

Annex 1

Table 1 – Structure of the double diploma

	Sapienza, Università di Roma, Laurea Magistrale in Ingegneria Gestionale. Students must elect to take the <i>Gestione delle Organizzazioni</i> (GO) curriculum	CENTRALESUPELEC Engineering curriculum Dominante Grands Systèmes en Interaction (GSI). Mention Supply Chain and Operations Management \$\$\$	ECTS
1st year	Courses taken at Sapienza transferrable to CentraleSupelec	Courses transferred from Sapienza *	60
2nd year	Transferred courses (+ Internship) from CentraleSupelec (S7 – S8 – S9 – S10) **	Courses transferred from Sapienza (+ Thesis)	60
Total ECTS			120

* Students from CentraleSupélec would join Sapienza after their second year of Engineering Cycle. They will attend courses at Sapienza - LM first year and second year - for an amount of 120 ECTS overall, or less if some courses already taken at CentraleSupélec are recognized.

** Sapienza students would join CentraleSupélec after their first year of LM programme. They will attend the 2nd and the 3rd year at CentraleSupélec (i.e. S7, S8, S9 and S10) including the project and stage. Students are expected to write a report on their stage experience (minimum 70 pages).

\$\$\$ If a student from Sapienza is not admitted to the curriculum Mention Supply Chain and Operations Management, due to his/her notes at the end of 2nd year at CentraleSupélec, he/she will be enrolled in the Mention Design and System Sciences Curriculum.

First year

Courses attended by Sapienza and by CentraleSupélec students at Sapienza

Course Title		Location
GO 1 Economia dei Sistemi Industriali	12	Sapienza
GO 2 Gestione degli Impianti Industriali	9	
GO 4 Modellistica e Identificazione	9	
GO 5 Programmazione Intera e Ottimizzazione Combinatoria	12	
GO 8 Sistemi di Servizio e Simulazione	6	

GO 9 Sistemi Informativi Aziendali	6	
GO 12 A scelta Choose one from those included in GO 11	6	

Second year

Courses attended by Sapienza students at CentraleSupélec and by CentraleSupélec students at Sapienza

Choose: SD9 (Ingenierie des systemes complexes, commande des systemes complexes, Introduction au management des operations et a la supply chain, aide a la decision, modelisation technico-economique) 8 CFU or SG 10 (Introduction Supply chain & Operations, Strategie et finance, Demand & supply planning, Prevision de la demande, Management de Production) 8 CFU	GO 3 Gestione dei Progetti (9)
Choose: SG 11 (Hackathon Lean Six Sigma & Supply Chain, Data Science for Supply Chain & Operations, Industrie 4.0 & Supply Chain Digital, Data Analytics & ML) 8 CFU or SG 10 (Introduction Supply chain & Operations, Strategie et finance, Demand & supply planning, Prevision de la demande, Management de Production) 8 CFU (if not chosen to replace SD9)	GO 6 Gestione degli Acquisti (6)
Choose: Marketing Strategy and organization (2.5) Corporate Finance and Law (2.5) Innovation Management and Business Creation (2.5) or: Stochastic Finance and Risk Modelling (7)	GO 7 Sistemi di Controllo di Gestione (6)
Automatic control (2.5) + One course (5) from ST5 among: Ecological district, a complex system Multi-energy systems Industrial complex and critical systems (or equivalent courses in ST5)	GO-GDPL-EGT-MDIG Choose one (6) from: Programmazione e Controllo della Produzione Tecnologie di Additive Manufacturing
Optimization (2.5) + Choose one from: Economics of growth and innovation (2.5) Big data management (2.5) Machine learning (2.5) + Choose one from: Optimization of Network Infrastructure for Smart Cities (7) Circular Economy and Industrial Systems (7) Optimization of Passenger Transport Systems (7) Additive Manufacturing Design (7) + Choose one from: Renewable Energies (2.5) Artificial Intelligence (2.5) Scientific Calculation (2.5) Mobility Issues (2.5) Advanced Statistics (2.5) Economics of the Environment, energy and sustainable development (2.5) Maintenance and Industry 4.0 (2.5) Supply Chain Operations Management (2.5)	GO 11 Choose two (12) from: Analisi Finanziaria dell'Impresa Gestione della Qualità Gestione delle Risorse Umane e delle Competenze Marketing and Innovation Management Smart Factory
S7 Project	Laboratorio 3

UE Projet + UE Langues + UE Stage (18)	TESI 18
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Information about courses at Sapienza are available at:

<http://www.ingegneriagestionale.uniroma1.it/laureamagistrale/insegnamenti>

https://corsidilaurea.uniroma1.it/it/corso/2021/29936/programmazione?current_erogata=68e9e293-8d90-4032-ba0f-778c10758071&guid_cv=9c7ac1ec-aea5-4ae8-820b-20851f65cde1

Information about courses at CentraleSupelec are available at:

<https://www.centralesupelec.fr/fr/mobilite-entrante-0?tab=double-diplome>

Tabelle di equiparazione Centrale Supelec

Equivalence between the Italian and the French grading systems

Sapienza, Italy	CentraleSupélec, France
≤17	F
18	D
19/21	C-
21/22	C
23/24	C+
25	B-
26	B
27	B+
28 / 29	A-
30	A
30 cum laude	A+

Equivalence between the Italian and the French grading systems for final grade

Sapienza, Italy	CentraleSupélec, France
<i>Fail</i>	GPA 0 / ECTS F
<i>Less than 90 and 90</i>	GPA 1 / ECTS E
<i>between 91 and 100:</i>	
91-94	GPA 2 / ECTS D
95-98	GPA 2.25 / ECTS D
99-100	GPA 2.5 / ECTS C
<i>between 101 and 109:</i>	
101-103	GPA 2.75 / ECTS C
104-106	GPA 3 / ECTS B
107-109	GPA 3.25 / ECTS B
<i>110 and 110 cum laude</i>	GPA 3.5 – 4 / ECTS A