

Preparing for the Academic Culture at TU Delft

TU Delft is a highly valued and rated institution in the world. We will be very happy to include you in our Academic World. Yet to enter into our Academic Community and to remain a part of it, you may want to explore the TU Delft way of doing things. This text is written to help you do that.

Along the way we will ask you to reflect on your own educational experiences and the way you think things ought to be done. Matching the two may help you to become aware of the adventure you will embark on when joining the TU Delft community.

What do you expect from teachers in your own educational system?

I expect of my teachers to guide me through problems, but without telling me the answers. Practicing this several times will increase my ability to think critically and to acquire the appropriate way of reasoning and approaches that are required to solve problems in my field of study. Similarly I expect of teachers to guide me through the course while giving the class the opportunity to practice exercises which will allow me to evaluate my skills in a particular topic and judge whether I need to study more."

Briefly note down what your expectations are from you teachers in your own country?

A needs analysis amongst 200 international master students in 2010 has shown their expectations with respect to the anticipated relationship with the professor at TU Delft. The statement above is an example of one of these expectations. There were many more with respect to the role, the personal characteristics, the professional expertise and the teaching skills of the teaching staff at TU Delft. In the following table a list of key-words as used by the 200 students is presented. These key-words indicate the expectations international students have from teachers at TU Delft:

Teaching skills: Teacher is a professional, who teaches according to the highest academic standards and is an experienced expert (proficient in the subject) in their field.

Explanations: Is prepared, Practical approach, Give easy to understand explanations, Gives insight into various concepts/applications, Illustrate difficult things simple, Effective in knowledge transfer, knows lots of examples, links theory to practice, well –informed in the discipline, Link to real life engineering, Concise and Clear

Interaction: Stimulates interaction, Convey the subject in an interactive and interesting manner, Create classroom atmosphere where knowledge sharing is stimulated,. Does not need to know all the answers, effective communicators Encourage creativity and cooperation, Open to student discussion and opinions , Reachable/available for questions on course topics

Working methods: Flexible in teaching methodologies, Include laboratory training, practical , demonstrations and field trips ,Give lots of assignments, Not too much writing homework,

Study tips; How to study fast and adaptively in delft, Gives an instructive guide on what projects to choose/how to do them, How to do research and involve us into research, guides student (to achieve excellence in their chosen field)

Motivation: Make students belief in their potential, Develops students interests, Encourage new ideas and approaches to problems

Internationalisation issues: Treat everyone as equals, Treat different nationalities equally, Tell us about local customs, Tolerant to adjustment, Inclusive, Make students feel at home/ supportive, patience, open-minded, Soothing/giving confidence, Superior command of English, Proficient in English

Character/attitude: Cooperative/supportive, Friendly, Outgoing, Inspiring (to do something for my community), Understanding, warm, Respectful, Receptive, Intuitive, Humorous, Kind, Dedicated to the students

Roles: Friend, Motivator, Career broker, Counsellor to find our life's mission and available for any type of question

Note there is overlap in the descriptive key-words. The central purpose of the list is to provide you as international students, what your fellow international students expect.

Most of these expectations hold true, however, not all of them are realistic, therefore a short description follows of what to expect:

Staff Preparation: TU Delft professors are prepared for teaching by having followed a University teaching qualification (UTQ) or have been screened for equivalent experience. The teaching staff is appointed on the basis of professional expertise in a specific discipline. That usually means a PhD and a research record or professional background in the scientific field. It means those courses are both grounded in research and real life engineering practice. Around 1/3 of the staff at TU Delft has an international background.

Working methods: The predominant working methods in courses at TU Delft are lectures, tutorials, instructions, practical sessions, lab-work and field trips, studio-classroom and project oriented learning or design learning in studio's. Project oriented learning and design learning often happens in teams of student with diverse cultural backgrounds. You will be challenged to solve problems and co-create engineering solutions. Communication- and negotiation skills, working independently, being able to take on different team-roles and realising in-depth knowledge creation are key-skills to get optimal results in these types of classes.

MOOCs and OCW: a recent trend at TU Delft is the participation in the open courseware consortium

You will be able to become acquainted with course materials used at TU Delft in your field of interest. Likewise TU Delft is a partner of the EdX online education platform together with Harvard, MIT and other world famous universities ([link](#)). On the Edx platform you can follow Massive Open Online Courses on e.g. Introduction Aerospace Engineering, Critical Risk Analysis or Watermanagement. Taking part in these courses will give you feeling for the level of knowledge offered and the demands on you as a student. Participation is free of charge.

Study methods: In the Netherlands we have the notion of learning to learn; i.e. learning which study-methods work for you to get the best learning results. If you have any typical problems with these skills you may follow a study skill workshop at [SMART-study TU Delft](#) or have a supportive conversation with a study counsellor, at the central office or in the faculty.

Student and Career support: is a special TU Delft department where counsellors can help you with a CV check, finding work or pursuing a scientific career. These activities are beyond the task of the teacher.

Beyond the System:

As described above many issues are taken care off within the system not necessarily by the teacher, but will indeed be addressed as expected. On a more personal note we would like to draw your attention to the following issues:

Personal interaction: An important observation is that Dutch people keep their private life separate from their working life. So you may think you are friends, because the teacher is friendly, you are allowed to call him/her by his/her first name, and you are invited to ask any questions at any time. It is however, better to check first whether you are on the same wavelength. Being on friendly terms in the Netherlands means a work-relationship. Only if you are invited at home several times, you may consider yourself to be a friend.

Attitude/character of the teacher: this is of course entirely dependent on the personality of the teacher and cannot be accounted for within the organisation. So e.g. open mindedness is not included in the character profile of the job description. TU Delft aims to attract the best scientists and qualify them for teaching activities. It includes, like in real life, learning to deal with different types of demands and personalities.

Look at the table again and underline your own expectations?

Taking Initiative

Individualists: Going to University in the Netherlands is a question of pursuing your own dream, growth and career path. Oh if you don't make it, that is too bad, consequences will be only for you. Not for the rest of the family, friends, world etc.

Although this is a little exaggerated it is indicative of the way the Dutch operate. You will find a reflection of this way of thinking in the classroom. Making your studies a success is to take initiative in different ways:

- **Voice your own opinion;** however do support your opinion by scientific arguments. I.e. discuss scholar x said the earth is flat because of a, b and c, scholar y says the world is round, because of a, c and e, yet you have reasons to believe the world is square on the basis of a, b and e.
- **Properly reference your work;** scholar A's words should be rephrased in your own words and referred to as the source of inspiration. Likewise Scholar B's work should be rephrased and referred to. If you fail to apply this principle it will be called plagiarism (copy/paste), and it will be treated as fraud.
- **Ask your questions in class;** (not after the lecture, when the lecturer wants a break and drink coffee, like everyone else). When asking a question try to share what you learned and experienced. Other students can learn from you.

- **Read beyond the assignments;** if I ask you: “Can you open a window?” What will you do? Say “Yes I can” and remain seated or will you actually get up and open the window? The latter initiative will have a beneficial impact on your results. Do extra reading and show the world that you did it.
- **Self-Reliance;** your life, your studies, your results, your friends are all your own business or personal responsibility, as the Dutch would say. A high level of autonomy is expected. Yet, remember you can ask help!! Remember, however, also asking help is your own initiative!! Fortunately, most people will be happy to help you and the university has a large support system.
 - Student Psychologists for mental problems,
 - Student Counsellors for financial and other study related problems,
 - Student advisors at the faculty for questions related to the organisation of course work
 - International counsellor at the faculty for issues specifically related to the international student body
 - Student & career support if you wish to continue your career in the Netherlands.
 - Student Unions at each faculty for fieldtrips in the discipline, fun and supportive study materials

During classes and exercises some students keep on asking affirmation and re-affirmation. It seems they want me to sit with them and take their hand and lead them to the right answer. Why do they not work independently; what to do? (a TU Delft Lecturer)

Equality

Teachers and students tend to appreciate an equal relationship. It seems as though the Dutch discuss everything on an equal basis and are thus perceived as being very direct in their remarks. “Your opinion is as valid as mine”. If you have a question you can always approach the teacher, by making an appointment and discussing the most pressing issues. Remember, however, time is money, so get to the point very quickly.

Relationships are governed by pragmatic solutions and by the rules/procedures. Exceptions for one student will not be allowed, unless there is valid evidence and the academic counsellor has explicitly discussed it with the teacher. Although, staff tends to be very approachable, work and private life are generally separated. At work the Dutch will work, at home is their private domain, which is not shared easily.

The Dutch also tend to be very task oriented and less relationship oriented. Their words are often meant literally. They will say things as they are, without meaning to insult the recipient. They do not take personal offence when they are constructively criticised for the way they perform a task. Likewise, they might not understand the importance of saving face in other cultures.

Yet be aware of the fact that some relations are more equal than others.

Grading

How do I give feedback on poor quality assignments to students from different cultural backgrounds in such a way that I don't scare them off and stimulate them to improve their work?

Grading is a tricky issue, as many of the issues pertaining to grading are not discussed. They have come into being as a combination of cultural values and educational system implicitly assimilated in the educational make-up of the institution. Grading is primarily checking what students have learned on the basis of the learning objectives formulated at the beginning of the course. The verbs included in the learning objective should be an indicator of the knowledge/skills/attitudes to be assessed. Yet how we expect to be assessed and/or assess is partly determined by our expectations and value systems.

Ideally, grading is about transparency, fairness and above all objectively measurable results.

My students are always disappointed when they get their grades; they all seem to expect they are best of class and deserve a nine at least. What to say to them?

Grading is generally realized on the basis of satisfactory results achieved during the course; i.e. conceptual understanding and deep learning of a topic and capacity to apply knowledge and skills in complex contexts. Ideally, grading is about transparency, fairness and above all objectively measurable results. More subjective issues such as **effort/personal growth** are usually **not** addressed, but may play a role in doing a master thesis project.

Performance indicators; Cues/feedback on performance can be derived from:

- the quality of the work handed in
- the class attendance rate (in some faculties is of a more mandatory nature)
- the level of collaboration in teamwork
- the process evaluations during project work
- the quiz materials
- the oral presentations

Grading systems and 'grading culture' vary from country to country. In the Netherlands a 1 – 10 grading scale is commonly used. The Dutch grading scale, implemented from primary school through university level, goes from 1 (very poor) to 10 (excellent). At TU Delft final marks are rounded off to whole and half figures. A 6.0 is a pass. Although the scale runs from 1.0 to 10.0, the marks 9.0 and 9.5 are not frequently awarded and 10's are extremely rare. The definition of the marks is as follows:

Mark	Definition
9.5 – 10.0	Excellent
8.5 – 9.0	Very good
7.5 – 8.0	Good
6.5 – 7.0	More than satisfactory
6.0	Satisfactory
4.5 – 5.5	Nearly satisfactory
3.5 – 4.0	Unsatisfactory
1.0 – 3.0	Very poor

As said above the Dutch grading culture is rather conservative: Getting an 8 in this system means you have done extremely well. Going to a teacher to question him/her on why you only received an 8, can be annoying for the teacher, who already rewarded you with (what they consider to be) a high mark. The average grading results of TU Delft BSc and MSc students are available at: tudelft.nl/grading-scale

Originality, Creativity and Innovation

Originality, Creativity and Innovation are very important criteria for research, project and design assignments. Originality means not copying other people's ideas, but developing the ability to present your own ideas based on a wide variety of sources and it is one of the first keys to good marks. Innovation is then the next step. To improve on scientific, engineering or design results which have been realized up till now, with innovative ideas is certainly providing extra points as much as creativity. Creativity is more subjective in nature and will depend on the teacher who performs the assessment (objectivity, fairness and transparency, issues which plays a role at more design oriented faculties). Then, not merely the accurateness of answers counts, albeit very necessary in the more exact sciences, but more importantly the soundness of scientific reasoning behind e.g. mathematical proof should be understood and applied.

Good governance of your studies is to predict the future based on known facts