U-Multirank 2017

Specification of programmes and degrees included

I.   Degree Programmes

U-Multirank includes all programmes that are equivalent to ISCED classification 6 and 7:

- Bachelor and equivalent (ISCED 6)
- Master and equivalent (ISECED 7)

Hence included are:

- First degrees equivalent to a Bachelor (up to 4 years duration)
- Undivided long first degrees equivalent to a Master (5 + years)

Not included are:

- Short degrees equivalent to ISCED 5 (e.g. Foundation degrees or associate degrees)
- Graduate certificates/diplomas
- PhD programmes (ISCED 8)

For reasons of comparability we do not include:

- Programmes of teacher education
- Genuine distance learning programmes

II.   Specification of Subjects

As far as possible our definitions and delineations of the field refer to the UNESCO *ISCED-F 2013 Classification of Fields of Education and Training*. For your information the classification of fields is attached as Annex I. The full document can be found here.

In 2017 the 2014 U-Multirank subjects will be updated for the first time. In addition, a number of new subjects will be added. The 2017 subjects include:
- Business studies (update)
- Economics (new)
- Computer science and engineering (update)
- Mechanical engineering (update)
- Electrical engineering (update)
- Chemical engineering (new)
- Industrial engineering/production (new)
- Civil engineering (new)

General remark on interdisciplinary programmes
Interdisciplinary or broad programmes and qualifications are those which combine several fields of education and training where no single field dominates. Many interdisciplinary programmes and qualifications cover several narrow or even broad fields (in terms of ISCED-F 2013).
In our definitions, the '*leading subject rule*' is used to determine the field to which the interdisciplinary study programme should be assigned.
To give an example: If a programme consists of 60% history, 20% sociology and 20% philosophy, it should be classified as history as this is the dominant subject.
If there is no leading subject (e.g. 50% chemistry and 50% environmental science), the decision to include the programmes into one of the six U-Multirank 2016 fields is left to the institution.

Please note:
Degree programmes which have already been included in one of the U-Multirank 2016 subjects (e.g. in chemistry) cannot be included again in the 2017!

1.   Business studies & management

Our definition of the field corresponds to the narrow field "041 Business and administration" of ISCED-F 2013. The following detailed fields can be included:
- *0411 Accounting and taxation*
- *0412 Finance, banking and insurance*
- *0413 Management and administration*
- *0414 Marketing and advertising*
- *Logistics*
- *Management, incl. sectoral management (e.g. Tourism management)*

Not to be included:

- *Engineering degrees (e.g. Business engineering)*
- *Business informatics*

2. Economics

Our definition of the field corresponds to detailed field "0311 Economics" of ISCED-F 2013 classification.

Note on business studies and economics:
Programmes integrating both business studies and economics (sometimes labelled "Business economics") can either be assigned to one of the fields by institutions (based on their main focus according to our remarks on interdisciplinary programmes, on most common majors etc.) or can be included in both subject rankings (with identical data). In the latter case, data have to be delivered only once; we will copy them to the second field then.

3. Computer science and engineering

Our definition of computer science and engineering corresponds to the narrow field "061 Information and Communication Technologies (ICTs)" of the ISCED 2013 classification. Included are all detailed fields listed as well as computer science programmes (incl. applied programmes).
To be included:

- Computer Science
- Applied computer science
- Informatics
- Software / software engineering
- Hardware/ hardware engineering
- Computer systems

Not to be included:

- Programmes included under electrical engineering

4. Mechanical engineering

In most engineering fields the ISCED classification, which aims to apply to all of education from lower secondary to higher education, does not fit very well to higher education engineering programmes.

Mechanical engineering is the broadest of the engineering disciplines. This subject focuses on two major topics: thermal systems and mechanical systems.
Included are:

- "General" mechanical engineering
- Energy engineering
- Applied mechanics

- Thermodynamics

As there will be no separate rankings on those (sub) fields in 2017, the following programmes can be subsumed under mechanical engineering as well:
- Automotive engineering
- Aerospace engineering;

Not to be included:
- Materials science & engineering (maybe added at a later year)

5. Electrical engineering

Our definition of the subject includes the detailed field "0714 Electronics and automation" (except of subjects "computer engineering" and "computer repairing") of the ISCED classification.

To be included:

- Electrical and electronic engineering;
- Robotics and automatic control;
- Automation and control systems;
- Communication engineering and systems;
- Telecommunication;

Not to be included: programmes assigned to computer science and engineering (see 3)

6. Industrial engineering/production

Here ISCED does not offer a useful definition. Institutions can include units and programmes explicitly labeled and focused on this subject.
- Industrial engineering
- Production / product development
- Manufacturing
- Logistics engineering

Programmes have to be assigned either to industrial engineering/production or one of the other engineering fields.

7. Chemical engineering

Our definition of the subject includes the detailed field "0711 Chemical engineering and processes".

To be included:
- Chemical engineering (plants, products);
- Chemical process engineering

Not to be included:
- Science degrees in chemistry, ISCED detailed field "0531 Chemistry" (in particular if already included in U-Multirank 2016)

8. Civil engineering

Our definition of the field refers to detailed field "0732 Building and civil engineering".
Included are both general programmes and specialised sub-fields, such as
- Water/hydraulic engineering
- Transport engineering

Not included are the ISCED detailed fields
- "0731 Architecture and town planning"
- "0521 Environmental sciences"

Appendix I. ISCED fields of education and training

Broad field	Narrow field	Detailed field
00 Generic programmes and qualifications	001 Basic programmes and qualifications 002 Literacy and numeracy 003 Personal skills and development	0011 Basic programmes and qualifications 0021 Literacy and numeracy 0031 Personal skills and development
01 Education	011 Education	0111 Education science 0112 Training for pre-school teachers 0113 Teacher training without subject specialisation 0114 Teacher training with subject specialisation
02 Arts and humanities	021 Arts	0211 Audio-visual techniques and media production 0212 Fashion, interior and industrial design 0213 Fine arts 0214 Handicrafts 0215 Music and performing arts
	022 Humanities (except languages)	0221 Religion and theology 0222 History and archaeology 0223 Philosophy and ethics
	023 Languages	0231 Language acquisition 0232 Literature and linguistics
03 Social sciences, journalism and information	031 Social and behavioural sciences	0311 Economics 0312 Political sciences and civics 0313 Psychology 0314 Sociology and cultural studies
	032 Journalism and information	0321 Journalism and reporting 0322 Library, information and archival studies
04 Business, administration and law	041 Business and administration	0411 Accounting and taxation 0412 Finance, banking and insurance 0413 Management and administration 0414 Marketing and advertising 0415 Secretarial and office work 0416 Wholesale and retail sales 0417 Work skills
	042 Law	0421 Law

Broad field	Narrow field	Detailed field
05 Natural sciences, mathematics and statistics	051 Biological and related sciences	0511 Biology 0512 Biochemistry
	052 Environment	0521 Environmental sciences 0522 Natural environments and wildlife
	053 Physical sciences	0531 Chemistry 0532 Earth sciences 0533 Physics
	054 Mathematics and statistics	0541 Mathematics 0542 Statistics
06 Information and Communication Technologies (ICTs)	061 Information and Communication Technologies (ICTs)	0611 Computer use 0612 Database and network design and administration 0613 Software and applications development and analysis
07 Engineering, manufacturing and construction	071 Engineering and engineering trades	0711 Chemical engineering and processes 0712 Environmental protection technology 0713 Electricity and energy 0714 Electronics and automation 0715 Mechanics and metal trades 0716 Motor vehicles, ships and aircraft
	072 Manufacturing and processing	0721 Food processing 0722 Materials (glass, paper, plastic and wood) 0723 Textiles (clothes, footwear and leather) 0724 Mining and extraction
	073 Architecture and construction	0731 Architecture and town planning 0732 Building and civil engineering

Broad field	Narrow field	Detailed field
08 Agriculture, forestry, fisheries and veterinary	081 Agriculture	0811 Crop and livestock production 0812 Horticulture
	082 Forestry	0821 Forestry
	083 Fisheries	0831 Fisheries
	084 Veterinary	0841 Veterinary
09 Health and welfare	091 Health	0911 Dental studies 0912 Medicine 0913 Nursing and midwifery 0914 Medical diagnostic and treatment technology 0915 Therapy and rehabilitation 0916 Pharmacy 0917 Traditional and complementary medicine and therapy
	092 Welfare	0921 Care of the elderly and of disabled adults 0922 Child care and youth services 0923 Social work and counselling
10 Services	101 Personal services	1011 Domestic services 1012 Hair and beauty services 1013 Hotel, restaurants and catering 1014 Sports 1015 Travel, tourism and leisure
	102 Hygiene and occupational health services	1021 Community sanitation 1022 Occupational health and safety
	103 Security services	1031 Military and defence 1032 Protection of persons and property
	104 Transport services	1041 Transport services

In addition to the detailed fields in the table above; "0", "8" and "9" may be used (see also the guidelines in Sections 7 and 8):

'8' is used at the narrow and detailed field level when classifying inter-disciplinary or broad programmes and qualifications to the broad field in which the greater part of the intended learning time is spent (e.g. 0288 'Inter-disciplinary programmes and qualifications involving arts and humanities'). '0' is used when no further information is available about the field than the field description at the next higher level of the classification hierarchy (i.e. at the broad field or at the narrow field level).

'9' is used at the detailed field level when classifying programmes and qualifications which do not fit within any of the listed detailed fields.

'9999', '999' or '99' can be used in data collections, especially in surveys if the field is not known.