

BRUFACE Admission
MSc Chemical and Materials Engineering

1. Fill in the total number of courses followed, the corresponding ECTS credits and grades on a scale from 0 to 20.

	Course	Total number of courses	Total ECTS credits* (60 ECTS = 1 y)	Grades** (scale 0-20 for each of these courses)
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 ECTS grade to Equivalent (scale 0-20); A = 17-20 / 20; B = 15-16; C = 13-14; D = 11-12; E > 10.

2. Self-assessment by candidate: check the correct box and define knowledge level; but no thick mark needed for every subject)

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