



SPHERE

Support and Promotion
for Higher Education
Reform Experts

Models, curriculum development, some examples

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“Perspectives and methods of organising joint master’s programmes in cooperation with European universities on double-degree basis; procedures for the development and implementation of joint educational programme”

The core of joint programmes is

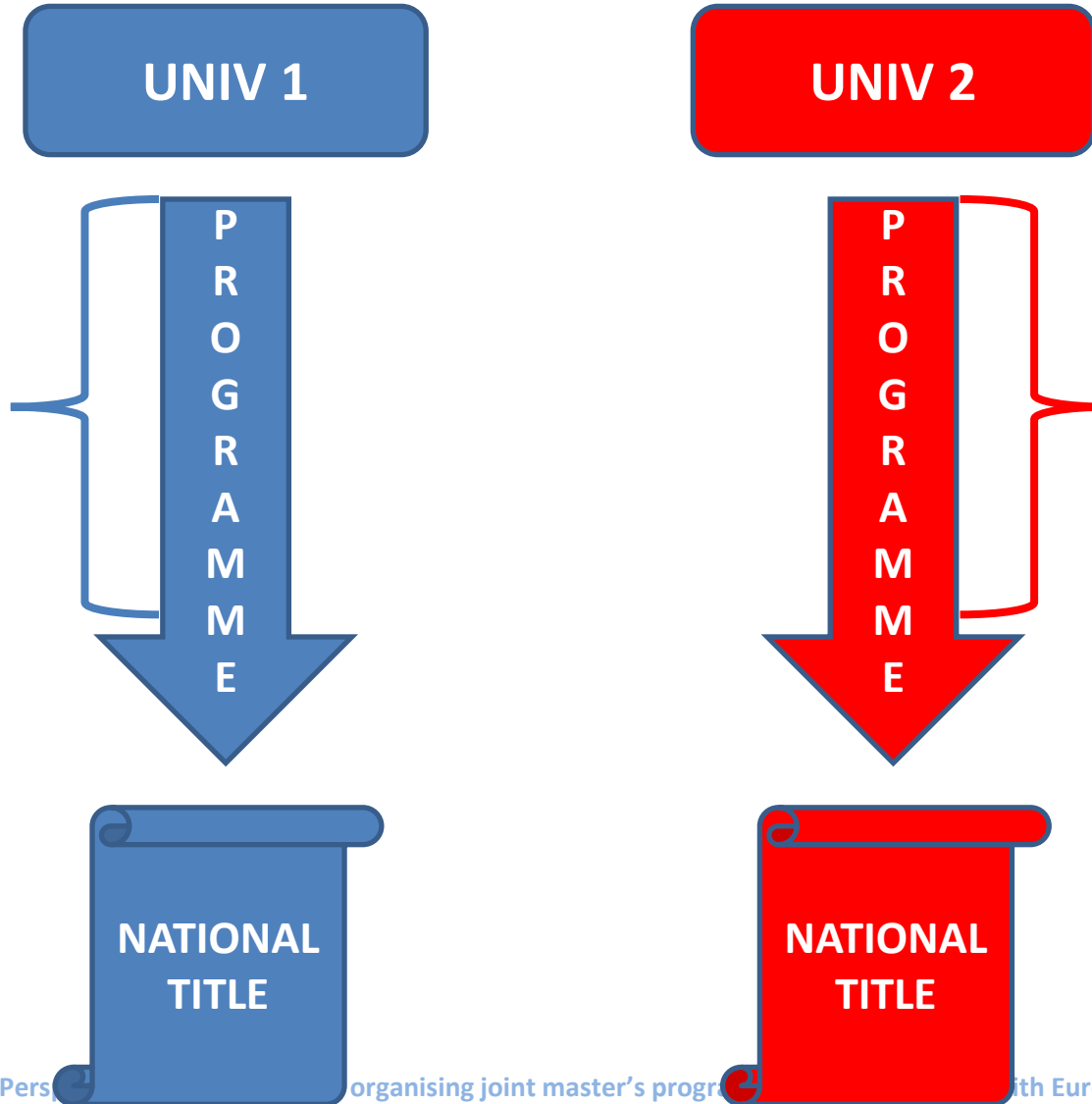
the curriculum

developed jointly,
which needs to be designed
as a coherent set of modules
with common learning outcomes.

Curriculum Development Models

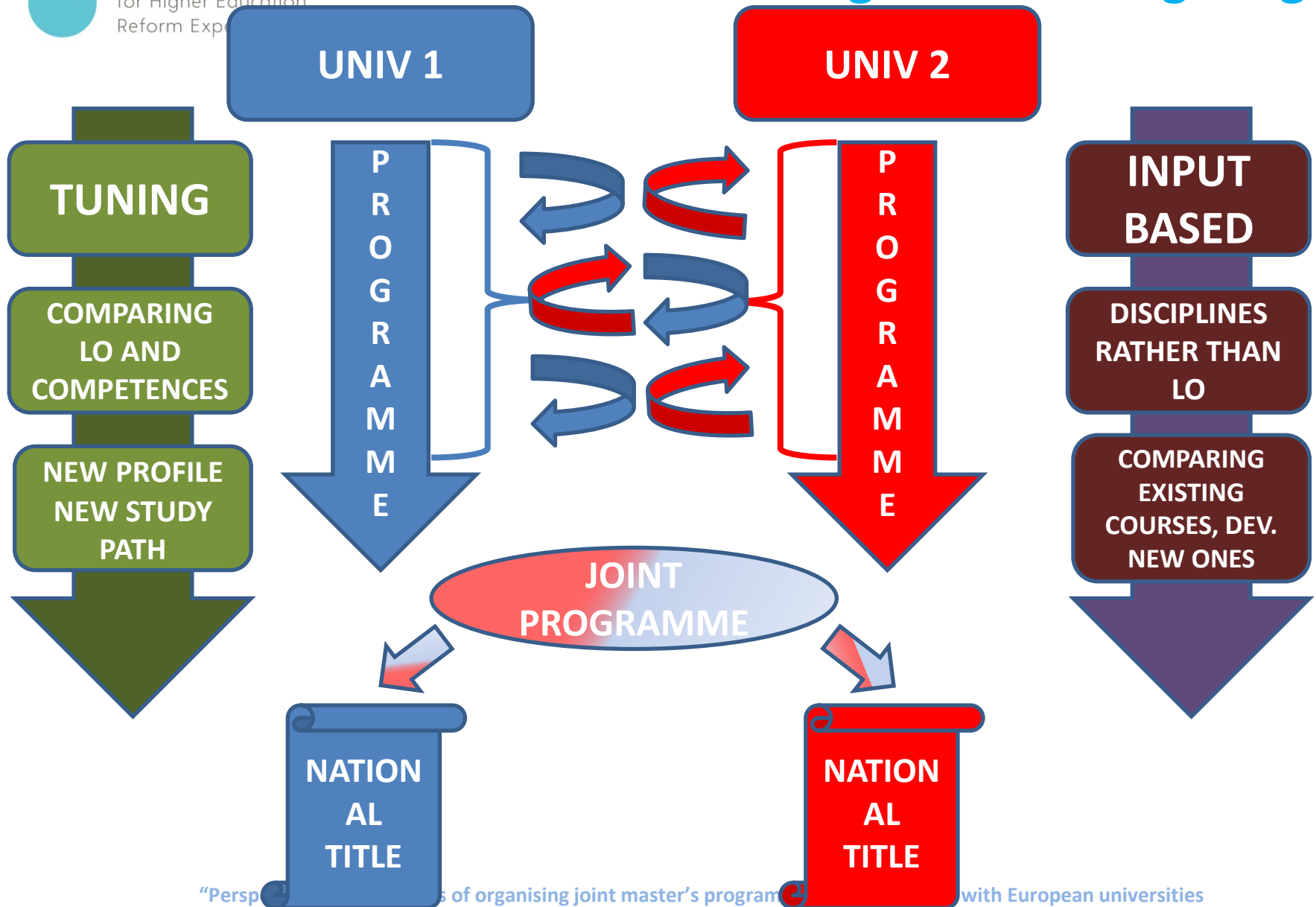
We can distinguish models in curriculum development observing the „starting point“ of the creation of the Programme („from scratch“ or „from an existing programme“) and the methodology adopted to develop the pedagogy („Tuning methodology“ based on learning outcomes, or „Input based“ based on contents).

No integration at all (no JP)



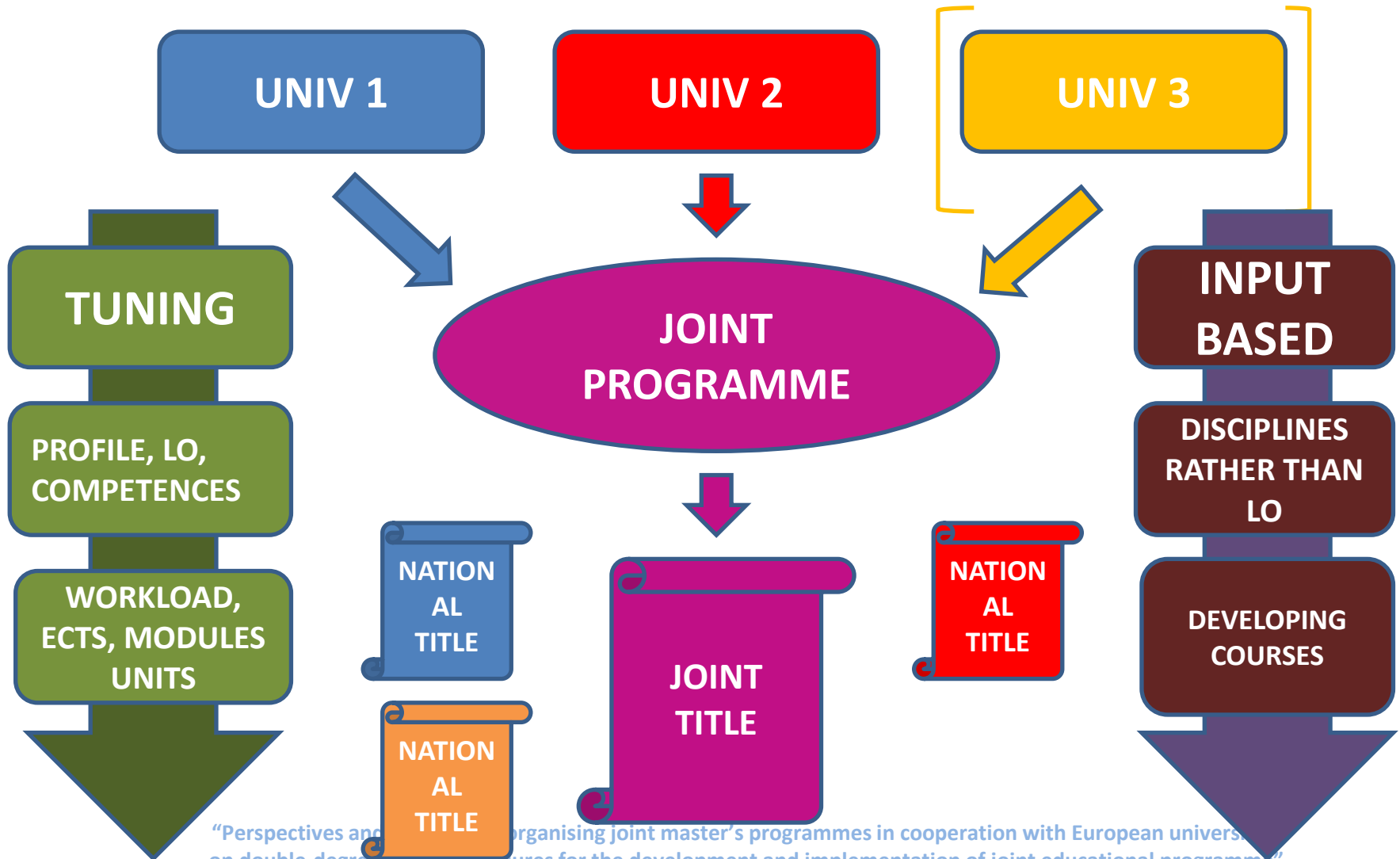
“Pers... organising joint master’s progr... with European universities
on double-degree basis; procedures for the development and implementation of joint educational programme”

Integration attempts... starting from existing Prog.



“Perspectives of organising joint master’s programme with European universities on double-degree basis; procedures for the development and implementation of joint educational programme”

From Scratch: towards a single „deed“



Curriculum Development Models

The development of the curriculum (pedagogy) is affected by different factors:

- The nature of the actors involved and their “curriculum development” culture
- The Quality assurance/accreditation requirements set by national agencies
- The normative restrictions in place at a certain moment in the institutional/national international contexts

Development of the LO, ECTS and contents is only one part of the curriculum development. Academics will also discuss didactical methodologies, different calendars, examination procedures, final dissertation procedures, students regulations, exams etc.

Mobility Models

Mobility **should** predominantly depend on study programme rationale, but it is also affected by the number of partner and funding scheme regulations.

N.B: Negotiations among partners may drive the definition of the paths according to specific interests (e.g Strategicity of first and third semester)

Some examples of mobility tracks (mobility options are infinite).

Some Mobility Schemes

Core Courses

- programmes with “core” courses offered by one or more partners, where the students start the degree programme
- a one/two semester mobility in a partner university offering specialist courses
- Final thesis at “home” university or at other HEI

Example: Core Courses

Compulsory subjects (1st semester)

Basics in Sustainable Development

Restricted electives (2nd semester) *One track to be chosen from the following options:*

Climate & Environmental Change (*Graz*)

Energy & Resources (*Utrecht*)

Environmental Evaluation and Management (*Venice, Italian only*)

Environmental Policy and Management (*Utrecht*)

Environmental Technology (*Leipzig*)

Integrated Coastal Zone Management (*Venice*)

International and European Environmental Law (*Utrecht*)

Land use & Biodiversity (*Utrecht*)

Marine Environment (*Venice, Italian only*)

Renewable Resources (*Graz*)

Resources Management (*Leipzig*)

Sustainability: The Social Dimension (*Basel*)

Sustainable Business Management (*Graz*)

Sustainable Development Science & Technology (*Hiroshima*)

Sustainable Urban & Regional Development (*Graz*)

Technologies and Control of the Environment (*Venice, Italian only*)

Terrestrial Environment (*Venice, Italian only*)

Compulsory subjects and electives (3rd semester)

Integration Module and further specialisation

Master's thesis and defence (4th semester)

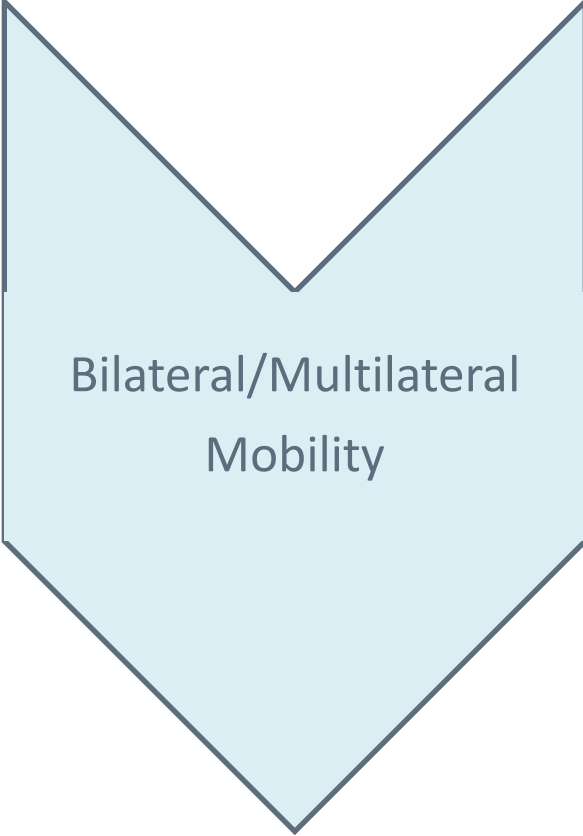
Some Mobility Schemes



Trip Programmes

- fixed mobility programmes within the partnership or at all the consortium institutions
- students are together from the beginning to the end
- more than one mobility period
- more expensive for the students in terms of mobility and adaptation;
- suitable for very small consortia

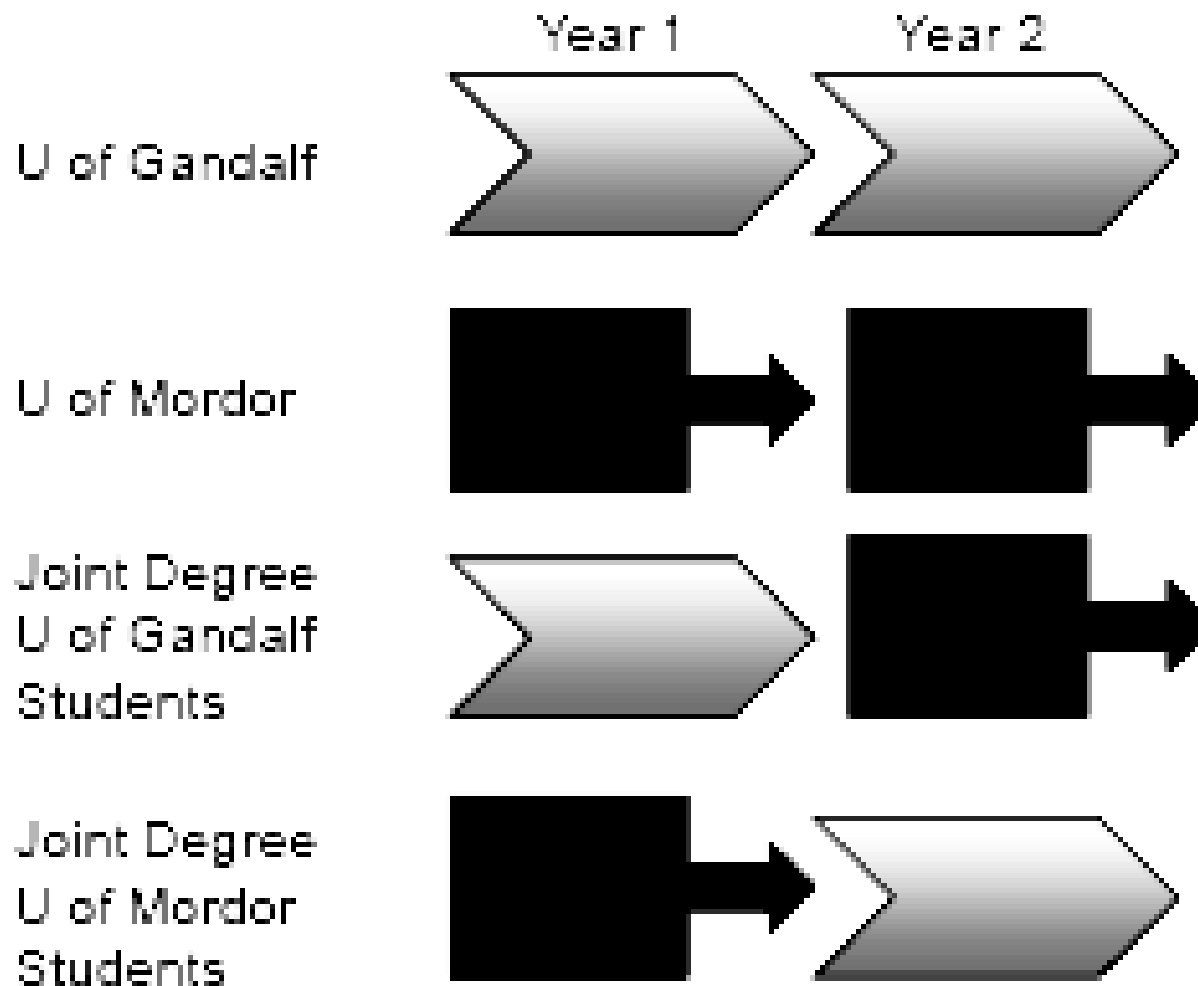
Some Mobility Schemes



Bilateral/Multilateral
Mobility

- one year at the starting institution
- second year at the second institution + research for the thesis
- mobility destinations may be fixed or chosen depending on the starting institution or on the fees.

Example: Bilateral Mobility



*Risk:
„Glue it
Together“ Approach*

Some Mobility Schemes



Intensive Residential Modules

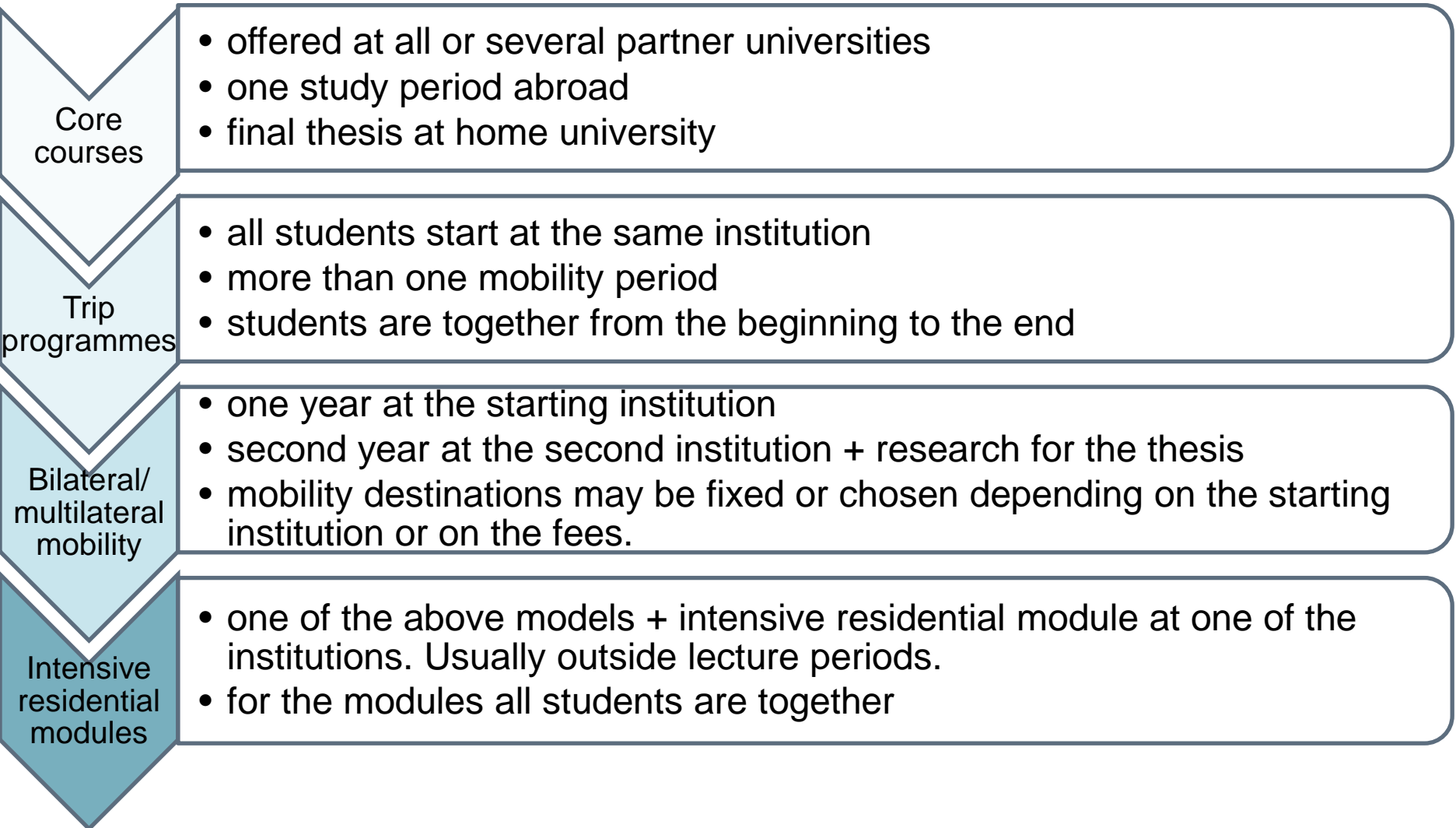
- one of the above models + intensive residential modules at one of the institutions. Usually outside lecture periods
- placements at companies or other organisations and virtual mobility periods
- for the modules all students are together

Intensive Residential Modules

Summer/Winter Schools

Intensive residential summer/winter schools may bring all students together and sometimes replacing part of the regular mobility. The teaching community is also together and students are requested to present a proposal for their Master Thesis that will be discussed in working groups together with lectures from the respective universities.

Some Mobility Schemes



Case Study: European master in Advanced Spectroscopy in Chemistry

Field of Study: Chemistry, Master Level

ECTS: 120 (2 years duration)

Institutions involved:

University of Lille (FR – coordinator)

University of Leipzig (DE)

University of Bologna (IT)

University of Helsinki (FI)

University of Kracow (PL)

Non degree awarding institutions (ASSOCIATED PARTNERS)

Chemical industries, research centres, University networks

Costs: 4500€ per year (EU students) 9000€ per year (non Eu students)



Case Study: European master in Advanced Spectroscopy in Chemistry

Degree awarded: Joint degree and national degrees

Concept:

The main idea of the curriculum design is to give a broad but still detailed overview of the state-of-the-art spectroscopic methods used in chemistry, with a particular focus on the most advanced issues addressed by these methods.

Each institutions involved with its own excellence
Lab-Sharing and sharing of unique equipment



Case Study: European master in Advanced Spectroscopy in Chemistry

Contents of the 4 semesters

Semester 1: introductory courses

Semester 2: Synchrotron radiation (specialization but offered to all students)

Semester 3 and 4 (different specializations and modules at each institutions, including lab work and thesis)

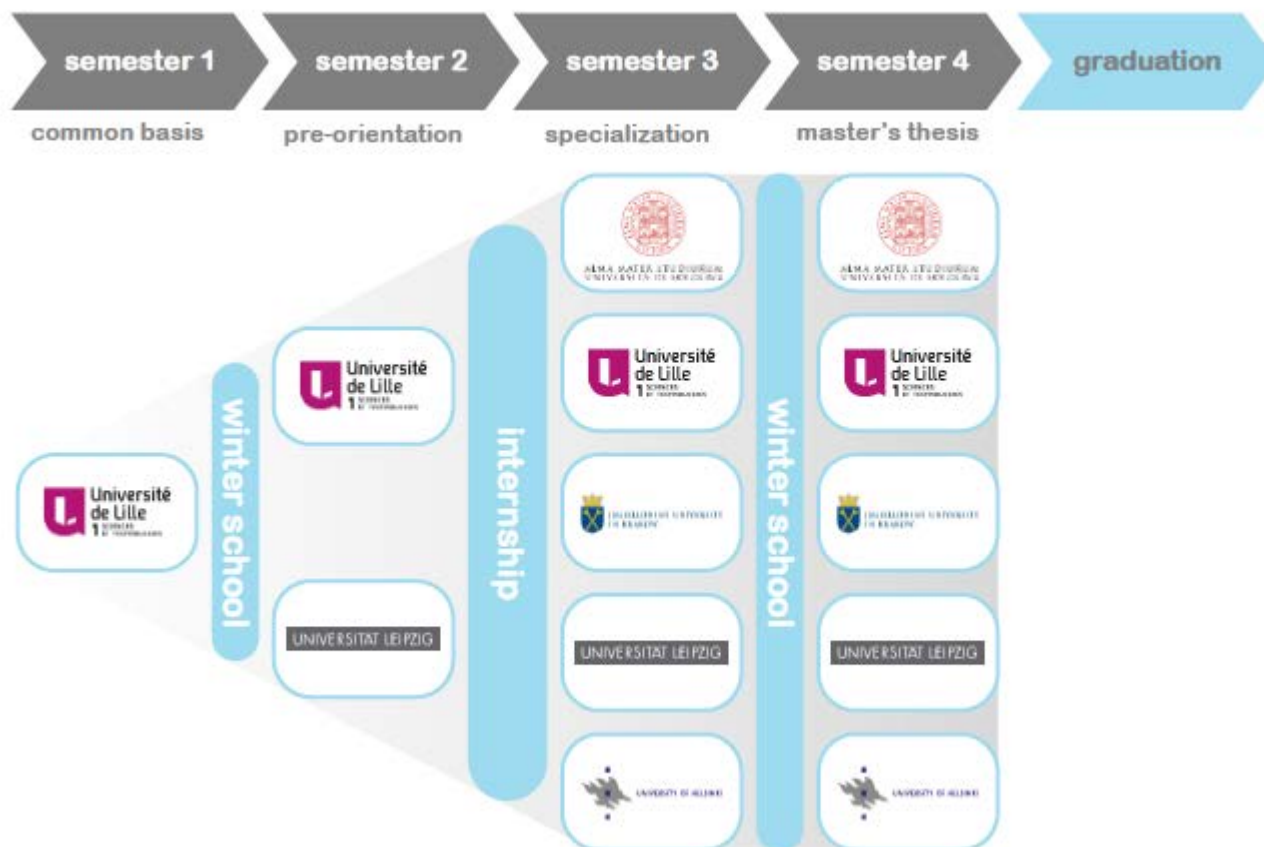
Innovative elements:

Winter school organised together with industries

10 ECTS of soft skills (team working, presentation skills, research skills)

Internship in international industries

Case Study: European master in Advanced Spectroscopy in Chemistry



Degree awarded: National degrees of the participating institutions

Concept:

The CLE Master Course seeks to provide a high quality preparation reflecting the multicultural aspects of Europe. It is organized by a consortium of EU and non-EU universities.

The CLE Master Course is a **two-year full-time** academic program. At the end of the two-year program, after defending their Master's thesis before an international committee, CLE students receive **two or three diplomas** issued by the universities of the Consortium where they spent at least one semester.

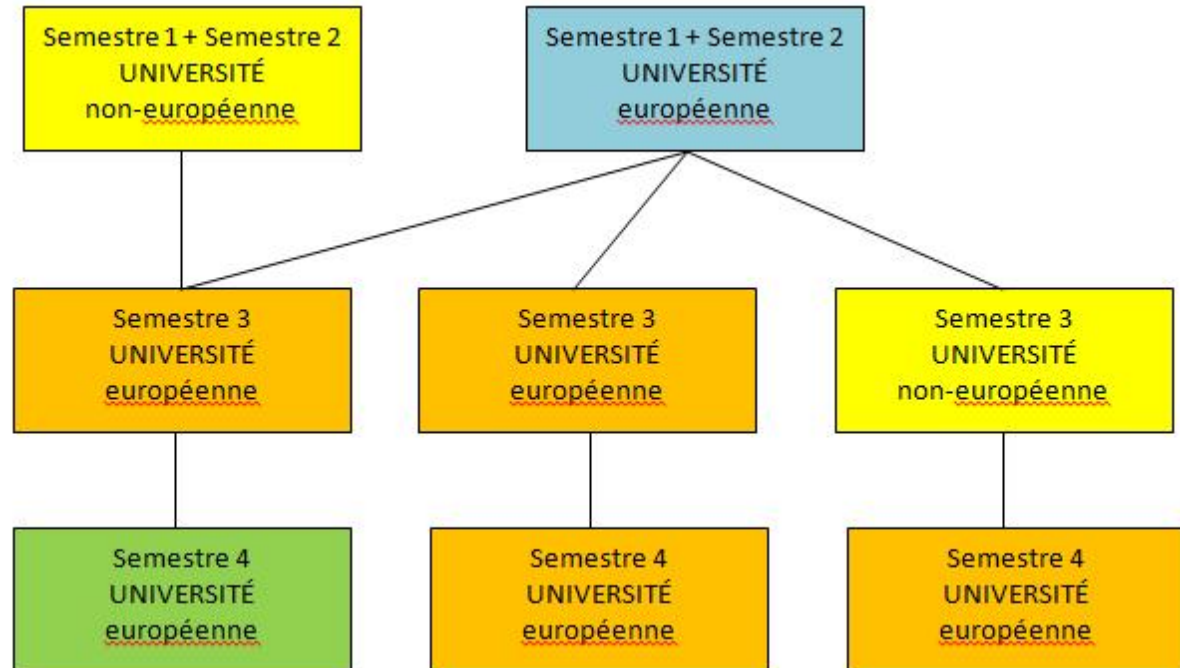
The language in which the courses are offered **may vary** according to the University providing them.

Case study: Master en Cultures Littéraires Européennes

Students stay in at least 2 partners universities

Partners:

1. Università di Bologna
2. Université Dakar
3. Université de Mulhouse
4. Université de Strasbourg
5. Université Thessaloniki





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