



**COMILLAS**

UNIVERSIDAD PONTIFICIA

ICAI

**Study Abroad Program  
for International  
Engineering Students**

**ICAI-SAPIENS**

**ICAI School of Engineering**

Madrid (Spain)

Academic Year

**2020-2021**



## DESCRIPTION

ICAI-SAPIENS is a program that was designed for engineering and other STEM students in 2013, and has been growing ever since. Students, especially from the US, gain international experience without delaying their graduation, given that the vast majority of these courses are what they need towards their curriculum.

We offer several categories of courses in our ICAI-SAPIENS, all of which are taught in English:

- **Fundamental Engineering/STEM:** these are meant to be similar/identical to their equivalent subjects in a standard US Sophomore/Junior year.
- **Culture, Language & Humanities:** these provide an insight into the Spanish language and culture, and include guided visits to several local landmarks.
- **Technological & Electives:** these are highly recommended for international engineering/STEM students.
- **Research Projects:** supervised by professors and researchers of the school of engineering. These projects are only available and assigned to semester-long and 8-week summer students.
- *Other, additional and business courses: offered at the ICAI School of Engineering, these are also available to ICAI-SAPIENS students, schedule permitting, offered in either English and/or Spanish. Please note that their calendar and exam period may differ from SAPIENS depending on the term(s).*

## PERIODS / TERMS

ICAI-SAPIENS is offered in the following three terms:

- **FALL 2020:** from September 7<sup>th</sup> to December 22<sup>nd</sup>
- **SPRING 2021:** from January 18<sup>th</sup> to April 30<sup>th</sup>
- **SUMMER 2021:** from May 17<sup>th</sup> to July 9<sup>th</sup> (4 to 8 weeks)

Note: these periods only include SAPIENS exams. ICAI (non-SAPIENS) exams may extend to January 15<sup>th</sup> (FALL) or May 21<sup>st</sup> (SPRING).

**RETAKE EXAMS:** for SAPIENS courses, mid to late May. For ICAI courses, mid to late June.

## LOCATION

The ICAI School of Engineering is located in downtown Madrid, within walking distance to the most significant historic landmarks in our city. Our 24/7 outsourced housing service provides numerous nearby housing options.

Madrid is conveniently situated in the center of Spain, with easy access (typically in under 3 hours by high-speed train or highway) to the most interesting tourist attractions and cities in Spain. Madrid International Airport offers direct flights to the most important cities in Europe, including all capital cities in the European Union.



## TESTIMONIAL

"The Comillas Summer Program has helped me broaden my mind, enhance my education and have a great summer with unforgettable friendships. Amazing courses like Entrepreneurship and The Internet of Things along with a Research Project have allowed me to collaborate with incredibly engaged and passionate professors who have opened my eyes to new possibilities for my future. I am extremely grateful for the opportunity to take part in the ICAI experience."

**María Pérez de la Llave**

Operations Research Engineering  
Cornell University, 2020

FUNDAMENTAL ENGINEERING/STEM COURSES		FALL	SPRING	SUMMER
DMA-SAP-431	Applied Linear Algebra		•	
DIE-SAP-212	Electricity & Magnetism	•		
DIM-SAP-353	Engineering Fluid Mechanics		•	
DOI-SAP-303	Engineering Statistics		•	
DIM-SAP-336	Engineering Thermodynamics	•	•	•
DIM-SAP-346	Environmental Engineering & Sustainability	•	•	
DIM-SAP-167	General Chemistry	•		
DMA-SAP-230	Introduction to Differential Equations	•	•	
DIM-SAP-233	Introduction to Dynamics		•	
DIM-SAP-211	Introduction to Statics	•		
DEA-SAP-235	Introduction to Electric & Electronic Circuits		•	
DIM-SAP-337	Introduction to Materials & their Applications		•	
DMA-SAP-241	Multivariable Calculus	•		
DMA-SAP-437	Numerical Analysis		•	
DIM-SAP-239	Principles of Molecular Cell Biology & Biotechnology		•	
DIM-SAP-246	Sustainable Engineering Principles			•
DIM-SAP-231	Thermal Physics		•	
DIM-SAP-232	Quantum Physics		•	

CULTURE, LANGUAGE & HUMANITIES COURSES		FALL	SPRING	SUMMER
TEO-SAP-123	Christianity & World Religions	•	•	•
CAC-SAP-13X	Cultural Electives	•	•	
IIM-SAP-140	Spanish Culture	•	•	•
DOI-SAP-140	Spanish Culture through Films	•	•	
	Spanish Language: All levels	•	•	•
	Other language courses and cultural activities	•	•	

TECHNOLOGICAL, ELECTIVE COURSES & RESEARCH		FALL	SPRING	SUMMER
DIM-OPT-436	3D Engineering Design with Dynamic Simulation		•	
DEA-OPT-438	Aerospace Electronics		•	
DEA-OPT-431	Automotive Electronics		•	
DIM-OPT-433	Automotive Engines		•	
DIE-OPT-437	The Challenge of Future Electricity Systems		•	
DOI-OPT-439	Circular Economy and Eco-Industry		•	
DIE-OPT-434	Energy Economics: Primary Sources, Electric Power Systems and Market		•	
DTC-SAP-247	Internet of Things (IoT): Basics and Practical Approach			•
DOI-OPT-445	Introduction to Entrepreneurship		•	•
DIM-OPT-423	Metrology		•	
DIM-OPT-432	Nanotechnology		•	
	Additional courses (technological, business, etc.) from local study plans	•	•	
	Research Project (I & II)	•	•	•

# comillas.edu

## CONTACT INFORMATION:

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