

This bachelor thesis deals with rational surfaces with rational offsets and minimal surfaces. We will give a connection between these two classes of surfaces. We will introduce a method of finding all rational surfaces with rational offsets using dual representation of surface as an envelope of its own tangent surfaces. A connection will be established between minimal surfaces and functions of a complex variable. Furthermore, we will derive the known Weierstrass-Enneper representation and its modifications for generating minimal surfaces. By means of these two tools we will show that all rational minimal surfaces obtained from the Weierstrass-Enneper representation also have rational offsets.