

Learning outcomes for the degrees of Bachelor and Master of Science (Pharmacy)

The objective of education leading to the degrees of Bachelor and Master of Science (Pharmacy) is to produce experts for pharmaceutical work in all branches of healthcare and provide them with the knowledge and skills they need to maintain and improve their expertise. To ensure pharmaceutical expertise, the degrees aim to provide students with the general knowledge and skills described below. [Directive 2005/36/EC](#) also outlines the knowledge to be acquired through education leading to the degree of Master of Science (Pharmacy).

Bachelor of Science (Pharmacy)	
Learning outcomes concerning knowledge Students who have completed the degree:	Learning outcomes concerning skills Students who have completed the degree:
Can apply basic knowledge of the natural sciences and biomedicine in pharmaceutical work	Have developed a professional identity and understand their expert role and duties in healthcare
Have a comprehensive command of pharmacotherapy, from the manufacture of medications to their safe and appropriate use	Are capable of critical thinking, that is, can assess information and apply the results of research in their work
Understand the field of pharmacy as a whole, including employment prospects as well as the role and significance of pharmacy in Finnish and other societies and healthcare systems	Have good problem-solving skills, can tolerate uncertainty and can acquire information independently
Have the language and communication skills required for expert pharmaceutical work	Understand the necessity of lifelong learning, are motivated to enhance their expertise and can act in a self-directed, creative, ethical and responsible manner in compliance with the principles of sustainable development
Understand the basic economic principles of business operations and the social functions of healthcare	Can communicate and interact both with customers and in multiprofessional groups
Master of Science (Pharmacy)	
Learning outcomes concerning knowledge	Learning outcomes concerning skills
Students who have completed the degree have expanded the knowledge and skills acquired through their Bachelor of Science (Pharmacy) degree, in addition to which they:	
Profoundly understand the broad scope of the discipline of pharmacy and have a command of its key phenomena, theories and concepts	Can work as experts, trainers and developers in multiprofessional groups in both the pharmaceutical industry and the healthcare sector in Finland and abroad
Have a command of the basics of pharmaceutical development, understand the process of pharmaceutical development and can apply their knowledge as experts in pharmaceutical development and pharmacotherapy	Have a command of key research methods as well as the research-based work method, can draw scientific conclusions and can produce scientific texts
Have acquired good theoretical competence and methodological knowledge in their specialist area	Have acquired the competences needed for research work in their specialist area as well as the competences for independent work in an international multiprofessional research community
Can work in an expert environment in compliance with the principles of expert leadership and have the competence to develop in supervisory positions	Can think critically and analytically and apply research-based knowledge in their work, and have acquired good argumentation and problem-solving skills
Have a command of the basic concepts of business administration and understand the realities of business, particularly from the perspective of pharmaceutical medicine	Understand the potential provided by their expertise in various international environments