

Internship in Mechanical Engineering

Supervisor	Prof. Dr. Flavia Zinani
Project	Computational Fluid Dynamics of Blood Flow http://www.unisinos.br/mestrado-e-doutorado/engenharia-mecanica/
Description	The objective is to work with optimization of geometries for blood flow employing Computational Fluid Dynamics. The student will learn about rheology, non-newtonian fluids, Computational Fluid Dynamics, optimization methods and Constructal Design.
Tasks	We have a laboratory with computers and CFD codes available. The student will do bibliographic research, build geometries, computational grids and numerical models. The student will build the optimization models and analyze results.
Requirements	<ul style="list-style-type: none"> • Students of Mechanical Engineering • Undergraduate student (at least beginning of the 3rd year) • Basic skills in scientific working (lab and/or field experiments)
Language Skills	English (Portuguese would be nice, but is not necessary).
Duration	4 months
Possible Beginning	February/July
Credits	According to agreement
Payment	None