This dissertation deals with coarticulatory nasalization in Czech and English. The theoretical part introduces the topic of coarticulation, presents methods used in the research of studies, as well as studies which have analyzed this topic before. In the practical part, the dissertation presents four experiments, which have been largely conducted by means of nasometric analysis. Three experiments analyze vowel nasalance based on segmental and suprasegmental parameters, both in logatoms and connected speech. I was interested in mean nasalance in the respective vowels, as well as in the course of nasalance throughout vowels and vowel-nasal-vowel tokens. In one experiment, I also examine the perceptual aspect of nasality; manipulations of spectral envelope were used to generate the target speechsounds.