event
11:30	BREAK	BREAK	BREAK	BREAK	
12:00	"Video Signal, Standards, formats & Interfaces III (Dr. Rafael Berenguer Vidal)"	"Video Editing III (Prof. Jorge Hernández Bellot)"	"Displays, Projectors & Digital Conference Platforms III (Dr. Rafael Melendreras Ruiz)"	Laboratory exercises III	
14:00	LUNCH	LUNCH	LUNCH	LUNCH	LUNCH

Fundamentals of Smart Cities: Planning, Design and Management



Objectives

- Get a global vision of the Smart City concept.
- Know the different technologies and standards used by the most representative smart cities nowadays.
- Get useful practice and knowledge about sensor management and intelligence.
- Understand the relationship of energy efficiency, renewable energy and sustainable urbanism with smart city.
- Get depth knowledge and real practice in Rivas Vaciamadrid, two times nominated for the World Smart City Awards.
- Get in contact with some representatives of the international and Spanish Smart City industry and entrepreneurs.

Teaching Staff

Dr. Rafael Melendreras

Vice-Dean of the degree of Telecommunications Systems Engineering. He received the M.S. degree in Telecommunications Engineering (2000) at the Polytechnic University of Valencia, Spain and his Ph.D. at the Catholic University of Murcia (UCAM), Spain, in the area of Digital Television (2012). Founder of the Energetic Efficiency Demonstrator at UCAM, his area of research are Remote Sensing and Telecommunication Systems. In 2014 he designed a Smart City Master Title together with RECI and Rivas Municipality. Rafael is also responsible of UCAM Eco Racing Team, the student ultra efficient prototype vehicle team of the university.

Dr. José Javier Medina

Telecommunications technical Engineer - Polytechnic University of Madrid, Spain (1980). PhD in Political Sciences and Sociology & Graduated on Sociological Industrial speciality by Pontifical University of Salamanca, Spain (1992). Master ESEM-Commercial Management and Marketing (1985). Eur. Ing by FEANI in Paris, France. Official positions: CEO of the "Asociación Española de Graduados e Ingenieros de Telecomunicación". President of the Spanish National Committee of Feani. President of the Ignite. Professional background at the private sector: 25 years as manager and engineer at > 10 multinational groups as: Mapfre, Izasa, Danfoss, BT España, Alcatel, Ingelsa-Electrolux-Siemens, Esser, Thyssen, Fagor. At the present: Teacher in Telecommunications University Schools at Graduate programs in Universidad Europea de Madrid and Master postgraduates in UCLM and UCAM. Coordinator in AMETIC Group Definition and Digital Indicators Communities for standardization, evaluation and training for new professional Engineering Profiles in Digital Economy and Smart Cities.

Dr. Andrés Muñoz (UCAM)

Senior lecturer in the Technical School at the Catholic University of Murcia (UCAM), Spain. He obtained his PhD in Computer Science in 2011 at the University of Murcia. He has published more than 40 scientific papers in international journals and conferences. He participates as editor in the Journal of Ambient Intelligence and Smart Environments and he has been pointed General Chair of the International Conference on Intelligent Environments 2017.

Dr. Juan Miguel Navarro (UCAM)

He received the telecommunications engineer degree, the M.S. degree in telecommunication technologies, from the Universidad Politécnica de Cartagena, Spain, in 2006 and 2008, respectively and the Ph.D. degree in telecommunications from the Universitat Politècnica de València, Spain (2012). Since 2006, he has been an Assistant Professor at the Polytechnic Science Department, Universidad Católica de Murcia (UCAM), Spain.

His interests include wireless sensor networks, internet of things, smart cities, room acoustics simulation, 3D spatial audio. In 2009, he was an invited researcher at Acoustic Technology, Technical University of Denmark, in 2012 at the Department of Media Technology, Aalto University of Finland, and in 2017 at Building Performance Department, Technical University of Eindhoven. His research is focused on signal processing algorithms for audio and acoustics within the topic of Smart Cities and IoT, where he has published more than 30 technical papers in international journals and conferences.

Eng. Carlos Ventura (Rivas Vaciamadrid Municipality)

After receiving his degree in telecommunication engineering he joined in 2000 the Rivas Vaciamadrid City Council where he found the New Technologies Department. Currently, he is the Head of the Telecommunications Department in the Area of Technological Innovation and Entrepreneur Projects. CIO of the Rivas Smart City Project of the Rivas Vaciamadrid Town Hall, he was the President of SC1 Infrastructure of the CTN178 Committee for the Standardization of Smart Cities in Spain. Also, he is coordinator and founding partner of the Spanish Network of Smart Cities RECI in the working groups of Environment and Infrastructure and Energy.

Other main teaching profiles in the course:

- **Eng. Enrique de Miguel.** Technological consultant at Telefónica.
- **Eng. Pedro Álamo.** Key Account Manager of Public Administrations. Huawei Technologies.
- **Eng. Juan Celdrán.** CEO at Syscomed. Vicepresident of TIMUR and CENTIC.
- **Mr. José Martínez.** Chief Technology officer Murcia City Council.
- **Eng. Ignacio Ballesta.** Responsible for Open Data strategy at Murcia Regional Government.
- **Eng. Jaime Ruiz.** Technical Coordinator at Murcia Municipality Energy Agency.
- **Eng. Miguel Miñano.** Technical Coordinator of Murcia Smart City Cluster (CITIZEM).
- **Eng. Antonio Navarro.** CEO at COTA Telecom.
- **Eng. José Antonio López.** Technology Councilor at Alcantarilla Municipality. Dean of COGITTRM.
- **Eng. Miriam Mendoza.** Researcher and Assistant Professor at Telecommunication Faculty UCAM.
- **Eng. Iván Leandro.** SECOM Lightning.
- **Eng. Miguel David Botía.** UCAM PhD student and Engineering Department at Intelkia.

3 Weeks Schedule

1st WEEK

Fundamentals of Smart Cities (UCAM – Murcia)

SESSION 1: (VARIOUS)

- 9:30- Course Opening
- 9:45- Introduction to Smart Cities (Dr. Rafael Melendreras)
- 10:00- **BREAK**
- 11:00- Energy efficiency, renewable energy and sustainable urbanism (Dr. Pedro A. Díaz)
- 11:30- **BREAK**
- 13:00- Visit to UCAM Labs (Dr. Rafael Melendreras)

SESSION 2: SMART CITY ARCHITECTURE

- 9:30- Smart City Networks: Fixed, Mobile and Wireless Networks (COTA Telecom)
- 11:30- **BREAK**
- 12:00- **BREAK**
- 13:30- Smart City Sensors (Eng. Juan Celdrán)
 - Smart sensors
 - The smart citizen as sensor

SESSION 3: (ENG. MIRIAM MENDOZA & ENG. IVÁN LEANDRO)

- 9:30- Laboratory Practice: Smart Parking Development with Open Hardware and Software

SESSION 4: (VARIOUS)

- 9:30- Smart City Platforms and Operating Systems (Dr. Juan Miguel Navarro)
- 11:30- **BREAK**
- 12:00- **BREAK**
- 13:30- The interest of Open Data for the Smart City (Eng. Ignacio Ballesta)

SESSION 5: NETWORKING

- 9:30- Meeting with CITIZEM (Region of Murcia Smart City Cluster). UCAM's Technology Institute (ITM)

2nd WEEK

Smart City (UCAM- Murcia)

SESSION 1: (VARIOUS)

- 9:30- Internet of Things and Smart Cities (Dr. Juan Miguel Navarro)
- 11:00- **BREAK**
- 11:30- **BREAK**
- 13:30- Security at the Smart City (CNIPJ)

SESSION 2: (ENG. MIGUEL DAVID BOTÍA & DR. JUAN MIGUEL NAVARRO)

- 9:30- Laboratory Practice: IoT applications.

SESSION 3: (DR. ANDRÉS MUÑOZ)

- 9:30- Big Data Fundamentals
- 11:15- **BREAK**
- 11:45- **BREAK**
- 13:30- Big Data: Successful Cases & Challenges

SESSION 4: (VARIOUS)

- 9:30- MiMurcia: Murcia SmartCity (Mr. José Martínez Márquez)
- 11:30- **BREAK**
- 12:00- **BREAK**
- 13:30- Intelligent and Sustainable Mobility (Eng. Jaime Ruiz)

SESSION 5:

- 9:30- Company Visit II
- 11:00- **BREAK - TRANSFER**
- 12:00- **BREAK**
- 13:30- Company Visit III: Smart Info Alcantarilla Municipality.

3rd WEEK

Real Lab and Case Study: Rivas Smart City - Madrid

SESSION 1: (DR. JOSÉ JAVIER MEDINA)

- 9:30- Projects of Infrastructures and Services in the Smart Cities. Public-Private collaboration.
- 10:30- The role of engineering associations and professionals in the Smart Cities designs. The technical project structure & contents
- 11:30- **BREAK**
- 11:45- Indicators, dashboards and Normative.
- 12:45- **BREAK**
- 13:30- Trends and Professional Profiles in Smart Cities

SESSION 2: (ENG. CARLOS VENTURA)

- 9:30- Welcome Act
- 9:45- Rivas Smart City: Presentation
- 11:00- **BREAK**
- 11:30- Rivas Smart City: Services
- 12:30- **BREAK**
- 13:30- Rivas Smart City: Platform

SESSION 3: (VARIOUS)

- 9:30- Smart City Infrastructures Visit (Eng. Carlos Ventura)
- 12:30- **BREAK**
- 13:00- **BREAK**
- 13:30- Course Conclusions (Dr. José Javier Medina)

SESSION 4: (ENG. PEDRO ALAMO) Company Visit III: Huawei Labs

SESSION 5: (PROF. DR. JOSÉ JAVIER MEDINA)

Company Visit IV: Telefónica (Eng. Enrique de Miguel Ambite)

Business Partners





UCAM Murcia CF Experience Program

Venue: UCAM Campus (Murcia) and UCAM football facilities

Duration: 4 weeks

Teaching Hours: 80 hours

Timetable: 09.30-13.30 (with 30 minutes break and lunch after classes), Mondays to Fridays

Dates: June, July and September

Please note that Non-EU students in Spain are not entitled to medical coverage. A private medical insurance is obligatory for the entire length of stay.

The club was formed in 1999 with the aim of achieving good results in the Spanish University Championships as well as with the hope of propagating the values of the University through sports.

Season 2008/09: promotion to Third Division.

2010/11 season: champion of group XIII of Third Division, like Costa Cálida CF.

In 2011, the UCAM C.F. has joined forces with Costa Cálida C.F. Thus, the Catholic University of Murcia officially presented the UCAM Murcia C.F. team, born from the union of both teams.

Season 2013/14: champion of group XIII of Third Division and promotion to 2nd Division B against Real Betis B.

Season 2014/15: playoff of promotion to 2nd. Eliminated by Bilbao Athletic.

In the 2015/16 season the team coached by José María Salmerón, gets the promotion to Second Division A (La Liga123) after a spectacular season.

In the 2016-17 season, the UCAM Murcia fell in the last game against Nàstic de Tarragona, the defeat against the Catalan team by 1-0 caused the return to Segunda B.

Objectives

- Provide quality football training at the service of our players.
- Become a national reference with an identity associated with excellence as a form of continuous improvement.
- Development and improvement of the individual and collective technical skills.
- Expand their knowledge of the game and adapt it to the tactical aspects that it requires.
- Train the players in the values represented by the UCAM CF and our university.
- To contribute in the football education, both inside and outside the field, enhancing the spirit of sportsmanship that promotes this institution.

Minimum Enrollment

The minimum number of students to offer the UCAM Murcia CF Experience is 15. UCAM reserves the right to cancel the course when the minimum number of students is not reached.



Course Fee Includes

- ✓ Spanish classes & trainings (4 hours Spanish classes)
- ✓ Football field & Installations use
- ✓ Referee for Football Matches
- ✓ Physician and Physiotherapist consultation
- ✓ Tours & transport.
- ✓ Full board and lodging
- ✓ Welcome pack
- ✓ Insurance
- ✓ Full sportswear package
- ✓ Accommodation (food and laundry included - students residence)

Summer Program

Spanish Language and Culture Intensive Course



Fees:

€1,650 (Homestay)

€1,230 (Without Accommodation)*

(transfer from the airport/station and air fare are not included)

**terms and conditions apply*

Please note that Non-EU students in Spain are not entitled to medical coverage. A private medical insurance is obligatory for entire length of stay.

Designed for:

Polytechnic students whose mother tongue is not Spanish.

Course Fee Includes

- Comfortable accommodation
- Homestay option includes 3 meals per day
- 25 hours Spanish teaching per week plus UCAM Course Completion Certificate
- 2 hours of cultural courses each week
- Unlimited card for city bus or tram travel
- Memorable farewell dinner
- Trips: 2 Saturday cultural trips
- Language levels:
The Spanish course is designed for beginners. More advanced levels of tuition can be taught if the class minimum is met.
- Learning outcomes:
We adapt our tuition to meet the demands and requirements communicated to us by our students. Oral and writing practice will be combined during the language sessions, as well as a dynamic teaching of grammar topics and overview of Spanish and Latin-American cultures.
- Teaching staff:
Graduate and PhD professors in Spanish Studies, who are specialized in teaching Spanish as a second language, with a wide experience in this field.
- Certificate of attendance and completion:
Students who have attended 80% of the total course hours will be entitled to take the final test and awarded a Certificate of Attendance by UCAM. The outcome of the final test will certify the student's level which will be registered on the Certificate of Completion of the Course.

Schedule

1st WEEK

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
9:00	Course Introduction	Grammar and Exercises	Visit to Murcia's city center	Grammar and Exercises	Grammar and Exercises	Trip to Calblanque and Cabo de Palos
11:00	BREAK	BREAK	BREAK	BREAK	BREAK	
11:30	Tour in UCAM	Grammar and Exercises	Grammar and Exercises	Culture	Grammar and Exercises	
13:30	WELCOME LUNCH	LUNCH	LUNCH	LUNCH	LUNCH	
15:00	Grammar and Exercises	Grammar and Exercises	UCAM Sports Center	Flamenco*	UCAM Sports Center	

2nd WEEK

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
9:00	Grammar and Exercises	Grammar and Exercises	Grammar and Exercises	Culture: Visit to the Market and the Cathedral	Grammar and Exercises	Trip to Cartagena
11:00	BREAK	BREAK	BREAK		BREAK	
11:30	Grammar and Exercises	Grammar and Exercises	Grammar and Exercises		Grammar and Exercises	
13:30	LUNCH	LUNCH	LUNCH	LUNCH	LUNCH	
15:00	Culture	UCAM Sports Center	Salsa and Latin Rhythms*	Grammar and Exercises	UCAM Sports Center	
				Spanish Cultural Dinner		

3rd WEEK

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
9:00	Grammar and Exercises	Grammar and Exercises	Grammar and Exercises	Grammar and Exercises	Written Exam	End of the program
11:00	BREAK	BREAK	BREAK	BREAK	BREAK	
11:30	Grammar and Exercises	Grammar and Exercises	Grammar and Exercises	Grammar and Exercises	Oral Exam	
13:30	LUNCH	LUNCH	LUNCH	LUNCH	LUNCH	
15:00	Culture	UCAM Sports Center	Culture	UCAM Sports Center	UCAM Sports Center	

Winter Program

Spanish Language and Culture Intensive Course



Fees:

€1,500 (Homestay)*

(transfer from the airport/station and air fare are not included)

**terms and conditions apply*

Please note that Non-EU students in Spain are not entitled to medical coverage. A private medical insurance is obligatory for entire length of stay.

Designed for:

Polytechnic students whose mother tongue is not Spanish.

Course Fee Includes

- Comfortable accommodation
- Homestay includes 3 meals per day
- 25 hours Spanish teaching per week plus UCAM Course Completion Certificate
- 2 hours of cultural courses each week
- Unlimited card for city bus or tram travel
- Memorable farewell dinner
- Trips: 2 Saturday cultural trips
- **Language levels:** Beginner, Intermediate and Advanced. Students will undergo a placement test in order to suit the different levels (state previous language level).
- **Learning outcomes:** We adapt our tuition to meet the demands and requirements communicated to us by our students. Oral and writing practice will be combined during the language sessions, as well as a dynamic teaching of grammar topics and overview of Spanish and Latin-American cultures.
- **Teaching staff:** Graduate and PhD professors in Spanish Studies, who are specialized in teaching Spanish as a second language, with a wide experience in this field.
- **Certificate of attendance and completion:** Students who have attended 80% of the total course hours will be entitled to take the final test and awarded a Certificate of Attendance by UCAM. The outcome of the final test will certify the student's level which will be registered on the Certificate of Completion of the Course.

Schedule

1st WEEK

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
9:00	Course Introduction	Grammar and Exercises	Visit to Murcia's city center	Grammar and Exercises	Grammar and Exercises	Cultural Trip
11:00	BREAK	BREAK	BREAK	BREAK	BREAK	
11:30	Tour in UCAM	Grammar and Exercises	Grammar and Exercises	Culture	Grammar and Exercises	
13:30	WELCOME LUNCH	LUNCH	LUNCH	LUNCH	LUNCH	
15:00	Grammar and Exercises	Grammar and Exercises	UCAM Sports Center	Flamenco*	UCAM Sports Center	

2nd WEEK

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
9:00	Grammar and Exercises	Grammar and Exercises	Grammar and Exercises	Culture: Visit to the Market and the Cathedral	Grammar and Exercises	Trip to Cartagena
11:00	BREAK	BREAK	BREAK		BREAK	
11:30	Grammar and Exercises	Grammar and Exercises	Grammar and Exercises		Grammar and Exercises	
13:30	LUNCH	LUNCH	LUNCH	LUNCH	LUNCH	
15:00	Culture	UCAM Sports Center	Salsa and Latin Rhythms*	Grammar and Exercises	UCAM Sports Center	
				Spanish Cultural Dinner		

3rd WEEK

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
9:00	Grammar and Exercises	Grammar and Exercises	Grammar and Exercises	Grammar and Exercises	Written Exam	End of the program
11:00	BREAK	BREAK	BREAK	BREAK	BREAK	
11:30	Grammar and Exercises	Grammar and Exercises	Grammar and Exercises	Grammar and Exercises	Oral Exam	
13:30	LUNCH	LUNCH	LUNCH	LUNCH	LUNCH	
15:00	Culture	UCAM Sports Center	Culture	UCAM Sports Center	UCAM Sports Center	



Photos of Murcia by Javier Bernal - imQuality



Cartagena (Mediterranean Sea)



City of Murcia

The city of Murcia is the capital of the Autonomous Community of the same name. Murcia has a total of 400,000 inhabitants, being the seventh most populated city in Spain. The metropolitan area of Murcia spreads over 881 km². The Mediterranean Sea and Mar Menor are just 30 minutes away from the city. Murcia, inhabited since Neolithic times, was founded by Abderraman II in 825. In the 9th century it was an emerging place and a Capital City, with an important court of artists and scientists.

The archaeological remains founded bear witness to a busy commercial traffic in Roman and Visigoth times, when there were large numbers of people in the area. The Cathedral was built on the land occupied by the old Arabic mosque. The first stone was laid in 1338 but the Cathedral was not finished until October 1467. This caused a mixture of different styles: Gothic, Renaissance and Baroque, which with their own features, have turned the cathedral into a diverse work.

Murcia and The Mar Menor

The region of Murcia is located in the South-East of Spain, between Valencia, Andalucia and the Mediterranean Sea. Its two main cities are Murcia and Cartagena. One of the main attractions of this area is its Mediterranean climate. Due to its scarcity of rainfall, the average yearly temperatures is added to 18°C with more than 2,800 hours of sun a year. Another outstanding characteristic of the Region of Murcia is its geography. Over a stretch of just a few kilometers we can find natural parks, mountainous zones, Mediterranean woods, orchards and cultivation areas and, of course, more than 170 km of coast. This exceptional area is made up of protected areas, with autochthonous flora and fauna, small bays, rocky beaches, salt lakes, dunes and a wide variety of sandy beaches. It goes without saying that thousands of holiday-makers spend the months between May and October sunbathing, swimming and engaging in nautical sports on the beaches of the Mediterranean and Mar Menor.

The Mar Menor, with its 180 km² and 170 km of coast is the largest salt lake in Europe. This natural paradise of the Costa Cálida is unique for nautical and recreational activities, such as sailing, canoeing, and scuba diving. There are so many features to the Mar Menor that it has actually been referred as the 'largest swimming pool in the world'.



How to Arrive at UCAM

TRAVEL TO SPAIN BY PLANE

Murcia-San Javier Airport
40 km to the center of Murcia.

Alicante Airport
75 km to Murcia.

Valencia Airport
270 km to Murcia.

Madrid Airport
400 km to Murcia.

TRAVEL TO MURCIA

From Murcia-San Javier Airport

Option 1: Take a taxi to Murcia (approx. €50).

Option 2: Latbus 73 from the airport.

From Alicante Airport

Take Alsa bus to Murcia, available every 2 hours (€5.23).

From Valencia Airport

Take Alsa bus to Murcia, leaving at 9.45 and 13.30 (€30).

From Madrid Airport

Option 1: Take Alsa bus to Murcia, leaving Terminal 4 (€30-€40).

Option 2: Go to Atocha Renfe in the center of Madrid by Metro (€2).

Then take a Renfe train to Murcia (€40-€47).

TRAVEL TO UCAM FROM MURCIA

Option 1: by Bus

Take Latbus 44 A/B/D (available every 15/30 minutes) or Latbus UCAM Directo to UCAM (€1.85).

Option 2: by Tranvia (tram)

Take the Tranvia (available every 10 minutes) to Los Rectors/Terra Natura where you change to the one with destination UCAM - Los Jerónimos, available every 20 minutes (€1.40).

USEFUL CONTACTS

- Alsa: www.alsa.es
- Latbus: www.latbus.es
- Tranvia de Murcia (Tram):
www.tranviademurcia.es
- Renfe: www.renfe.es





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