Universidade do Porto no Performance Ranking of Scientific Papers for World Universities – NTU Ranking 2014

http://nturanking.lis.ntu.edu.tw/

I. Metodologia do NTU Ranking e participação da U.Porto

"The "Performance Ranking of Scientific Papers for World Universities" is released by National Taiwan University, and is also known as NTU Ranking. NTU Ranking provides overall rankings, rankings by six fields, and rankings by 14 selected subjects.

[…]

This ranking system employs bibliometric methods to analyze and rank the scientific paper performances of the world's top 500 universities. The selection of the 500 universities for inclusion in this ranking system was based on information obtained from the Essential Science Indicators (ESI). Of more than 4,000 research institutions listed in ESI, this ranking system first selected the top 700 institutions based on the numbers of published journal articles and numbers of citations. Non-university institutions were then removed from the list, and the project staff compared the remaining universities to those included in other ranking programs such as ARWU, THE, QS, and U.S. News. This resulted in 903 universities for this ranking system. Data used to assess the performances of the universities was drawn from ISI's ESI and Web of Science Core Collection (WOS), which includes SCI and SSCI, and Journal Citation Reports (JCR).

The concept of authority control was employed to retrieve data indexed under different forms of a university's name in the aforementioned databases – i.e. the official name, the abbreviated name and other possible forms of the name. This ranking system also considered the merging and splitting of universities (or different campuses in a university system) and included publications by university-affiliated institutions such as research centers and university hospitals. This effort ensured the accuracy of each university's number of published journal articles and the subsequent citation statistics.

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The reader may notice that the publications counting method for some institutions in ESI changed this past year, and some universities and their affiliated institutions are now considered as single institutions where they were previously considered separate institutions. This led to an increase in the number of published journal articles. Moreover, journal articles are now indexed by publication year instead of database year. These two changes will affect our ranking results.

Indicators

The 2014 performance measures are composed of eight indicators. These indicators together represent three different criteria of scientific paper performance: research productivity, research impact, and research excellence. Table 1 lists the indicators and shows the respective weightings for each indicator.

Table 1 The Criteria and Indicators, and Their Respective Weightings, Used for the Overall Performance-Based Ranking

Criteria	2014 Overall Performance Indicators	Weighting	
Research productivity	Number of articles in the last 11 years* (2003-2013)	10%	25%
	Number of articles in the current year (2013)	15%	
Research impact	Number of citations in the last 11 years* (2003-2013)	15%	35%
	Number of citations in the last 2 years (2012-2013)	10%	
	Average number of citations in the last 11 years* (2003-2013)	10%	
Research excellence	h-index of the last 2 years (2012-2013)	10%	45%
	Number of Highly Cited Papers* (2003-2013)	15%	
	Number of articles in the current year in high-impact journals (2012-2013)	15%	

*Note: The timeframe of the three long-term indicators is consistent with that in ESI, providing cumulative data for the last 11 years.

Indicator Definition

Research Productivity:

The number of articles published in peer-reviewed academic journals is frequently used to indicate the productivity of a research institution. To objectively represent a university's current and on-going research productivity, this ranking system employs two indicators: the number of articles in the last 11 years (2003-2013), and the number of articles in the current year (2013).

"Number of articles in the last 11 years" draws data from ESI, which includes 2003-2013 statistics articles published in journals indexed by SCI and SSCI. "Number of articles in the current year" relies on the 2013 data obtained from SCI and SSCI, which were extracted in April, 2014. We used to extract data in every January, but after a yearly observation, we discovered that papers published in 2012 would continue to be indexed by the databases into early 2013. Accordingly, we decided to postpone the data extraction time to April so the data would be more complete.

Research Impact:

The number of citations of a particular academic article within a specific time frame is a commonly accepted indicator for that article's impact. This ranking system considers both the long-term and short-term impact of a particular research and seeks to provide a fairer representation of a university's research impact regardless of its size or faculty number. Thus, this ranking system measures research impact by the number of citations in the last 11 years, the number of citations in the last 2 years, and the average number of citations in the last 11 years.

"Number of citations in the last 11 years" draws 2003-2013 citation statistics from ESI. "Number of citations in the last 2 years" draws 2012-2013 citation statistics from SCI and SSCI in WOS, which include citation statistics updated to the dates of retrieval. "Average number of citations in the last 11 years" is the number of citations in the last 11 years divided by the number of articles in the last 11 years.

Research Excellence:

This ranking system assesses each university's research excellence by the following indicators: the h-index of the last 2 years, the number of Highly Cited Papers from ESI, and the number of articles in the current year in high-impact journals (Hi-Impact journal articles). "h-index of the last 2 years" measures both the quantity and quality of a university's research via the use of the 2012-2013 SCI and SSCI data. Employing Hirsch's (2005) concept of h-index , a university has index h if h of its Np papers in the last two years have at least h citations each and the other (Np – h) papers have ≦h citations each.

"Number of Highly Cited Papers" utilizes data from ESI, which includes statistics of "Highly Cited Papers" from 2003 to 2013. ESI defines Highly Cited Papers as SCI/SSCI-indexed papers that are cited most (in the top 1% of the total papers indexed in the same year) within the last 11 years.

"Number of articles in the current year in high-impact journals" employs data from JCR, which supplies the impact factor of each journal in its subject field. The impact factor of a journal is the number of citations of the papers published in that particular journal within the previous two years divided by the number of that journal's papers within the previous two years. A journal with a higher impact factor means that journal has articles more frequently cited by other journals, thus suggesting its higher scholarly value. This ranking system defines high-impact journals as those whose impact factors are ranked in the top 5% of the total journals within a specific subject category. With high-impact journal lists derived from JCR, this ranking system is able to count the numbers of each university's articles published in high-impact journals by subject."[1]

A National Taiwan University não solicita informação às Universidades.

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[1] http://nturanking.lis.ntu.edu.tw/BackgroundMethodology/Methodology-enus.aspx acedido 10/10/2014

II.   Posição das Universidades portuguesas no NTU Overall Ranking

Universidade do Porto: Evolução

	2007	2008	2009	2010	2011	2012	2013	2014
Ranking Mundial	459	375	332	328	320	318	296	279
Ranking Europeu	195	161	140	141	141	137	126	120
Ranking Ibero-americano		10	11	9	8	10	10	9
Ranking Nacional	1	1	1	1	1	1	1	2

Universidades Portuguesas no World Overall Ranking

	2013	2014
University of Lisbon	--	224
University of Porto	296	279
University of Coimbra	387	368
Minho University	494	470
University of Aveiro	--	487
Universidade Tecnica de Lisboa	365	--
University of Lisbon	411	--

Scores da Universidades Portuguesas no World Overall Ranking 2014

World Rank	Country Rank	University	Total Score	11 Years Articles	Current Articles	11 Years Citations	Current Citations	Ave. Citations	H-Index	HiCi Papers	Hi-Impact Journal Articles	Ref. Rank (normalized by number of faculty)
224	1	University of Lisbon	52,6	53,7	59,7	49,8	54,1	46,5	54,9	50,2	51,5	258
279	2	University of Porto	50,4	53,1	56,8	49,3	50,4	45,8	48,7	48,2	49,8	266
368	3	University of Coimbra	48,2	47,7	50,1	46,5	50,3	44,9	53,4	46,7	47,3	384
470	4	Minho University	46,6	45	46,7	45,4	47,8	45,4	51	46,5	46,1	493
487	5	University of Aveiro	46,4	47,1	48,3	46	46,4	43,3	46,4	46,1	46,5	394

III.   NTU Ranking by Field

Taiwan (World by FIELD)	2008	2009	2010	2011	2012	2013	2014
Agriculture and Enviroment Sciences	U.Porto: 253	U.Porto: 199 UTL: 256 U.Aveiro: 299	U.Porto: 181 UTL: 277 U. Aveiro: 287	U.Porto: 159 U. Aveiro: 252 UTL: 288	U.Porto: 147 UTL: 264	U.Porto: 119 UTL: 201 U.Aveiro: 294	U.Lisboa: 103 U.Porto: 117 U.Aveiro:269
Clinical Medicine	-	-	-	-	-	-	-
Engineering	U.Aveiro: 171	U.Aveiro: 137 UTL: 189 U.Porto: 257	U.Aveiro: 172 UTL: 183 U.Porto: 218	UTL: 157 U.Porto: 165 U. Aveiro: 168 U.Minho: 291	U.Porto: 164 UTL: 166 U.Aveiro: 180 U.Minho: 296	UTL: 136 U.Porto: 170 U.Aveiro: 173	U.Lisboa: 113 U.Porto: 156 U.Aveiro: 190 U.Minho: 273
Life Sciences	-	-	U.Porto: 283	U.Porto: 290	U.Porto: 296	U.Porto: 262	U.Porto: 226
Natural Sciences	-	UTL: 229	UTL: 230 U.Porto: 285	UTL: 224 U.Porto: 226	U.Porto: 212 UTL: 243	UTL: 229 U.Porto: 276	U.Lisboa: 123 U.Porto: 281
Social Sciences	-	-	-	-	-	-	-

Taiwan (Europe by FIELD)	2008	2009	2010	2011	2012	2013	2014
Agriculture and Enviroment Sciences	U.Porto: 102	U.Porto: 72 UTL: 99 U.Aveiro: 299	U.Porto: 67 UTL: 112 U. Aveiro: 120	U.Porto: 61 U. Aveiro: 105 UTL: 120	U.Porto: 56 UTL: 109	U.Porto: 42 UTL: 79 U.Aveiro: 123	U.Lisboa: 34 U.Porto: 42 U.Aveiro: 113
Clinical Medicine	-	-	-	-	-	-	-
Engineering	U.Aveiro: 49	U. Aveiro: 38 UTL: 56 U.Porto: 91	U. Aveiro: 50 UTL: 53 U.Porto: 67	UTL: 42 U.Porto: 46 U. Aveiro: 47 U.Minho: 103	U.Porto: 43 UTL: 45 U.Aveiro: 50 U.Minho: 100	UTL: 31 U.Porto: 50 U.Aveiro: 51	U.Lisboa: 22 U.Porto: 38 U.Aveiro:53 U.Minho:87
Life Sciences	-	-	U.Porto: 118	U.Porto: 125	U.Porto: 125	U.Porto: 110	U.Porto: 97
Natural Sciences	-	UTL: 99	UTL: 100 U.Porto: 129	UTL: 99 U.Porto: 100	U.Porto: 90 UTL: 104	UTL: 97 U.Porto: 121	U.Lisboa: 46 U.Porto: 124
Social Sciences	-	-	-	-	-	-	-

IV.   NTU Ranking by Subject

Taiwan (World by SUBJECT)	2010	2011	2012	2013	2014
Physics	UTL: 189 U.Porto: 243	UTL: 198 U.Porto: 225	UTL: 226 U.Porto: 251	UTL: 230	U.Lisboa: 136
Chemistry	UTL: 225 U.Porto: 242 U. Aveiro: 256	U.Porto: 179 UTL: 230 U. Aveiro: 253	U.Porto: 124	U.Porto: 150 U.Aveiro: 194 UTL: 229 UNL: 284	U.Lisboa: 148 U.Porto: 151 U.Aveiro: 198 UNL: 250
Mathematics	UTL: 121	UTL: 148 U. Aveiro: 213	UTL: 120 U. Aveiro: 141	UTL: 135 U. Aveiro: 144	U.Lisboa: 75 U.Aveiro: 149
Geosciences	-	-	UL: 218	UL: 211	U.Lisboa: 126
Electrical Engineering	UTL: 198 U.Minho: 204	U.Minho: 166 UTL: 189 U. Coimbra: 293	UTL: 160	UTL:132 U.Porto: 209 UMinho: 284	U.Lisboa: 126 U.Porto: 209 U. Coimbra: 274 UMinho: 287
Computer Science	U.Porto: 297 UTL: 300	UTL: 191 U.Porto: 299	UTL: 142 U.Porto: 215	UTL: 126 U.Porto: 250	U.Lisboa: 104 Porto: 215
Mechanical Engineering	U.Porto: 62 UTL: 132 U. Aveiro: 138	U.Porto: 47 UTL: 132 U. Aveiro: 152 U.Minho: 223 U. Coimbra: 255	U.Porto: 30 UTL: 107 U. Aveiro: 126 U. Coimbra: 241	U.Porto: 92 UTL: 94 U. Aveiro: 131 U.Coimbra: 264 UMinho:298	U.Lisboa: 59 U.Porto: 65 U. Aveiro: 158 U.Coimbra: 205
Chemical Engineering	U.Porto: 85 UTL: 140 U. Aveiro: 181 U.Minho: 250 U. Coimbra: 275	U.Porto: 58 UTL: 136 U. Aveiro: 174 U.Minho: 178 U. Coimbra: 299	U.Porto: 60 U. Aveiro: 150 UTL: 151 U.Minho: 183	U.Porto: 64 UTL: 145 U.Aveiro: 161 U.Minho: 175 UC:263	U.Porto: 69 U.Lisboa: 129 U.Aveiro: 175 U.Minho: 201 U. Coimbra: 250
Materials Science	U. Aveiro: 102 U.Minho: 246 U.Porto: 255 UTL: 276	U. Aveiro: 120 U.Minho: 221 U.Porto: 239 UTL: 279	U. Aveiro: 131 U.Minho: 214 U.Porto: 291	U.Aveiro: 114 U.Minho: 215 U.Porto: 226	U.Aveiro: 122 U.Lisboa: 207 U.Porto: 218 U.Minho: 218
Civil Engineering	UTL: 109 U.Porto: 126 U.Minho: 278	U.Porto: 97 UTL: 115 U. Aveiro: 227 U.Minho: 240 UNL: 247	U.Porto: 67 UTL: 90 U.Minho: 241 U. Coimbra: 248 UNL: 253 U.Aveiro: 295	U.Porto: 54 UTL: 67 U.Minho: 217 U.Coimbra: 246 U.Aveiro:269	U.Lisboa: 47 U.Porto: 50 U.Minho: 187 U.Coimbra: 224 U.Aveiro: 261 UNL:300
Agricultural Sciences		U.Porto: 66 UTL: 162 U.Aveiro: 249 U.Lisboa: 299	U.Porto: 57 U.Minho: 209 UTL: 223 U.Aveiro: 261	U.Porto:47 UTL:125 U.Minho:204 U.Aveiro: 247	U.Porto: 69 U.Lisboa: 87
Environment/Ecology		U.Porto: 192 U.Aveiro: 193 UTL: 261 U.Lisboa: 281 U. Coimbra: 294	U.Porto: 185 U. Aveiro: 212 UTL: 262 U.Coimbra: 266	U.Porto: 163 UTL: 198 U.Aveiro:223 U.Coimbra: 273 Lisboa: 290	U.Lisboa: 118 U.Porto: 126 U.Aveiro: 206
Plant & Animal		U.Lisboa: 296	U.Lisboa: 242 U.Porto: 277	U.Porto: 196 U.Lisboa. 250 UAlgarve: 280 UTL: 282	U.Lisboa: 95 U.Porto: 160 UAlgarve: 280
Pharmacology &Toxicology			U.Porto: 206 U.Coimbra: 237	U.Porto:149 UCoimbra:237	U.Porto: 87 U. Coimbra: 267

Taiwan (Europe by SUBJECT)	2010	2011	2012	2013	2014
Physics	UTL: 82 U.Porto: 109	UTL: 88 U.Porto: 103	UTL: 103 U.Porto: 114	UTL: 105	U.Lisboa: 53
Chemistry	UTL: 95 U.Porto: 103 U. Aveiro: 109	U.Porto: 70 UTL: 101 U. Aveiro: 107	U.Porto: 37	U.Porto: 48 UAveiro: 74 UTL: 95 UNL:119	U.Lisboa: 46 U.Porto: 49 UAveiro: 79 UNL:101
Mathematics	UTL: 36	UTL: 48 U. Aveiro: 83	UTL: 36 U. Aveiro: 46	UTL: 39 U.Aveiro: 46	U.Lisboa: 17 U.Aveiro: 49
Geosciences	-	-	UL: 93	UL: 89	U.Lisboa: 47
Electrical Engineering	UTL: 64 U.Minho: 67	U.Minho: 52 UTL: 63 U.Coimbra: 105	UTL: 47	UTL:37 U.Porto: 62 UMinho:93	U.Lisboa: 29 U.Porto: 63 U. Coimbra: 87 UMinho: 95
Computer Science	U.Porto: 112 UTL: 114	UTL: 56 U.Porto: 117	UTL: 42 U.Porto: 75	UTL: 34 U.Porto: 91	U.Lisboa: 23 U.Porto: 65
Mechanical Engineering	U.Porto: 17 UTL: 46 U.Aveiro: 47	U.Porto: 13 UTL: 45 U. Aveiro: 55 U.Minho: 85	U.Porto: 7 UTL: 35 U.Aveiro: 41 U. Coimbra: 85	U.Porto: 28 UTL: 29 U.Aveiro: 42 U.Coimbra: 93 UMinho:111	U.Lisboa: 16 U.Porto: 19 U.Aveiro: 51 U.Coimbra: 64
Chemical Engineering	U.Porto: 20 UTL: 42 U.Aveiro: 60 U.Minho: 88 U.Coimbra: 98	U.Porto: 16 UTL: 42 U.Aveiro: 56 U.Minho: 58 U.Coimbra: 112	U.Porto: 12 U.Aveiro: 43 UTL: 44 U.Minho: 57	U.Porto: 13 UTL: 42 U.Aveiro: 47 U.Minho: 53 U.Coimbra:86	U.Porto: 14 U.Lisboa: 35 U.Aveiro: 50 U.Minho: 61 U.Coimbra: 80
Materials Science	U. Aveiro: 25 U.Minho: 86 U.Porto: 90 UTL: 98	U. Aveiro: 32 U.Minho: 73 U.Porto: 80 UTL: 97	U. Aveiro: 29 U.Minho: 64 U.Porto: 97	U. Aveiro:20 U.Minho: 58 U.Porto: 66	U.Aveiro: 22 U.Lisboa: 56 U.Porto: 62 U.Minho: 62
Civil Engineering	UTL: 27 U.Porto: 36 U.Minho: 99	U.Porto: 25 UTL: 35 U.Aveiro: 78 U.Minho: 83 UNL: 87	U.Porto: 16 UTL: 22 U.Minho: 83 U. Coimbra: 87 UNL: 89 U.Aveiro: 106	U.Porto: 14 UTL: 16 U.Minho: 73 U.Coimbra: 84 U.Aveiro:92	U.Lisboa: 10 U.Porto: 13 U.Minho: 55 U.Coimbra: 75 U.Aveiro: 91 UNL: 105
Agricultural Sciences		U.Porto: 24 UTL: 71 U.Aveiro: 107 U.Lisboa: 131	U.Porto: 19 U.Minho: 87 UTL: 93 U.Aveiro: 110	U.Porto:15 UTL:51 U.Minho:82 U.Aveiro: 100	U.Porto: 24 U.Lisboa: 33
Environment/Ecology		U.Porto: 65 U.Aveiro: 66 UTL: 100 U.Lisboa: 109 U.Coimbra: 117	U.Porto: 61 U.Aveiro: 73 UTL: 99 U.Coimbra: 103	U.Porto: 56 UTL: 67 U.Aveiro:79 U. Coimbra: 105 UL: 111	U.Lisboa: 43 U.Porto: 47 U.Aveiro: 72
Plant & Animal		U.Lisboa: 135	U.Lisboa: 107 U.Porto: 127	U.Porto: 86 U.Lisboa. 111 UAlgarve: 126 UTL: 127	U.Lisboa: 34 U.Porto: 68 UAlgarve: 124
Pharmacology &Toxicology			U.Porto: 79 U.Coimbra: 93	U.Porto:54 UCoimbra:92	U.Porto: 32 . Coimbra: 108

V.   Anexos

Field Categories[2]

"The National Taiwan University Ranking (NTU Ranking) categorizes subfields into six fields, namely Agriculture, Clinical Medicine, Engineering, Life Sciences, Natural Sciences and Social Sciences. "

Field	Subfield
Agriculture	Agricultural Sciences
	Environment/Ecology
	Plant & Animal Science
Clinical Medicine	Clinical Medicine
	Psychiatry
Engineering	Computer Science
	Engineering
	Materials Science
Life Sciences	Biology & Biochemistry
	Immunology
	Microbiology
	Molecular Biology & Genetics
	Neuroscience & Behavior
	Pharmacology & Toxicology
Natural Sciences	Chemistry
	Geosciences
	Mathematics
	Physics
	Space Science
	Psychology
Social Sciences	Economics & Business
	Social Sciences, General

Agriculture Subfields

Field	Subfield
Agricultural Sciences	Agricultural Economics & Policy
	Agricultural Engineering
	Agriculture, Dairy & Animal Science
	Agriculture, Multidisciplinary
	Agriculture, Soil Science
	Agronomy
	Food Science & Technology
	Horticulture
	Nutrition & Dietetics
Environment/Ecology	Biodiversity Conservation
	Ecology
	Environmental Sciences
	Water Resources
Plant & Animal Science	Entomology
	Fisheries
	Forestry
	Marine & Freshwater Biology
	Mycology
	Ornithology
	Plant Sciences
	Veterinary Sciences
	Zoology

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[2] http://nturanking.lis.ntu.edu.tw/BackgroundMethodology/FieldCategories-enus.aspx Acedido 10/10/2014

Clinical Medicine Subfields

Field	Subfield
Clinical Medicine	Allergy
	Andrology
	Anesthesiology
	Cardiac & Cardiovascular Systems
	Clinical Neurology
	Critical Care Medicine
	Dentistry, Oral Surgery & Medicine
	Dermatology
	Emergency Medicine
	Endocrinology & Metabolism
	Gastroenterology & Hepatology
	Geriatrics & Gerontology
	Health Care Sciences & Services
	Hematology
	Imaging Science & Photographic Technology
	Integrative & Complementary Medicine
	Medical Ethics
	Medical Laboratory Technology
	Medical Informatics
	Medicine, General & Internal
	Medicine, Legal
	Medicine, Research & Experimental
	Nursing
	Obstetrics & Gynecology
	Oncology
	Ophthalmology
	Orthopedics
	Otorhinolaryngology
	Pediatrics
	Peripheral Vascular Disease
	Radiology, Nuclear Medicine & Medical Imaging
	Rehabilitation
	Respiratory System
	Rheumatology
	Surgery
	Transplantation
	Tropical Medicine
	Urology & Nephrology
Psychiatry	Psychiatry

Engineering Subfields

Field	Subfield
Computer Science	Computer Science, Artificial Intelligence
	Computer Science, Cybernetics
	Computer Science, Hardware & Architecture
	Computer Science, Information Systems
	Computer Science, Interdisciplinary Applications
	Computer Science, Software Engineering
	Computer Science, Theory & Methods
Engineering	Automation & Control Systems
	Construction & Building Technology
	Energy & Fuels
	Engineering, Aerospace
	Engineering, Biomedical
	Engineering, Chemical
	Engineering, Civil
	Engineering, Electrical & Electronic
	Engineering, Environmental
	Engineering, Geological
	Engineering, Industrial
	Engineering, Manufacturing
	Engineering, Marine
	Engineering, Mechanical
	Engineering, Ocean
	Engineering, Petroleum
	Instruments & Instrumentation
	Mechanics
	Mining & Mineral Processing
	Robotics
	Telecommunications
	Thermodynamics
	Transportation
	Transportation Science & Technology
Materials Science	Materials Science, Biomaterials
	Materials Science, Ceramics
	Materials Science, Characterization & Testing
	Materials Science, Coatings & Films
	Materials Science, Composites
	Materials Science, Multidisciplinary
	Materials Science, Paper & Wood
	Materials Science, Textiles
	Metallurgy & Metallurgical Engineering

Life Sciences Subfields

Field	Subfield
Biology & Biochemistry	Anatomy & Morphology
	Biochemical Research Methods
	Biology
	Biophysics
	Evolutionary Biology
	Mathematical & Computational Biology
	Physiology
	Parasitology
	Pathology
	Reproductive Biology
Immunology	Immunology
	Infectious Diseases
	Virology
Microbiology	Biotechnology & Applied Microbiology
	Microbiology
	Microscopy
Molecular Biology & Genetics	Biochemistry & Molecular Biology
	Cell Biology
	Developmental Biology
	Genetics & Heredity
Neuroscience & Behavior	Behavioral Sciences
	Neuroimaging
	Neurosciences
Pharmacology & Toxicology	Pharmacology & Pharmacy
	Substance Abuse
	Toxicology

Natural Sciences Subfields

Field	Subfield
Chemistry	Chemistry, Analytical
	Chemistry, Applied
	Chemistry, Inorganic & Nuclear
	Chemistry, Medicinal
	Chemistry, Multidisciplinary
	Chemistry, Organic
	Chemistry, Physical
	Crystallography
	Electrochemistry
	Spectroscopy
	Polymer Science
Geosciences	Geochemistry & Geophysics
	Geography
	Geography, Physical
	Geology
	Geosciences, Multidisciplinary
	Limnology
	Meteorology & Atmospheric Sciences
	Mineralogy
	Oceanography
	Paleontology
	Remote Sensing
	Soil Science

Field	Subfield
Mathematics	Mathematics
	Mathematics, Applied
	Mathematics, Interdisciplinary Applications
	Statistics & Probability
Physics	Acoustics
	Nanoscience & Nanotechnology
	Nuclear Science & Technology
	Optics
	Physics, Applied
	Physics, Atomic, Molecular & Chemical
	Physics, Condensed Matter)
	Physics, Fluids & Plasmas
	Physics, Mathematical
	Physics, Multidisciplinary
	Physics, Nuclear
	Physics, Particles & Fields
Space Science	Astronomy & Astrophysics
Psychology	Psychology
	Psychology, Applied
	Psychology, Biological
	Psychology, Clinical
	Psychology, Developmental
	Psychology, Educational
	Psychology, Experimental
	Psychology, Mathematical
	Psychology, Multidisciplinary
	Psychology, Psychoanalysis
	Psychology, Social

Social Sciences Subfields

Field	Subfield
Economics & Business	Business
	Business, Finance
	Economics
	Industrial Relations & Labor
	Management
	Operations Research & Management Science
Social Sciences, General	Area Studies
	Communication
	Criminology & Penology
	Demography
	Education & Educational Research
	Education, Scientific Disciplines
	Education, Special
	Environmental Studies
	Ergonomics
	Ethics
	Ethnic Studies
	Family Studies
	Film, Radio, Television
	Health Policy & Services
	Information Science & Library Science
	International Relations
	Law
	Planning and Development
	Political Science
	Public Administration
	Public, Environmental & Occupational Health
	Social Issues
	Social Sciences, Biomedical
	Social Sciences, Interdisciplinary
	Social Sciences, Mathematical Methods
	Social Work
	Sociology
	Sport Sciences
	Urban Studies
	Women's Studies
	Asian Studies
	Folklore
	Hospitality, Leisure, Sport & Tourism

Subject Categories[3]

"The National Taiwan University Ranking (NTU Ranking) ranks each university by 14 subjects, namely Agricultural Sciences, Environment/Ecology, Plant & Animal Science, Computer Science, Chemical Engineering (including Energy & Fuels), Civil Engineering (including Environmental Engineering), Electrical Engineering, Mechanical Engineering, Materials Science, Pharmacology & Toxicology, Chemistry, Geosciences, Mathematics, and Physics."

Agricultural Sciences Subject Categories:
Agricultural Economics & Policy
Agricultural Engineering
Agriculture, Dairy & Animal Science
Agriculture, Multidisciplinary
Agriculture, Soil Science
Agronomy
Food Science & Technology
Nutrition & Dietetics
Horticulture

Environment/Ecology Subject Categories:
Biodiversity Conservation
Ecology
Environmental Sciences
Water Resources

Plant & Animal Science Subject Categories:
Entomology
Fisheries
Forestry
Marine & Freshwater Biology
Mycology
Ornithology
Plant Sciences
Veterinary Sciences
Zoology

Computer Science Subject Categories:
Computer Science, Artificial Intelligence
Computer Science, Cybernetics
Computer Science, Hardware & Architecture
Computer Science, Hardware & Architecture
Computer Science, Interdisciplinary Applications
Computer Science, Software Engineering
Computer Science, Theory & Methods

Chemical Engineering Subject Categories:
Energy & Fuels
Engineering, Chemical
Engineering, Petroleum
Polymer Science

Civil Engineering Subject Categories:
Construction & Building Technology
Engineering, Civil
Engineering, Environmental
Engineering, Geological
Engineering, Ocean
Transportation
Transportation Science & Technology

Electrical Engineering Subject Categories:
Automation & Control Systems
Engineering, Biomedical
Engineering, Electrical & Electronic
Instruments & Instrumentation
Telecommunications

Mechanical Engineering Subject Categories:
Engineering, Aerospace

Engineering, Manufacturing
Engineering, Marine
Engineering, Mechanical
Mining & Mineral Processing
Mechanics
Robotics
Thermodynamics
Engineering, Industrial

Materials Science Subject Categories:
Materials Science, Biomaterials
Materials Science, Ceramics
Materials Science, Characterization & Testing
Materials Science, Coatings & Films
Materials Science, Composites
Materials Science, Multidisciplinary
Materials Science, Paper & Wood
Materials Science, Textiles
Metallurgy & Metallurgical Engineering

Pharmacology & Toxicology Subject Categories:
Pharmacology & Pharmacy
Substance Abuse
Toxicology

Chemistry Subject Categories:
Chemistry, Analytical
Chemistry, Applied
Chemistry, Inorganic & Nuclear
Chemistry, Medicinal
Chemistry, Multidisciplinary
Chemistry, Organic
Chemistry, Physical
Crystallography
Electrochemistry
Spectroscopy

Geosciences Subject Categories:
Geochemistry & Geophysics
Geography
Geography, Physical
Geology
Geosciences, Multidisciplinary
Limnology
Meteorology & Atmospheric Sciences
Mineralogy
Oceanography
Paleontology
Remote Sensing

Mathematics Subject Categories:
Mathematics
Mathematics, Applied
Mathematics, Interdisciplinary Applications
Statistics & Probability

Physics Subject Categories:
Acoustics
Nanoscience & Nanotechnology
Nuclear Science & Technology
Optics
Physics, Applied
Physics, Atomic, Molecular & Chemical
Physics, Condensed Matter
Physics, Fluids & Plasmas
Physics, Mathematical
Physics, Multidisciplinary
Physics, Nuclear
Physics, Particles & Fields
Astronomy & Astrophysics