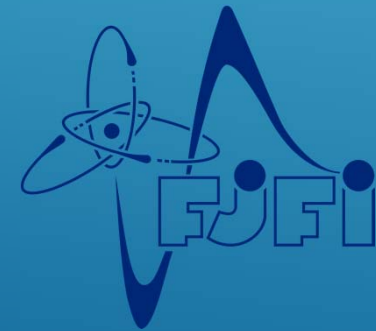


CHERNE 2016 – CERVIA (ITALY), 30 MAY – 1 JUNE 2016

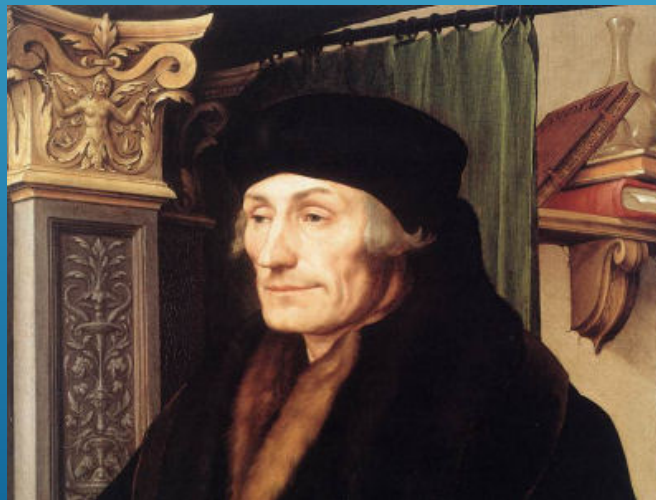
# FOREIGN STUDENTS – EXPERIENCE FROM THE ERASMUS PROGRAMME

LADISLAV MUSÍLEK

[musilek@jfifi.cvut.cz](mailto:musilek@jfifi.cvut.cz)



- ▶ The **Erasmus Programme** (*European Region Action Scheme for the Mobility of **U**niversity*) is a European Union student exchange programme established in 1987.
- ▶ Erasmus+ is the new programme combining all the EU's current schemes for education, training, youth and sport, which was started in January 2014.



## Advertisement on the web page of CTU Prague:

- ▶ Czech Technical University in Prague welcomes students from all over Europe who wish to spend a year or a semester studying at the oldest and one of the biggest technical institutes in Central Europe. With more than 350 agreements for Erasmus programme, CTU is an internationally acknowledged institution that offers a wide range of international study programmes, supports international research projects and participates actively in international networks and organizations.
- ▶ Prague is a wonderful place to spend your Erasmus stay in: being a favourite tourist destination it is admired by millions of visitors every year for its historical beauty and unique atmosphere. Besides being the sixth most popular European city with international visitors, Prague also has a large international community. The city offers a great cultural life with a lot of museums, galleries, theatres, cinemas, music clubs and countless historical sights and of course, the best beer in the world!



## Advertisement on the web page of CTU Prague:

**One to two semestral stay at the Czech Technical University as a part of your degree offers lots of benefits, including the chance to:**

- ▶ Choose from many interesting courses taught in English and get new inspiration for your future career.
- ▶ Enjoy Prague student life and the support of student organisations aimed at providing help to international students.
- ▶ Travel around the country and enjoy the four seasons: try skiing or snowboarding in the Czech mountains in winter, enjoy bathing, climbing and water sports during summer and visit exciting areas of natural beauty or numerous historical towns, castles and chateaus in spring and autumn.
- ▶ Learn a new language or improve your current language skills.
- ▶ Make new friendships that may last for your life and become more flexible and ready to take on the challenges that your future studies, career and life may bring.

## Erasmus at CTU and at our department

- ▶ CTU in Prague has more than 350 agreements with universities from abroad about student exchanges in ERASMUS. Wide variety of lectures is offered by all eight faculties of the university.
- ▶ Our department (Department of Dosimetry and Application of Ionising Radiation) offers three lectures at the “advanced” bachelor level: Introductory Radiation Physics, Fundamentals of Radiation Dosimetry, and Introduction of Ionizing Radiation Applications in Research and Industry.
- ▶ This selection is relatively narrow and oriented to basic facts about radiation science. The orientation to medical physics problems, which is significant in courses in the complete Bc. and MSc. study programmes is not reflected here at all. However, this orientation to the basic problems is understandable in the context of difficulties discussed in this paper.

All these advantages are certainly correct. However, participation of students in the Erasmus programme has also some shadows:

- ▶ Students choose their study subjects abroad without deeper knowledge of their content. Brief syllabus is not sufficient and the choice often does not correspond to needs and mixes subjects maybe interesting for a student, but fully mutually incompatible.
- ▶ Teachers, who decide at the host university, if they accept students into their lectures, have only a brief study record. This also is not sufficient and they cannot assess the depth of entrance knowledge of a particular student.
- ▶ Insufficient correspondence between programmes of the home university and the host university sometimes leads to problems with recognition of credits obtained abroad and prolonging length of studies by the time spend abroad.
- ▶ Group of students attending a particular lecture or an exercise (especially on the higher level of courses) have different level of fundamental knowledge, on which the subject is built up.
- ▶ Students (some, not all of them) deal much more with studying beauties of the host country (and its pubs) than with studying subjects in the frame of their study programme.



## Randomly selected choice of lectures of a German student

(from the Faculty of Mechanical Engineering, branch Mechanics and metal trades) arriving for one semester to the CTU in Prague in the frame of Erasmus:

- ▶ Czech for beginners Faculty of Mechanical Engineering
- ▶ History of discovery of the Universe Faculty of Mechanical Engineering
- ▶ Alternative energy sources Faculty of Mechanical Engineering
- ▶ Applied nuclear physics Faculty of Nuclear Sciences
- ▶ Fundamentals of radiation physics Faculty of Nuclear Sciences
- ▶ New reactor sources Faculty of Nuclear Sciences
- ▶ History of architecture Faculty of Architecture
- ▶ Contemporary architecture Faculty of Architecture
- ▶ History of interior Faculty of Architecture
- ▶ History of urbanism Faculty of Architecture
- ▶ Marketing – basics Institute of Advanced Studies

Another selection of subjects, strange, but at least closer to engineering  
(a Finnish student from the Faculty of Civil Engineering, branch Building and civil engineering,  
arriving for two semesters):

- ▶ Czech – intermediate
- ▶ Water engineering
- ▶ Energetic and ecological systems
- ▶ Small robot design
- ▶ Robots
- ▶ Fundamentals of radiation physics
- ▶ Digital safety systems
- ▶ New reactor sources
- ▶ Safety systems of nuclear reactors
- ▶ Principles of nuclear reactor physics
- ▶ Experimental research of nuclear waste
- ▶ Fundamentals of alternative energy sources
- ▶ Hydromechanical equipment
- ▶ Solar energy application systems

Faculty of Mechanical Engineering  
Faculty of Civil Engineering  
Faculty of Civil Engineering  
Faculty of Mechanical Engineering  
Faculty of Electrical Engineering  
Faculty of Nuclear Sciences  
Faculty of Nuclear Sciences  
Faculty of Nuclear Sciences  
Faculty of Nuclear Sciences  
Faculty of Nuclear Sciences  
Faculty of Nuclear Sciences  
Faculty of Civil Engineering  
Faculty of Mechanical Engineering  
Faculty of Mechanical Engineering  
Faculty of Electrical Engineering



And, finally, one selection, which seems to be more or less seriously considered and well done:

(Austrian student from the Faculty of Mathematics, Physics and Geodesy of a Technical University, arriving for one semester)

- |   |                             |
|---|-----------------------------|
| ▶ Transport effects/non-equilibrium systems | Faculty of Nuclear Sciences |
| ▶ Applied nuclear physics                   | Faculty of Nuclear Sciences |
| ▶ Diffraction methods in structural biology | Faculty of Nuclear Sciences |
| ▶ Physics of surfaces and interfaces        | Faculty of Nuclear Sciences |
| ▶ Principles of plasma physics              | Faculty of Nuclear Sciences |
| ▶ Fundamentals of radiation physics         | Faculty of Nuclear Sciences |

(Unfortunately, though the selection of subjects was reasonable, the results of this student in exams were not brilliant)

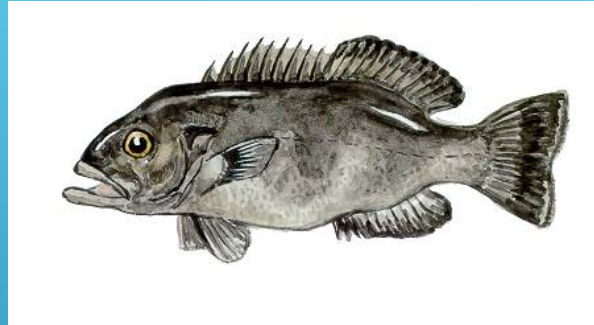
## Questions, which may be raised in the context of choice of study subjects abroad in the framework of Erasmus stays:

- ▶ To which extent the study plan at the host university should correspond to the subjects at the home university?
- ▶ Is diversity of subjects chosen by an Erasmus student positive (it extends student's general view of the world) or negative (a student deals with topics having nothing to do with his study branch and are from this point of view useless)?
- ▶ Is it possible to approve credits obtained abroad, if the subject does not correspond to the study branch of a student?
- ▶ Should we be tolerant to a strange choice of subjects and accept a student into our lecture, though we know that his/her choice is problematic?
- ▶ Should we be more tolerant to such students, when evaluating their exam results, because we know that they studied a subject, for which they had a weak preparatory basis (e.g., much shorter course of general physics compared with our students), and moreover, they studied in a foreign language?
- ▶ Should we try to influence the choice of study subject of our student going for an Erasmus stay or is it better to respect fully his/her interests?
- ▶ Is prolonging of the duration of studies due to an Erasmus stay, which sometimes occurs, a trouble or an enrichment?

There is probably no simple answer to these questions and the practice depends on the particular university and its faculty.

**My personal view:**

- ▶ The most successful and useful Erasmus stays are oriented to scientific collaboration between the home and host department in preparing theses. In such case, the participation of a student at lectures is a benefit, but it is not essential.
- ▶ The balanced compromise between wishes of a student and needs of a home department should be found by active interaction and discussion between a student and a department.
- ▶ Previous collaboration and mutual knowledge of the home and host departments can help substantially in preparing a suitable programme for a student.
- ▶ CHERNE gives good conditions for development of a best practice in Erasmus exchanges and should be intensively used for this purpose.



Thank you for attention

