Branch: Agriculture

Code: FOSREM
Option: Forestry science and resource management
Level: Bachelor
Prerequisites: Scientific baccalaureate or equivalent
Opportunities:
The aim of this degree is to provide a solid basis for further master's studies in the fields of "forest science" and "resource management". In addition, the study program also offers a first qualifying degree for a professional field. Professional profiles include, for example, the management of small forest holdings, employment in forestry and timber industry companies or forestry consultancy activities. The degree program also qualifies students for training as a higher technical forestry service (3rd level qualification).
Description
The aim of the curriculum is to teach students about the sustainable use of resources using the example of "forests" and the renewable raw material wood. In addition to sound technical knowledge, this also requires a comprehensive understanding of systems and in-depth methodological skills.
Forests, as complex ecosystems, are the main hotspots of terrestrial biodiversity in the world and fulfil a multitude of functions. They provide habitats for plant and animal species, produce wood, the most important renewable resource in terms of area and quantity, and contribute significantly to the common good of society. In the era of climate change and related efforts to decarbonize, forests are also becoming increasingly important as a source of energy and carbon

storage. Forest ecosystems therefore have to meet a multitude of demands and are increasingly at the center of socio-political discourse. This is also reflected in the fact that the demand for wood and wood products has been growing for years, but also in the increasing efforts to protect and preserve forests.
In order to do justice to the diverse and sometimes conflicting demands for the use of renewable raw materials and forest ecosystems, careful and holistic management is essential.
The Bachelor's program "Forestry and Resource Management" provides the necessary foundations in terms of subjects and economic, social and natural sciences. The scientific foundations play an equally important role as the technical use of products and the socio-political importance of natural resources.
The Faculty of Forestry and Resource Management focuses on the broadest possible education.
In addition to scientifically based specialist training, the development of students' personal skills is another objective of the curriculum. To this end, team projects, additional courses such as rhetoric, conflict management or stays abroad are offered.

Quality and competences:
After successful completion of the degree program "Forest Science and Resource Management", graduates understand the basic principles of sustainable management and action. They know the ecological, economic and socio-political importance of natural resources. They have a basic knowledge of natural, social and economic sciences and are able to apply this knowledge to solve a wide range of problems. They are able to think networked and analytically and to work methodically and scientifically.
They know and understand the complexity and dynamics of forest ecosystems and are able to use this knowledge as a basis for forestry action. They have an overview of the historical development of forestry as well as the current legal and political framework conditions. They understand the importance of long-term planning as a basis for forestry action and are able to evaluate the economic and ecological effects of different action steps. They are able to apply different silvicultural and operational concepts, to adapt them to changing conditions and to develop them further. They understand operational work processes and are able to analyze and evaluate them holistically. Furthermore, they are able to analyze, evaluate and control forestry processes taking into account economic, ecological and technical aspects. They have an overview of the most important

technologies and lines of wood utilization. They are familiar with the different methods of industrial processing and understand the resulting quality requirements for raw materials. In addition, they have basic planning knowledge and skills in the field of landscape management and know the importance of the forest as a landscape element.