The thesis examines version control systems (VCs) and the possibilities of their use in information technology classes. At first, various solutions for version management are evaluated. As a result, a decentralized system called Git is deemed the most appropriate to be used in education. The text further explains the details of how Git works while also introducing some of the relevant training software and Git extensions. The thesis continues by exploring the role of version control systems in education, their teaching, and use as a didactic tool. The final chapters are practically oriented and include the description of processes which allow source code version control to be used within a student group environment. The thesis concludes with an overall evaluation of the use of version management systems in teaching, including practical recommendations and examples.