

Joint M.Sc. program in Applied Geophysics

Society of Mining Professors Kosice 2006

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June 19, 2006

Joint vs double (multiple degrees)

- Joint degrees are:
 - One diploma with 2 or more seals
 - One set of exam rules
- Double (multiple) degrees are
 - 2 or more diploma's from partners
 - Each partner has it's own exam rules

Why joint M.Sc. Degrees ?

Joint degrees are:

- **High on the European political agenda**
- **Very relevant to the objectives of the Bologna Declaration**

High quality partner institutions should guarantee international recognition of joint degrees.

Why joint M.Sc. Degrees ?

Joint degrees are expected to:

- **Strengthen competitiveness of European higher education**
- **Improve transparency and compatibility**
- **Boost student and staff mobility**

IDEA League partnership

- Imperial College (UK)
- Delft University of Technology (the Netherlands)
- ETH Zurich (Switzerland)
- RWTH Aachen (Germany)

Attractiveness of IDEA League joint M.Sc. degrees

Three IDEA League universities located in attractive European cities.

Very attractive program for students worldwide.

Why Applied Geophysics ?

- Meet the growing demands of the world's expanding population for natural resources
- Resolve problems created by our misuse of the land
- Provide critical data to architects and civil engineers
- Forecast the effects of natural disasters

Applied geophysicists provide this essential information in a non-destructive manner.

New concept in applied geophysics education

Need for highly qualified applied earth scientists

TUD, ETH and RWTH offer a two-year M.Sc. program in Applied Geophysics.

Take advantage of the complementary expertise available in the respective earth science departments.

4 Year Pilot project

If not successful in recruiting enough students, it will be terminated.

If highly successful in recruiting large numbers of top-class students, the necessary extra permanent resources must come from sponsorships.

Expectations

Year 1: 10-20 students

Year 2: 20-30 students

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Year N: 30-50 students

Most students will likely come from EU/EFTA countries, but top-class students from Asia are expected as well

Two phases

16-months phase at the three universities:

- Lectures
- Hands-on data acquisition and processing exercises

8 - months research project at one of the participating universities or in industry.

A new concept in applied geophysics education

Different teaching periods at the three universities:

A number of courses will be outside of the semesters.

Some courses to be given twice:

- Once for the regular degree programs**
- Once for the joint M.Sc. program.**

No lectures during the period July 15-August 31

Many components in the form of block courses.

Schedule

TUD

September 1 - October 31

November 1 - January 15

Students move

ETH

February 1 - March 31

April 1 - June 15

June 16 - July 15

Students move

RWTH

September 15 – Christmas

Students move

TUD/ETH/RWTH

January 1 - August 31

Period 1

Period 2

Period 3

Period 4

specialized courses

Period 5

8 month M.Sc.

thesis projects

Two options

Specialization in:

- Hydrocarbon exploration and exploitation
- Environmental and engineering investigations (including geothermal energy exploration and exploitation)

Also background in the other specialty.

Advisory Board – Academic Committee

Advisory Board comprising of one academic from each university and one representative from each Rectorate.

Chaired by an academic from one of the universities, rotating on a two-yearly basis between the three universities.

Other proposed committees

Administrative Action Committee (in start up phase)

Education Committee of each department

Examination Board of each department

Industrial Committee

Some details

Credits required for the joint M.Sc. degree:

120 ECTS's

Language of all courses:

English

Nature of the degree:

A single M.Sc. degree from all three universities - accredited in Holland (and therefore all of Europe)

Industry Involvement:

European and other companies:

- direct financial support**
- funds for scholarships**
- opportunities for research projects**
- personnel to give special lectures**

Eligibility and application process

Eligible to enter

- **Students with high quality degrees in appropriate subjects from EU/EFTA universities**
- **Students with high quality degrees from top universities in other countries***

Applications:

Completed electronically at a single central location (TUD)

*** Students from non-EU/EFTA countries will have to meet strict language and other criteria**

Acceptance into the program

The TUD officials, in consultation with the two other universities determine the eligibility of applicants to enter the joint M.Sc. degree program.

Acceptance into the joint M.Sc. degree program may be conditional, such that some applicants may have to fulfill specific conditions (e.g. pass certain examinations) before final acceptance.

Once accepted, all students will be automatically registered at all three universities.

Tuition fees and scholarships

Tuition fees:	€ 1 500 + €500 for EU/EFTA students €11 000 for non-EU/EFTA students
Scholarships 1:	minor reductions of tuition fees for EU/EFTA students reductions of tuition fees to €2000 for exceptional non-EU/EFTA students
Scholarships 2:	scholarships, grants and loans

Accommodation, insurance and visas

Accommodation:	Short-term accommodation for at least 20 students Costs are in the €250-400/month range
Health insurance:	All students must have health insurance for the duration of their studies
Visas:	Non-EU/EFTA students must obtain student visas for studying in the three countries

Organizational matters

Movements between countries and universities

For each move, two weeks are reserved for travel and adjustment to the local living and studying environments

Introductory courses:

TUD offers one-month summer courses that introduce non-EU/EFTA students to living and studying in Europe.

Tutors/mentors:

One academic tutor and one advisor from the Rector's office at each university tutor/mentor the entire group of students while they are at the respective university.

Examinations

Examination schedule:

TUD Exam rules

Examination type:

For most courses, written examinations will be given at the end of the respective teaching period.

Re-sits:

Students will be able to take an examination a maximum of three times

Go/no go:

For students to proceed past study periods 1 and 2 at TUD, it will be necessary for them to obtain a minimum of 16 ECTS's.

Marketing

Brochure:

Web-based and paper copy

Contains information on the universities, cities and degree program

Web page

Situated on the IDEA League Server with links from many other computers

Contain the brochure and other key details for the students

Master of Science in Applied Geophysics

A Joint Degree Programme of three
IDEA League Universities:
Delft University of Technology,
ETH Zurich and RWTH Aachen University



M.Sc. rules and regulations

A single set of rules and regulations governs the joint M.Sc. degree program.

Launching the program, evaluation of the program and awarding the degrees

The joint M.Sc. degree will be:

- Launched September 1, 2006 at TUD
- Evaluated annually
- Assessed in June/July 2008 with a view to continue or not
- Will be awarded at a single graduation ceremony