

Bachelor Degree in Industrial Engineering

Operational Excellence in Industry

I YEAR	CFU
Mathematical analysis	15
General physics and Fundamentals of chemistry	15
Computer science	9
Experimental data analysis and statistics	9
Student's choice teachings (table 1)*	12
English language (Certification)	3

II YEAR	CFU
Operations Research for industrial applications	6
Fundamentals of automation	6
Fundamentals of electrical and electronic engineering	10
Business decisions: models and tools	9
Production management	9
Strategic analysis and organisational design	6
Energy services for industry	9
Information Management	6

III YEAR (english option)	CFU
Business Process Management and Control	10
Logistics Management	6
Industrial marketing	6
Manufacturing Systems	6
Lean Manufacturing	6
Quality Design and Management	6
Operational excellence lab°	6
Teachings useful for job placement (table 2) or	6
Internship	6
Final exam	4

Table 1 Choice teachings usable from the first year	CFU
Fundamentals of economics	6
Methods and tools for modelling	6
Agenda 2030 and the United Nations Sustainable Development Goals *	3
Information literacy for Engineers*	3
Ethics for engineers*	3
Second Foreign Language French	3
Second Foreign Language Spanish	3
Second Foreign Language German	3

Tab 2 Teachings usable only from the third year	CFU
Excel for business applications	3
Minecraft: logistics and purchasing business game	3
Agenda 2030 and the United Nations Sustainable Development Goals *	3
Information literacy for Engineers*	3
Ethics for engineers *	3

° not compulsory for the pathway substitutable with the workshop area business design in the digital age and/or operational industrial excellence

* if used as an alternative to the internship, must be selected in year 3