**Topics of dissertation theses for doctoral studies, “Forest management” study programme – academic year 2023-2024**

• Study of mensuration variables of forest tree and forest stand

• Influence of changed climate conditions on growth and increment of forest trees and stands

• Modelling of development of forest growth variables

• Optimisation of forest inventory sampling design

• Adaptation of control methods of forest management to forests in conversion to selection system

• Optimisation of final cut

• Optimisation of thinning

• Optimisation of rotation period

• Optimisation of forest management planning with respect to non-wood forest production

• Forest management planning using mathematical programming

• Random processes and their influence on forest management

• Use of Multicriterial Decision Analysis (MCDA) methods for forest ecosystem management planning

• Tools for decision support in forestry based on artificial intelligence (AI) methods

• Utilization of modern photogrammetric methods in forest taxation

• Species recognition using modern terrestrial RS methods.

• Forest growth models

• Modeling of forest structure development

• Close to nature forest management

• Forest management of forest in transition to close to nature