# Common generic skills of the University of Oulu

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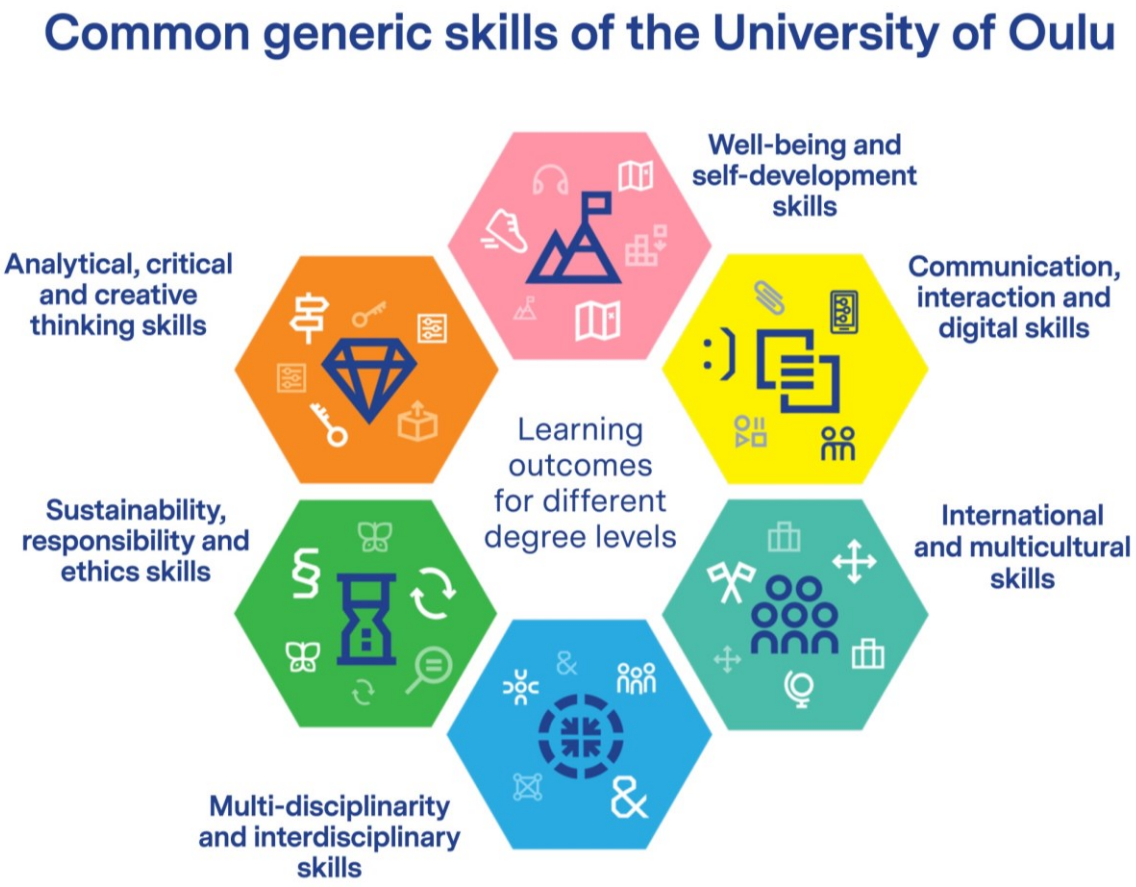
UNIVERSITY OF OULU

# Common generic skills selected in a participatory process

Generic skills refer to skills common to all fields that are needed during studies and working life. These skills are needed alongside field-specific competence. In order to strengthen the development of graduating students' working life skills alongside strong field-specific competence, **the University of Oulu has selected the following six common generic skills in autumn 2024 as the skills which will be systematically developed during studies in all degree programmes**. In a participatory process, examples of sub-skills have been prepared for these skills and the university's common degree-specific learning outcomes have been created. The common generic skills learning outcomes take into account the Government Decree on Framework for Qualifications and Other Competence Modules (120/2017) (available only in Finnish) and define the competences related to these themes for levels 6, 7 and 8.




Common generic skills are integrated into all degrees (Bachelor’s, Master’s and Doctoral) at the University of Oulu starting from the academic year 2026–2027. The work will start with curriculum mapping of the current state of generic skills. Workshops will be organised to support the degree programmes and examples of course-specific generic skills learning outcomes and different ways of assessing the achievement of generic skills learning outcomes will be produced.

# Examples of sub-skills of common generic skills

Examples of sub-skills have been defined for each common generic skill in the generic skills workshops in autumn 2024. The listings allow degree programmes to identify skills related to each theme and to utilise the sub-skills listings when planning the teaching of common generic skills.

## Analytical, critical and creative thinking skills

Analytical, critical and creative thinking sub-skills include, for example:

Analysis and separation of information from the essential, examination of methods, sources and research results, re-evaluation of existing practices, argumentation skills, evaluation of arguments, drawing conclusions, problem identification, source criticism (e.g. related to artificial intelligence), generation of new ideas, development of innovative solutions and creative problem solving, ability to think systemically.

## Well-being and self-development skills

Well-being, and self-development sub-skills include, for example:

Time management, balance between work, studies and free time, self-management, personal goals and strategies, self-assessment of competence, self-reflection, ability to take responsibility for one's own actions and well-being, recognition of personal strengths and weaknesses, emotional skills, tolerance of uncertainty and discomfort, self-compassion, competence related to community and sociability, development of professional identity, setting career goals, continuous learning and updating skills, job search skills.

## International and multicultural skills

International and multicultural sub-skills include, for example:

Cultural sensitivity (exposure/ open encounters/ acquaintance, awareness, understanding and appreciation), openness, curiosity, courage, flexibility and patience in multicultural contexts, cooperation in global networks, development of diverse language skills, understanding and competence in equality and non-discrimination between different national, linguistic and ethnic groups.

## Sustainability, responsibility and ethical skills

Sustainability, responsibility and ethics sub-skills include, for example:

Assessing the environmental and ecological impacts of one's own field, identifying the dimensions of sustainability (ecological, social, economic and cultural) and their interdependencies in one's own field of science, applying the UN Sustainable Development Goals, systems thinking, responsible decision-making, basics of professional ethics, promoting ethical, equity, and diversity activities, adhering to good research practices, understanding the impact of one's own background, privileges, position and values on one's own activities and accountability, influencing society, respecting people, nature and culture.

## Multidisciplinary and interdisciplinary skills

Multidisciplinary and interdisciplinary sub-skills include, for example:

Multiprofessional cooperation skills, combining and utilising expertise from different fields, understanding the boundaries and interdisciplinary connections of one's own field, appreciating

and accepting different fields and perspectives, ability to adapt to constant change, appreciation of knowledge formation and approaches from different disciplines, and ability to cross sectoral boundaries.

### Communication, interaction and digital skills

Communication, interaction and digital sub-skills include, for example:

Clear and concise expression, listening and discussion skills, responsible communication and awareness of power relations and one's own position, consideration of the target audience and communication channel, cooperation and teamwork skills, networking skills and building trust, presentation skills, media and digital skills, artificial intelligence skills, multilingual skills.

## Learning outcomes of common generic skills at different degree levels

The University of Oulu has defined the following common generic skills learning outcomes for different degree levels.

| Generic skill | A person with a bachelor's degree… | A person with a master's degree… | A person with a doctoral degree… |
|---|---|---|---|
|  **Analytical, critical and creative thinking skills** | • identify the key skills of analytical, critical and creative thinking and be able to observe them in their own activities<br>• identify and be able to describe the importance of analytical, critical and creative thinking in scientific, professional and ethical activities<br>• is able to critically evaluate knowledge in their own field and apply it to solve complex and unpredictable problems. | • is able to apply analytical and critical thinking skills in a manner appropriate to their discipline, considering the interfaces between fields and new knowledge<br>• is able to apply creative thinking and problem solving in their work to develop new knowledge and new procedures<br>• is able to analyse arguments and argue appropriately. | • is able to combine analytical, critical and creative thinking skills to solve complex problems in research or innovation activities<br>• is able to develop and apply innovative approaches to problem solving and to build and evaluate well-founded arguments from different perspectives<br>• is able to utilize analytical, critical and creative thinking across disciplines in producing new knowledge and solving problems. |
|  **Well-being and self-development skills** | • identifies key elements related to their own well-being and self-management<br>• identifies stressors related to expert work and utilizes self-compassion to support well-being<br>• is able to describe their own expertise, develop their own professional identity, promote group learning and development, and recognize the need for lifelong learning. | • knows how to promote their well-being, develop their self-management skills and build their professional identity, and maintain their own competence in a goal-oriented manner<br>• knows how to act constructively in situations of uncertainty and discomfort, develop self-compassionate ways of acting, and promote community and interaction to support well-being. | • is able to use and actively develop self-management skills within a scientific framework<br>• is able to set professional goals, plan their career and develop and maintain one's own competence in research and development activities. |

| Generic skill | A person with a bachelor's degree… | A person with a master's degree… | A person with a doctoral degree… |
|---|---|---|---|
|  **International and multicultural skills** | • recognizes the diversity of cultures and the problematic nature of stereotypes related to different language, nationality and ethnic groups, and recognizes stereotypical ways of thinking<br>• is able to work in multicultural teams and act openly in international and multinational situations with people from different cultural backgrounds. | • is able to work in international cooperation and take the international operating environment into account in their activities<br>• is able to promote constructive cooperation with people from different backgrounds, develop their language skills and be able to challenge their own stereotypical thinking patterns. | • is able to promote international cooperation and build and utilise global networks. |
|  **Sustainability, responsibility and ethics skills** | • identifies the dimensions of sustainability (social, ecological, economic, cultural) and evaluate their own actions in relation to them<br>• identifies the UN Sustainable Development Goals (SDGs)<br>• knows how to work equally and equitably with different people in accordance with professional ethics and good scientific practice, respecting different stakeholder groups, environments and values. | • recognizes the dependencies between the dimensions of sustainability (social, ecological, economic, cultural) in their own field of study and is able to assess the impacts of their own field's activities on them<br>• is able to apply the UN Sustainable Development Goals in their own professional activities and identify ways to participate in social debate and decision-making in their own field<br>• is able to solve ethical questions in their field with sound reasoning and justify their actions ethically, taking into account different backgrounds, positions of power, values, and environments. | • is able to place research activities in a broader context in order to understand complex issues and to evaluate their own research taking into account the perspectives of sustainability and global justice<br>• is able to promote the UN's Sustainable Development Goals in their own field of research and development<br>• is able to act responsibly and proactively in accordance with professional ethics and good scientific practice, and to consider the impacts of their actions on stakeholders and the environment. |
|  **Multi-disciplinarity and interdisciplinary skills** | • is able to compare the differences and similarities between their own field of study and related disciplines<br>• is able to be open to the perspectives of representatives of other fields and to identify possible interdisciplinary perspectives that could promote the development and cooperation of their own field<br>• is able to work in multidisciplinary and multiprofessional teams and appreciate expertise across different fields. | • is able to apply the methods of their own discipline and recognise the strengths and limitations of methods in other disciplines<br>• is able to seek and combine expertise from different fields to find innovative solutions to global challenges as part of a working group<br>• is able to promote multidisciplinary cooperation and lead multidisciplinary and multiprofessional teams. | • is able to integrate methods from their own discipline and other fields into their research and evaluate their compatibility and impact in research and practical applications<br>• is able to develop multidisciplinary and multi-professional solutions to global challenges, combining expertise from different fields in an innovative way<br>• is able to lead and develop multiprofessional and multidisciplinary cooperation, acting as a trendsetter and influencer in different expert environments. |

| Generic skill | A person with a bachelor's degree… | A person with a master's degree… | A person with a doctoral degree… |
|---|---|---|---|
|  **Communication, interaction and digital skills** | • can communicate clearly orally and in writing to both experts in their field and to other audiences, including in a foreign language<br>• is able to communicate clearly in a group, actively listen to others, give constructive feedback and resolve conflicts constructively<br>• is able to develop their communication, interaction and multi-literacy skills<br>• is able to use digital and AI applications relevant to their field in their studies appropriately, safely, and responsibly.<br>• can communicate and discuss in their mother tongue and second domestic language (this learning outcome only applies to degrees in Finnish). | • is able to communicate as an expert in a way suitable for the target audience, also in a foreign language, and to build professional networks<br>• is able to evaluate the activities of individuals and groups, such as the achievement of goals, group dynamics, communication and work atmosphere, is able to provide constructive feedback, guidance and development suggestions to others and lead a team<br>• is able to utilise and critically evaluate digital solutions and AI technologies in their own area of expertise appropriately, safely and responsibly, and to identify their impacts on research, working life and society. | • is able to communicate effectively and discuss dialogically with the scientific community and other audiences about their own research and discipline<br>• is able to present their own research and its results and impacts in the scientific community and beyond<br>• is able to apply methods, practices, and solutions based on digital technology and AI appropriately, safely, and responsibly in research, development work, and in demanding expert tasks in their own discipline. |

## Generic skills definition process

The common generic skills definition process at the University of Oulu has progressed as follows:

- On 20 December 2023, the Education Management Group decided that the University of Oulu would begin preparing generic skills common to all degrees.
- On 15 February 2024, the Vice Rector for Education, Tapio Koivu, appointed the Generic Skills Working Group to prepare the matter.
- The Generic Skills Working Group reviewed the generic skills defined for degrees published by Finnish universities and prepared a Webropol survey for the community.
- The Webropol survey on generic skills was carried out during Spring 2024 for alumni, students and staff. The survey included 18 generic skills, the importance of which was assessed by respondents on a scale of 0–10. Respondents were also allowed to suggest other generic skills that they considered important.
- The Generic Skills Working Group analysed the survey results and prepared its proposal for common generic skills.
- The results of the Generic Skills Survey and the proposal for common generic skills were discussed at the Education Management Group meeting on 13 August 2024. The Vice Rector for Education, Mirja Illikainen, decided in accordance with the proposal of the University of Oulu Common Generic Skills Working Group.
- Workshops open to all were organized for each selected generic skill in November-December 2024, where the more specific sub-skills and learning outcomes of the

generic skill were defined by degree level. A total of 120 people participated in the workshops.
- The jointly developed generic skills learning outcomes were discussed at the Education Management Group meeting on 18 February 2025, from where they were sent to faculties and units for a comment round.
- The Vice Rector for Education, Mirja Illikainen, decided on the sub-skills and learning outcomes of common generic skills on 26 March 2025.

## More information

Additional information for University of Oulu staff: Additional material and instructions for integrating generic skills into curricula and courses have been compiled for teachers and programme directors on the intranet Patio page Integrating common generic skills into curricula.

More information for University of Oulu students can be found on page Common generic skills and learning outcomes of the degrees.

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