



*UNIVERSITY OF TRIEST
(ITALY)*

FACULTY OF MEDICINE AND SURGERY

Course of Degree for Radiographers

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“Differences between
didactic plans of European
Universities

A comparison about the courses
of degree for Radiographers



The aim of the presentation is to
compare the didactic plans
of different countries in order to:

1. Have a basis of knowledge of the
differences among countries
2. Have an useful reference for
creating an ideal uniformity among
them



- We have compared the different
formative plans using the document
of ISRRT “Conditions for the
Education of Radiographers within
Europe”, report of 2003.



- ISRRT means:
 - “International Society of Radiographers
and Radiological Technologists”
 - One of the aims of this society is to
promote and encourage improved
standards of radiography.

www.isrrt.org



- Some of the informations that we have
processed come also from the answers to a
questionnaire sent by mail to 15 persons
responsible for these courses.

- Other informations have been taken over
the Internet, in the web sites of the different
national Societies.

THE QUESTIONNAIRE:


We have received 8 answers to our questionnaire, which have been useful to complete our tables.

For example, we have been able to include in the study Italy and to complete some data not present in the original document of the ISRRT.

The European countries, considered in this work, are some members of EU and some not.

The radiographer's role is different in the various countries and it depends on many factors included the number and the role of the other health professions and the culture of the country.

Education of Radiographers in Europe



- Austria (AT)
- Belgium- Francophone (BE-F)
- Belgium- Flemish (BE-FI)
- Croatia (HR)
- Czech Republic
- Denmark (DK)
- Estonia (EE)
- Finland (FI)
- France (FR)
- Germany (DE)
- Greece (GR)
- Iceland (IS)
- Ireland (IE)
- Italy (IT)
- Latvia (LV)
- Luxemburg (LU)
- Macedonia (MK)
- Malta (MT)
- Netherlands (NL)
- Norway (NO)
- Portugal (PT)
- Slovenia (SI)
- Spain (ES)
- Sweden (SE)
- Switzerland (CH)
- United Kingdom (GB)
- Yugoslavia (YU)

Length of the courses

	YEARS
AT	3
BE-F	3
BE-FI	3
CH	3 or 4
CZ	3
DE	3
DK	3.5
EE	3.5
ES	2
FI	3.5
FR	3
GB	3
GR	4
HR	3
IS	4
IT	3
LU	3
LV	3.5
MK	4
MT	4
NL	4
NO	3
PT	4
SE	3
SI	4
YU	3

- A total of 25 Countries has been investigated.
- The range of length of the studies goes from 2 to 4 years, with an average of 3.3 years.
- No differences have been found among northern & southern, or eastern & western Europe.

Who organizes them?

UNIVERSITY	TEC.INST.	HOSPITAL C.
AT	X	
BE-F	X	
BE-FI	X	
CH	X	
CZ	X	
DE		X
DK	X	
EE	X	
ES	X	X
FI	X	
FR	X	X
GB	X	
GR	X	
HR		
IS	X	
IT	X	
LU		
LV	X	
MK	X	
MT	X	
NL	X	X
NO	X	
PT	X	
SE	X	
SI	X	
YU	X	

- In 16 countries the course is organized by the University;
- In 11 countries a Technic Institution organizes the course;
- In 4 countries (Germany, Spain, Netherlands and France) there are Hospital Courses for education.

Data obtained through the Internet search

Multiple curricula or ..?

UNIVERSITY	TEC.INST.	HOSPITAL C.
AT	X	
BE-F	X	
BE-FI	X	
CH	X	
CZ	X	X
DE		X
DK	X	
EE	X	X
ES		X
FI	X	
FR	X	X
GB	X	
GR	X	
HR		
IS	X	
IT	X	
LU		
LV	X	
MK	X	
MT	X	
NL	X	X
NO	X	
PT	X	X
SE	X	
SI	X	
YU	X	

- In 5 countries there are multiple organizers of the courses.
- From the data available from ISRRT we do not understand exactly if there are different curricula in the parallel courses or different steps of a unique, multi-step curriculum of studies (as it might be Italy)

Which sub-specialities are implemented?

We can find two modalities of implementation of the courses for the radiographer education:

- **“COMBINED COURSES”** (17/25 countries)
(The different subspecialities -Diagnostic Imaging, Radiotherapy, Nuclear Medicine and Ultrasound- are variably mixed together)
- **“SEPARATED COURSES”** (8/25 countries)
(The learning of the single subspecialities is separated and autonomously implemented)

COMBINED COURSES

	DIAGNOSTIC IMAGING	RADIOTHERAPY	NUCLEAR MEDICINE	ULTRASOUND
AT	YES	YES	YES	YES
BE-F	YES	NO	YES	NO
BE-FI	YES	NO	YES	YES
CH	YES	YES	YES	NO
CZ	YES	YES	YES	YES
DE	YES	YES	YES	YES
EE	YES	YES	YES	NO
ES	YES		YES	YES
FI	YES	YES	YES	
FR	YES	YES	YES	YES
GR	YES	YES	YES	YES
HR	YES	YES	YES	NO
IS	YES	NO	YES	NO
IT	YES	YES	YES	NO
LU	YES	YES	YES	YES
LV	YES	YES	YES	YES
MK	YES	YES	YES	NO
NL	YES	YES	YES	YES
NO	YES	YES	YES	NO
SI	YES	YES	YES	YES
YU	YES	YES	YES	NO

Diagnostic Imaging

	DIAGNOSTIC IMAGING
AT	YES
BE-F	YES
BE-FI	YES
CH	YES
CZ	YES
DE	YES
EE	YES
ES	YES
FI	YES
FR	YES
GR	YES
HR	YES
IS	YES
IT	YES
LU	YES
LV	YES
MK	YES
NL	YES
NO	YES
SI	YES
YU	YES

- Diagnostic Imaging is the fundamental subject in all countries
- This subspeciality is present in all courses, either combined or separated.

Radiotherapy

	RADIOTHERAPY
AT	YES
BE-F	NO
BE-FI	NO
CH	YES
CZ	YES
DE	YES
EE	YES
ES	NO
FI	YES
FR	YES
GR	YES
HR	YES
IS	NO
IT	YES
LU	YES
LV	YES
MK	YES
NL	YES
NO	YES
SI	YES
YU	YES

- Nearly always present.
- There are only 3 countries in which it isn't a subject included in the plane of study of a combined course:
 - Belgium
 - Spain
 - Iceland
- We will see later that there can be separated courses for this subspeciality

Nuclear Medicine

	NUCLEAR MEDICINE
AT	YES
BE-F	YES
BE-FI	YES
CH	YES
CZ	YES
DE	YES
EE	YES
ES	YES
FI	YES
FR	YES
GR	YES
HR	YES
IS	YES
IT	YES
LU	YES
LV	YES
MK	YES
NL	YES
NO	YES
SI	YES
YU	YES

- Nuclear medicine is included in all countries that organize combined courses.

Ultrasounds

	ULTRASOUND
AT	YES
BE-F	NO
BE-FI	YES
CH	NO
CZ	YES
DE	YES
EE	NO
ES	YES
FI	
FR	YES
GR	YES
HR	NO
IS	NO
IT	YES
LU	YES
LV	YES
MK	NO
NL	YES
NO	NO
SI	YES
YU	NO

- Here there are many differences among the countries.
- In 8 of them, ultrasounds are not considered a professional field for radiographers.



SEPARATED COURSES

In eight countries there are separate courses for one or more subspecialties.

In the following table we see:

- The length of each separate course
- If the basic qualification in the course of Diagnostic Imaging is necessary to qualify also in a different one (red background).



SEPARATED COURSES

	DIAGNOSTIC IMAGING	RADIO - THERAPY	MEDICINE NUCLEAR	ULTRA - SOUND
DK	3.5	+1	NO	NO
ES	2	2	nd	nd
GB	3	3	+1(2)	+1(2)
IE	4	4	NO	NO
MT	4	NO	NO	+2
NL	3	3	1.5	+1(2)
PT	4	4	4	nd
SE	3	+1	NO	+1.2



Conclusions

- Our analysis, based upon the policies of 25 European Countries, shows that in Europe the organization of the courses for Radiographers are only partially similar.
- To enter in a course, an Upper School Leaving Certificate is always required in all Countries and it is obtained at the age of 18-19 years.



- The courses for radiographers take a different number of years, but with an average of more than three.
- There are also courses organized in steps with special steps “post – qualification” (Italy is an example).



- Diagnostic Imaging is the basis of all courses for radiographers and also Nuclear Medicine is always included.
- On the contrary, there are differences with Radiotherapy and Ultrasounds, and in particular the latter is not treated at all in several countries.
- In our personal experience (Italy), the ultrasonographic examinations are performed by the Radiologist alone.



- Theory and practice should be concomitant along the studies and there should be a certain didactic uniformity everywhere to make possible, in a near future, an interchange among University students of these courses.
- This interchange will be more easy to achieve if the European Courses for radiographers will be of the same kind.
- In our opinion the COMBINED course is the best model of learning for our category



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Thank you for your attention

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