

BRUFACE Admission
MSc Chemical and Materials Engineering

1. Fill in the total number of courses followed, the corresponding credits and grades.

	Course	Total number of courses	Total number of credits in ECTS*	Grades** GPA (Out of 4)
Basic Formation	Chemistry			
	Mathematics			
	Physics			
General Engineering	Mechanics			
	Numerical methods			
	Electricity / electronics			
	Automation / Control theory			
Chemical Engineering	Fluid mechanics and transfer processes (mass and heat)			
	Process technology			
	Thermodynamics and kinetics			
	Materials Science			

* 60 ECTS corresponds to 1 year; Recalculate if needed to balance out

** Conversion to GPA grade scale: <https://www.scholaro.com/gpa-calculator/>
(4 = A = 16-20/20; 3 = B = 13-15/20 ; 2 = C = 11-12/20; 1 = D = 8-10/20; E < 10/20).

1. Self-assessment by candidate: check the correct box to define your knowledge level; no thick mark needed for every subject (an advance level in all topics is not expected).

	Coverage/Knowledge level:	Advanced	Medium	Low
Chemistry	General chemistry			
	Organic chemistry			
	Analytical chemistry and spectroscopy			
	Physical chemistry and thermodynamics			
	Reaction kinetics			
Engineering: Foundations	Algebra			
	Geometry			
	Calculus			
	Differential equations			
	Statistics and measurement errors			
	Dimensional analysis and unit conversions			
	Computational/modeling tools: Excel, Matlab			
General Engineering	Electricity and electro-magnetism			
	Fluid mechanics			
	Mechanics: forces and movement			
	Electronics			
	Process control and automation			
Chemical Eng.	Phase equilibria, mass and energy balances			
	Reactor design			
	Separation processes and unit operation			
	Heat and mass transfer			
Materials Science	Metals/alloys + corrosion			
	Polymers + composites			
	Ceramics			