



### MATHEMATICAL ANALYSIS B

<b>Enrollment year</b>	2009/2010
<b>Academic year</b>	2009/2010
<b>Regulations</b>	DM270
<b>Academic discipline</b>	MAT/05 (MATHEMATICAL ANALYSIS)
<b>Department</b>	DEPARTMENT OF ELECTRICAL, COMPUTER AND BIOMEDICAL ENGINEERING
<b>Course</b>	MECHATRONIC ENGINEERING
<b>Curriculum</b>	PERCORSO COMUNE
<b>Year of study</b>	1°
<b>Period</b>	2nd semester (01/03/2010 - 04/06/2010)
<b>ECTS</b>	6
<b>Lesson hours</b>	60 lesson hours
<b>Language</b>	Italian
<b>Activity type</b>	ORAL TEST
<b>Teacher</b>	BONETTI ELENA (titolare) - 6 ECTS
<b>Prerequisites</b>	Required by the faculty for beginners
<b>Learning outcomes</b>	The course deals with the notions of calculus required for a faculty of engineering: differential and integral calculus for scalar and vectorial real functions, the infinitesimal calculus for curves and surfaces, and differential equations. The student is expected to tackle problems such as optimization, applications in geometry and mechanics, modelling simple situations by use of differential systems, using Stokes and Gauss' theorems to describe balance laws.
<b>Course contents</b>	Differential calculus Integral calculus Differential equations
<b>Teaching methods</b>	

<b>Reccomended or required readings</b>	Bramanti, Pagani, Salsa. Matematica, Calcolo infinitesimale e algebra lineare. Ed. Zanichelli.
<b>Assessment methods</b>	Examination: solving exercises and interrogation
<b>Further information</b>	
<b>Sustainable development goals - Agenda 2030</b>	<a href="#">\$lbl legenda sviluppo sostenibile</a>