

Appendix III



Competence tables

In 2008, the Applied Science Domain drew up a common competence-oriented profile description of the Bachelor of Science (then still referred to as Bachelor of Applied Science) in consultation with the national professional field. This competence profile describes the competences and competence indicators for a professional with five years of work experience after graduating from one of the programmes in the Applied Science domain (Level IV).

In 2010, this profile description was revised on a number of points and reissued. In this version, the domain competences are supplemented with details of the intermediate levels (Levels I to III), intended to give the professional field insight into the possible level structure within the programmes. These details were provided after an

exchange and comparison of details from the various universities. The elaboration per programme may vary within the various universities of applied science, based on the programme's own profiling and the application of the competences within the programme, as elaborated in the programme's own training policy and training competence profiles.

The Research, Experimentation and Development competences were completely revised between 2016 and 2019. The descriptions of the indicators were made more consistent, clearer and more compatible with educational practice. The professional field agreed to the changes made.

The level structure is cumulative: each successive level also includes the underlying levels.

1. COMPETENCE: RESEARCH

Within the Applied Science domain, the Bachelor of Science conducts research that either contributes to solving a problem or developing a method, or leads to greater insight into a subject within his professional environment.

	Level I	Level II	Level III	Level IV
	The student <i>performs simple research in response to a problem statement and setup provided.</i> He demonstrates this by:	The student <i>makes a major contribution to a research strategy provided and conducts the research.</i> He demonstrates this by:	The student <i>translates a problem provided into a research strategy and conducts the research.</i> He demonstrates this by:	Experienced professional (see description of competence above). He demonstrates this by:
a. Setting an objective for the research assignment	Communicating with the client about the problem and the objective of the research	Analysing a problem in consultation and in a coordinated way and translating it into the objectives of the research assignment.	Analysing, independently, a problem provided and translating it into the objective of the research assignment.	Analysing a problem independently and translating it into the objective of the research assignment.
b. Using literature or sources	Gaining an insight into the professional aspects of the research by studying the literature or sources provided.	Gaining an insight into the problem and the professional aspects of the research by studying the literature or sources the student has selected.	Selecting and obtaining, without assistance, scientific and other literature or sources in order to study the problem in greater depth, thereby validating the reliability of the different sources of information.	Selecting and obtaining, without assistance, scientific and other literature and/or sources in order to study the problem in full depth, thereby validating the reliability of the different sources of information.
c. Determining the research design	Explaining the relationship between the research question provided, sub-questions and research activities.	Formulating, under supervision, sub-questions and research activities regarding the research to be carried out.	Formulating, without assistance, sub-questions and research activities regarding the research to be carried out.	Formulating, without assistance, sub-questions and research activities regarding the research to be carried out.
d. Drawing up a work plan for research	Developing an approach to carrying out the research activities of a simple research assignment according to a format provided, including the planning of the work.	Preparing a work plan in consultation, drawing up the plan independently, taking account of any preconditions.	Preparing a work plan without assistance, taking into account the interdependencies of various research activities and preconditions.	Methodically drawing up a work plan, allowing time for evaluation and adjustment and taking account of preconditions and uncertainties.
e. Carrying out the research activities and obtaining the research results	Working in accordance with the work plan when carrying out the assignment and finding effective ways of achieving the intended results. Applying basic knowledge or skills.	Working in accordance with the work plan when carrying out the assignment. Implementing the work plan effectively and efficiently and determining whether interim adjustments are necessary on the basis of interim results. Applying relevant knowledge or skills.	Implementing a complex work plan effectively and efficiently and updating it as necessary in between times. Acquiring relevant knowledge and putting it into practice.	Implementing a complex work plan effectively and efficiently and working with dynamic scheduling as necessary. Acquiring relevant knowledge and putting it into practice.
f. Processing and checking data	Summarising the data from the research activities, structuring it in the light of the research question and presenting it clearly. Reflecting critically on the results to determine whether they are realistic.	Summarising and interpreting the full or partial results in relation to the assignment/research question. Critically reflecting on the reliability of the results.	Logically and clearly combining the full or partial results and interpreting them in relation to the research question. Performing an analysis of the reliability of the results.	Summarising, structuring and interpreting the results in relation to the research question. Ensuring that the results are reliable.
g. Formulating research conclusions and recommendations	Using the research results to formulate conclusions relating to the research question and if necessary submitting a proposal for improving the implementation of the assignment/the research.	Using the research results to formulate conclusions relating to the research question and using these to make a proposal for follow-up steps.	Using the research results to formulate and interpret conclusions relating to the research question. Making proposals for follow-up research based on the conclusions.	Making proposals for follow-up research based on the conclusions and other insights. Continue on page 80 →

→ COMPETENTIE ONDERZOEKEN (CONTINUATION)

h. Reporting	Reporting orally and/or in writing on the assignment in accordance with specified guidelines.	Combining the results into one report in accordance with the applicable guidelines/standard.	Reporting on the research in accordance with the standard applicable in the professional field.	Reporting on the results of the research in accordance with the standard applicable/valid in the professional field.
i. Cooperation and communication	Actively working as part of a team, processing the feedback on the work delivered to achieve better results. Being able to communicate concisely about goals and results as the work progresses.	Acting as a full team member in the student's working environment, where feedback and reflection lead to better results, reasoned choices and effective coordination in conducting the research. Being able to match communication on progress to the situation.	Acting as a full member and working as part of a team which also contains staff from other professional field(s). Communicating independently about the relevant substantive aspects of the progress.	Collaborating in a result-oriented way in a multidisciplinary setting. Communicating and reporting effectively on progress and coordination.

Definitions Competence Research

- Research involves working on an issue such as solving a problem, developing a method or gaining a greater understanding of a subject. Where the word **'problem'** is used in the competence indicators, it can also refer to a type of issue other than solving a problem. The word 'question' has deliberately not been used so as to avoid confusion with the term 'research question'.
- **Provided** indicates that there is a client who makes demands on, or has expectations of, the result. This is a higher level than a student who devises and conducts his or her own research in which the result or the quality of the result is of no importance.
- **Research strategy** concerns the objective, the research question and the design of the research.
- **Preconditions** relate to available resources (availability of resources in the widest sense), quality assurance (which also includes management measures), safety, health, welfare, the environment, sustainability and ethics.
- **Work plan** involves as a minimum the objectives, the design, the approach, the preconditions and the planning.
- **Complex work plan** is used when, for example, the plan is on a large scale in terms of duration and involves a multitude of substantive aspects, strict requirements for the quality of the results, multiple disciplines that need to be managed, a high risk factor or a lot of interaction and communication.
- **Follow-up steps** concern new objectives for solving the problem, developing a method, gaining insight into a subject or any other type of follow-up research.
- **The follow-up to a research assignment** may involve, for example: follow-up research, using a developed method, developing a product or ending work on a development.
- **Dynamic scheduling** produces a schedule that is not fixed in advance, but is constantly updated based on the results obtained.
- The **reliability** of the results can be derived from statistical calculations, but also from other calculations, literature or additional experiments.

2. COMPETENCE: EXPERIMENTATION

The Bachelor of Science conducts experiments within the Applied Science domain in order to obtain demonstrably reliable results.

	Level I	Level II	Level III	Level IV
	The student <i>conducts an experiment according to the approach/ protocol provided and obtains replicable results.</i> He demonstrates this by:	The student <i>chooses a protocol/approach, adjusts it if necessary, implements it and obtains reproducible and reliable results.</i> He demonstrates this by:	The student <i>sets up experiments under supervision and conducts them unsupervised in a systematic way and obtains reproducible and reliable results.</i> He demonstrates this by:	Experienced professional (see description of competence above). He demonstrates this by:
a. Objective and design	Explaining the objective of the experiment.	Choosing an approach and explaining why it is a suitable way of achieving the objective.	Formulating, without assistance, an approach to achieving the objective of the experiment.	Translating a research question into objectives by means of a suitable experimental design.
b. Methods and techniques (conceptual)	Explaining the principle of the method and technique provided.	Having sufficient knowledge and understanding of available methods and techniques to assess their suitability and choose the right equipment and/or device settings.	Choosing or developing suitable methods and techniques and anticipating possible experimental problems.	Demonstrating such knowledge, insight and skill as makes it possible to carry out the work in a responsible, safe and critical way using the correct methods, techniques and equipment.
c. Equipment/ setups/ instruments/ hardware and software* (use)	Becoming proficient in the correct handling of the equipment.	Becoming so skilled in operating the available equipment that adjusting the settings leads to desired effects.	Being capable of learning independently about the possibilities and limitations of the equipment to be used in order to recognise experimental problems and be able to act accordingly.	Being capable of learning about the possibilities and limitations of the equipment in order to be able to deal with experimental problems.
d. Preparation and implementation	Properly preparing an experiment on the basis of a protocol/approach provided, conducting it and obtaining replicable results within the specified time and maintaining accurate and clear documentation.	Preparing a schedule for implementing a protocol/ approach, conducting the experiment and obtaining reproducible results within the specified time and maintaining accurate and clear documentation.	Preparing a schedule for a number of experiments, conducting them and obtaining reproducible results within the specified time and maintaining accurate and clear documentation.	Drawing up and implementing work instructions so that demonstrably reliable and reproducible results can be obtained and maintaining accurate and clear documentation.
e. Health, safety, environment (HSE) and sustainability	Working according to HSE standards and taking ethical and sustainability standards into account when preparing and conducting the experiment.	Assessing whether the approach can be implemented according to HSE, ethical and sustainability standards.	Assessing the approach and adapting it if necessary in accordance with HSE, ethical and sustainability standards.	Designing an approach in accordance with HSE, ethical and sustainability standards, assuming responsibility for the local environment.
f. Reliability of results	Processing measurement results properly and correctly and estimating whether a result obtained is realistic.	Assessing the reliability of a result on the basis of an (e.g. statistical) analysis provided.	Choosing a statistical or other analysis for assessing the reliability and validity of the result obtained.	Using (statistical) techniques to process/validate the results and ensure their quality.
g. Critical review	Giving reasons to establish whether the approach to the experiment has been followed correctly.	Giving reasons to establish whether the approach to the experiment requires improvement.	Making proposals, where necessary, to improve the approach and propose additional experiments.	Taking a decision on the follow-up, based on the results.

* Where 'equipment' is mentioned in the level descriptions, this can be read as including setups/instruments/hardware and software.

Definitions Competence Experimentation (page 81)

- Where **documentation** is mentioned, this can also be read as: 'lab journal, logbook, technical manual or any other type of documentation used in the professional field'.
- Where **experiment** is mentioned, this can also be read as 'analysis'.
- Here, **replicability** means that the experiment produces the same results if it is carried out again by the same person under as equal conditions as possible.
- Here, **reproducibility** means that the experiment produces the same results if it is carried out again by another person under as equal conditions as possible.
- The **reliability** of the results can be derived from statistical calculations, but also from other calculations, literature or additional experiments.

Definitions Competence Development (page 83)

- **Developing** can also be 'designing', 'improving', 'optimising' or 'up- or downscaling' a process.
- We call it a **process** when a 'component' undergoes a treatment in a 'device' or other item of equipment, e.g. a distillation column, a reactor or a heat exchanger.
- An **instrument** is a 'device' or other item of equipment that has a physical, chemical or biological function, e.g. a magnet, an analytical instrument or a booster.
- A **component** is a material or intermediate product that undergoes a process.
- A situation is **complex** as a result of a large number of concepts, a significant correlation between concepts or a correlation with another discipline.
- **Or** is the 'inclusive or', that is 'and/or'.
- **Discipline-specific** is an adjective used within the context of Applied Science, e.g. relating to chemistry, physics, biology, engineering.
- A **discipline-specific concept** is a subject from the discipline for which a theory or models have been described, e.g. reaction kinetics (chemistry), distillation (physics), increase of biomass (biology) or electromagnetism (engineering).
- A **discipline-specific model** is a model of a discipline-specific concept or a combination thereof.
- **Discipline-specific feasibility** is feasibility in terms of chemistry, physics, biology or engineering, but not economic feasibility. Economic feasibility is defined separately.
- The **result** is the developed product, process, instrument or material or the scaled process.
- The **development** is the entire process undergone to achieve the result.

3. COMPETENCE: DEVELOPMENT

The Bachelor of Science develops or improves a process, instrument, product or material or scales a process up or down in the Applied Science domain.

	Level I	Level II	Level III	Level IV
	The student <i>develops or improves in accordance with a supplied approach.</i> He demonstrates this by:	The student <i>develops or improves by selecting or adapting an approach.</i> He demonstrates this by:	The student <i>develops or improves by independently creating an approach.</i> He demonstrates this by:	The experienced professional <i>develops or improves independently, where the situation is complicated or transfer from a different discipline is involved.</i> He demonstrates this by:
a. Criteria in specification of requirements (SoR)	Applying the criteria that the product, process, instrument or material must meet (SoR).	Adapting where necessary the criteria that the product, process, instrument or material must meet (SoR).	Setting the criteria that the product, process, instrument or material must meet, based on the client's requirements or wishes (SoR).	Setting the criteria with which the product, process, instrument or material must comply in a complex situation, based on the client's requirements or wishes (SoR).
b. Concepts	Identifying discipline-specific concepts supplied (assessing whether and where they can be identified), in the specification of requirements.	Choosing from a supplied set of discipline-specific concepts while identifying these concepts in the specification of requirements.	Identifying without assistance discipline-specific concepts in the specification of requirements.	Identifying without assistance, in a complex situation, discipline-specific concepts in the specification of requirements.
c. Parameters	Selecting the discipline-specific design parameters supplied that can affect the process, product, instrument or material.	Selecting the most suitable discipline-specific design parameters supplied that can affect the process, product, instrument or material.	Selecting the most suitable discipline-specific design parameters that can affect the process, product, instrument or material.	Selecting, in a complex situation, the most suitable discipline-specific design parameters that can affect the process, product, instrument or material
d. Models	Verifying whether discipline-specific models supplied are in accordance with the SoR, adjusting them and validating them.	Selecting suitable discipline-specific models supplied, verifying whether they are in accordance with the SoR, adjusting them and validating them.	Selecting, without assistance, suitable discipline-specific models, verifying whether they are in accordance with the SoR, adjusting them and validating them.	Selecting, in a complex situation, suitable discipline-specific models, verifying whether they are in accordance with the specification of requirements, applying and validating them.
e. Feasibility, sustainability	Using a supplied method to investigate the discipline-specific feasibility of the result.	Investigating the discipline-specific feasibility and sustainability of the result.	Investigating the discipline-specific and economic feasibility and sustainability of the result.	Investigating, in a complex situation, the discipline-specific and economic feasibility and sustainability of the result.
f. Feedstocks and unit operations	Determining the quantity of the feedstocks supplied and – if necessary – the dimensions of the unit operations.	Selecting the most suitable of the supplied feedstocks and unit operations in both qualitative (which) and quantitative (quantity, dimensions) terms.	Selecting, without assistance, the most suitable feedstocks and unit operations in both qualitative (which) and quantitative (quantity, dimensions) terms.	Selecting, in a complex situation, the most suitable feedstocks and unit operations in both qualitative (which) and quantitative (quantity, dimensions) terms.
g. Documentation	Preparing the documentation for the development and the result in a supplied format.	Preparing the documentation for the development and the result in accordance with detailed guidelines.	Preparing the documentation for the development and the result in accordance with the standard applicable in the professional field.	Preparing the documentation for the development and the result in accordance with the standard applicable in the professional field for a complex situation.

4. COMPETENCE: MANAGEMENT | COORDINATION

The Bachelor of Science develops, implements and maintains a management system or parts thereof to ensure that the system conforms to the relevant legislation and quality standards and the organisation's norms and values.

	Level I	Level II	Level III	Level IV
	The student <i>checks the work against the requirements of different management systems.</i> He demonstrates this by:	The student <i>makes a contribution to one or more management systems within the organisation.</i> He demonstrates this by:	The student <i>implements and maintains a management system.</i> He demonstrates this by:	Experienced professional (see description of competence above). He demonstrates this by:
a	Identifying and noting actual or potential problems in implementing a management system.	Making proposals for solving problems connected with the implementation and maintenance of a management system.	Anticipating possible problems in implementing and maintaining a management system.	Analysing any problems relating to the development, implementation and maintenance of a data or other management system.
b	Reviewing the options for improving the implementation of a management system.	Making proposals for improving a management system.	Preparing an improvement plan for a management system and implementing it or arranging its implementation.	Preparing, implementing and assessing an improvement plan that will solve the problems in a creative, structured and economically viable way.
c	Showing that he is familiar with relevant legislation.	Applying in practice elements of legislation when updating a management system.	Incorporating new legislation or socially desirable developments into an existing management system.	Taking account of legislation and national and international standards and values, particularly in the area of sustainability and reliability.
d	Fitting his activities into the management systems used at his place of employment.	Verifying compliance with the guidelines for generally applicable management systems.	Maintaining and/or improving the management systems used at his place of employment and implementing a new system if required.	Coordinating activities relating to the development, implementation and maintenance of the data or other management system (or parts thereof).
e	Reporting on compliance with the guidelines for the management systems used when carrying out his activities.	Reporting on the implementation of one or more management systems at his place of employment.	Reporting on and presenting changes in one or more management systems.	Reporting and presenting information in accordance with the standard applicable in the professional field.
f	Providing, on request, information for employees on the implementation of the management system used.	Keeping employees fully informed of the contents of a management system and alerting them to any changes.	Helping employees to use a management system.	Keeping employees fully informed of the contents and use of the data management system and any changes.

5. COMPETENCE: ADVICE | PROCUREMENT AND SALES

The Bachelor of Science provides properly substantiated advice on the design, improvement or use of products, processes and methods and effects profitable transactions involving products or services within the Applied Science domain.

	Level I	Level II	Level III	Level IV
	The student <i>familiarises himself with users' problems and/or requirements.</i> He demonstrates this by:	The student <i>helps to solve a user's technical problem.</i> He demonstrates this by:	The student <i>gives practical advice on a specific issue.</i> He demonstrates this by:	Experienced professional (see description of competence above). He demonstrates this by:
a	Listening to the customer.	Asking pertinent open questions.	Dealing flexibly with the customer's changing requirements.	Adopting a service-oriented attitude.
b	Describing the assignment clearly and unambiguously.	Reporting/presenting the customer's requirements which have been identified.	Making a reasoned recommendation.	Clarifying the issue raised by the client.
c	Analysing market research data.	Interpreting market research data.	Identifying market trends and responding to them.	Preparing and implementing market and other research.
d	Specifying actions to follow a piece of market research.	Preparing an action plan for a piece of market research.	Preparing an advice plan, taking account of his employer's competitive position.	Preparing (parts of) a recommendation.
e	Acknowledging the requirements of the customer/client or user as a relevant technical problem.	Identifying the customer's requirement.	Devising creative solutions for specific problems or developments.	Translating customers' wishes and questions into feasible solutions or recommendations in consultation with researchers and developers.
f	Knowing the customer/client or user.	Forming a relationship based on trust.	Taking account of the customer's environment.	Maintaining relationships with customers in an appropriate manner.
g	Identifying different negotiating techniques.	Using suitable negotiating techniques.	Persuading stakeholders in order to be able to implement desirable activities.	Using negotiating techniques when buying and selling.

6. COMPETENCE: INSTRUCTION | SUPERVISION | TEACHING | COACHING

The Bachelor of Science instructs and supervises employees and customers while teaching new knowledge and skills within the Applied Science domain.

	Level I	Level II	Level III	Level IV
	The student <i>passes his own knowledge and skills, on request, to employees (by demonstrating and explaining).</i> He demonstrates this by:	The student <i>takes the initiative to instruct employees who are lacking in knowledge and skills.</i> He demonstrates this by:	The student <i>transfers knowledge and skills to employees using appropriate teaching methods.</i> He demonstrates this by:	Experienced professional (see description of competence above). He demonstrates this by:
a	Helping to provide fellow employees, students or trainees with instructions/demonstrations with regard to a practical test, etc.	Providing fellow employees, students or trainees with instructions/ demonstrations with regard to a practical test, etc.	Independently providing fellow employees, students, trainees or course participants with a theoretical introduction incl. instructions/ demonstrations with regard to a practical test, etc.	Independently providing employees, trainees, students or course participants with theoretical introductions, instructions and demonstrations with regard to practical experiments, the use of equipment, materials, etc.
b	Helping to supervise employees, trainees, students or course participants in the use of methods and equipment, etc.	Participating in the supervision of employees, trainees, students or course participants in the use of methods and equipment, etc.	Providing part of the supervision of employees, trainees, students or course participants in the use of methods and equipment, etc.	Supervising employees, trainees, students or course participants in the use of methods and equipment as well as in conducting desk research for practical assignments.
c	Explaining things clearly.	Transferring information tailored to the target group.	Transferring complex information tailored to the target group.	Applying teaching skills in different educational settings.
d	Being aware of the importance of continuously developing his expertise.	Initiating activities to develop his own expertise and that of others.	Helping to coach employees on the basis of his own experience.	Coaching employees and teams on the development of expertise.
e	Providing feedback, on request, on the evaluation/ assessment of the results of instructions, etc.	Providing a substantiated evaluation/assessment of the results of instructions, etc.	Helping to draw up assessment criteria and making suggestions for further development.	Evaluating and assessing the results of instructions, training and/or courses.

7. COMPETENCE: LEADERSHIP | MANAGING PEOPLE

The Bachelor of Science provides direction and guidance for organisational processes and the employees involved in them in order to achieve the goals of the division/department or the project which he is managing.

	Level I	Level II	Level III	Level IV
	The student <i>provides employees with assistance and guidance when asked to do so.</i> He demonstrates this by:	The student <i>provides employees with assistance and guidance in order to improve performance.</i> He demonstrates this by:	The student <i>ensures that team members' goals and roles have been defined and helps the members to achieve the team goals.</i> He demonstrates this by:	Experienced professional (see description of competence above). He demonstrates this by:
a	Showing that he understands the place and role of his part of the organisation (internship/graduation project)	Bringing his own knowledge and understanding to bear in approaching new activities in the organisation.	Ensuring that employees are clear about what their role is in achieving the organisation's goals and supervising them in this regard.	Having a vision for his part of the organisation and communicating it.
b	Helping to allocate tasks and work.	Providing assistance in solving problems in scheduling and prioritising work.	Specifying how tasks should be allocated when scheduling work, as well as providing a timetable, setting priorities and listing other constraints in terms of time, money, quality, information and organisation.	Working on the basis of a project and according to a plan.
c	Being approachable and accessible for employees, fellow students and lecturers.	Motivating employees	Delegating tasks to employees according to their job and qualities.	Coaching employees by inspiring, persuading and motivating them, showing them respect, encouraging collaboration and delegating.
d	Being honest and reliable towards employees, fellow students and lecturers.	Calling employees to account for the way they deal with colleagues.	Being open and clear about his own position and helping to resolve conflicts.	Acting as a role model for employees.
e	Supporting others in their initiatives.	Encouraging employees to develop new initiatives themselves.	Helping employees to develop their initiatives.	Giving employees a feeling of shared responsibility.
f	Contributing to staff and progress meetings on the basis of his own work.	Sharing ideas with other employees at staff and progress meetings and taking the initiative to solve problems.	Allowing participants at the meeting to make a specific contribution based on their role in the team.	Chairing meetings, including progress meetings.
g	Giving a clear and unambiguous explanation or instructions about a task to be performed.	Consulting with other employees to reach a common goal.	Managing employees' progress to achieve the specified goals.	Communicating in a task- and process-oriented way.
h	Giving employees an insight into the importance of the constraints of the project.	Adjusting an existing schedule by agreement to remain within the stated constraints.	Allocating tasks to those participating in the project so as to achieve the best possible results within the constraints.	Managing a project in terms of time, money, quality, information and organisation.

8. COMPETENCE: SELF-MANAGEMENT

The Bachelor of Science manages himself in performing his duties and in his development and ensures that he is up to date with the latest developments in terms of knowledge and skills and in terms of ethical dilemmas and socially accepted norms and values.

	Level I	Level II	Level III	Level IV
	The student <i>reflects on his own performance.</i> He demonstrates this by:	The student <i>reflects on his own performance and development.</i> He demonstrates this by:	The student <i>manages himself in his own work.</i> He demonstrates this by:	Experienced professional (see description of competence above). He demonstrates this by:
a	Working towards an established learning objective. Discussing the learning strategy and the ensuing results; being aware of the function of a learning objective and how to use it in his learning strategy.	Determining his own learning objective and learning strategy in consultation/without assistance and reflecting on the result.	Making a career development plan and setting his own new learning objectives.	Setting and implementing a learning objective and a learning strategy without assistance and feeding the result back into the learning objective.
b	Identifying any need to adjust his own performance in the academic environment.	Using feedback on his own performance to adapt to the working environment.	Adjusting his performance to meet the requirements of the different working environments.	Quickly adapting to changing working environments.
c	Communicating with others about professional and ethical dilemmas and identifying professional and ethical dilemmas.	Taking note of any professional and ethical dilemmas and giving his opinion on them.	Taking a position based on socially accepted professional and ethical norms and values.	Weighing up professional and ethical dilemmas and taking a decision in accordance with socially accepted norms and values.
d	Seeking information in order to improve his own performance.	Taking on board criticism of work delivered and discussing his own performance with colleagues.	Adapting his own performance on the basis of experience.	Giving and receiving feedback.
e	Critically evaluating his own actions and thinking. Being aware of the effect of his own attitude to work on others and on group members in the case of a project.	Drawing conclusions on his own actions and if necessary articulating them to others.	Accounting to others for his own actions and giving reasons for choices to be made.	Critically evaluating his own actions and thinking, and accepting responsibility for them and taking this on board.