### LEARNING OUTCOMES ON LEVEL 8 PQF

Through education in a doctoral school, doctoral students acquire learning outcomes for qualifications at level 8 of the Polish Qualifications Framework.

# The learning outcomes are defined in terms of:

- knowledge (knows and understands)
- skills (can)
- social competences (is ready to)

## **P8S** WG (knows and understands:)

- to the extent allowing to revise existing paradigms, the world-wide body of knowledge covering theoretical foundations and general and selected specific issues appropriate to the scientific or artistic discipline,
- major trends in the development of the scientific or artistic disciplines in which the training is given,
- research methodology,
- the rules for dissemination of scientific results, including through open access,

#### **P8S** WK (knows and understands:)

- fundamental dilemmas of modern civilisation
- economic, legal, ethical, and other relevant determinants of scientific activity
- the basic principles for the transfer of knowledge to the economic and social spheres and for the commercialisation of the results of scientific activities and of the know-how related to these results,

# P8S\_UW (can:)

- use knowledge from different scientific disciplines or the arts to creatively identify, formulate and innovatively solve complex problems or perform tasks of a research nature, in particular:
- define the purpose and object of scientific research, formulate a research hypothesis,
- develop research methods, techniques and tools and apply them creatively,
- make inferences from scientific findings,
- critically analyse and evaluate the results of scientific research, expert activities and other works of a creative nature and their contribution to the advancement of knowledge,
- transfer the results of scientific activities to the economic and social spheres,

## **P8S\_UK** (can:)

- communicate on specialist subjects to the extent necessary for active participation in the international scientific community,
- disseminate the results of scientific activities, including in popular forms,
- initiate debate,
- participate in scientific discourse,
- use a foreign language at B2 level of the Common European Framework of Reference for Languages to the extent necessary for participation in an international scientific and professional environment,

#### P8S UO (can:)

• plan and carry out individual and team research or creative projects, including in an international environment,

### P8S UU (can:)

- independently plan and act for their own development and inspire and organise the development of others,
- plan and deliver a class or group of classes using modern methods and tools,

## **P8S KK** (is ready to:)

- critically evaluate achievements within a scientific or artistic discipline,
- critically appraise one's own contribution to the development of that scientific or artistic discipline,
- recognise the importance of knowledge in solving cognitive and practical problems,

## **P8S KO** (is ready to:)

- fulfil the social obligations of researchers and authors,
- initiate actions in the public interest,
- think and act entrepreneurially,

# P8S\_KR (is ready to:)

- uphold and develop the ethos of the research and creative community, including: conducting scientific activity in an independent manner,
- respect the principle of public ownership of scientific results, taking into account the principles of protection of intellectual property.