



Malaysian
Research and Development
Classification System
6th Edition



Malaysian
Research and Development
Classification System
6th Edition

Malaysian Research and Development Classification System 6th Edition



Published by:

Malaysian Science and Technology Information Centre (MASTIC)
Ministry of Science, Technology and Innovation (MOSTI)
Level 4, Block C5, Complex C,
Federal Government Administrative Centre
62662 Putrajaya, Malaysia
Tel: 603-8885 8000/8038 Fax: 603-8889 2980
Email : mastic@mastic.gov.my
<http://www.mastic.gov.my>

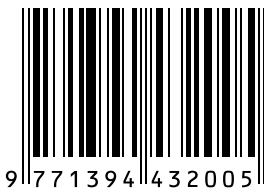
First Printing : March 2011

Copyright ©MOSTI 2011. All right Reserved

No part of this book maybe reproduced, stored in a retrieval system or transmitted in any form by any means, including electronic, photocopying, recording or otherwise, without prior written permission of Ministry of Science, Technology and Innovation (MOSTI).

All information is correct at the time of printing and may be subject to change without notice. The publisher does not bear any responsibility for any incorrect information or omission. Every measure has been taken to make this book comprehensive and accurate.

ISSN 1394-4320



9 771394 432005

Table of Contents

PREFACE	1
CHAPTER 1 Overview	3
CHAPTER 2 Field of Research	8
Division 1 Natural Sciences	9
F1200000 Mathematical Sciences	11
F1210000 Physical Sciences	15
F1220000 Chemical Sciences	18
F1230000 Biological Sciences	21
F1240000 Bioinformatics	25
F1250000 Nuclear Sciences	27
F1260000 Earth Sciences	30
F1270000 Environmental Sciences	33
F1280000 Material Sciences	36
F1290000 Marine Sciences	37
Division 2 Biotechnology	43
F2100000 Biotechnology	45
Division 3 Engineering and Technology	49
F3010000 Engineering and Technology	51
F3020000 Applied Sciences and Technologies	60
Division 4 Information, Computer and Communication Technology (ICT)	67
F4010000 Information, Computer and Communication Technology (ICT)	69
Division 5 Medical and Health Sciences	77
F5010000 Medical and Health Sciences	79
Division 6 Agriculture and Forestry	91
F6010000 Agricultural Sciences and Technology	93
F6020000 Forestry Sciences and Technology	99
Division 7 Social Sciences	103
F7010000 Social Sciences	105
Division 8 Humanities	117
F8010000 Humanities	119

Division 9	Economics, Business and Management	125
F9010000	Economics, Business and Management	127

CHAPTER 3 Socio-Economic Objective 140

Division 1	Defence and Security	141
S1010000	Defence	143
S1020000	Logistics	143

Division 2	Sustainable Economic Development	143
S2010000	Plant Production and Primary Products	143
S2020000	Animal Production and Primary Products	143
S2030000	Mineral Resources (Excluding Energy)	144
S2040000	Energy Resources	144
S2050000	Energy Supply and Security	144
S2060000	Manufacturing	144
S2070000	Construction	145
S2080000	Transport	146
S2090000	Information and Communication Services	146
S2100000	Commercial Services	146
S2110000	Economic Framework	146
S2120000	Natural Resources	147
S2130000	Forest Production and Products	147
S2140000	Marine Resources and Products	147
S2150000	Bioresource Production and Products	148

Division 3	Society	148
S3010000	Health	148
S3020000	Education	148
S3030000	Social Development and Community Services	149
S3040000	Arts, Culture and Heritage	149
S3050000	Religion and Ethics	149
S3060000	Social Problems	149

Division 4	Environment	150
S4010000	Environmental Knowledge	150
S4020000	Environmental Aspects of Development	150
S4030000	Environmental Management and Other Aspects	150
S4040000	Environmental Policy, Legislation and Standards	151

Division 5	Advancement of Knowledge	152
S5010000	Natural Sciences and Engineering	152
S5020000	Humanities and Quality of Life	152

Division 6	Advanced Experimental and Applied Science	153
S6010000	Applied Sciences, Engineering and Technologies	153

Annex : Acknowledgement	154
--------------------------------	------------

Preface

As research activities become extremely important in generating the economy through innovative products and ideas, the identification of field areas of research need attention for amendments or improvement to fulfil the requirements of current demands.

The classification of field areas of research is based on the impact of social needs and their significant contributions to our nation. The publication of new editions had gone through appraisal processes. The experts from GRI and universities are invited to share ideas in workshops. The validation of workshops' outcomes are certified through third random assessments whereas comments from all universities research management centres are compiled and restructured.

Thus, MASTIC would like to express its gratitude to MOSTI's Secretary General, Dato' Madinah Mohammad, Deputy Secretary General (Policy), Dato' Sharifah Zarah Syed Ahmad, Deputy Secretary General (Science), Datin Paduka Prof Dr. Khatijah Mohd Yusof and all experts for their support to accomplish and publish the Sixth Edition of MRDCS.

Finally, on behalf of MASTIC, I hope all research institutes, public and private sectors, would find this New Sixth Edition of MRDCS beneficial and valuable as the major reference for future innovative creation of the nation's wealth.

SAKENA ABDUL JABAR

Chapter 1

OVERVIEW OF THE MRDCS

PURPOSE OF THE MRDCS

The MRDCS was first introduced in the 1992 National Survey of Research and Development. It was designed for classifying and describing research activities in Malaysia to the highest detail and accuracy. These classifications provide the basis for the measurement and analysis of R&D activities and statistics that are useful guidelines to government policy makers, industrialists and researchers. It is also a useful indicator on the direction of R&D and technological change. As technological advances become increasingly dynamic, there are no limitations to the introduction of new researchable areas. The sixth edition of MRDCS is seen as a continuation and latest updates to address any presence of technological gaps and barriers. The standard framework set up in these classifications support distinct and highly distinguishable related R&D activities for ensuring efficiency and effectiveness in setting priorities, providing funds, maximising national R&D efforts and also as indicators for international comparisons.

THE SYSTEM OF CLASSIFICATION

Two internationally recognised systems were used in conjunction with the OECD, 'Frascati Manual' but further improved to support a variety of user interests within the Malaysian R&D context. The classifications are:

- i. **Field of Research (FOR)** represents R&D activities classified according to their scientific and academic disciplines. These disciplines tend to be universally applicable, with national variations arising from the grouping of different research fields.
- ii. **Socio Economic Objective (SEO)** allows R&D activities to be categorised according to their purposes or presumed sectoral benefits as perceived by the researchers. It consists of discrete economical, social, environmental, technological or scientific domain for identifying the principal purpose of the R&D. This system shows greater national variation according to a nation's profile and development priorities.

The two classification systems must be considered in tandem as they cover the same activities but from two different and important perspectives.

STRUCTURE OF THE MRDCS

The FOR and SEO follows a hierarchal structure and are uniquely assigned Special codes F and S respectively. The remaining descending characters identify its Division, Category, Group and Area. The higher the hierarchy, the broader the subject area or research discipline. The FOR and SEO classifications hierarchy are assigned specific sub-codes to further portray the hierarchical differences in the classification structure.

The FOR has four hierarchical levels, starting at the Division (broadest level), Category, Group and Area (finest and where research project is allocated). Each level is identified with a unique number or code for easy reference. The illustration below shows the approach to the FOR hierarchical structure;

EXAMPLE 'FOR'	: F1020104
SYSTEM OF CLASSIFICATION :	F
DIVISION (1 Digit)	: 1 : Natural Sciences
CATEGORY (2 Digit)	: 02 : Physical Sciences
GROUP (2 Digit)	: 01 : Astronomy and Astrophysics
AREA (2 Digit)	: 04 : Stellar System

The SEO is structured to have three hierarchical levels, the Division (broadest level), Category and Group (shows the main purpose of the R&D activities). The illustration below shows the SEO hierarchical structure;

EXAMPLE 'SEO'	: S2010200
SYSTEM OF CLASSIFICATION :	S
DIVISION (1 Digit)	: 2 : Sustainable Economic Development
CATEGORY (2 Digit)	: 01 : Plant Production and Primary Products
GROUP (4 Digit)	: 0100 : Food Security

Where a defined field cannot be identified within a research area or programme, the not elsewhere classified (n.e.c) connotation is used.

GUIDELINES FOR CLASSIFYING FIELD OF RESEARCH

There are 9 possible Divisions which represent broad subject areas or research disciplines, while Categories, Groups and Areas at the lowest level represent more detailed dissections of the categories which allow entry of more possible areas for future expansion.

The classification hierarchical manner is achieved by first determining the Division in which the research is being performed, followed by the most relevant Category within that Division and moving lower to the most relevant Group within that Category.

A research project or activity is located at the lowest end of the hierarchy, the AREA level. To achieve the classification hierarchy, it is vital for the researcher, first to identify from this Area level and progress to the higher level of the hierarchy (Group, Category and Division). There are identical titles within the different Groups and Categories which might be useful indicators not to be missed by the researchers. These guidelines are applicable to both the FOR and SEO classifications.

APPLICATION OF MRDCS

The classifications have been designed primarily to meet the needs in classifying research projects in a more consistent and structured manner. MRDCS would be able to provide considerable flexibilities to variety of users, addressing multi-

disciplinary works to be applied to one or more different purposes. The system used in this document would among others be applicable but not limited to the following activities:

- Conducting National Survey for Research and Development;
- Applying for R&D funds such as TechnoFund and ScienceFund; and
- Identifying and codifying of the research projects and experts in database development.

DEFINITIONS

Research and Development

The Frascati Manual "Proposed Standard Practice for Surveys on Research and Experimental Development" 2002 defined the term R&D as comprising creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man, culture and society, and the use of this stock of knowledge to devise new applications.

Boundaries of R&D

In real terms, there is a wide range of scientific and related activities that are not R&D but very closely linked to R&D, both through flows of information and in terms of operations, organisations, and resource allocation, which should be excluded when measuring R&D. These activities which do not have clear boundaries in support of R&D are listed below;

a. Education and Training of Personnel and Students.

Postgraduate research, including supervision of the research is considered to be R&D. The development of new teaching methods is also regarded as R&D. However, teaching and training students, using established methods and subject knowledge, is excluded.

b. Specialised Scientific and Technical Information Services

Specialised scientific and technical information services which are undertaken solely in support of R&D are regarded as R&D. Example of these are scientific data collection, coding, recording, classification, dissemination, translation, analysis and bibliographic services.

These specialised services are excluded if they are undertaken independently and not solely in support of R&D.

c. General Purpose or Routine Data Collection

Collecting data in support of R&D work is included in R&D. However, data collection of a general nature is excluded. This is normally carried by government agencies to record natural, biological, economic or social phenomena of general public or government interest. Examples are national population censuses, surveys of unemployment, topographical mapping and routine geographical surveys or environmental surveys.

d. Maintenance of National Standards

Routine testing and analysis of materials, components, products, processes, soils, atmospheres, etc. for standard compliance is excluded from R&D.

e. Feasibility Studies

Feasibility studies undertaken in support of R&D are included. However, feasibility study which involves gathering information about existing conditions, for use in deciding whether or not to implement a project, is excluded, e.g. a study to determine the viability of a petrochemical complex in a particular location.

f. Specialised Medical Care

R&D includes the development of new treatments and procedures, including such developments in conjunction with advanced medical care and examination usually carried out by university hospitals. However, routine investigations or normal application of specialised medical knowledge, techniques or equipment are excluded from R&D.

g. Clinical Trials

Phase 1, 2 and 3 clinical trials are included in R&D. Phase 4 clinical trials are excluded from R&D, unless they bring about further scientific technological advance.

h. Patent and License Work

Patent work connected directly with R&D projects is included in R&D. However, commercial, administrative and legal work associated with patenting, copywriting and licensing, is excluded.

i. Policy Related Studies

The boundary between certain related policy related studies as described in the Frascati Manual and R&D is complex. In the Frascati Manual, policy related studies cover activities such as the 'analysis and assessment of existing programmes, continued analysis and monitoring of external phenomena (e.g. defence and security analysis), legislative inquiry concerned with general government departmental policy or operations'. Rigour is required to separate policy related studies, which are not R&D from bona fide R&D policy work.

Studies to determine the effect of a specific national policy to a particular economic or social condition or social group have elements of R&D. Routine management studies or efficiency studies are excluded.

j. Marketing and Market Studies

Market research and opinion polls are excluded from R&D.

k. Mineral Exploration

The development of new or vastly improved methods of data acquisition, processing and interpretation of data is included as R&D. Surveying undertaken as an integral part of an R&D project to observe geological phenomena is also

regarded as R&D. However the search for minerals using existing methods is excluded from R&D.

I. Prototypes and Pilot Plants

The design, construction and testing of prototypes generally falls within the scope of R&D. However, the trial production and copying of prototypes are excluded from R&D.

The construction and operation of pilot plants is part of R&D, provided this is used to obtain experience or new data for evaluating hypotheses.

Pilot plants are excluded as soon as the experimental phase is over or as soon as they are used as normal commercial production units even if they continue to be described as 'pilot plants'. If a pilot plant is used for combined operations, the component used for R&D is to be estimated.

Other activities, which are ancillary or consequential to R&D, are excluded. Examples of these are interpretative commentary using existing data, forecasting, operation research as a contribution to decision-making and the use of standard techniques in applied psychology to classify or diagnose human characteristics.

TYPES OF ACTIVITY

Three types of activities applicable to R&D are recognised in this classification:

- Basic Research (Pure Basic Research and Strategic Basic Research);
- Applied Research; and
- Experimental Development.

Pure basic research: is experimental or theoretical work undertaken to acquire new knowledge without looking for long term benefits other than the advancement of knowledge.

Strategic basic research: is experimental or theoretical work undertaken to acquire new knowledge directed into specified broad areas in the expectation of new discoveries. It provides the broad base of knowledge necessary for the solution of recognised practical problems

Applied research: is also original work undertaken primarily to acquire new knowledge with a specific application in view. It is undertaken either to determine possible use for the findings of basic research or to determine new ways of achieving some specific and pre-determined objectives.

Experimental development: is systematic work, using existing knowledge gained from research and/or practical experience, which is directed to producing new materials, products or devices, installing new processes, systems and services, or improving substantially those already produced or installed.

Chapter 2

FIELD OF RESEARCH (FOR)

This classification allows R&D activity to be categorised according to the field of research undertaken. In this respect, it is the nature of the R&D itself, specifically the methodology used which is being considered rather than the activity or the purpose of the performing unit.

FOR classification consists of discrete categories which identify research fields through various disciplines and major subfields as investigated by national research institutions, universities and related tertiary institutions, organisations and emerging areas of study. It reflects the expansion of research activity from the former 2 Division to the present 9 Division classification unit. Major structural changes have been included in this edition. Inclusion of a great number of new research areas is inevitable as the country's development pace increases.

This new edition currently classified all the R&D activities into 9 Divisions (2 in last edition), 21 Categories (20 in last edition), 266 Groups (237 in last edition) and 3371 discrete Areas (3010 in last edition).



Division 1

Natural Sciences

CATEGORY	GROUP	AREA
F1200000		MATHEMATICAL SCIENCES
	F1200100	Applied Mathematics
	F1200101	Approximation Theory
	F1200102	Calculus of Variation
	F1200103	Category Theory, K-Theory and Homological Algebra
	F1200104	Combinatorics
	F1200105	Complex Analysis
	F1200106	Control Theory
	F1200107	Cryptography
	F1200108	Dynamical Systems
	F1200109	Field Theory
	F1200110	Fourier and Harmonic Analysis
	F1200111	Functional Analysis
	F1200112	Fuzzy Mathematics
	F1200113	Geometry, Topology and Manifolds
	F1200114	Global Analysis and Bifurcation
	F1200115	Graph Theory
	F1200116	Group Theory and Generalisations
	F1200117	History and Philosophy
	F1200118	Indigenisation and Islamisation
	F1200119	Integral, Integro-Differential and Functional Equations
	F1200120	Linear and Multilinear Algebra
	F1200121	Mathematical Logic and Set Theory
	F1200122	Mathematical Programming and Optimisation
	F1200123	Number Theory
	F1200124	Numerical Analysis
	F1200125	Operations Research
	F1200126	Ordinary Differential and Partial Differential Equations
	F1200127	Real Analysis
	F1200128	Real and Complex Functions
	F1200129	Rings and Algebras
	F1200130	Sequential and Parallel Algorithms
	F1200131	Several Complex Variables
	F1200199	Other Applied Mathematics n.e.c.
	F1200200	Applied Statistics
	F1200201	Decision Theory
	F1200202	Experimental Design and Analysis
	F1200203	Exploratory Data Analysis
	F1200204	History and Philosophy
	F1200205	Indigenisation and Islamisation
	F1200206	Multivariate Analysis

CATEGORY	GROUP	AREA
F1200000		MATHEMATICAL SCIENCES
		F1200207 Observational Studies F1200208 Probability and Distribution Theory F1200209 Quality and Productivity Measurement F1200210 Sampling and Survey Techniques F1200211 Statistical Computing F1200212 Statistical Inferences F1200213 Statistical Modelling F1200214 Stochastic Analysis and Modelling F1200215 Stochastic Operations Research F1200216 Survival and Reliability Analysis F1200217 Time Series and Spatial Analysis F1200299 Other Applied Statistics n.e.c.
	F1200300	Mathematics and Statistics for ICT and Industries
		F1200301 Algorithms and Cryptology F1200302 Applied Logic and Automata F1200303 Artificial Intelligence F1200304 Circuits and Networks F1200305 Computational Mathematics F1200306 Computational Methodology and Complexities F1200307 Computer Systems Organisation F1200308 Computer-Aided Geometric Design (CAGD) F1200309 Data Mining F1200310 Deterministic and Stochastic Difference F1200311 Discrete Mathematics F1200312 Dynamical Systems F1200313 Experimental Mathematics F1200314 Forensic Statistics F1200315 Image Processing and Pattern Recognition F1200316 Image Processing Theory F1200317 Industrial Computing F1200318 Industrial Optimisation and Control F1200319 Industrial Statistics F1200320 Information and Communication F1200321 Mathematical Prediction F1200322 Monitoring Mathematics F1200323 Natural Language Programming F1200324 Software Engineering F1200325 Visualisation of Mathematics F1200399 Other Mathematics and Statistics for ICT and Industries n.e.c.

CATEGORY	GROUP	AREA
F1200000		MATHEMATICAL SCIENCES
	F1200400	Mathematics and Statistics for Science and Engineering
	F1200401	Actuarial Mathematics
	F1200402	Actuarial Modelling
	F1200403	Biological and Medical Sciences
	F1200404	Bio-Mathematics
	F1200405	Business, Financial and Managerial Sciences
	F1200406	Celestial Mechanics, Mathematical Astrophysics and Cosmology
	F1200407	Computational Complex Analysis
	F1200408	Deformed Solid Mechanics
	F1200409	Economics
	F1200410	Fluid Mechanics
	F1200411	Inverse Problem
	F1200412	Optics and Electromagnetism
	F1200413	Particle, Rigid Bodies and System Mechanics
	F1200414	Potential Theory
	F1200415	Quality Assurance and Standard
	F1200416	Quantum Theory
	F1200417	Random Matrix Theory
	F1200418	Relativity
	F1200419	Social Sciences and Humanities
	F1200420	Statistical Mechanics and Structure of Matter
	F1200421	Thermodynamics and Heat Transfer
	F1200422	Unified Theory and Theory of Everything
	F1200423	Visualisation, Prediction and Monitoring
	F1200499	Other Mathematics and Statistics for Science and Engineering n.e.c.
	F1200500	Mathematical Science for Education
	F1200501	Critical and Mathematical Thinking
	F1200502	Curriculum Development and Teaching Methods
	F1200503	Education and Instruction
	F1200504	Education Policy and System
	F1200505	Educational Material and Media, and Educational Technology
	F1200506	Mathematical Ethnoscience and Islamic Education
	F1200507	Popularisation and Acculturation
	F1200508	Psychology
	F1200599	Other Mathematical Science for Education n.e.c.

CATEGORY	GROUP	AREA
F1200000		MATHEMATICAL SCIENCES
	F1200600	Mathematics for Business
	F1200601	Business Management
	F1200602	Calculus
	F1200603	Elementary Algebra
	F1200604	Elementary Arithmetic
	F1200605	Financial Analysis
	F1200606	Financial Mathematics
	F1200607	Linear Programming
	F1200608	Mathematical Finance (Quantitative Behavioral Finance)
	F1200609	Mathematics in Accounting
	F1200610	Matrix Algebra
	F1200611	Real Analysis
	F1200612	Statistics and Probability
	F1200613	Trigonometric Functions
	F1200699	Other Mathematics for Business n.e.c.
	F1200700	Advancement of Mathematical Science Knowledge
	F1200701	Grand Challenge Application
	F1200702	Library, Repository and Apps Software
	F1200703	New Trends of International Mathematics and Statistics
	F1200704	Numerical Library and Repository
	F1200705	Visualisation, Prediction and Monitoring
	F1200799	Other Advancement of Mathematical Science Knowledge n.e.c.
	F1209900	Other Mathematical Sciences n.e.c.

CATEGORY	GROUP	AREA
F1210000		PHYSICAL SCIENCES
	F1210100	Astronomy and Astrophysics
	F1210101	Aeronomy
	F1210102	Archeoastronomy
	F1210103	Astrophysics
	F1210104	Cosmology
	F1210105	Gallactic and Extragalactic
	F1210106	Optical Astronomy
	F1210107	Radioastronomy
	F1210108	Solar System
	F1210109	Sphericalastronomy
	F1210110	Stellar System
	F1210199	Other Astronomy and Astrophysics n.e.c.
	F1210200	Theoretical and Computational Physics
	F1210201	Chaos Theory and Simulation
	F1210202	Classical and Quantum Physics
	F1210203	Condensed Matter
	F1210204	Electromagnetism
	F1210205	Field Theory
	F1210206	Fractals
	F1210207	Relativity and Gravitation
	F1210208	Statistical Physics and Thermodynamics
	F1210209	Wave Phenomena and Propagation
	F1210299	Other Theoretical and Computational Physics n.e.c.
	F1210300	Atomic and Molecular Physics
	F1210301	Atomic and Molecular Collision Processes and Interactions
	F1210302	Atomic and Molecular Structure
	F1210303	Instrumentation and Measurement Techniques
	F1210399	Other Atomic and Molecular Physics n.e.c.
	F1210400	Acoustics and Optical Physics
	F1210401	Acoustical and Optical Signal Processing
	F1210402	Acoustics
	F1210403	Electro-Optics and Light Modulation
	F1210404	Fibre Optics and Waveguides (<i>Including Communication Equipment</i>)

CATEGORY	GROUP	AREA
F1210000		PHYSICAL SCIENCES
	F1210405	Instrumentation, Measurement Techniques and Metrology
	F1210406	Optics, Non-Linear Optics and Quantum Optics
	F1210407	Opto-Acoustic and Opto-Thermal Phenomena
	F1210408	Quantum Electronics and Lasers
	F1210499	Other Acoustics and Optical Physics n.e.c.
	F1210500	Condensed Matter Physics
	F1210501	Composite
	F1210502	Crystallography
	F1210503	Electronic, Electrical, Magnetic and Optical Properties
	F1210504	Low Dimensional Physics
	F1210505	Low Temperature Physics
	F1210506	Magnetic Material
	F1210507	Nano Physics
	F1210508	Phonon Physics
	F1210509	Semiconductor Materials and Devices
	F1210510	Structure, Mechanical and Thermal Properties
	F1210511	Superconductivity
	F1210512	Surface Interface
	F1210513	Thin Film
	F1210599	Other Condensed Matter Physics n.e.c.
	F1210600	Fluid, Discharges and Plasma Physics
	F1210601	Electric Discharges
	F1210602	Fluid Dynamics
	F1210603	Gaseous Electronics
	F1210604	Physical Properties of Gases
	F1210605	Plasma Devices and Applications
	F1210606	Space Plasma
	F1210607	Theory and Modelling of Plasma
	F1210699	Other Fluid, Discharges and Plasma Physics n.e.c.

CATEGORY	GROUP	AREA
F1210000		PHYSICAL SCIENCES
	F1210700	Cross Disciplinary Physics
		F1210701 Astrophysics
		F1210702 Atmospheric Physics
		F1210703 Biophysics
		F1210704 Mathematical Physics
		F1210705 Medical Physics
		F1210799 Other Cross Disciplinary Physics n.e.c.
	F1210800	Advancement of Physical Sciences Knowledge
		F1210801 Acoustics
		F1210802 Atmospheric Physics
		F1210803 Atomic and Molecular Physics
		F1210804 High Energy Physics
		F1210805 High Temperature Superconductivity
		F1210806 Ionospheric Physics
		F1210807 Low Temperature Physics
		F1210808 Magnetospheric Physics
		F1210809 Material Physics
		F1210810 Nanostructure
		F1210811 Nuclear and Reactor Physics
		F1210812 Optics, Non-Linear Optics and Quantum Optics
		F1210813 Optoelectronics and Lasers
		F1210814 Plasma Physics
		F1210815 Radiation Physics
		F1210816 Space Exploration
		F1210817 Space Science
		F1210899 Other Advancement of Physical Sciences Knowledge n.e.c.
	F1219900	Other Physical Sciences n.e.c.

CATEGORY	GROUP	AREA
F1220000		CHEMICAL SCIENCES
	F1220100	Physical Chemistry
		F1220101 Catalysis, Kinetics and Mechanisms of Reactions
		F1220102 Chemical Thermodynamics
		F1220103 Colloid Chemistry
		F1220104 Electrochemistry
		F1220105 Ionic Liquids
		F1220106 Polymer Chemistry
		F1220107 Quantum Chemistry
		F1220108 Soft Matters
		F1220109 Solution Chemistry
		F1220110 Statistical Mechanics
		F1220111 Structural Chemistry
		F1220112 Surface Chemistry
		F1220113 Theoretical Chemistry
		F1220114 Transport Properties and Non-Equilibrium Processes
		F1220199 Other Physical Chemistry n.e.c.
	F1220200	Inorganic Chemistry
		F1220201 Bio-Inorganic Chemistry
		F1220202 f-Block Chemistry
		F1220203 Inorganic Green Chemistry
		F1220204 Main Group Metal Chemistry
		F1220205 Non-Metal Chemistry
		F1220206 Organometallic Chemistry
		F1220207 Solid State Chemistry
		F1220208 Transition Metal Chemistry
		F1220299 Other Inorganic Chemistry n.e.c.
	F1220300	Organic Chemistry
		F1220301 Bioorganic Chemistry
		F1220302 Fine and Speciality Chemicals
		F1220303 Free Radical Chemistry
		F1220304 Medicinal Chemistry
		F1220305 Natural Products Chemistry
		F1220306 Oleochemical Chemistry
		F1220307 Organic Chemical Synthesis
		F1220308 Organic Green Chemistry
		F1220309 Petrochemical Chemistry
		F1220310 Physical Organic Chemistry
		F1220311 Polymer Synthesis
		F1220399 Other Organic Chemistry n.e.c.

CATEGORY	GROUP	AREA
F1220000		CHEMICAL SCIENCES
	F1220400	Analytical Chemistry
	F1220401	Analytical Nuclear Chemistry
	F1220402	Analytical Spectrometry
	F1220403	Chemical and Physical Methods
	F1220404	Chemometrics
	F1220405	Computational Chemistry
	F1220406	Electroanalytical Chemistry
	F1220407	Immunological and Bioassay Methods
	F1220408	Instrumental Methods
	F1220409	Quality Assurance
	F1220410	Sensor Technology (Chemical Aspects)
	F1220411	Separation Science
	F1220412	Trace Chemical Analysis
	F1220413	Traceability and Metrological Chemistry
	F1220499	Other Analytical Chemistry n.e.c.
	F1220500	Macromolecular and Materials Chemistry
	F1220501	Characterisation of Molecules
	F1220502	Functional Macromolecules
	F1220503	Liquid Crystal
	F1220504	Nanochemistry and Supramolecular Chemistry
	F1220505	Optical Properties of Materials
	F1220506	Physical Chemistry of Molecules
	F1220507	Polymerisation Mechanisms
	F1220508	Synthesis of Molecules
	F1220509	Theory and Design of Materials
	F1220599	Other Macromolecular and Materials Chemistry n.e.c.
	F1220600	Medicinal and Biomolecular Chemistry
	F1220601	Biologically Active Molecules
	F1220602	Biomolecular Modelling and Design
	F1220603	Characterisation of Biological Macromolecules
	F1220604	Cheminformatics and Quantitative Structure-Activity Relationships
	F1220605	Enzymatic Chemistry
	F1220606	Molecular Medicine
	F1220607	Proteins and Peptides
	F1220699	Other Medicinal and Biomolecular Chemistry n.e.c.

CATEGORY	GROUP	AREA
F1220000		CHEMICAL SCIENCES
	F1220700	Food Chemistry
	F1220701	Additives and Contaminants
	F1220702	Enzymes
	F1220703	Food Analysis
	F1220704	Food Emulsion Products
	F1220705	Food Microbiology
	F1220706	Food Preservation
	F1220799	Other Food Chemistry n.e.c.
	F1220800	Environmental Chemistry
	F1220801	Aquatic Chemistry
	F1220802	Atmospheric Chemistry
	F1220803	Pollution Chemistry
	F1220804	Seawater Chemistry
	F1220805	Soil Chemistry
	F1220899	Other Environmental Chemistry n.e.c.
	F1220900	Applied Chemical Sciences
	F1220901	Chemical Education
	F1220902	Cosmeceuticals
	F1220903	Drug Intermediates from Indigenous Sources
	F1220904	Expired Patent Chemicals
	F1220905	Forensic Chemistry
	F1220906	Heat Resistant/Flame Retarding Chemicals
	F1220907	Industrial Chemistry
	F1220908	Nuclear Chemistry
	F1220909	Radiochemistry
	F1220910	Toxicological Chemistry
	F1220999	Other Applied Chemical Sciences n.e.c.
	F1229900	Other Chemical Sciences n.e.c.

CATEGORY	GROUP	AREA
F1230000		BIOLOGICAL SCIENCES
	F1230100	Biochemistry
		F1230101 Bioenergetics
		F1230102 Carbohydrates
		F1230103 Cell Biology
		F1230104 Electrolytes
		F1230105 Enzymology
		F1230106 Immunology
		F1230107 Lipids
		F1230108 Manufacturing Instruments (<i>Including Bioglass, Biochips, Biometrics and Bioreactor</i>)
		F1230109 Membrane Biology
		F1230110 Neurochemistry
		F1230111 Nucleic Acids
		F1230112 Proteins
		F1230199 Other Biochemistry n.e.c.
	F1230200	Genetics
		F1230201 Biochemical Genetics
		F1230202 Cell Biology
		F1230203 Comparative Genetics
		F1230204 Cytogenetics
		F1230205 Developmental Genetics
		F1230206 Embryonic Cell Nuclear Transfer
		F1230207 Forensic Genetics
		F1230208 Mendelian Genetics
		F1230209 Molecular Genetics
		F1230210 Mutagenesis
		F1230211 Phylogenetics
		F1230212 Polyploidisation
		F1230213 Population Genetics
		F1230214 Recombinant DNA Techniques
		F1230215 Semantic Dicaryotisation
		F1230216 Single Nucleotide Polymorphisms (SNPs)
		F1230217 Somatic Cell Nuclear Transfer
		F1230218 Stem Cell
		F1230299 Other Genetics n.e.c.

CATEGORY	GROUP	AREA
F1230000		BIOLOGICAL SCIENCES
	F1230300	Microbiology
	F1230301	Bacteriology
	F1230302	Environmental Microbiology
	F1230303	Immunology
	F1230304	Industrial Microbiology
	F1230305	Medical Microbiology
	F1230306	Microbial Systematic
	F1230307	Mycology
	F1230308	Parasitology
	F1230309	Plant-Microbe Interactions
	F1230310	Protozoology
	F1230311	Virology
	F1230399	Other Microbiology n.e.c.
	F1230400	Botany
	F1230401	Economic Botany
	F1230402	Ethnobotany
	F1230403	Phycology
	F1230404	Plant Cell and Molecular Biology
	F1230405	Plant Developmental and Reproductive Biology
	F1230406	Plant Pathology
	F1230407	Plant Physiology
	F1230408	Plant Systematic
	F1230409	Plant Taxonomy
	F1230499	Other Botany n.e.c.
	F1230500	Zoology
	F1230501	Anatomy
	F1230502	Animal Developmental and Reproductive Biology
	F1230503	Animal Immunology
	F1230504	Animal Systematics
	F1230505	Animal Taxonomy
	F1230506	Entomology
	F1230507	Ethnology
	F1230508	Ethology
	F1230509	Herpetology
	F1230510	Histology
	F1230511	Ichthyology
	F1230512	Invertebrates
	F1230513	Mammology

CATEGORY	GROUP	AREA
F1230000		BIOLOGICAL SCIENCES
	F1230514	Neurobiology
	F1230515	Ornithology
	F1230599	Other Zoology n.e.c.
F1230600		Ecology
	F1230601	Coastal Ecology
	F1230602	Ecological Engineering
	F1230603	Estuarine Ecology
	F1230604	Freshwater Ecology
	F1230605	Karst Ecology
	F1230606	Landscape Ecology
	F1230607	Limnology
	F1230608	Mangrove Ecology
	F1230609	Marine Ecology
	F1230610	Molecular Ecology
	F1230611	Montane Ecology
	F1230612	Palaeoecology
	F1230613	Physiological Ecology
	F1230614	Population Ecology
	F1230615	Social Biology and Behaviour Ecology
	F1230616	Terrestrial Ecology
	F1230699	Other Ecology n.e.c.
F1230700		Physiology
	F1230701	Animal Biophysics Physiology
	F1230702	Animal Cell Physiology
	F1230703	Animal Systems Physiology
	F1230704	Comparative Physiology
	F1230705	Human Physiology
	F1230706	Insect Physiology
	F1230707	Leaf Gas Exchange
	F1230708	Microbial Physiology
	F1230709	Neurophysiology
	F1230710	Physicochemical Assimilation
	F1230711	Plant and Water Relation
	F1230712	Plant Growth Regulators
	F1230713	Post Harvest Physiology
	F1230714	Radiation Interception
	F1230715	Reduction of Juvenile Period
	F1230716	Seasonality
	F1230717	Stress Physiology
	F1230718	Translocational Studies
	F1230799	Other Physiology n.e.c.

CATEGORY	GROUP	AREA
F1230000		BIOLOGICAL SCIENCES
	F1230800	Biodiversity and Conservation
	F1230801	Bioethic and Environmental Ethic
	F1230802	Biogeography
	F1230803	Brackish Water Biodiversity and Conservation
	F1230804	Conservation Genetics
	F1230805	Ecosystem Diversity
	F1230806	Evolutionary Biology
	F1230807	Freshwater Biodiversity and Conservation
	F1230808	Freshwater Ecology
	F1230809	Fungal Biodiversity and Conservation
	F1230810	Genetic Diversity
	F1230811	Indigenous Microbes Biodiversity and Conservation
	F1230812	Landscape Ecology
	F1230813	Life History BT: Population Ecology
	F1230814	Livestock Biodiversity and Conservation
	F1230815	Mapping, Monitoring and Modeling
	F1230816	Marine Biodiversity and Conservation
	F1230817	Palaeoecology
	F1230818	Parks and Protected Areas Conservation
	F1230819	Phylogeography
	F1230820	Plant Biodiversity and Conservation
	F1230821	Sociobiology and Behavioural Ecology
	F1230822	Species Diversity
	F1230823	Terrestrial Biodiversity and Conservation
	F1230824	Terrestrial Ecology
	F1230825	Wildlife Biodiversity and Conservation
	F1230826	Wildlife Conservation
	F1230899	Other Biodiversity and Conservation n.e.c.
	F1230900	Advancement of Biological Science Knowledge
	F1230901	Evolutionary Biology
	F1230999	Other Advancement of Biological Science Knowledge n.e.c.
	F1239900	Other Biological Sciences n.e.c.

CATEGORY	GROUP	AREA
F1240000		BIOINFORMATICS
	F1240100	Computational Molecular Biology
		F1240101 Comparative Genomics
		F1240102 Epigenomics
		F1240103 Evolutionary Genomics
		F1240104 Functional Genomics
		F1240105 Gene Expression Analyses
		F1240106 Gene Regulatory Network
		F1240107 Genome Annotation, Assembly and Mapping
		F1240108 Genome Platform and Tools
		F1240109 Genome Profiling
		F1240110 Genomics-Based Diagnostic
		F1240111 Metagenomics
		F1240112 Pharmacogenomics
		F1240113 Psychogenomics
		F1240114 RNomics
		F1240115 Structural Genomics
		F1240116 Systematics
		F1240117 Toxicogenomics
		F1240118 Translational Genomics
		F1240199 Other Computational Molecular Biology n.e.c.
	F1240200	Structural Bioinformatics
		F1240201 Absorption, Distribution, Metabolism, Elimination/Excretion and Toxicity (ADMET) Modelling
		F1240202 Binding Pocket Modelling
		F1240203 Biomolecular Interactions
		F1240204 Biomolecular Structure and Function
		F1240205 Biomolecular Topology
		F1240206 Computer-based Lead Compound Discovery
		F1240207 Molecular Docking
		F1240208 Molecular Dynamics Simulation
		F1240209 Molecular Virtual Screening
		F1240210 Protein Interaction Network
		F1240211 Protein Mobility Analysis
		F1240212 Structural Proteomics
		F1240213 Synthetic Molecular Structure
		F1240214 Virtual Structural Library Design and Management
		F1240299 Other Structural Bioinformatics n.e.c.

CATEGORY	GROUP	AREA
F1240000		BIOINFORMATICS
	F1240300	Systems Biology
	F1240301	Animal Systems Biology
	F1240302	Cell Modelling
	F1240303	Cellular Metabolomics
	F1240304	Ecological Systems Biology
	F1240305	Host-Pathogen Interaction
	F1240306	Microbial Systems Biology
	F1240307	Network Modelling
	F1240308	Pathway Modelling
	F1240309	Plant Systems Biology
	F1240310	Systems Immunobiology
	F1240311	Systems Neuroscience
	F1240399	Other Systems Biology n.e.c.
	F1240400	Bioinformatics Tools, Platforms and Technologies
	F1240401	Artificial Intelligence and Intelligent Systems for Life Sciences
	F1240402	Bio-Embedded Systems
	F1240403	Biogrid and Biocluster
	F1240404	Bioimaging Processing
	F1240405	Bio-Knowledge Management
	F1240406	Biomodeling and Simulation
	F1240407	Bioontologies and Semantics
	F1240408	Biosensing
	F1240409	Biosignal Processing and Analysis
	F1240410	Bio-Virtualisation
	F1240411	Data Acquisition, Management and Processing for Life Sciences
	F1240412	Data and Network Security
	F1240413	Data Integration for Life Sciences
	F1240414	Data Mining for Life Sciences
	F1240415	Data Standards for Life Sciences
	F1240416	Database
	F1240417	Decision Support Systems
	F1240418	Diagnostic Tools for Life Sciences (Including AURA, EEG, GATE and IRIS)
	F1240419	Digital Atlases of Organisms
	F1240420	Laboratory Information Management Systems
	F1240499	Other Bioinformatics Tools, Platforms and Technologies n.e.c.

CATEGORY	GROUP	AREA
F1240000		BIOINFORMATICS
	F1240500	Specialised Bioinformatics
		F1240501 Agriculture Informatics
		F1240502 Biodiversity Informatics
		F1240503 Bioethics and Intellectual Property
		F1240504 Biomedical Informatics
		F1240505 Cancer Bioinformatics
		F1240506 Drug Discovery Informatics
		F1240507 Ecological Informatics
		F1240508 Evolutionary Informatics
		F1240509 Forensic Bioinformatics
		F1240510 Forest Bioinformatics
		F1240511 Health Informatics
		F1240512 Immunoinformatics
		F1240513 Microarray Bioinformatics
		F1240514 Microbial Informatics
		F1240515 Neuroinformatics
		F1240516 Pathology Informatics
		F1240599 Other Specialised Bioinformatics n.e.c.
	F1240600	Computational Biosciences
		F1240601 Computational-Aided Drug Design
		F1240602 Computational Biochemistry
		F1240603 Computational Biomathematics
		F1240604 Computational Biophysics
		F1240605 Computational Bioprocess
		F1240606 Computational Biostatistics
		F1240699 Other Computational Biosciences n.e.c.
	F1249900	Other Bioinformatics n.e.c.
F1250000		NUCLEAR SCIENCES
	F1250100	Nuclear Fundamental
		F1250101 Nuclear Data Study
		F1250102 Nuclear Fission and Fusion Physics
		F1250103 Nuclear Reaction and Scattering
		F1250104 Nuclear Structure
		F1250105 Radiation Detection and Measurement
		F1250106 Radiation Effect
		F1250107 Radiation Source
		F1250108 Radioactivity and Electromagnetic Emission
		F1250109 System of Dose Limitation
		F1250199 Other Nuclear Fundamental n.e.c.

CATEGORY	GROUP	AREA
F1250000		NUCLEAR SCIENCES
	F1250200	Nuclear Technology
		F1250201 Accelerator Technology
		F1250202 Industrial Radiography
		F1250203 Ion and Electron Beam Technology
		F1250204 Ionising Radiation Technology
		F1250205 Isotope/Isotopic Tracer Technology
		F1250206 Neutron Beam Technology
		F1250207 Neutron Science and Technology
		F1250208 Non Destructive Testing
		F1250209 Non-Ionising Radiation Technology
		F1250210 Radiation Safety and Security
		F1250211 Radiation Sterilisation
		F1250212 Radiation Technology
		F1250213 Radiography
		F1250214 Reactor Technology
		F1250215 Technologically Enhanced Naturally Occurring Radioactive Material (TENORM)
		F1250299 Other Nuclear Technology n.e.c.
	F1250300	Nuclear Engineering
		F1250301 Fuel and Structural Reactor Materials
		F1250302 Irradiation Effect
		F1250303 Isotope Production
		F1250304 Nuclear Safety, Security and Safeguard
		F1250305 Quality Assurance and Control
		F1250306 Radiation Detection Device
		F1250307 Radiation Processing
		F1250308 Radiation Shielding
		F1250309 Radiation Sterilisation
		F1250310 Safety Assurance
		F1250311 Thermal Hydraulic
		F1250399 Other Nuclear Engineering n.e.c.
	F1250400	Nuclear and Radiation Safety
		F1250401 Decommissioning of Nuclear and Radiation Facility
		F1250402 Spent Fuel Management
		F1250403 Transport of Radioactive and Nuclear Materials
		F1250404 Waste Management
		F1250499 Other Nuclear and Radiation Safety n.e.c.

CATEGORY	GROUP	AREA
F1250000		NUCLEAR SCIENCES
	F1250500	Nuclear Security
		F1250501 Border Security
		F1250502 Design Basis Threat
		F1250503 Illicit Trafficking
		F1250504 Physical Protection
		F1250599 Other Nuclear Security n.e.c.
	F1250600	Nuclear Safeguard
		F1250601 Containment and Surveillance
		F1250602 Nuclear Material Accounting
		F1250603 Nuclear Trade
		F1250604 Physical Inventory Verification
		F1250699 Other Nuclear Safeguard n.e.c.
	F1250700	Radiation Protection
		F1250701 Dosimetry
		F1250702 Internal and External Dose Exposure
		F1250703 Occupational Exposure and Hazard
		F1250704 Public Exposure
		F1250799 Other Radiation Protection n.e.c.
	F1250800	Nuclear Law
		F1250801 Authorisation Process
		F1250802 Enforcement Process
		F1250803 Nuclear Legislation
		F1250804 Public Acceptance
		F1250805 Regulatory Development Process
		F1250899 Other Nuclear Law n.e.c.
	F1250900	International Treaty and Obligation
		F1250901 Non-Proliferation of Nuclear Weapon
		F1250902 Nuclear Liability
		F1250903 Nuclear Safety
		F1250904 Nuclear Terrorism
		F1250905 Nuclear Waste
		F1250906 Physical Protection of Nuclear Material
		F1250999 Other International Treaty and Obligation n.e.c.

CATEGORY	GROUP	AREA
F1250000		NUCLEAR SCIENCES
	F1251000	Nuclear and Radiological Emergency
		F1251001 Decontamination
		F1251002 Radiological and Emergency Response
		F1251099 Other Nuclear and Radiological Emergency n.e.c.
	F1251100	Nuclear Analytical Methodology
		F1251101 Chromosome Aberration
		F1251102 Radioimmunoassay
		F1251103 Radiotracer
		F1251104 Radon and Thoron
		F1251199 Other Nuclear Analytical Methodology n.e.c.
	F1251200	Advancement of Nuclear Sciences Knowledge
		F1251201 Cyclotron
		F1251202 Environmental Impact Assessment
		F1251203 Forensic
		F1251204 Gamma Source
		F1251205 Neutron Source
		F1251206 Radiation Lithography
		F1251207 Radiological Impact Assessment
		F1251208 Synchrotron
		F1251299 Other Advancement of Nuclear Sciences Knowledge n.e.c.
	F1259900	Other Nuclear Sciences n.e.c.
F1260000		EARTH SCIENCES
	F1260100	Geology
		F1260101 Economic Geology (<i>Including Ore Deposit Petrology</i>)
		F1260102 Engineering Geology (<i>Including Geohazard</i>)
		F1260103 Environmental Geology (<i>Including Conservation Geology/Geotourism</i>)
		F1260104 Geochronology (<i>Including Radiometrics, Carbon Dating</i>)
		F1260105 Geomorphology
		F1260106 Geotectonics
		F1260107 Glaciology

CATEGORY	GROUP	AREA
F1260000		EARTH SCIENCES
	F1260108	Historical Geology (<i>Including Quaternary Geology</i>)
	F1260109	Marine Geoscience
	F1260110	Mineralogy (<i>Including Crystallography and Gemology</i>)
	F1260111	Palaeontology (<i>Including Pollen Dating</i>)
	F1260112	Petroleum Geology (<i>Including Coal Geology</i>)
	F1260113	Petrology (<i>Including Igneous and Metamorphic Petrology, Sedimentary Petrology</i>)
	F1260114	Sedimentology
	F1260115	Speleology
	F1260116	Stratigraphy
	F1260117	Structural Geology
	F1260118	Volcanology
	F1260199	Other Geology n.e.c.
F1260200		Geophysics
	F1260201	Geodynamics
	F1260202	Geomagnetism
	F1260203	Geomagnetism and Paleomagnetism
	F1260204	Geomechanics (<i>Including Rock Mechanics, Soil Mechanics</i>)
	F1260205	Geothermics
	F1260206	Gravity (<i>Including Gravimetrics</i>)
	F1260207	Petrophysics
	F1260208	Radiometric
	F1260209	Seismology (<i>Including Earthquake and Tsunami, Seismic Exploration</i>)
	F1260299	Other Geophysics n.e.c.
F1260300		Geochemistry
	F1260301	Biogeochemistry
	F1260302	Exploration Geochemistry
	F1260303	Inorganic Geochemistry
	F1260304	Isotope Geochemistry
	F1260305	Microbial Geochemistry
	F1260306	Organic Geochemistry
	F1260399	Other Geochemistry n.e.c.

CATEGORY	GROUP	AREA
F1260000		EARTH SCIENCES
	F1260400	Hydrology
	F1260401	Ecohydrology
	F1260402	Ground Water Hydrology
	F1260403	Hydraulic System
	F1260404	Hydrometeorology
	F1260405	Rural Hydrology
	F1260406	Surface Water Hydrology
	F1260407	Urban Hydrology
	F1260499	Other Hydrology n.e.c.
	F1260500	Atmospheric Sciences
	F1260501	Climatology
	F1260502	El Nino Southern Oscillation (ENSO)
	F1260503	Ionosphere Physics
	F1260504	Magnetosphere Physics
	F1260505	Meteorology
	F1260506	Monsoon System
	F1260507	Palaeoclimatology
	F1260508	Solar-Terrestrial Interaction
	F1260509	Space Weather
	F1260599	Other Atmospheric Sciences n.e.c.
	F1260600	Ionosphere and Upper Atmosphere
	F1260601	Dynamics
	F1260602	Effects on Electromagnetic Waves
	F1260603	Electron Content and Scintillation
	F1260604	Geomagnetic Field
	F1260605	Ionospheric Sounding
	F1260606	Irregularities
	F1260607	Morphology
	F1260608	Profile
	F1260609	Seismo-Ionospheric Coupling
	F1260699	Other Ionosphere and Upper Atmosphere n.e.c.
	F1260700	Advancement of Earth Sciences Knowledge
	F1269900	Other Earth Sciences n.e.c.

CATEGORY	GROUP	AREA
F1270000		ENVIRONMENTAL SCIENCES
	F1270100	Environmental Issues and Assessment
		F1270101 Acid Rain F1270102 Agro Waste F1270103 Air Pollution F1270104 Aquatic Environment F1270105 Atmospheric Chemistry F1270106 Climate Change F1270107 Coastal Erosion F1270108 Environmental Impact Assessment (EIA) F1270109 Environmental Protection F1270110 Environmental Racism F1270111 Environmentalism F1270112 Global Warming/Climate Change F1270113 Groundwater Contamination F1270114 Heavy Metal Waste F1270115 Isotope Hydrology F1270116 Land Reclamation F1270117 Natural Ecosystem F1270118 Noise Pollution F1270119 Nutrient Removal Process F1270120 Ozone Depletion F1270121 Radioactive Waste F1270122 Remote Sensing F1270123 Renewable Energy F1270124 Sea Water/Salt Water Intrusion F1270125 Sediment Transport and Silting F1270126 Toxic and Hazardous Waste F1270127 Waste Water F1270128 Water Pollution F1270129 Water Quality Simulation Modelling F1270130 Water Resources Study F1270199 Other Environmental Issues and Assessment n.e.c.
	F1270200	Environment Technology/Industry
		F1270201 Biodegradable Packaging F1270202 Carbon Sequestration (Carbon Conversion) F1270203 Cloud Seeding Technology F1270204 Composting F1270205 Environmentally-Friendly Products and Technologies F1270206 Erosion Control F1270207 Gaseous Treatment

CATEGORY	GROUP	AREA
F1270000		ENVIRONMENTAL SCIENCES
		<p>F1270208 Geographical Information System (GIS)</p> <p>F1270209 Incineration</p> <p>F1270210 Integrated System and Building</p> <p>F1270211 Landscape Technology</p> <p>F1270212 Organic Waste Treatment</p> <p>F1270213 Pollution Control Product</p> <p>F1270214 Pollution Prevention and Control (<i>Including Agricultural Chemicals, Basic Metal Products, Ceramic, Glass and Industrial Mineral Products, Communication Equipment, Computer Hardware and Electronic Equipment, Fabricated Metal Products, Fibre, Processing and Textiles; Footwear and Leather Products, Human Pharmaceutical Products, Incineration, Industrial Chemicals and Related Products, Instrumentation, Machinery and Equipment, Processed Food Products and Beverages, Quarry and Mining, Transport Equipment, Wood, Wood Products and Paper, Bio-Based Chemicals and Related Products, Building Materials and Bio-Based Pollution Control</i>)</p> <p>F1270215 Pollution Sensing Device</p> <p>F1270216 Pyrolysis</p> <p>F1270217 Reduction of Bad-Odour</p> <p>F1270218 Reduction of Noise and Vibration</p> <p>F1270219 Steep Slopes and Hill Development Technology</p> <p>F1270220 Tropicalisation of Product and Process</p> <p>F1270221 Water and Wastewater Treatment Technology</p> <p>F1270222 Zero-Discharge Technology</p> <p>F1270299 Other Environment Technology/ Industry n.e.c.</p>
	F1270300	Environment Management and Bioremediation
		<p>F1270301 Catchment Management (<i>Including Water Catchments in The Forest</i>)</p> <p>F1270302 Coastal Management</p> <p>F1270303 Disaster Management</p> <p>F1270304 Drinking Water Quality Standards</p> <p>F1270305 Drought Management</p> <p>F1270306 Environmental Risk Assessment and Bionomics</p> <p>F1270307 Environmental Standards</p>

CATEGORY	GROUP	AREA
F1270000		ENVIRONMENTAL SCIENCES
	F1270308	Ex-Mining Land Management
	F1270309	Flood Mitigation Management
	F1270310	Hazardous Waste Management
	F1270311	Industrial Water Management
	F1270312	Integrated Water Resource Management
	F1270313	Natural Resource Management
	F1270314	Park Management
	F1270315	Pest Management
	F1270316	River Basin Management
	F1270317	Soil Bioremediation
	F1270318	Solid Waste Management
	F1270319	Storm Water Management
	F1270320	Waste Bioremediation
	F1270321	Waste Management
	F1270322	Water Body Management
	F1270323	Water Resources Management
	F1270324	Wildlife and Habitat Management
	F1270399	Other Environmental Management and Bioremediation n.e.c.
	F1270400	Advancement of Environmental Sciences Knowledge
	F1279900	Other Environment Sciences n.e.c.

CATEGORY	GROUP	AREA
F1280000		MATERIAL SCIENCES
	F1280100	Electronic Materials
	F1280101	Electroactive Polymers
	F1280102	Electrochemical Materials
	F1280103	Electronic Packaging Materials
	F1280104	Magnetic Materials
	F1280105	Molecular Electronics
	F1280106	Optoelectronic Materials
	F1280107	Semiconductor Materials
	F1280108	Superconductor Materials
	F1280109	Thin-Film Dielectrics
	F1280199	Other Electronic Materials n.e.c.
	F1280200	Functional Materials
	F1280201	Adhesives
	F1280202	Biocompatible Materials
	F1280203	Catalyst
	F1280204	Coating
	F1280205	Display Materials
	F1280206	Ear Mould Materials
	F1280207	Electrochromic Materials
	F1280208	Hard and Brittle Materials
	F1280209	Magnetic Materials
	F1280210	Optical Materials
	F1280211	Soft and Brittle Materials
	F1280299	Other Functional Materials n.e.c.
	F1280300	Polymeric Materials
	F1280301	Adhesive, Coating and Ink
	F1280302	Biopolymers
	F1280303	Conducting Polymers
	F1280304	Elastomers
	F1280305	Inorganic Polymers
	F1280306	Membranes
	F1280307	Polymer Composites
	F1280308	Polymer Electrolytes
	F1280309	Thermoplastics
	F1280399	Other Polymeric Materials n.e.c.
	F1280400	Advanced Materials
	F1280401	Biocompatible Materials/Biomaterials
	F1280402	Ceramics
	F1280403	Composite Materials

CATEGORY	GROUP	AREA
F1280000		MATERIAL SCIENCES
	F1280404	Electro-Active Ceramics
	F1280405	Epitaxy
	F1280406	Metals and Metal Alloy Materials
	F1280407	Nano Materials
	F1280408	Photonics Materials
	F1280409	Polymer Compounds
	F1280410	Textile Compounds
	F1280499	Other Advanced Materials n.e.c.
	F1289900	Other Material Science n.e.c.
F1290000		MARINE SCIENCES
	F1290100	Marine Biology
	F1290101	Breeding of Marine Organisms
	F1290102	Culture of Marine Organisms
	F1290103	Marine Benthic Biology
	F1290104	Marine Ecophysiology
	F1290105	Marine Ichthyology
	F1290106	Marine Mammalogy
	F1290107	Marine Microbiology
	F1290108	Marine Mycology
	F1290109	Marine Parasitology
	F1290110	Marine Phycology
	F1290111	Marine Planktonology
	F1290112	Marine Products (<i>Including Sea Cucumber and Algae/Seaweed</i>)
	F1290113	Marine Productivity
	F1290199	Other Marine Biology n.e.c.
	F1290200	Marine Agriculture
	F1290201	Mariculture
	F1290202	Marine Ornamental Fishes
	F1290203	Seagrass Culture
	F1290204	Seaweed Culture
	F1290299	Other Marine Agriculture n.e.c.
	F1290300	Marine Technology
	F1290301	Acoustic and Instrumentation
	F1290302	Artificial Reefs and Fish Aggregating Devices
	F1290303	Biofouling/Structural Deterioration
	F1290304	Fishing Gear Technology

CATEGORY	GROUP	AREA
F1290000		MARINE SCIENCES
	F1290305	Marine Biofilters
	F1290306	Remote Sensing and GIS
	F1290399	Other Marine Technology n.e.c.
F1290400		Marine Biochemistry
	F1290401	Marine Bioproducts Synthesis
	F1290402	Marine Natural Products
	F1290499	Other Marine Biochemistry n.e.c.
F1290500		Marine Ecology
	F1290501	Benthic Ecology
	F1290502	Coral Reef Ecology
	F1290503	Ecotourism
	F1290504	Estuarine Ecology
	F1290505	Lagoon Ecology
	F1290506	Mangrove Ecology
	F1290507	Marine Conservation
	F1290508	Microbial Ecology
	F1290509	Population and Community Ecology
	F1290510	Seagrass and Seaweed Ecology
	F1290511	Tidal Flats Ecology
	F1290599	Other Marine Ecology n.e.c.
F1290600		Marine Toxicology
	F1290601	Control of Pests, Diseases and Exotic Species in Marine Environment
	F1290602	Endocrine Disruptors
	F1290603	Harmful Algal Blooms (HABs) and Toxins
	F1290604	Indicators and Biomonitoring
	F1290605	Marine Poisonous Organisms
	F1290606	Natural Hazards in Marine Environment
	F1290699	Other Marine Toxicology n.e.c.
F1290700		Oceanography
	F1290701	Biological Oceanography
	F1290702	Chemical Oceanography
	F1290703	Coastal Oceanography and Processes
	F1290704	Fisheries Oceanography
	F1290705	Geological Oceanography
	F1290706	Hydrodynamic and Sedimentation Modelling

CATEGORY	GROUP	AREA
F1290000		MARINE SCIENCES
	F1290707	Hydrography Survey
	F1290708	Land-Sea Interactions and Processes
	F1290709	Marine Pollution
	F1290710	Meteorological Oceanography
	F1290711	Oceanography Instrumentation
	F1290712	Optical Oceanography
	F1290713	Physical Oceanography
	F1290714	Satellite Oceanography
	F1290715	Stock Assessment Survey
	F1290799	Other Oceanography n.e.c.
	F1290800	Marine Chemistry
	F1290801	Carbon Sequestration
	F1290802	Ecotoxicology
	F1290803	Establishment of Marine Standard Reference Materials
	F1290804	Eutrophication
	F1290805	Heavy Metals
	F1290806	Petrochemical and Hydrocarbon
	F1290807	Radioactive Contaminants
	F1290808	Seawater and Sediment Chemistry
	F1290899	Other Marine Chemistry n.e.c.
	F1290900	Marine Geology
	F1290901	Geochemistry
	F1290902	Mapping and GIS
	F1290903	Marine Oceanic Processes
	F1290904	Mineralogy
	F1290905	Palaeontology
	F1290906	Sediment Dating
	F1290907	Sediment Transport
	F1290908	Seismology
	F1290909	Tracer Application
	F1290999	Other Marine Geology n.e.c.
	F1291000	Marine Economics
	F1291001	Cost-Benefits Evaluation
	F1291002	Ecological Valuation
	F1291003	Fisheries Economics
	F1291099	Other Marine Economics n.e.c.

CATEGORY	GROUP	AREA
F1290000		MARINE SCIENCES
	F1291100	Marine Archeology
		F1291101 Artefacts Dating
		F1291102 Artefacts Preservation
		F1291103 Exploration Technology
		F1291199 Other Marine Archeology n.e.c.
	F1291200	Coastal Zone Management
		F1291201 Coastal Habitats Management
		F1291202 Ecosystem Based Management
		F1291203 Environmental Impact Assessment (EIA)
		F1291204 Integrated Coastal Zone Management
		F1291205 Pollution Management
		F1291206 Protected Conservation Areas in Marine Environments
		F1291207 Risk Analysis
		F1291208 Socio-Economics of Coastal Communities
		F1291209 Sustainable Utilisation of Marine Resources
		F1291299 Other Coastal Zone Management n.e.c.
	F1291300	Marine Laws and Policies
		F1291301 Code of Conduct for Responsible Fisheries and Aquaculture Practices
		F1291302 Exclusive Economic Zone (EEZ)
		F1291303 Law of the High Seas
		F1291304 Marine Regulation on Alien Species
		F1291305 Marine Territory Disputes and Settlement
		F1291306 Marine Water Quality Standards and Criteria
		F1291307 National Biodiversity Policy
		F1291308 Policies on Transboundary Pollution and Shared Stocks
		F1291399 Other Marine Laws and Policies n.e.c.
	F1291400	Advancement of Marine Sciences Knowledge
		F1291401 Essential Fish Habitats
		F1291402 Larval Biology
		F1291403 Marine Archaeology
		F1291404 Marine Biodiversity, Conservation and Management
		F1291405 Marine Biotechnology
		F1291406 Marine Pollution

CATEGORY	GROUP	AREA
F1290000		MARINE SCIENCES
	F1291407	Marine Radioactivity
	F1291408	Physical Oceanography
	F1291409	Sea Level Changes
	F1291410	Seabed Properties and Stability
	F1291411	Tsunami
	F1291499	Other Advancement of Marine Sciences Knowledge n.e.c.
F1291500		Estuaries and Coasts
	F1291501	Coastal Erosion
	F1291502	Hydrodynamics and Mixing Processes
	F1291503	Mangrove Habitats
	F1291504	Morphology Charges
	F1291505	Mud Flat and Cohesive Sediment
	F1291506	Pollution Transport and Modeling
	F1291507	Sediment Transport
	F1291599	Other Estuaries and Coasts n.e.c.
F1291600		Marine Atmosphere
	F1291601	Aerosol
	F1291602	Cosmogenic Isotopes
	F1291603	Radiation
	F1291604	Sterol
	F1291699	Other Marine Atmosphere n.e.c.
F1291700		Maritime Management
	F1291701	Fishing Port Management
	F1291702	Harbour Management
	F1291703	Shipping Management
	F1291799	Other Maritime Management n.e.c.
F1291800		Marine Social, Education and Awareness
	F1291801	Education and Awareness of Coastal Communities
	F1291802	Immigrants and Coastal Communities
	F1291803	Marine Ecotourism
	F1291804	Marine Indigenous Culture
	F1291899	Other Marine Social, Education and Awareness n.e.c.

CATEGORY	GROUP	AREA
F1290000		MARINE SCIENCES
	F1291900	Marine Navigation and Nautical Science
	F1291901	Marine Astronomy
	F1291902	Marine Crew Training
	F1291903	Marine Navigational Expertise
	F1291999	Other Marine Navigation and Nautical Science n.e.c.
	F1292000	Marine Underwater Technology
	F1292001	Autonomous Underwater Vehicle
	F1292002	Marine Robotics
	F1292003	SCUBA Diving Technology
	F1292004	Underwater Sensor Technology
	F1292099	Other Marine Underwater Technology n.e.c.
	F1292100	Marine Alien Species
	F1292101	Ballast Water
	F1292102	Marine Invasive Alien Species
	F1292199	Other Marine Alien Species n.e.c.
	F1299900	Other Marine Sciences n.e.c.



Division 2

Biotechnology

CATEGORY	GROUP	AREA
F2100000		BIOTECHNOLOGY
	F2100100	Molecular Biology
	F2100101	Gene Isolation
	F2100102	Gene Probes
	F2100103	Gene Transformation
	F2100104	Genomic
	F2100105	Microarray
	F2100106	Molecular and Structural Biology
	F2100107	Oligoarray
	F2100108	Proteomics
	F2100109	Transgenic Studies
	F2100199	Other Molecular Biology n.e.c.
	F2100200	Plant Biotechnology
	F2100201	Anther Culture
	F2100202	Artificial Seeds
	F2100203	Cryopreservation
	F2100204	Micropropagation
	F2100205	Molecular Marker
	F2100206	Post Harvest Technology
	F2100207	Protoplast Technology
	F2100208	Tissue Culture
	F2100209	Transgenic Plant (<i>Including Transgenic Crops from the Aspects of Pest and Disease Resistance, Increase Shelf Life, Colour and Nutritional Enhancement, Drought, Salinity and Flooding Resistance</i>)
	F2100299	Other Plant Biotechnology n.e.c.
	F2100300	Animal Biotechnology
	F2100301	Animal Cloning
	F2100302	Animal Diseases Diagnostic
	F2100303	Biofeed
	F2100304	Cell Line Culture
	F2100305	Cryopreservation
	F2100306	Feed and Nutrition
	F2100307	Reproduction
	F2100308	Transgenic Animal
	F2100309	Vaccine
	F2100399	Other Animal Biotechnology n.e.c.

CATEGORY	GROUP	AREA
F2100000		BIOTECHNOLOGY
	F2100400	Industrial and Environmental Biotechnology
	F2100401	Biocatalyst
	F2100402	Biocontrol Agent
	F2100403	Bioconversion
	F2100404	Biofeedstocks
	F2100405	Biofertilizer
	F2100406	Biofuel
	F2100407	Bioplastic
	F2100408	Bioprocess Design
	F2100409	Bioremediation
	F2100410	Biosensor
	F2100411	Bioseparation
	F2100412	Biosurfactant
	F2100413	Cell Culture Technology
	F2100414	Composting
	F2100415	Design Technology
	F2100416	Downstream Processing
	F2100417	Enzyme Technology
	F2100418	Fermentation Technology
	F2100419	Immobilised Technology
	F2100420	Product Recovery
	F2100421	Solid Substrate Technology
	F2100422	Submerged Fermentation
	F2100499	Other Industrial and Environmental Biotechnology n.e.c.
	F2100500	Medical Biotechnology
	F2100501	Biomaterial
	F2100502	Diagnostics
	F2100503	Gene Therapy
	F2100504	Graft Engineering
	F2100505	Human/Population Genetics
	F2100506	Nano Drug
	F2100507	Regenerative Technology
	F2100508	Stem Cell Technology
	F2100509	Vaccines
	F2100599	Other Medical Biotechnology n.e.c.

CATEGORY	GROUP	AREA
F2100000		BIOTECHNOLOGY
	F2100600	Forensic Biotechnology
		F2100601 Databasing
		F2100602 DNA Archiving
		F2100603 DNA Damage
		F2100604 DNA Probe Technology
		F2100605 Forensic Genetics
		F2100606 Forensic Statistics
		F2100607 Human Identification Systems
		F2100608 Marine Forensic
		F2100609 Plant Forensic
		F2100610 Population Genetics
		F2100611 Trace and Contact DNA
		F2100612 Wildlife Forensic
		F2100699 Other Forensic Biotechnology n.e.c.
	F2100700	Food Biotechnology
		F2100701 Algal Products
		F2100702 Bioconversion
		F2100703 Bioprocessing
		F2100704 Bioreactor
		F2100705 Biosensor
		F2100706 Cell Culture Technology
		F2100707 Enzyme Technology
		F2100708 Functional Food
		F2100709 Immobilised Technology
		F2100710 Microbial Technology
		F2100711 Mushroom Products
		F2100712 Nutraceuticals
		F2100713 Post Harvest Technology
		F2100714 Product Recovery
		F2100715 Solid Substrate Fermentation
		F2100716 Submerged Fermentation
		F2100799 Other Food Biotechnology n.e.c.
	F2100800	Biopharmacy Biotechnology
		F2100801 Biopharmaceuticals
		F2100802 Biopharming
		F2100803 Drug Discovery
		F2100804 Transgenic Drugs
		F2100899 Other Biopharmacy Biotechnology n.e.c.

CATEGORY	GROUP	AREA
F2100000		BIOTECHNOLOGY
	F2100900	Marine Biotechnology
	F2100901	Algae
	F2100902	Biopharmaceuticals
	F2100903	Cryopreservation
	F2100904	Genetic Manipulation
	F2100905	Marine Bioprospecting
	F2100906	Marine Food Biosafety
	F2100907	Marine Genomic
	F2100908	Marine Microbial Genetics
	F2100909	Marine Pharmaceutical Products
	F2100910	Marine Products
	F2100911	Molecular Systematics
	F2100999	Other Marine Biotechnology n.e.c.
	F2101000	Biosafety, Biosecurity and Bioethics
	F2101001	Eugenics
	F2101002	Job Safety Analysis
	F2101003	Public Awareness
	F2101004	Risk Assessment
	F2101005	Risk Management
	F2101099	Other Biosafety, Biosecurity and Bioethics n.e.c.
	F2101100	Biosurveillance
	F2101101	Animal Surveillance
	F2101102	Biosurveillance Technology
	F2101103	Food Safety Surveillance
	F2101104	Mortality Surveillance
	F2101105	Open Source Monitoring
	F2101106	Pathogen Detection Surveillance
	F2101107	Policy and Regulation
	F2101108	Radiation Surveillance
	F2101109	Syndromic Surveillance
	F2101199	Other Biosurveillance n.e.c.
	F2109900	Other Biotechnology n.e.c.

A black and white photograph of the Petronas Towers in Kuala Lumpur, Malaysia. The image is a low-angle shot looking up at the towers, emphasizing their height and the repetitive architectural details of the facade. The towers are connected by a skybridge. The image is split horizontally by a blue and black banner containing text.

Division 3

Engineering And Technology

CATEGORY	GROUP	AREA
F3010000		ENGINEERING AND TECHNOLOGY
	F3010100	Mechanical Engineering
	F3010101	Air-Conditioning and Refrigeration
	F3010102	Combustion and Fuels
	F3010103	Hydraulic and Pneumatics
	F3010104	Industrial Tribology
	F3010105	Internal Combustion Engines
	F3010106	Machine Design
	F3010107	Mechanical Control
	F3010108	Stress Analysis
	F3010109	Wear and Tear
	F3010199	Other Mechanical Engineering n.e.c.
	F3010200	Chemical Engineering
	F3010201	Biochemical Process
	F3010202	Catalyst and Reactions
	F3010203	Chemical Processes
	F3010204	Chemical/ Physical Modification
	F3010205	Heat/ Mass Transfer Operations
	F3010206	Industrial Chemical Production
	F3010207	Plant Design and Testing
	F3010208	Polymerisation Process
	F3010209	Process Control
	F3010210	Raw Materials Processing
	F3010211	Separation Process
	F3010299	Other Chemical Engineering n.e.c.
	F3010300	Mining and Mineral Processing Engineering
	F3010301	Extractive Metallurgy
	F1070302	Mineral Evaluation/Appraisal
	F1070303	Mineral Processing
	F1070304	Mining Process
	F1070305	Precious Metals Recovery
	F1070399	Other Mining and Mineral Processing Engineering n.e.c.
	F3010400	Civil Engineering
	F3010401	Coastal and Offshore
	F3010402	Construction Techniques
	F3010403	Foundation

CATEGORY	GROUP	AREA
F3010000		ENGINEERING AND TECHNOLOGY
	F3010404	Geology and Rock
	F3010405	Geotechniques
	F3010406	Highway
	F3010407	Hydrology and Hydraulic Engineering
	F3010408	Infrastructural Engineering (<i>Including Equipment and Infrastructure for Defence System such as Materials and Advanced Materials, Bridge System, Industrialised Construction System Connection System, Bunkers and Underground Structures, Blast Resistance Buildings, Under Water Structures and Coastal Protection Structures</i>)
	F3010409	River Engineering/Integrated River Basin Management
	F3010410	Structures
	F3010411	Traffic
	F3010412	Traffic Planning and Management
	F3010413	Transportation
	F3010414	Water Resources Management/ Integrated Water Resources Management
	F3010499	Other Civil Engineering n.e.c.
	F3010500	Electrical and Electronic Engineering
	F3010501	Autonomous System
	F3010502	Control and System
	F3010503	Device Fabrication and Process
	F3010504	Device Physics
	F3010505	Digital and Analogue Electronics
	F3010506	Discrete Device
	F3010507	Embedded System
	F3010508	High Voltage
	F3010509	IC Design
	F3010510	Image Processing
	F3010511	Instrumentation
	F3010512	Lab-On-Chip (LOC)
	F3010513	Machines and Drives
	F3010514	Microelectronics
	F3010515	Power Electronics
	F3010516	Power System
	F3010517	Radio Frequency (RF) and Microwaves
	F3010518	Robotics and Mechatronics
	F3010519	Security System
	F3010520	Sensors

CATEGORY	GROUP	AREA
F3010000		ENGINEERING AND TECHNOLOGY
	F3010521	Signal Processing
	F3010522	System-On-Chip (SOC)
	F3010599	Other Electrical and Electronic Engineering n.e.c.
F3010600		Agricultural Engineering
	F3010601	Agro-Waste Management
	F3010602	By-Product Utilisation
	F3010603	Farm Estate Planning
	F3010604	Farm Machinery
	F3010605	Mechanisation System
	F3010606	Non-Destructive Testing (NDT)
	F3010607	Post Harvest Handling
	F3010608	Precision Farming
	F3010609	Storage and Transportation
	F3010699	Other Agricultural Engineering n.e.c.
F3010700		Food Engineering
	F3010701	Engineering Properties of Food and Biological Materials
	F3010702	Extraction System
	F3010703	Food Dehydration
	F3010704	Food Engineering Unit Operations
	F3010705	Food Extrusion
	F3010706	Food Mechanisation
	F3010707	Food Preservation
	F3010708	Food Process Control and Automation
	F3010709	Food Processing Plant and Machinery Design <i>(Including Manufacturing of Machinery and Equipment for Food Processing)</i>
	F3010710	Food Transfer Process
	F3010711	Genetically Modified Food
	F3010712	Packaging and Handling Technology
	F3010713	Radiation Processing
	F3010714	Storage and Secondary Processing
	F3010715	Thermal Processing
	F3010716	Waste Handling and Processing
	F3010799	Other Food Engineering n.e.c.

CATEGORY	GROUP	AREA
F3010000		ENGINEERING AND TECHNOLOGY
	F3010800	Environmental Engineering
		F3010801 Factory Environment
		F3010802 Green Manufacturing (<i>Including Water Footprint, Carbon Footprint</i>)
		F3010803 Indoor Air Quality
		F3010804 Life Cycle Analysis
		F3010805 River Rehabilitation
		F3010806 Sustainable Sanitation
		F3010807 Water Sanitary
		F3010808 Zero Emissions
		F3010899 Other Environmental Engineering n.e.c.
	F3010900	Marine Engineering
		F3010901 Coastal and Offshore
		F3010902 Hydroinformatics
		F3010903 Marine Transport
		F3010904 Naval Architecture
		F3010905 Oceanography
		F3010906 Ports and Harbour
		F3010907 Ship and Platform Hydrodynamics
		F3010908 Ship and Platform Structure
		F3010909 Submersible Vehicle
		F3010999 Other Marine Engineering n.e.c.
	F3011000	Industrial and Manufacturing Engineering
		F3011001 CAD/CAM/CAE Applications
		F3011002 Casting
		F3011003 Cutting Tool Technology
		F3011004 Design for Manufacturing and Assembly
		F3011005 Ergonomic
		F3011006 Fabrication Technology (<i>Including Manufacturing of High Speed/ Precision Equipment Fabrication Machinery and Equipment and Standard Supporting Technologies of Fabrication for Metal and Plastic</i>)
		F3011007 Forging
		F3011008 Foundry Technology
		F3011009 Gerontechnology (<i>Including R&D for Advancement of Knowledge in Gerontechnology</i>)

CATEGORY	GROUP	AREA
F3010000		ENGINEERING AND TECHNOLOGY
	F3011010	Grinding
	F3011011	Latex Products Processing Manufacturing
	F3011012	Machining/Rapid Prototyping and Tooling (Including Standard Supporting Technologies of Precision Machining and Micro Machining)
	F3011013	Milling and Process Materials
	F3011014	Mould and Die
	F3011015	OSH Requirement
	F3011016	Packaging Technology and Materials
	F3011017	Plastic Moulding Technology
	F3011018	Polishing
	F3011019	Powder Metallurgy
	F3011020	Precision Engineering
	F3011021	Production Process
	F3011022	Productivity Measurement
	F3011023	Quality Assurance
	F3011024	Reverse Engineering (Including Standard Supporting Technology)
	F3011025	Surface Engineering
	F3011026	Textile
	F3011027	Thixo-Moulding
	F3011028	Virtual Manufacturing
	F3011099	Other Industrial and Manufacturing Engineering n.e.c.
F3011100		Automotive Engineering
	F3011101	Automotive Control
	F3011102	Automotive Design
	F3011103	Automotive Prototyping
	F3011104	Auxiliary Components
	F3011105	Braking System
	F3011106	By-Wire Technology
	F3011107	Chassis Engineering
	F3011108	Collision Avoidance Technology
	F3011109	Commercial Vehicles and Trucks
	F3011110	Drivetrain Engineering
	F3011111	Electric Vehicles
	F3011112	Emission Control
	F3011113	Engine Management System
	F3011114	Fuelling/ Intake Systems
	F3011115	Hybrid Vehicles
	F3011116	Instrument Cluster Technology
	F3011117	Intelligent Vehicle

CATEGORY	GROUP	AREA
F3010000		ENGINEERING AND TECHNOLOGY
	F3011118	In-Vehicle Entertainment System
	F3011119	Lightings
	F3011120	Motorsports Engineering
	F3011121	Noise, Vibration and Harshness (NVH)
	F3011122	Off-Road Vehicles
	F3011123	Onboard Navigation
	F3011124	Performance, Evaluation and Optimisation
	F3011125	Safety Technology
	F3011126	Stability Control
	F3011127	Suspension System
	F3011128	Telematics
	F3011129	Turbo and Supercharging Technology
	F3011130	Tyre Technology
	F3011131	Valvetrain Engineering
	F3011199	Other Automotive Engineering n.e.c.
	F3011200	Geomatic Engineering
	F3011201	Cartography
	F3011202	Deformation Monitoring
	F3011203	Fast Mapping
	F3011204	Geodesy and Geodetic Controls
	F3011205	Geometry, Radiometry Calibration Analysis
	F3011206	Hydrography
	F3011207	Industrial and Automated Measurement System
	F3011208	Laser Measurement
	F3011209	Surveying
	F3011210	Navigation and Positioning System
	F3011211	Photogrammetry
	F3011212	Remote Sensing
	F3011213	Spatial Data Modelling and Databasing
	F3011214	Spatial Information Systems
	F3011215	Surveying and Mapping
	F3011299	Other Geomatic Engineering n.e.c.
	F3011300	Metallurgy
	F3011301	Heat Treatment
	F3011302	Material Recyclability
	F3011303	Metal
	F3011304	Metallurgy Process
	F3011305	Physical Metallurgy
	F3011306	Powder Metallurgy

CATEGORY	GROUP	AREA
F3010000		ENGINEERING AND TECHNOLOGY
	F3011307	Smelting
	F3011308	Specialty Alloy
	F3011309	Surface Treatment
	F3011399	Other Metallurgy n.e.c.
F3011400		Biomedical Engineering
	F3011401	Artificial Intelligent Screening
	F3011402	Artificial Organs & Prosthetics
	F3011403	Biocomputing and Biochips
	F3011404	Biological Data Mining and Visualisation
	F3011405	Biomechanics
	F3011406	Biomedical Signals
	F3011407	Biomedical Systems
	F3011408	Biometrics
	F3011409	Biophotonic Technology
	F3011410	Clinical
	F3011411	Computer Assisted Intervention Systems
	F3011412	Computer Tomography
	F3011413	Decision Support Systems
	F3011414	Diagnostic and Prognostic Systems and Tools
	F3011415	Health Monitoring
	F3011416	Implant
	F3011417	Mass Screening Systems and Tools
	F3011418	Medical Imaging
	F3011419	Physiological Process and Modelling
	F3011420	Plasma Medicine
	F3011421	Radiological Technology
	F3011422	Rehabilitation
	F3011423	Support System Technology
	F3011424	Surgical Technology
	F3011425	Telemedicine Technology
	F3011426	Therapeutic Systems
	F3011427	Tissue Engineering
	F3011428	Treatment Technology
	F3011429	Virtual Reality
	F3011430	Wearable Healthcare Systems
	F3011499	Other Biomedical Engineering n.e.c.

CATEGORY	GROUP	AREA
F3010000		ENGINEERING AND TECHNOLOGY
	F3011500	Computer Engineering
	F3011501	Antenna Design
	F3011502	Arithmetic and Logic Structures
	F3011503	Board Design
	F3011504	Control Structures and Microprogramming
	F3011505	Display Technology
	F3011506	Input, Output and Data Devices
	F3011507	Logic Design
	F3011508	Memory Structures
	F3011509	Mobile Communication Devices
	F3011510	Multi-Processor
	F3011511	Neural Network Computer
	F3011512	Processor Architectures
	F3011513	Quantum Computer
	F3011514	Redundant Array of Independent Disks (RAID)
	F3011515	Wearable Computer
	F3011599	Other Computer Engineering n.e.c.
	F3011600	Communication Engineering
	F3011601	Antenna Technology
	F3011602	Broadband Networks
	F3011603	Digital Communications Networks
	F3011604	Microwave and Millimetrewave Technology
	F3011605	Optical and Photonic Systems
	F3011606	Radio Communications and Broadcasting
	F3011607	Radio Frequency and Wireless Systems
	F3011608	Satellite Communications
	F3011699	Other Communication Engineering n.e.c.
	F3011700	Space Science and Space Engineering
	F3011701	Celestial and Orbital Mechanics
	F3011702	Experimental and Scientific Satellites
	F3011703	Ionospheric and Magnetospheric Science
	F3011704	Propulsion
	F3011705	Solar-Terrestrial Interaction
	F3011706	Space Launchers and Vehicles
	F3011707	Space Probes Design and Engineering
	F3011799	Other Space Science and Engineering n.e.c.

CATEGORY	GROUP	AREA
F3010000		ENGINEERING AND TECHNOLOGY
	F3011800	Interdisciplinary Engineering
	F3011801	Acoustic Engineering
	F3011802	Biomimetics
	F3011803	Fluid Mechanics
	F3011804	Fluidisation
	F3011805	Forensic Engineering
	F3011806	Heat and Mass Transfer Operations
	F3011807	Metrology
	F3011808	Non-Destructive Testing (NDT)
	F3011809	Optical Engineering
	F3011810	Power Plant Engineering
	F3011811	System Engineering
	F3011812	Thermodynamics
	F3011813	Turbulent Flows
	F3011899	Other Interdisciplinary Engineering n.e.c.
	F3011900	Advancement of Knowledge Engineering Sciences
	F3019900	Other Engineering and Technology Sciences n.e.c.

CATEGORY	GROUP	AREA
F3020000		APPLIED SCIENCES AND TECHNOLOGIES
	F3020100	Aerospace
	F3020101	Advance and Emerging Methods (<i>Including Quantitative Analysis such as Forecasting, Modelling, Inference, Data Mining; Survey Techniques Complex Survey, Rank Set Sampling, Market Survey</i>), and Performance Measurement (<i>Hierarchical Modelling, Data Envelopment Analysis, Stochastic Frontier Analysis and Risk Analysis</i>)
	F3020102	Advanced Materials-Composite Special Alloys
	F3020103	Advancement of Aerospace Knowledge
	F3020104	Aerodynamics
	F3020105	Aeroelasticity
	F3020106	Aeronautical Technology
	F3020107	Aerospace Electrical Systems
	F3020108	Aerospace Manufacturing (<i>Including Manufacturing of Transportation Component for Defence and Security System e.g Rotary and Fixed Wing and Instrumentation Manufacturing such as On-Board Computer for Satellites</i>)
	F3020109	Aerospace Materials
	F3020110	Aerospace Structures
	F3020111	Aircraft Design
	F3020112	Aircraft Performance
	F3020113	Assembly, Integration and Test (AIT) System
	F3020114	Avionics
	F3020115	Computational Fluid Dynamics
	F3020116	Earth Observation System (EOS)
	F3020117	Experimental Aerodynamics
	F3020118	Flight Control Systems
	F3020119	Flight Dynamics
	F3020120	Ground and Space Stations
	F3020121	Intelligent Navigation System
	F3020122	Missile Systems
	F3020123	Rocketry
	F3020124	Satellite and Spacecraft Design
	F3020125	Sensor
	F3020126	Thermal System
	F3020127	Unmanned Aerial Vehicle
	F3020199	Other Aerospace n.e.c.

CATEGORY	GROUP	AREA
F3020000		APPLIED SCIENCES AND TECHNOLOGIES
	F3020200	Process Technology
		F3020201 Bioprocess Engineering
		F3020202 Control Technology
		F3020203 Drying Technology
		F3020204 Extraction Technology
		F3020205 Fermentation Technology
		F3020206 Green Technology
		F3020207 Hazard Analysis and Risk Assessment
		F3020208 Joining Technology
		F3020209 Material Processing Technology
		F3020210 Microwave Technology
		F3020211 Printing Technology
		F3020212 Process Control
		F3020213 Roasting Technology
		F3020214 Separation Technology (<i>Including Membrane Technology</i>)
		F3020215 Supercritical Fluid Technology
		F3020216 Supermagnet Processing
		F3020217 Textile Technology
		F3020218 Welding Technology (<i>Including Standard Supporting Technology for Heat Treatment and Welding Technologies</i>)
		F3020299 Other Process Technology n.e.c.
	F3020300	Resource-Based Technology
		F3020301 Commodity Crops
		F3020302 Oils and Fats
		F3020303 Petroleum and Gas
		F3020304 Rubber
		F3020305 Water (<i>Including Bio-Defence Technology</i>)
		F3020306 Wood and Non Wood-Based Forest Products
		F3020399 Other Resource-Based Technology n.e.c.
	F3020400	Energy Technology
		F3020401 Biomass Energy Technology (<i>Including Biogas and Biofuel</i>)
		F3020402 Coal Energy Technology
		F3020403 Electrical Power Generation and Supply
		F3020404 Energy Management and Audit
		F3020405 Energy Storage
		F3020406 Energy Transportation
		F3020407 Fuel Cell

CATEGORY	GROUP	AREA
F3020000		APPLIED SCIENCES AND TECHNOLOGIES
		F3020408 Geo-Thermal F3020409 Hydro Power Technology F3020410 Natural Gas Technology F3020411 Solar Energy Technology F3020412 Waste Heat Recovery F3020413 Wind F3020499 Other Energy Technology n.e.c.
	F3020500	Water Technology
		F3020501 Disinfection F3020502 Reclamation, Reuse and Recycling F3020503 Wastewater Treatment F3020504 Water Delivery System F3020505 Water Enrichment F3020506 Water Filtration F3020507 Water Meters F3020508 Water Treatment F3020599 Other Water Technology n.e.c.
	F3020600	Nanotechnology
		F3020601 Molecular Devices F3020602 Nano Delivery F3020603 Nano Devices and Systems F3020604 Nano Materials F3020605 Nano Medicine F3020606 Nano Optics F3020607 Nano Photonic F3020608 Nano Structured Materials F3020609 Nanobiotechnology F3020610 Nanoelectronics F3020611 Nanomanufacturing F3020612 Nanometrology F3020613 Nanoscale Characterisation F3020614 Nanotoxicology Health and Safety F3020615 Quantum Device F3020699 Other Nanotechnology n.e.c.
	F3020700	Engineering Materials
		F3020701 Alloy Materials F3020702 Biocomposite F3020703 Biomaterial F3020704 Bitumen and Asphalt F3020705 Bricks

CATEGORY	GROUP	AREA
F3020000		APPLIED SCIENCES AND TECHNOLOGIES
		F3020706 Ceramics F3020707 Composite Materials F3020708 Concrete F3020709 Glass and Glass Ceramics F3020710 Glue and Adhesive F3020711 Lightweight Concrete F3020712 Mineral and Chemical Admixtures F3020713 Non-Ferrous Metals F3020714 Optical Material F3020715 Pipe material F3020716 Polymers F3020717 Refractories F3020718 Rubber F3020719 Steel F3020720 Superconducting Material F3020721 Timber F3020799 Other Engineering Materials n.e.c.
	F3020800	Architecture
		F3020801 Building Design F3020802 Built Environment F3020803 Design for Disabilities F3020804 Design Management and Professional Practice F3020805 Green Building F3020806 Heritage and Conservation F3020807 High Rise and Intelligent Building F3020808 Hospital Design F3020809 Indigenous Architecture F3020810 Interior and Environment Design F3020811 Open Building F3020899 Other Architecture n.e.c.
	F3020900	Urban Planning
		F3020901 Facilities for Disabilities F3020902 Land Use F3020903 Planning Administration and Practice F3020904 Planning of Construction (<i>Including Commercial Building, Community Planning, Construction Open Building, Development Models, Environmental Sustainable Habitat, Industrial Building, Seaport and Airport, Residential, Residential and Public Building,</i>

CATEGORY	GROUP	AREA
F3020000		APPLIED SCIENCES AND TECHNOLOGIES
		<i>Road, Bridge and Highway, Spatial and Physical Planning, Urban Renewal, Integrated Construction, Intelligent Building, Land Reclamation and Land Readjustment, Dam and Irrigation Systems)</i>
	F3020905	Public Transport
	F3020999	Other Urban Environmental Planning n.e.c.
F3021000		Landscape Architecture and Planning
	F3021001	Ecotourism
	F3021002	Landscape Ecology
	F3021003	Landscape Management
	F3021004	Landscape Planning
	F3021005	Landscape Technology
	F3021006	Parks and Recreation
	F3021007	Therapeutic Garden
	F3021099	Other Landscape Architecture and Planning n.e.c.
F3021100		Construction and Project Management
	F3021101	Building Economics
	F3021102	Building Management and Services of Construction (<i>Including of Commercial Building Management Services, Housing Management Services, Industrial Building Management Services, Industrialised Building/Construction System (IBS/ICS), Structural Products (Wall/Floor Tiles, Roofing Tiles)</i>)
	F3021103	Construction Materials
	F3021104	Construction Processes (<i>Including of Commercial Building Construction Processes, Housing Construction Processes, Industrial Building Construction Processes, Industrialised Building/Construction System, K-Based Construction, Seaport and Airport Construction Processes, Road and Highway Construction Processes, Standard Regulation and Legislation and Construction Waste Materials</i>)
	F3021105	Design of Construction (<i>Including of Bridges, Commercial Building, Construction, High Rise Building, Industrial Building, Industrialised Building/Construction System (IBS/ ICS), Port and Airport, Residential, Residential and</i>

CATEGORY	GROUP	AREA
F3020000		APPLIED SCIENCES AND TECHNOLOGIES
		<i>Public Building, Road and Highway, Seismic and Dynamic Resistant, Structural Design and Assessment, Smart Building, Intelligent Building, Dam and Irrigation Systems)</i>
	F3021106	Facilities Management
	F3021107	Project Management and Costing
	F3021108	Quantity Surveying
	F3021109	Real Estate
	F3021110	Value Management
	F3021199	Other Construction and Project Management n.e.c.
	F3021200	Geographical Information System (GIS)
	F3021201	Remote Sensing
	F3021299	Other Geographical Information System (GIS) n.e.c.
	F3021300	Advancement of Knowledge in Applied Sciences and Technologies (Including Aerospace, Nanotechnology, Microwave)
	F3029900	Other Applied Sciences and Technologies n.e.c.



Division 4

Information, Computer And
Communication Technology (ICT)

CATEGORY	GROUP	AREA
F4010000	INFORMATION, COMPUTER AND COMMUNICATION TECHNOLOGY (ICT)	
	F4010100	Information Systems
	F4010101	Agent Technology
	F4010102	Agricultural Information System (AIS) <i>(Including Information-Based Agricultural Services)</i>
	F4010103	Data Exchange Format
	F4010104	Decision Support System
	F4010105	Electronic Information Storage and Retrieval Services
	F4010106	Executive Information System
	F4010107	Geographic Information System (GIS) <i>(Including of Digital Data, Digital Model, Environmental Information, Land Value Information, Map, Precise Measurement, Resource-Based Information, Spatial Databased, Strategic Information and Geo-Positioning System (GPS))</i>
	F4010108	Grid Application
	F4010109	Information Services <i>(Including Information Services, Library Services, Bioinformation Services, Business Intelligence Services, Collaborative Computing Services, Health Information Services, Legal Information Services, Natural Resource Services, Political Information Services, Social and Community Information Services and Internet)</i>
	F4010110	Management Information System
	F4010111	Rural Informatics
	F4010112	Search Engine
	F4010113	Semantic Grid
	F4010114	Telemedicine
	F4010115	Tomography
	F4010199	Other Information Systems n.e.c.
	F4010200	ICT Infrastructure
	F4010201	Computer System Organisation
	F4010202	Data Communication Device
	F4010203	Optical Computing
	F4010204	Sensor Networks
	F4010299	Other ICT Infrastructure n.e.c.

CATEGORY	GROUP	AREA
F4010000	INFORMATION, COMPUTER AND COMMUNICATION TECHNOLOGY (ICT)	
	F4010300	Software
	F4010301	Compilers and Interpreters
	F4010302	Computer Aided Software Engineering (CASE) Tools
	F4010303	Computer Aided System
	F4010304	Decision Support System
	F4010305	Embedded Systems
	F4010306	Object Oriented Technology
	F4010307	Open Systems Software
	F4010308	Operating Systems
	F4010309	Programming Languages
	F4010310	Programming Techniques
	F4010311	Safety Critical Software
	F4010312	Simulation System
	F4010313	Software Agents
	F4010314	Software Engineering
	F4010399	Other Software n.e.c.
	F4010400	Emergent Information Technology
	F4010401	4D, 5D, Nth Dimension Modeling
	F4010402	Ad-Hoc Computing (<i>Including Vehicular Ad-Hoc Network (VANET), Mobile Ad-Hoc Network (MANET)</i>)
	F4010403	Autonomous Computing
	F4010404	High Performance Computing
	F4010405	High Speed Network
	F4010406	Human Computer Interaction (HCI)
	F4010407	Intelligent Database
	F4010408	Knowledge Base
	F4010409	Middleware Technology
	F4010410	Mobile Computing
	F4010411	Multi-Protocol Label Switching (MPLS)
	F4010412	Natural Language
	F4010413	Parallel Architecture and Processing
	F4010414	Pervasive Computing
	F4010415	Quantum Computing
	F4010499	Other Emergent Information Technology n.e.c.
	F4010500	Communication
	F4010501	Asynchronous Transmission Mode
	F4010502	Audio/Voice Communication
	F4010503	Barcode
	F4010504	Coding and Information Theory

CATEGORY	GROUP	AREA
F4010000	INFORMATION, COMPUTER AND COMMUNICATION TECHNOLOGY (ICT)	
	F4010505	Communication Protocols
	F4010506	Communication Services (<i>Including of Broadcasting , Postal Communication, Telecommunication , Tele-Education, Tele-Working, Multiservice Convergence Network, 3G Celullar Networks, Internet Protocol , Short-Range Communication, VOIP, Teleport and Tele-Health</i>)
	F4010507	Communication Software
	F4010508	Data Communication Device
	F4010509	Electromagnetic Compatibility (EMC)
	F4010510	Equipments (<i>Including Broadcasting Equipment, Data Image and Text Equipment, Network Transmission Equipment, Photonic Equipment, Radio and Radio Frequency Identification (RFID), Nano Equipment</i>)
	F4010511	Ethernet Technology
	F4010512	Financial Information Grid
	F4010513	High Performance Computing
	F4010514	High Speed Network
	F4010515	Human-Machine Interfacing
	F4010516	Integrated Communication Device
	F4010517	Integrated Service Digital Network (ISDN)
	F4010518	Mobile Network Technology
	F4010519	New IPTV/WebTV
	F4010520	Open System Interconnecting (OSI) Model
	F4010521	Routers Technology
	F4010522	Switched Networks
	F4010599	Other Communications n.e.c.
	F4010600	Security System
	F4010601	Authentication System
	F4010602	Biometrics Security System
	F4010603	Computer Forensic
	F4010604	Cryptography
	F4010605	Digital Signatures
	F4010606	Encryption System
	F4010607	Firewalls
	F4010608	Hacking
	F4010609	Intrusion Detection System
	F4010610	Intrusion Prevension System
	F4010611	Malware, Worms and Viruses
	F4010612	National Security (<i>Including Health Aspects such as Medicine and Medical Supply, Disaster Preparedness and Imported Diseases</i>)

CATEGORY	GROUP	AREA
F4010000	INFORMATION, COMPUTER AND COMMUNICATION TECHNOLOGY (ICT)	
	F4010613	Security Protocols
	F4010614	Security Services (<i>Including Digital Forensic, Steganography, Network Security, Public Key Infrastructure and Biometrics</i>)
	F4010615	Smart System
	F4010616	Surveillance System
	F4010699	Other Security System n.e.c.
F4010700	Artificial Intelligence	
	F4010701	Cognitive Science
	F4010702	Computational Linguistic
	F4010703	Expert Systems
	F4010704	Logic Programming
	F4010705	Machine Learning
	F4010706	Natural Language
	F4010707	Natural Language Processing
	F4010708	Neural, Evolutionary and Fuzzy Computation
	F4010709	Parallel Architecture and Processing
	F4010710	Predictive Analytics
	F4010711	Soft Computing
	F4010799	Other Artificial Intelligence n.e.c.
F4010800	Signal Processing	
	F4010801	Algorithms and Techniques
	F4010802	Data Hiding and Steganography
	F4010803	Detection and Estimation
	F4010804	Digital Signal Processing
	F4010805	Filters
	F4010806	Pattern Recognition and Image Recognition
	F4010807	Signal Analysis and Processing
	F4010808	Speech Recognition
	F4010809	Watermarking Techniques
	F4010899	Other Signal Processing n.e.c.
F4010900	Computation Theory and Mathematics	
	F4010901	Analysis of Algorithms and Complexity
	F4010902	Computational Economics
	F4010903	Computer Aided Geometrical Design
	F4010904	Discrete Mathematics
	F4010905	Logics and Meanings of Programs
	F4010906	Mathematical Logic and Formal Language
	F4010907	Mathematics Software

CATEGORY	GROUP	AREA
F4010000	INFORMATION, COMPUTER AND COMMUNICATION TECHNOLOGY (ICT)	
		F4010908 Numerical Analysis F4010909 Simulation and Modelling F4010910 Symbolic and Algebraic Manipulation F4010999 Other Computation Theory and Mathematics n.e.c.
	F4011000	Data Management
		F4011001 Compression Technology F4011002 Data Encryption F4011003 Data Recovery and Backup F4011004 Data Security F4011005 Data Storage and Representations F4011006 Data Structures F4011007 Files Management Representation and Organisation F4011008 Knowledge Base F4011099 Other Data Management n.e.c.
	F4011100	Database Technology
		F4011101 Data Mining F4011102 Data Warehousing F4011103 Database F4011104 Distributed Database F4011105 Intelligent Database F4011106 Mobile Database F4011107 Multidimensional Database F4011199 Other Database Technology n.e.c.
	F4011200	ICT Policy and Social Impact
		F4011201 Augmenting Individuals and Transforming Societies F4011202 Digital Divide and E-Inclusion F4011203 E-Community F4011204 E-Strategy F4011205 ICT Ethics F4011206 ICT Law F4011207 ICT Outsourcing F4011208 ICT Policies F4011209 Information System (IS) Planning F4011210 Intellectual Property Rights F4011211 Open System Standards F4011212 Social Impact F4011213 Telecommuting and Teleworking F4011299 Other ICT Policy and Social Impact n.e.c.

CATEGORY	GROUP	AREA
F4010000	INFORMATION, COMPUTER AND COMMUNICATION TECHNOLOGY (ICT)	
	F4011300	ICT Applications
	F4011301	E-Architecture
	F4011302	E-Commerce
	F4011303	E-Culture
	F4011304	E-Dictionary
	F4011305	Education
	F4011306	Edutainment
	F4011307	E-Government
	F4011308	E-Law
	F4011309	e-Learning
	F4011310	E-Library
	F4011311	E-Museum
	F4011312	E-Tourism
	F4011313	Finance and Insurance
	F4011314	Food Traceability
	F4011315	Games
	F4011316	Games Engines
	F4011317	Healthcare
	F4011318	Manufacturing
	F4011319	M-Commerce
	F4011320	M-Government
	F4011321	Serious Games
	F4011322	Telehealth
	F4011323	Teleworking
	F4011324	Virtual Reality
	F4011325	Wearable Computing
	F4011399	Other ICT Applications n.e.c.
	F4011400	Software Engineering
	F4011401	Component Based Software Development
	F4011402	Project Management
	F4011403	Requirements Engineering
	F4011404	Software Design
	F4011405	Software Management
	F4011406	Software Metrics
	F4011407	Software Process Models
	F4011408	Software Quality
	F4011409	Software Reliability and Testing
	F4011410	Software Tools
	F4011499	Other Software Engineering n.e.c.

CATEGORY	GROUP	AREA
F4010000	INFORMATION, COMPUTER AND COMMUNICATION TECHNOLOGY (ICT)	
	F4011500	Web Technology
	F4011501	Collaborative Computing
	F4011502	Semantic Web
	F4011503	Web Services
	F4011504	Web Wrapping
	F4011599	Other Web Technology n.e.c.
	F4011600	Multimedia
	F4011601	Computer Animation and Digital Arts (Including Edutainment, Information Processing Services, Integrated and Expert System for Designing, Multimedia Content, Virtual Reality and Virtual Manufacturing)
	F4011602	Computer Graphics and Animations
	F4011603	Digital Image Processing System
	F4011604	Education and Training Services
	F4011605	Edutainment (Including Merging Education and Entertainment Technologies)
	F4011606	Interface Design
	F4011607	Virtual Reality
	F4011699	Other Multimedia n.e.c.
	F4011700	Educational Technology
	F4011701	Computer Assisted Instruction (CAI)
	F4011702	Computer Based Training
	F4011703	e-Learning
	F4011704	Web Based Courses
	F4011799	Other Educational Technology n.e.c.
	F4011800	Distributed Computing
	F4011801	Cloud Computing
	F4011802	Cluster Computing
	F4011803	Grid Computing
	F4011804	Mobile Computing
	F4011805	Ubiquitous Computing
	F4011899	Other Distributed Computing n.e.c.
	F4011900	Advancement of ICT Knowledge
	F4019900	Other Information, Computer and Communication Technology (ICT) n.e.c.

Division 5

Medical And Health Sciences



CATEGORY	GROUP	AREA
F5010000		MEDICAL AND HEALTH SCIENCES
	F5010100	Immunology
	F5010101	Allergy
	F5010102	Cellular Immunology
	F5010103	Humoral Immunology
	F5010104	Immunochemistry
	F5010105	Immunogenetics
	F5010106	Immunomodulation
	F5010107	Nutritional Immunology
	F5010108	Radioimmunology
	F5010109	Transplantation Immunology
	F5010110	Tumour Immunology
	F5010199	Other Immunology n.e.c.
	F5010200	Medical Biochemistry and Clinical Chemistry
	F5010201	Antioxidants
	F5010202	Carbohydrates
	F5010203	Hormones
	F5010204	Lipids
	F5010205	Nucleic Acids
	F5010206	Proteins
	F5010207	Vitamins
	F5010299	Other Medical Biochemistry and Clinical Chemistry n.e.c.
	F5010300	Medical Microbiology
	F5010301	Bacteriology
	F5010302	Mycology
	F5010303	Parasitology
	F5010304	Virology
	F5010399	Other Medical Microbiology n.e.c.
	F5010400	Pharmacology
	F5010401	Clinical Pharmacology
	F5010402	Medical Pharmacology
	F5010403	Molecular Pharmacology
	F5010404	Radiopharmacology
	F5010405	Therapeutics
	F5010406	Toxicology
	F5010499	Other Pharmacology n.e.c.

CATEGORY	GROUP	AREA
F5010000		MEDICAL AND HEALTH SCIENCES
	F5010500	Physiology
	F5010501	Cell Physiology
	F5010502	Comparative Physiology
	F5010503	Stress Physiology
	F5010504	Systems Physiology
	F5010599	Other Physiology n.e.c.
	F5010600	Neurosciences
	F5010601	Auditory Neuroscience
	F5010602	Autonomic Nervous System
	F5010603	Cell Receptors
	F5010604	Cellular Nervous System
	F5010605	Central Nervous System
	F5010606	Cerebral Palsy
	F5010607	Cerebral Vascular Disorder
	F5010608	Degenerative Diseases
	F5010609	Epilepsy
	F5010610	Migraine
	F5010611	Molecular Characterization
	F5010612	Neuropsychiatry
	F5010613	Peripheral Nervous System
	F5010614	Psychogeriatrics
	F5010615	Sensory Systems
	F5010616	Sleep Disorders
	F5010617	Trauma Inflammation (<i>Including Mechanism of Tissue Damage; Head Injury</i>)
	F5010699	Other Neurosciences n.e.c.
	F5010700	Clinical Medicine
	F5010701	Allergies
	F5010702	Anaesthesiology
	F5010703	Carcinogenesis
	F5010704	Cardiology
	F5010705	Clinical Psychology
	F5010706	Dermatology
	F5010707	Emergency Medicine
	F5010708	Endocrinology
	F5010709	Forensic
	F5010710	Gastroenterology
	F5010711	Geriatrics
	F5010712	Gynaecology

CATEGORY	GROUP	AREA
F5010000		MEDICAL AND HEALTH SCIENCES
	F5010713	Haematology
	F5010714	Infectious/ Communicable Diseases
	F5010715	Intensive Care
	F5010716	Medical Genetics
	F5010717	Neonatology
	F5010718	Nephrology
	F5010719	Neurology
	F5010720	Neuromuscular Diseases
	F5010721	Nuclear Medicine
	F5010722	Obstetrics
	F5010723	Occupational Therapy
	F5010724	Oncology
	F5010725	Ophthalmology
	F5010726	Orthopaedics
	F5010727	Otolaryngology
	F5010728	Paediatrics
	F5010729	Pathology
	F5010730	Physical Therapy
	F5010731	Psychiatry
	F5010732	Radiation Oncology
	F5010733	Radiology
	F5010734	Radiotherapy
	F5010735	Rehabilitation
	F5010736	Reproduction
	F5010737	Respiratory Diseases
	F5010738	Rheumatology
	F5010739	Surgery
	F5010740	Transplants
	F5010741	Traumatology
	F5010742	Urology
	F5010743	Venereology
	F5010799	Other Clinical Medicine n.e.c.
F5010800		Public Health
	F5010801	Epidemiology
	F5010802	Mental Health
	F5010803	Preventive Medicine
	F5010804	Primary Health Care
	F5010805	Radiation Health and Safety
	F5010806	Urban and Rural Health
	F5010807	Vaccination
	F5010808	Vector Borne Diseases
	F5010899	Other Public Health n.e.c.

CATEGORY	GROUP	AREA
F5010000		MEDICAL AND HEALTH SCIENCES
	F5010900	Environmental and Occupational Health and Safety Research
	F5010901	Air Quality
	F5010902	Drinking Water Quality
	F5010903	Environmental Protection and Health Impact
	F5010904	Ergonomics
	F5010905	Health and Safety (Occupational)
	F5010906	Health Information Systems
	F5010907	Injuries
	F5010908	Noise Pollution
	F5010909	Social Epidemiology
	F5010910	Solid Waste Management
	F5010911	Waste Water Management
	F5010912	Waterborne Diseases
	F5010999	Other Environmental and Occupational Health and Safety Research n.e.c.
	F5011000	Nutrition (Clinical and Public Health Research)
	F5011001	Body Image
	F5011002	Clinical Nutrition
	F5011003	Eating Disorders
	F5011004	Food Services
	F5011005	Functional Foods
	F5011006	Nutrient and Micronutrient Deficiencies
	F5011007	Nutrient Requirement
	F5011008	Nutrition Promotion and Education
	F5011009	Nutrition Related Chronic Diseases
	F5011010	Nutrition Related to Performance and Mental Health
	F5011011	Nutrition Transition
	F5011012	Nutritional Databases
	F5011013	Obesity
	F5011099	Other Nutrition (Clinical and Public Health Research) n.e.c.
	F5011100	Health Care System
	F5011101	Burden of Disease
	F5011102	Child Care
	F5011103	Continuous Quality Improvement
	F5011104	Delivery Systems
	F5011105	Equity
	F5011106	Health Care Administration

CATEGORY	GROUP	AREA
F5010000		MEDICAL AND HEALTH SCIENCES
	F5011107	Health Care Financing
	F5011108	Health Economics
	F5011109	Health Education and Promotion
	F5011110	Health Information Management
	F5011111	Health Legislation
	F5011112	Health Outcomes
	F5011113	Health Policy Analysis
	F5011114	Health Rehabilitation Service
	F5011115	Health Systems Management
	F5011116	Home Care Services
	F5011117	Human Resource Development (<i>Including Technologies in Attitude Determination Control Instruments</i>)
	F5011118	Maternal Care
	F5011119	Medical Biotechnology
	F5011120	Medical Ethics
	F5011121	Mortality and Morbidity Studies
	F5011122	Programme Evaluation
	F5011123	Quality Assurance of Health Instruments
	F5011124	Quality of Life
	F5011125	Screening
	F5011126	Social Care
	F5011127	Social Support System
	F5011128	Standards and Calibration
	F5011129	Telemedicine
	F5011199	Other Health Care System n.e.c.
F5011200		Pharmaceutical Industry
	F5011201	Botanical Pesticides (<i>Including BT: Agricultural Chemical</i>)
	F5011202	Drug Pricing
	F5011203	Halal Labelling
	F5011204	Human Pharmaceutical Products (<i>Including Blood Products, Diagnostic, Therapeutic Agents, Vaccine and Halal Products</i>)
	F5011205	Labelling and Safety
	F5011206	Law and Ethics
	F5011207	Licensing
	F5011208	Natural Products
	F5011209	Nutraceuticals (<i>Including Manufacturing of Nutraceuticals Products</i>)
	F5011210	Personal Care Products and Cosmetics (<i>Including Cosmoceuticals, Nutritional Supplements and; Manufacturing of Cosmetics, Cosmeceuticals, Toiletries, Soap ,</i>

CATEGORY	GROUP	AREA
F5010000		MEDICAL AND HEALTH SCIENCES
		<i>Household Cleaners and Detergents Products)</i>
	F5011211	Photochemical
	F5011212	Phytochemicals
	F5011213	Purification Technology
	F5011214	Regulation
	F5011215	Screening Technology
	F5011216	Synthesis Technology
	F5011217	Tissue Banking
	F5011218	Veterinary Pharmaceutical Products (Including Antibiotics, Chemical Treatments, Diagnostics, Therapeutic Agents, Vaccine and Halal Products)
	F5011299	Other Pharmaceutical Industry n.e.c.
	F5011300	Complementary/Alternative Medicine
	F5011301	Clinical Research
	F5011302	Education
	F5011303	Ethnomedicine
	F5011304	Ethnopsychiatry
	F5011305	Information Management
	F5011306	Natural Therapy
	F5011307	Practitioners
	F5011308	Quality and Safety
	F5011309	Sociological Research
	F5011310	Toxicology
	F5011311	Traditional Medicine and Natural Product (Including Development of Traditional and Herbal Medicine)
	F5011399	Other Complementary/Alternative Medicine n.e.c.
	F5011400	Pharmacy
	F5011401	Adjuvant Drug Admixture
	F5011402	Adverse Drug Reaction
	F5011403	Bioequivalence
	F5011404	Cardiovascular Pharmacy
	F5011405	Community Pharmacy
	F5011406	Cytotoxicology
	F5011407	Drug Discovery
	F5011408	Drug Interaction
	F5011409	Good Manufacturing Practice
	F5011410	Medicinal Chemistry

CATEGORY	GROUP	AREA
F5010000		MEDICAL AND HEALTH SCIENCES
		F5011411 Nanopharmacy F5011412 Neurotoxicology F5011413 Optimum Drug Design F5011414 Pharmaceutical Biotechnology F5011415 Pharmaceutical Technology F5011416 Pharmacodynamics F5011417 Pharmacoeconomics F5011418 Pharmacoethics F5011419 Pharmacogenomics F5011420 Pharmacognosy F5011421 Pharmacoinformatics F5011422 Pharmacokinetics F5011423 Pharmacovigilance F5011424 Pharmacy Jurisprudence F5011425 Prescription/Dispensing Errors F5011426 Radioimmunology F5011427 Radioisotopes F5011428 Radiopharmaceutical F5011429 Social and Administrative Pharmacy F5011430 Therapeutic Drug Monitoring F5011431 Total Parenteral Nutrition F5011499 Other Pharmacy n.e.c.
	F5011500	Speech and Language Pathology
		F5011501 Acquired Language Disorders F5011502 Articulation & Phonological Disorders F5011503 Aural Rehabilitation F5011504 Child Language Disorders F5011505 Cleft Lip and Palate F5011506 Dyslexia F5011507 Epidemiology of Speech and Language Pathology F5011508 Linguistic Analysis of Language Pathology F5011509 Motor Speech Disorders F5011510 Multicultural and Cross-Cultural Aspects of Language Pathology F5011511 Normal Speech and Language Developments F5011512 Speech Acoustics F5011513 Speech and Language Assessments/Tests/Therapy Materials F5011514 Speech and Language Disorders F5011515 Speech Dysfluency

CATEGORY	GROUP	AREA
F5010000		MEDICAL AND HEALTH SCIENCES
	F5011516	Swallowing Disorders
	F5011517	Voice Disorders
	F5011599	Other Speech and Language Pathology n.e.c.
F5011600		Optometry
	F5011601	Binocular Vision
	F5011602	Clinical Contact Lens Care
	F5011603	Clinical Optometry
	F5011604	Low Vision
	F5011605	Ophthalmic Materials
	F5011606	Opto-Optical Sciences
	F5011607	Refractive Disorders
	F5011608	Vision Sciences
	F5011609	Vision Therapy
	F5011610	Visual Development
	F5011699	Other Optometry n.e.c.
F5011700		Audiology
	F5011701	Auditory Neuroscience
	F5011702	Auditory Processing
	F5011703	Auditory Processing Disorders
	F5011704	Cochlear Hair Cells Function
	F5011705	Cochlear Implant & Hearing Amplification
	F5011706	Development of Diagnostic Materials
	F5011707	Diagnostic Audiology
	F5011708	Early Hearing Detection & Intervention (EHDl)
	F5011709	Epidemiological Studies
	F5011710	Geriatric Audiology
	F5011711	Hearing Conservation
	F5011712	Hearing Psychology
	F5011713	Industrial Audiology
	F5011714	Physiological Acoustics (Hearing Physiology)
	F5011715	Presbycusis
	F5011716	Psychoacoustics
	F5011717	Rehabilitative Audiology
	F5011799	Other Audiology n.e.c.
F5011800		Medical Diagnostic Imaging
	F5011801	Bone Densitometry
	F5011802	Computed Tomography (CT Scan)
	F5011803	Image Construction and Management

CATEGORY	GROUP	AREA
F5010000		MEDICAL AND HEALTH SCIENCES
		F5011804 Magnetic Resonance Imaging (MRI) F5011805 Mammography F5011806 Medical Instrumentation F5011807 Medical Physics F5011808 Nuclear Medicine F5011809 Radiology F5011810 Ultrasound F5011899 Other Medical Diagnostic Imaging n.e.c.
	F5011900	Radiotherapy
		F5011901 Boron Neutron Capture Therapy (BNCT) F5011902 Brachy Therapy F5011903 Medical Physics F5011904 Nuclear Medicine F5011905 Radiation Biology F5011906 Radiation Biophysics F5011907 Radiation Physics F5011908 Radiochemistry, Radiatonchemistry and Radioprotectant F5011909 Tissue Biophysics F5011910 Tissue Protection F5011911 Tissue/ Tumour Sensitisation F5011999 Other Radiotherapy n.e.c.
	F5012000	Anatomy
		F5012001 Comparative Anatomy F5012002 Cytology F5012003 Histology F5012004 Technique and Instrumentation F5012099 Other Anatomy n.e.c.
	F5012100	Dentistry
		F5012101 Community Dentistry F5012102 Dental Education F5012103 Dental Informatics F5012104 Dental Materials F5012105 Dental Practice Management F5012106 Dental Technology F5012107 Dentistry Support F5012108 Endodontics F5012109 Forensic Dentistry F5012110 Geriatric Dentistry

CATEGORY	GROUP	AREA
F5010000		MEDICAL AND HEALTH SCIENCES
		F5012111 Implantology F5012112 Operative Dentistry F5012113 Oral and Maxillofacial Surgery F5012114 Oral Biology F5012115 Oral Health Care Practice F5012116 Oral Imaging F5012117 Oral Pathology F5012118 Orthodontics F5012119 Paediatric Dentistry F5012120 Periodontology F5012121 Preventive Dentistry F5012122 Prosthetic Dentistry F5012123 Prosthodontics F5012124 Sports Dentistry F5012199 Other Dentistry n.e.c.
	F5012200	Nursing
		F5012201 Cardiology F5012202 Complementary/Alternative Medicine in Nursing F5012203 Critical Care Unit (CCU) and Intensive Care Unit (ICU) F5012204 Ear, Nose and Throat (ENT) F5012205 Environmental Health F5012206 Gerontology F5012207 Haematology F5012208 HIV/ AIDS F5012209 Hospice Care F5012210 Immunology F5012211 Industrial Nursing F5012212 Medical F5012213 Mental Health F5012214 Neonatal F5012215 Nephrology F5012216 Neurology/ Neurosurgery F5012217 Nonsurgical Cosmetic Surgery F5012218 Nursing Care F5012219 Nutrition F5012220 O&G / Midwifery F5012221 Ophthalmology F5012222 Oncology F5012223 Orthopedic F5012224 Palliative Care F5012225 Pediatric F5012226 Perioperative F5012227 Plastic Surgery

CATEGORY	GROUP	AREA
F5010000		MEDICAL AND HEALTH SCIENCES
		F5012228 Public/Community Health F5012229 Rehabilitation F5012230 Surgical F5012231 Transreligious/Transcultural Nursing F5012232 Trauma F5012233 Urology F5012299 Other Nursing n.e.c.
	F5012300	Nursing Education
		F5012301 Continuous Nursing Education F5012302 Curriculum Development F5012303 Curriculum Evaluation F5012304 Health Education F5012305 Programme Assessment F5012306 Students Evaluation F5012307 Tests Psychometric F5012399 Other Nursing Education n.e.c.
	F5012400	Nursing Management
		F5012401 Clinical Pathway F5012402 Health Administration F5012403 Health Care Financing/Economic F5012404 Health Outcome F5012405 Health Policy F5012406 Health System Management F5012407 Health Technology F5012408 Law and Ethics F5012409 Leadership F5012410 Nursing Advocacy F5012411 Nursing Audit F5012412 Personal Professional Development F5012413 Quality Assurance F5012414 Tele-Medicine F5012499 Other Nursing Management n.e.c.
	F5012500	Medical Device, Equipment and System
		F5012501 Artificial Intelligent Diagnostic System F5012502 Artificial Organ F5012503 Biomechanical Device F5012504 Biomechanics F5012505 Health Technology Assessments F5012506 Implant Device F5012507 Innovative Technology

CATEGORY	GROUP	AREA
F5010000		MEDICAL AND HEALTH SCIENCES
	F5012508	Medical Imaging Instrument
	F5012509	Monitoring Equipment
	F5012510	Radiological System
	F5012511	Rehabilitation Equipment
	F5012512	Robotic Systems
	F5012513	Screening Device and Equipment
	F5012514	Support System for Disabled
	F5012515	Surgical Equipment
	F5012516	Tissue Engineering
	F5012517	Treatment Equipment
	F5012518	Virtual Reality Software
	F5012599	Other Medical Device, Equipment and System n.e.c.
	F5012600	Biomedical Sciences
	F5012601	Apoptosis
	F5012602	Behavioural Neuroscience
	F5012603	Biomarkers
	F5012604	Carcinogenesis
	F5012605	Cell Therapy
	F5012606	Diagnostic Imaging
	F5012607	Genomics
	F5012608	Metabolomics
	F5012609	Molecular Medicine
	F5012610	Nanomedicine
	F5012611	Neurodegenerative Diseases
	F5012612	Proteomics
	F5012613	Radiotherapy
	F5012614	Regenerative Medicine
	F5012615	Stem Cells
	F5012699	Other Biomedical Sciences n.e.c.
	F5012700	Sports Science
	F5012701	Exercise/ Physical Fitness
	F5012702	Human Biophysics
	F5012703	Sports Physiology
	F5012799	Other Sport Sciences n.e.c.
	F5019900	Other Medical and Health Sciences n.e.c.

A black and white photograph of a young plant seedling with several leaves growing out of a mound of dark, rich soil. The seedling is positioned centrally, with its stem extending upwards. The background is a plain, light color, creating a high-contrast image. A horizontal band with a blue and black background and white text is overlaid across the middle of the image.

Division 6

Agriculture And Forestry

CATEGORY	GROUP	AREA
F6010000		AGRICULTURAL SCIENCES AND TECHNOLOGY
	F6010100	Soil and Water Management
	F6010101	Problematic Soil
	F6010102	Soil Biology
	F6010103	Soil Chemistry
	F6010104	Soil Erosion, Land Management and Conservation
	F6010105	Soil Fertility
	F6010106	Soil Microbiology
	F6010107	Soil Physics
	F6010199	Other Soil and Water Management n.e.c.
	F6010200	Crop Production and Agriculture Information System and Technology
	F6010201	Acclimatised Plants (<i>Including Spices, Industrial, Herbal, Horticulture and Agronomic Crops</i>)
	F6010202	Agronomy
	F6010203	Commodity
	F6010204	Crop Ecophysiology
	F6010205	Crop Improvement and Breeding
	F6010206	Crop Manipulation/Genetic Engineering
	F6010207	Crop Modelling
	F6010208	Crop Nutrition
	F6010209	Crop Physiology
	F6010210	Farm Mechanisation
	F6010211	Food Traceability
	F6010212	Geographic Information System
	F6010213	Geospatial Information Technology
	F6010214	K-Agriculture
	F6010215	Other Crop and Pasture Production
	F6010216	Pasture Management
	F6010217	Pests and Diseases
	F6010218	Pre-Harvest and Post-Harvest
	F6010219	Production System (<i>Including micropropagation (tissue culture and bioreactor)</i>)
	F6010220	Remote Sensing
	F6010221	Root Studies
	F6010222	Seed Production (<i>Including Certification systems and Standards Compliance</i>)
	F6010223	Weed Sciences
	F6010299	Other Crop Production and Agriculture Production System and Technology n.e.c.

CATEGORY	GROUP	AREA
F6010000	AGRICULTURAL SCIENCES AND TECHNOLOGY	
	F6010300	Horticulture
	F6010301	Floriculture
	F6010302	Fruit Crops
	F6010303	Hydroponic and Aquaponic
	F6010304	Landscape
	F6010305	Olericulture (vegetables)
	F6010306	Ornamental Plants
	F6010399	Other Horticulture n.e.c.
	F6010400	Animal and Avian Production
	F6010401	Animal Feed
	F6010402	Animal Growth and Development
	F6010403	Animal Health
	F6010404	Animal Husbandry
	F6010405	Animal Nutrition (<i>Including Metabolic Disorders</i>)
	F6010406	Animal Pests and Pathogens
	F6010407	Animal Reproduction
	F6010408	Breeds and Breeding
	F6010409	By-Products (Edible and Non-Edible) (<i>Including Bee and Bee Products, Beef, Eggs, Fishgelatine, Hides, Milk (Minimally Processed), Mutton, Pork, Poultry, Raw Wool, Skins, Birds Nest, Food Supplement, Food Ingredient, Collagen, Hormone, Enzyme, Animal Manure, Holuthoria Spp (Sea Cucumber/Gamat), Ostrich Meat, Rabbit Meat, Venison, Frog Legs and Lamb</i>)
	F6010410	Dairy Science and Technology
	F6010411	Livestock Product (<i>Including Beef, Cattle, Breeders, Broilers, Buffalo, Dairy Cattle, Deer, Goats-Meat, Goats-Milk, Horses, Layers, Ostrich, Pigs, Rabbit, Sheep-Meat, Sheep-Wool, Frog, Animal Production in Oil Palm Plantation, Seladang, Banteng, Barking-Deer, Larger Mouse-Deer (Napuh), Lesser Mouse-Deer (Kancil), Crocodile, Sea Turtle, River Terrapin, Porcupine, Serow, Jungle Fowl, Pheasant, Swiftlet, Snail, Sago Worm, Chicken, Duck, Earthworm and Cengkerik/Sicada</i>)
	F6010412	Meat Science and Technology
	F6010413	Pilot Plant Technology
	F6010414	Post Harvest Handling
	F6010415	Poultry Egg Technology
	F6010416	Product and Ingredient Technology

CATEGORY	GROUP	AREA
F6010000		AGRICULTURAL SCIENCES AND TECHNOLOGY
	F6010417	Value-Added Product
	F6010499	Other Animal and Avian Production n.e.c.
F6010500		Veterinary Sciences
	F6010501	Anaesthesiology
	F6010502	Bacteriology and Virology
	F6010503	Biologics
	F6010504	Diseases Management (<i>Including Avian Diseases, Equine Diseases, Immunologic Diseases, Non-Ruminant Diseases, Nutritional Diseases, Parasitology, Pathology, Pet and Domestic Animal Diseases and Wildlife and Zoo Animal Diseases</i>)
	F6010505	Epidemiology
	F6010506	Equine Sciences
	F6010507	Immunology (<i>Including Immunochemistry</i>)
	F6010508	Medicine (<i>Including Radiology, Therapeutics and Surgery</i>)
	F6010509	Obstetrics and Theriogenology
	F6010510	Therapeutics
	F6010511	Virology
	F6010512	Wildlife and Zoo Animal Diseases
	F6010599	Other Veterinary Sciences n.e.c.
F6010600		Plant Pest and Disease Management
	F6010601	Biological Control (<i>Including GAP, SALM, GBP and other Standards</i>)
	F6010602	Causal Diseases (<i>Including Mammatology, Nematology, Pathology and Virology</i>)
	F6010603	Entomology
	F6010604	Integrated Pest Management
	F6010605	Pesticide Application Techniques
	F6010606	Quarantine Pest and Treatment
	F6010699	Other Plant Pest and Disease Management n.e.c.
F6010700		Fisheries Sciences
	F6010701	Brackish Fisheries
	F6010702	Capture Fisheries
	F6010703	Feed Formulation for Marine, Freshwater, Brackish and Ornamental
	F6010704	Fish Stock Assessment (<i>Including Mapping, Monitoring and Modelling</i>)

CATEGORY	GROUP	AREA
F6010000		AGRICULTURAL SCIENCES AND TECHNOLOGY
		F6010705 Fisheries Ecology and Conservation F6010706 Fresh Water Fisheries F6010707 Marine Fisheries F6010708 Ornamental/ Aquarium Fish and Plants F6010709 Recreational Fisheries F6010799 Other Fisheries Sciences n.e.c.
	F6010800	Food Sciences and Nutrition
		F6010801 Additives and Contaminants F6010802 Enzymes F6010803 Food Analysis F6010804 Food Chemistry F6010805 Food Emulsion Products F6010806 Food Microbiology F6010807 Food Preservation F6010808 Food Processing F6010809 Food Quality F6010810 Food Safety F6010811 Food Security F6010812 Food Sensory Evaluation F6010813 Food Toxicology F6010814 Functional Food F6010815 Halal Products F6010816 Improvement of Finish Products F6010817 New Food Ingredients F6010818 Nutrient Bioability F6010819 Nutrient Composition of Food F6010820 Pilot Testing and Technology F6010821 Product Development F6010822 Production Modelling F6010899 Other Food Science and Nutrition n.e.c.
	F6010900	Aquaculture
		F6010901 Aquaculture Engineering (<i>Including Aquaculture Mechanisation</i>) F6010902 Aquaculture Products (<i>Including Fish, Prawns, Leeches, Seaweed and Gamat</i>) F6010903 Aquatic Environment F6010904 Aquatic Plants and Animals F6010905 Brood Stock Management (<i>Including Fry Production</i>) F6010906 Culture System F6010907 Diseases of Aquatic Organisms F6010908 Drug and Chemical

CATEGORY	GROUP	AREA
F6010000		AGRICULTURAL SCIENCES AND TECHNOLOGY
	F6010909	Effluent Treatment and Waste Management
	F6010910	Farming System and Technology of Aquatic Organisms
	F6010911	Fish Nutrition
	F6010912	Fish Reproduction
	F6010913	Genetic Selection
	F6010914	Husbandry of Aquatic Organisms
	F6010915	Indigenous Live Feed Production
	F6010916	Post Harvest Handling
	F6010999	Other Aquaculture n.e.c.
F6011000		Precision Farming
	F6011001	Crop Management
	F6011002	Crop Modelling
	F6011003	Economics
	F6011004	Farm Infrastructure
	F6011005	Food Traceability
	F6011006	Geographic Information System
	F6011007	Geospatial Information Technology
	F6011008	Harvesting
	F6011009	K-Agriculture
	F6011010	Pest and Disease Management
	F6011011	Post Harvest
	F6011012	Precision Supporting System
	F6011013	Soil Management
	F6011014	Water Management
	F6011015	Weed Management
	F6011099	Other Precision Farming n.e.c.
F6011100		Primary Products from Plants
	F6011101	Biomass Products
	F6011102	By-Product Utilisation
	F6011103	Cocoa Products
	F6011104	Herbal Products
	F6011105	Natural Oil and Essential Oil
	F6011106	Natural Rubber Latex
	F6011107	Palm Oil (<i>Including Palm Kernel Oil</i>)
	F6011108	Post Harvest
	F6011109	Tobacco Leaf and Kenaf
	F6011110	Unprocessed Cereals
	F6011199	Other Primary Products From Plants n.e.c.

CATEGORY	GROUP	AREA
F6010000	AGRICULTURAL SCIENCES AND TECHNOLOGY	
	F6011200	Nutraceuticals and Cosmetics
	F6011201	Bioactive and Phenolic Compound
	F6011202	Cosmetic Products (<i>Including nanocosmetics</i>)
	F6011203	Essential Oil
	F6011204	Flavour and Fragrance
	F6011205	Food Supplements
	F6011206	Natural Ingredients
	F6011299	Other Nutraceuticals and Cosmetics n.e.c.
	F6011300	Advancement of Knowledge on Agriculture
	F6011301	Agricultural Extension
	F6011302	Genetics, Genomics and Proteomics
	F6011399	Other Advancement of Knowledge on Agriculture n.e.c
	F6019900	Other Agricultural Sciences and Technology n.e.c.

CATEGORY	GROUP	AREA
F6020000		FORESTRY SCIENCES AND TECHNOLOGY
	F6020100	Forest Engineering and Operation
	F6020101	Harvesting System Design (<i>Including Minimal Impact Logging</i>)
	F6020102	Road Design
	F6020103	Surveying Techniques
	F6020199	Other Forest Engineering and Operation n.e.c.
	F6020200	Forestry Information System and Technology
	F6020201	Airborne Hyperspectral Imaging
	F6020202	Geographical Information System (GIS)
	F6020203	Geospatial Information Technology
	F6020204	Precision Forestry
	F6020299	Other Forestry Information System and Technology n.e.c.
	F6020300	Biodiversity and Conservation
	F6020301	Beach, Riverine and Peat Swamp Management
	F6020302	Conservation Areas
	F6020303	Genetic Diversity
	F6020304	Hill and Mountain Forests (<i>Including Heath Forests</i>)
	F6020305	Inventory and Documentation
	F6020306	Lowland Forests
	F6020307	Mangrove Forest
	F6020308	Peat Swamp Forest
	F6020309	Wetlands
	F6020399	Other Biodiversity and Conservation n.e.c.
	F6020400	Pest and Disease Management
	F6020401	Biological Control
	F6020402	Causal Disease (<i>Including Entomology, Mammology, Nematology, Pathology and Virillogy</i>)
	F6020403	Entomology
	F6020404	Integrated Pest Management
	F6020499	Other Pest and Disease Management n.e.c.

CATEGORY	GROUP	AREA
F6020000		FORESTRY SCIENCES AND TECHNOLOGY
	F6020500	Agroforestry
		F6020501 Fertiliser Regime
		F6020502 Integrated System
		F6020503 Soil Compaction
		F6020504 Sustainable Production
		F6020599 Other Agroforestry n.e.c.
	F6020600	Forest Management
		F6020601 Coastal Zone Management
		F6020602 Fire Planning and Control
		F6020603 Forest Ecology
		F6020604 Forest Inventory and Measurement (<i>Including Forest Sampling</i>)
		F6020605 Forest Modelling
		F6020606 Forest Plantation
		F6020607 Forest Recreation
		F6020608 In-Situ and Ex-Situ Conservation
		F6020609 Reforestation
		F6020610 Silviculture
		F6020611 Soil and Land Improvement
		F6020612 Sustainable Forest Management
		F6020613 Tourism
		F6020614 Urban Forestry
		F6020615 Wildlife Management
		F6020699 Other Forest Management n.e.c.
	F6020700	Tree Improvement
		F6020701 Breeding and Cryopreservation
		F6020702 Micropropagation Techniques
		F6020703 Seed Technology
		F6020799 Other Tree Improvement n.e.c.
	F6020800	Wood and Non Wood Forest Products
		F6020801 Bamboo and Rattans
		F6020802 Medicinal Plants
		F6020803 Oil and Resin
		F6020804 Wood Processing
		F6020805 Wood Sciences
		F6020806 Wood Utilisation
		F6020899 Other Wood and Non Wood Forest Products n.e.c.

CATEGORY	GROUP	AREA
F6020000		FORESTRY SCIENCES AND TECHNOLOGY
	F6020900	Forest Production and Forest Products
	F6020901	Harvesting (<i>Including Machineries, Reduced Impact Logging and Rehabilitation of Logged Forest Ecosystems</i>)
	F6020902	Information and Communication Services in Forestry (<i>Including Decision Support System</i>)
	F6020903	Natural Forests (<i>Including By Product Utilisation, Improved Planting Stock, Medicinal Plants, Phytochemicals, Timber, Ecotourism, Wildlife, Conservation and Mushrooms</i>)
	F6020904	Plantation Forests (<i>Including Composites, Furniture, Improved Planting Stock, Pulp and Paper and Landscaping</i>)
	F6020905	Transportation (<i>Including Land, Water and Air, Road Design and Survey</i>)
	F6020999	Other Forest Production and Forest Products n.e.c.
	F6021000	Advancement of Forestry Sciences Knowledge
	F6021001	Airborne Hyperspectral Imaging
	F6021002	Biodiversity Conservation
	F6021003	Biodiversity Conservation/Utilisation
	F6021004	Carbon Sequestration, Legal Aspects of Forestry
	F6021005	Engineered Timber and Composite
	F6021006	Forensic Forestry
	F6021007	Laser Technology
	F6021099	Other Advancement of Forestry Sciences Knowledge n.e.c.
	F6021100	Biomass Utilisation
	F6021101	Biocomposites and Hybrid Composites
	F6021102	Biomass Fuel and Energy
	F6021103	Biopolymers and Biodegradables
	F6021104	Carbon and Activated Carbon
	F6021105	Cellulosic and Fibre Technology (<i>Including Nano Cellulosic Materials</i>)
	F6021106	Coatings Products Technology
	F6021107	Oil and Adhesives
	F6021199	Other Biomass Utilisation n.e.c.
	F6029900	Other Forestry Sciences and Technology n.e.c.



Division 7

Social Sciences



CATEGORY	GROUP	AREA
F7010000		SOCIAL SCIENCES
	F7010100	Political Sciences and Public Policy
	F7010101	Comparative Politics
	F7010102	Conflict Resolution
	F7010103	Development Policies
	F7010104	Diplomacy
	F7010105	Electoral Studies
	F7010106	Empowerment
	F7010107	Federalism
	F7010108	Foreign Policy
	F7010109	Governance
	F7010110	International Politics
	F7010111	International Relations
	F7010112	Islamic Political System
	F7010113	Law and Politics
	F7010114	Local Government Studies
	F7010115	Malaysian Politics
	F7010116	Policy Studies
	F7010117	Political Economy
	F7010118	Political Theory and Political Philosophy
	F7010119	Public Policy and Administration
	F7010120	Strategic Studies
	F7010199	Other Political Sciences and Public Policy n.e.c.
	F7010200	Habitat and Human Settlement
	F7010201	Community Development
	F7010202	Disaster Planning
	F7010203	Land Use Planning and Management
	F7010204	Regional Planning
	F7010205	Resettlement Studies
	F7010206	Rural Studies
	F7010207	Social Housing
	F7010208	Urban Studies
	F7010299	Other Habitat and Human Settlement n.e.c.
	F7010300	Sociology
	F7010301	Class Studies
	F7010302	Consumerism
	F7010303	Death and Dying
	F7010304	Developmental Sociology
	F7010305	Environmental Sociology

CATEGORY	GROUP	AREA
F7010000		SOCIAL SCIENCES
		F7010306 Ethnic Studies F7010307 Family Studies F7010308 Fatwa and Society F7010309 Future and Foresight Studies F7010310 Gender Studies F7010311 Islamisation of Sociology F7010312 Late-Life Family F7010313 Medical Sociology F7010314 Multiethnicity and Pluralism F7010315 Poverty, Social Welfare, and Social Policy F7010316 Retirement Planning F7010317 Rural Sociology F7010318 Social Capital F7010319 Social Gerontology F7010320 Social Impact Assessment F7010321 Social Informatics F7010322 Social Justice F7010323 Social Stratification F7010324 Social Theory F7010325 Sociology of Child and Youth F7010326 Sociology of Consumption F7010327 Sociology of Development F7010328 Sociology of Disaster F7010329 Sociology of Education F7010330 Sociology of Family F7010331 Sociology of Health F7010332 Sociology of Law F7010333 Sociology of Religion F7010334 Sociology of Technology F7010335 Sociology of Work F7010399 Other Sociology n.e.c.
	F7010400	Sociology of Development
		F7010401 Collective Action and Social Change F7010402 Industrial Sociology F7010403 Marginal and Minority Relations F7010404 Migration F7010405 Modernity Studies F7010406 Social Trend and Indicator F7010407 Urban Sociology F7010499 Other Sociology of Development n.e.c.

CATEGORY	GROUP	AREA
F7010000		SOCIAL SCIENCES
	F7010500	Sociology of Politics
		F7010501 Nation Building
		F7010502 Sociology on Local-Global Relations
		F7010599 Other Sociology of Politics n.e.c.
	F7010600	Community Development
		F7010601 Community Leadership
		F7010602 Community Mobilisation
		F7010603 Community Research
		F7010604 Community-based Organisation
		F7010605 Social Enterprise
		F7010606 Social Movement
		F7010699 Other Community Development n.e.c.
	F7010700	Social Issues and Problems
		F7010701 Abuse, Neglect and Maltreatment
		F7010702 At-Risk Behaviour
		F7010703 Cohabitation
		F7010704 Criminology
		F7010705 Deviance and Social Control
		F7010706 Suicide
		F7010799 Other Social Issues and Problems n.e.c.
	F7010800	Archaeology and History
		F7010801 Archaeology and Classical Study
		F7010802 Marine Archaeology
		F7010803 Material Culture
		F7010804 Museum and Archives Management
		F7010805 Palaeography
		F7010806 Prehistory
		F7010807 Preservation and Conservation
		F7010899 Other Archaeology and History n.e.c.
	F7010900	Geography
		F7010901 Behavioural Geography
		F7010902 Climatology
		F7010903 Economic Geography
		F7010904 Environmental Geography
		F7010905 Environmental Management

CATEGORY	GROUP	AREA
F7010000		SOCIAL SCIENCES
	F7010906	Geographical Information System (GIS)
	F7010907	Human Geography
	F7010908	Population Geography
	F7010909	Regional Geography
	F7010910	Remote Sensing
	F7010911	Social and Cultural Geography
	F7010912	Tourism Studies
	F7010913	Transport Geography
	F7010914	Urban Morphology
	F7010999	Other Geography n.e.c.
F7011000		Population and Demographic Studies
	F7011001	Ageing
	F7011002	Family and Household Studies
	F7011003	Fertility Trends
	F7011004	Migration
	F7011005	Morbidity Trends
	F7011006	Mortality Trends
	F7011007	Nuptiality
	F7011008	Population Policy
	F7011099	Other Population and Demographic Studies n.e.c.
F7011100		Law
	F7011101	Adat Law
	F7011102	Administrative Law
	F7011103	Agricultural Law
	F7011104	Air and Space Law
	F7011105	Alternative Dispute Resolution
	F7011106	Biosafety Law (<i>Including GMOs, Bioethics, Sustainable Development</i>)
	F7011107	Child Law
	F7011108	Civil Law
	F7011109	Commercial Law
	F7011110	Comparative Law
	F7011111	Competition Law
	F7011112	Constitutional Law
	F7011113	Construction Law
	F7011114	Contract Law
	F7011115	Corporations and Associations Law
	F7011116	Criminal Law
	F7011117	Customary Law

CATEGORY	GROUP	AREA
F7010000		SOCIAL SCIENCES
	F7011118	Cyber/ICT Law
	F7011119	Disabled Law
	F7011120	Energy Law
	F7011121	Environmental Law <i>(Including Environmental Impact Assessment, Pollution Law, Heritage Law)</i>
	F7011122	Equity and Trust Law
	F7011123	Family Law
	F7011124	Food Law
	F7011125	Governance
	F7011126	Health Law
	F7011127	Human Rights
	F7011128	Indigenous Law
	F7011129	Industrial Law
	F7011130	Intellectual Property <i>(Including Copyrights, Patents, Trademarks, Industrial Design)</i>
	F7011131	International Law <i>(Including Public and Private International Law, Law of the Sea, International Trade Law)</i>
	F7011132	Jurisprudence
	F7011133	Justice System
	F7011134	Labour Law
	F7011135	Land Law
	F7011136	Law and Literature
	F7011137	Law and The Elderly
	F7011138	Law of Procedures
	F7011139	Law of Torts
	F7011140	Legal History
	F7011141	Legal Practice and Ethics
	F7011142	Legal Systems
	F7011143	Maritime Law <i>(Including Admiralty Law)</i>
	F7011144	Media Law <i>(Including Entertainment Law)</i>
	F7011145	Medical Law
	F7011146	Nanotechnology Law
	F7011147	Natural Resources Law <i>(Including Water Law)</i>
	F7011148	Occupational Safety and Health Law
	F7011149	Personal Data Protection Law
	F7011150	Planning Law
	F7011151	Precautionary Principle Biotechnology Law <i>(Including Stem Cell Law, Plant Variety Protection, Plants Patent)</i>
	F7011152	Property Law and Conveyancing
	F7011153	Sports Law
	F7011154	Taxation Law

CATEGORY	GROUP	AREA
F7010000		SOCIAL SCIENCES
		F7011155 Tourism Law F7011156 Transport Law F7011157 Waste Management Law F7011199 Other Law n.e.c.
	F7011200	Syariah Law
		F7011201 Administration of Islamic Law F7011202 Islamic Banking Law F7011203 Islamic Family Law F7011204 Islamic Jurisprudence F7011205 Islamic Law of Evidence F7011206 Islamic Law of Succession F7011207 Islamic Law of Transaction F7011299 Other Syariah Law n.e.c.
	F7011300	Psychology
		F7011301 Abnormal Psychology F7011302 Biological Psychology F7011303 Clinical Psychology F7011304 Cognitive Psychology F7011305 Comparative Psychology F7011306 Counselling and Psychotherapy F7011307 Developmental Psychology F7011308 Forensic Psychology F7011309 Health Psychology F7011310 Islamic Psychology F7011311 Neuropsychology F7011312 Organisational and Industrial Psychology F7011313 Performance and Perception F7011314 Personality, Abilities and Assessment F7011315 Psychogeriatric F7011316 Psychological Assessment F7011317 Psychological Methodology F7011318 Psychometrics F7011319 Psychopharmacology F7011320 Sensory and Perception F7011321 Social and Community Psychology F7011399 Other Psychology n.e.c.

CATEGORY	GROUP	AREA
F7010000		SOCIAL SCIENCES
	F7011400	Social Psychology
	F7011401	Attitude (<i>Including Attitude Change</i>)
	F7011402	Group Behaviour (<i>Including Groups Dynamics, Leadership, Group Decision-Making, Conflicts, Cooperation, Group Influence</i>)
	F7011403	Prejudice and Discrimination
	F7011404	Prosocial Behaviour
	F7011405	Psychology of Religion
	F7011406	Self and Social Identity
	F7011407	Social and Community Psychology
	F7011408	Social Cognition
	F7011409	Social Influence (<i>Including Psychology of Persuasion, Peer Pressure, Conformity, Obedience</i>)
	F7011410	Violence and Aggression
	F7011499	Other Social Psychology n.e.c.
	F7011500	Education
	F7011501	Classroom Studies (<i>Including Teacher-Student Language</i>)
	F7011502	Continuing Professional Education
	F7011503	Curriculum Development
	F7011504	Distance Learning
	F7011505	Education Counselling
	F7011506	Education Policy, Management and Administration
	F7011507	Education Structure
	F7011508	Educational Psychology
	F7011509	Educational Technology and Media
	F7011510	e-Learning
	F7011511	Ethics and Moral Education
	F7011512	Extension Education
	F7011513	History and Philosophy of Education
	F7011514	Internationalisation of Education
	F7011515	Language Literacy (<i>Including English (TESOL, ESL, TEFL) and other Languages</i>)
	F7011516	Learner Autonomy (<i>Including Language Learning</i>)
	F7011517	Life-Long Education
	F7011518	Mainstreaming of Special Groups
	F7011519	Non-Formal Education

CATEGORY	GROUP	AREA
F7010000		SOCIAL SCIENCES
	F7011520	Pedagogy (<i>Including Teaching Methodologies for Content and Language Subjects</i>)
	F7011521	Philosophy of Education
	F7011522	Pre-School Education
	F7011523	Private and Public Education
	F7011524	Professional Teacher Development
	F7011525	Sociology of Education (<i>Including Youth Work, Identity, Gender, Social Class, Changing Contexts and Forms of Education</i>)
	F7011526	Special Education
	F7011527	Sports Education
	F7011528	Teacher Education
	F7011529	Tertiary Education
	F7011530	Testing Methodologies (<i>Including Testing Specifications, Testing of Content Subjects and Language Skills</i>)
	F7011599	Other Education n.e.c.
F7011600		Media and Communications
	F7011601	Advertising (<i>Including Globalisation</i>)
	F7011602	Broadcasting
	F7011603	Censorship
	F7011604	Cinema
	F7011605	Comics Research (<i>Including Animation, Comic Books, Comic Strips, Caricature, Cartoons, Animae, Graphic Novels, Bandes dessinees</i>)
	F7011606	Edutainment
	F7011607	Film and Video
	F7011608	Film Directing
	F7011609	Health Communication
	F7011610	Humour (<i>Including Sit-Coms, Movies, Print Media, Radio Talk</i>)
	F7011611	Information Management
	F7011612	Information Studies (<i>Including Social Science Data Management, Analysis and Interpretation</i>)
	F7011613	Interpersonal Communications
	F7011614	Investor Relation
	F7011615	Journalism
	F7011616	Librarianship
	F7011617	Malaysian Mass Media and New Media
	F7011618	Media and Globalisation (<i>Including International Communication</i>)

CATEGORY	GROUP	AREA
F7010000		SOCIAL SCIENCES
	F7011619	Media and Language (<i>Including Discourse and Power</i>)
	F7011620	Media and Technology (<i>Including Social Networking</i>)
	F7011621	Media Policies
	F7011622	Media, Culture and Society (<i>Including Communication, Audience and Cultural Identity, Gender, Children and The Aged</i>)
	F7011623	Multimedia (<i>Including Computer-Assisted and Web-Based Approaches</i>)
	F7011624	Persuasion
	F7011625	Political Communications
	F7011626	Print Media (<i>Including Magazines, Newspapers, Newsletters</i>)
	F7011627	Public Relations and Communication
	F7011628	Science Communication
	F7011629	Telecommunication
	F7011630	Visual Communication
	F7011699	Other Media and Communication n.e.c.

F7011700**Anthropology**

F7011701	Anthropology of Arts
F7011702	Anthropology of Gender
F7011703	Anthropology of Law
F7011704	Anthropology of Religion
F7011705	Applied Anthropology
F7011706	Cultural Theory
F7011707	Death and Dying
F7011708	Demographic Anthropology
F7011709	Ecological Anthropology
F7011710	Economic Anthropology
F7011711	Ethnography
F7011712	Ethnomusicology
F7011713	Family Studies
F7011714	Forensic Anthropology
F7011715	Indigenous People
F7011716	Linguistics Anthropology
F7011717	Medical Anthropology
F7011718	Minority Groups
F7011719	Nutritional Anthropology
F7011720	Orang Asli
F7011721	Physical and Biological Anthropology
F7011722	Political Anthropology

CATEGORY	GROUP	AREA
F7010000		SOCIAL SCIENCES
	F7011723	Psychological Anthropology
	F7011724	Social and Cultural Anthropology
	F7011725	Social Anthropology
	F7011726	Urban Anthropology
	F7011799	Other Anthropology n.e.c.
	F7011800	Professional Development of Law Practitioners
	F7011801	Adjudication
	F7011802	Legal Education
	F7011803	Legal Practice
	F7011804	Professional Ethics
	F7011899	Other Professional Development of Law Practitioners n.e.c.
	F7011900	Law Enforcement
	F7011901	Correctional Theory and Services; Penology
	F7011902	Criminology
	F7011903	Detection and Prevention of Crime; Security Services
	F7011904	Evidence and Procedure
	F7011905	Forensic Science
	F7011906	Police Administration, Procedures and Practice
	F7011907	Jurisdiction and Conflict
	F7011999	Other Law Enforcement n.e.c.
	F7012000	Social Work
	F7012001	Adoption
	F7012002	Child Welfare (<i>Including Abuse, Protection, Rights, Street Children</i>)
	F7012003	Clinical Social Work Practice (<i>Including Child Trauma</i>)
	F7012004	Counselling, Welfare and Community Services (<i>Including Ageing, AIDS</i>)
	F7012005	Developmental Disability and Disabilities
	F7012006	Disaster
	F7012007	Family Therapy
	F7012008	Juvenile and Youth
	F7012009	Lesbian, Gay, Bisexuals and Transgenders
	F7012010	Marriage and Marital Counseling

CATEGORY	GROUP	AREA
F7010000		SOCIAL SCIENCES
	F7012011	Poverty
	F7012012	Program Development
	F7012013	Single Parenthood
	F7012014	Social Policy
	F7012015	Social Program Evaluation
	F7012016	Social Support (Including Homelessness)
	F7012017	Social Work and Administration
	F7012018	Social Work and Technology
	F7012019	Substance Abuse
	F7012020	Violence and Injury Prevention
	F7012021	Volunteerism
	F7012099	Other Social Work n.e.c.
	F7012100	Cognitive Science
	F7012101	Artificial Intelligence
	F7012102	Computer Perception, Memory and Attention
	F7012103	Knowledge Representation and Machine Learning
	F7012104	Linguistic Processes
	F7012105	Neurocognitive Patterns and Neural Networks (<i>Including Neurolinguistics</i>)
	F7012106	Nutrition and Cognitive Function
	F7012107	Philosophy of Cognition
	F7012108	Planning and Problem Solving
	F7012109	Psycholinguistics
	F7012199	Other Cognitive Science n.e.c.
	F7012200	Farmer's Education and Agricultural Extension
	F7012201	Agricultural Education
	F7012202	Agricultural Education Engineering
	F7012203	Agricultural Extension Research
	F7012204	Biotechnology Extension Education
	F7012205	Environmental Conservation Extension Education
	F7012206	Forestry Extension Education
	F7012207	Horticulture Extension Education
	F7012208	Rural Developmental Extension Education
	F7012209	Rural Women Extension Education
	F7012210	Waste Management Extension Education
	F7012211	Youth and Entrepreneurship Extension

CATEGORY	GROUP	AREA
F7010000		SOCIAL SCIENCES
	F7012299	Education Other Farmer's Education and Agricultural Extension n.e.c.
	F7012300	Advancement of Social Sciences Knowledge
	F7012301	Family Functionings (<i>Including Dysfunction Issues and Problems</i>)
	F7012302	Productivity
	F7012303	Sexuality
	F7012304	Social Engineering
	F7012305	Social Measurements and Modelling
	F7012306	Social Stress and Monitoring System
	F7012399	Other Advancement of Social Sciences Knowledge n.e.c.
	F7019900	Other Social Sciences n.e.c.



Division 8

Humanities



CATEGORY	GROUP	AREA
F8010000		HUMANITIES
	F8010100	Linguistics and Literature
	F8010101	Applied Linguistics
	F8010102	Asian Languages and Literature (<i>Including ASEAN Languages</i>)
	F8010103	Clinical Linguistics
	F8010104	Comparative Literature
	F8010105	Computational Linguistics
	F8010106	Computer-Assisted Language Learning (CALL)
	F8010107	Corpus Linguistics
	F8010108	Dialectology
	F8010109	Discourse Studies (<i>Including Critical Linguistics, Text Linguistics, Mediated Discourse Analysis, CDA, Genre Studies, Genre Analysis, Conversation Analysis, Social Interactions Analysis (Macro and Micro), Semiotics</i>)
	F8010110	Educational Linguistics
	F8010111	Endangered Languages (<i>Including Moribund Languages</i>)
	F8010112	Ethnolinguistics
	F8010113	Ethnopragmatics
	F8010114	Ethnosemantics
	F8010115	Feminism (<i>Including Feminism and Power, Sexuality, Empowerment, Class, Disability, Human Rights, Global Feminist, Ethnicity, Power Relations, Neutral Language</i>)
	F8010116	Forensic Linguistics
	F8010117	Historical Linguistics
	F8010118	Intercultural Communication
	F8010119	Laboratory Phonetics and Speech Science (<i>Including Prosody</i>)
	F8010120	Language Acquisition (<i>Including First Language Acquisition, SLA, Bilingualism, Foreign Language Learning</i>)
	F8010121	Language and Gender (<i>Including Social Class, Ageism, Media</i>)
	F8010122	Language Evaluation and Assessment (<i>Including Test Specifications, Test of Listening and Speaking, Reading and Writing</i>)

CATEGORY	GROUP	AREA
F8010000		HUMANITIES
	F8010123	Language of the Disabled (<i>Including Deaf Culture, Visually Impaired Language/Braille, Sign Language</i>)
	F8010124	Language, Media and Culture (<i>Including Social Networks, Impact on Society (Age and Gender), Audience Perception</i>)
	F8010125	Lexicography
	F8010126	Linguistic Structures (<i>Including Grammatical Structures and Lexicology</i>)
	F8010127	Literary Studies (<i>Including Literary Genres, Stylistics</i>)
	F8010128	Literary Theory
	F8010129	Malay Language and Literature
	F8010130	Malaysian Languages and Literature
	F8010131	Morphology
	F8010132	Phonetics and Phonology (<i>Including Prosody</i>)
	F8010133	Pragmatics (<i>Including Conversation Analysis, Non-Verbal Language</i>)
	F8010134	Science of Communication
	F8010135	Semantics
	F8010136	Sociolinguistics (<i>Including Language, Culture and Society, Language Change, Social Dialects, Regional Dialects, Multilingualism, Language Maintenance and Shift</i>)
	F8010137	Syntax
	F8010138	Translation and Interpretation Studies
	F8010139	World Language and Literature Studies
	F8010199	Other Linguistics and Literature n.e.c.
	F8010200	Historical and Civilisation Studies
	F8010201	Archaeological Science
	F8010202	Archaeology of Agricultural and Pastoral Societies
	F8010203	Archaeology of Complex Societies: Asia, Africa Oceania and The Americas
	F8010204	Archaeology of Complex Societies: Europe, the Mediterranean and the Levant
	F8010205	Archaeology of Hunter-Gathered Societies (<i>Including Pleistocene Archaeology</i>)
	F8010206	Biography
	F8010207	Constitutional History of Malaysia
	F8010208	Cultural History
	F8010209	Development of Administration

CATEGORY	GROUP	AREA
F8010000		HUMANITIES
	F8010210	Economic and Commercial History of Malaysia
	F8010211	Emergence of The Third World
	F8010212	Foreign Policy
	F8010213	Historical Archaeology (<i>Including Industrial Archaeology</i>)
	F8010214	History of Civilisations
	F8010215	History of Local Government of Malaysia
	F8010216	History of Political Development in Malaysia
	F8010217	Malay Historiography
	F8010218	Malay Society
	F8010219	Malay World
	F8010220	Maritime Archaeology
	F8010221	Methods and Ideas of History
	F8010222	Modern History
	F8010223	Muslim History
	F8010224	Muslim Society
	F8010225	Nationalism in Southeast Asia and Malaysia
	F8010226	Prehistory of Southeast Asia
	F8010227	World Historical Studies
	F8010299	Other Historical and Civilisation Studies n.e.c.
F8010300		Philosophy
	F8010301	Aesthetics
	F8010302	Applied Ethics (<i>Including Bioethics and Environmental Ethics</i>)
	F8010303	Applied Philosophy
	F8010304	Comparative Philosophy
	F8010305	Epistemology
	F8010306	Ethical Theory
	F8010307	Ethics
	F8010308	Hermeneutic Theory
	F8010309	History and Philosophy of Ideas
	F8010310	Islamisation of Knowledge
	F8010311	Logic
	F8010312	Metaphysics
	F8010313	Phenomenology
	F8010314	Philosophy of Action
	F8010315	Philosophy of Language
	F8010316	Philosophy of Minds
	F8010317	Philosophy of Specific Culture
	F8010318	Social Philosophy
	F8010399	Other Philosophy n.e.c.

CATEGORY	GROUP	AREA
F8010000		HUMANITIES
	F8010400	Arts and Culture
		F8010401 Aboriginal Culture Studies
		F8010402 Ceramic Arts
		F8010403 Consumption and Everyday Life
		F8010404 Costumes
		F8010405 Cultural Policy Studies
		F8010406 Cultural Theory
		F8010407 Culture, Gender and Sexuality
		F8010408 Design Studies
		F8010409 Drama
		F8010410 E-Culture (<i>Including Digitisation of Cultural Heritage</i>)
		F8010411 E-Museum (<i>Including Virtual Museums</i>)
		F8010412 Ethnomusicology
		F8010413 Filming Tradition
		F8010414 Islamic Calligraphy
		F8010415 Material Culture
		F8010416 Metal Handicraft Arts and Tradition
		F8010417 Multicultural, Intercultural and Cross-Cultural Studies
		F8010418 Popular Culture
		F8010419 Post and Colonial and Global Culture Studies
		F8010420 Screen and Media Culture
		F8010421 Theatre
		F8010422 Traditional Arts and Culture
		F8010423 Traditional Costumes
		F8010424 Traditional Performing Arts
		F8010425 Traditional Textile (<i>Including Batik, Songket, Pua Kumbu, Limau, Hand-Woven Materials</i>)
		F8010426 Wood Carving Tradition
		F8010499 Other Arts and Culture n.e.c.
	F8010500	Religious Studies
		F8010501 Atheism and Free Thinkers
		F8010502 Buddhist Studies
		F8010503 Christian Theology (<i>Including Biblical Studies and Church History</i>)
		F8010504 Comparative Religion
		F8010505 Deviance
		F8010506 Fundamentalism
		F8010507 Hindu Studies

CATEGORY	GROUP	AREA
F8010000		HUMANITIES
	F8010508	Ijtihad and Tajdid (<i>Religious Revivalism</i>)
	F8010509	Indigenous Beliefs
	F8010510	Islamic Studies
	F8010511	Jewish Studies
	F8010512	Missionary and Propagation Studies
	F8010513	Moral (Akhlaq)
	F8010514	Mysticism
	F8010515	Philosophy of Religion
	F8010516	Psychology of Religion
	F8010517	Quranic and Hadith Studies
	F8010518	Religion and Civilisation
	F8010519	Religion and Modernisation
	F8010520	Religion and Society
	F8010521	Religious Education
	F8010522	Studies in Other Religious Traditions
	F8010523	Theology and Religious Studies
	F8010524	Ummatic Studies
	F8010599	Other Religious Studies n.e.c.
F8010600		Performing Arts and Music
	F8010601	E-Performance (<i>Including Virtual Performance of Dancers and Arts</i>)
	F8010602	Indigenous Musical Instruments
	F8010603	Indigenous Performing Arts and Music
	F8010604	Modern Dances
	F8010605	Modern Music
	F8010606	Telematic Choreography
	F8010607	Traditional Musical Instruments
	F8010608	Traditional/Classical Dances
	F8010609	Traditional/Classical Music
	F8010699	Other Performing Arts and Music n.e.c.
F8010700		Visual Arts and Crafts
	F8010701	Crafts
	F8010702	Fine Arts Sculpture and Painting
	F8010703	Graphics Arts
	F8010704	Photography
	F8010799	Other Visual Arts and Crafts n.e.c.

CATEGORY	GROUP	AREA
F8010000		HUMANITIES
	F8010800	History and Philosophy of Sciences and Medicine
	F8010801	History and Philosophy of Medicine
	F8010802	History and Philosophy of Science and Technology
	F8010803	Sociology and Social Studies of Science and Technology
	F8010899	Other History and Philosophy of Sciences and Medicine n.e.c.
	F8010900	Clinical Linguistics
	F8010901	Clinical Morphology and Syntax
	F8010902	Clinical Phonetics and Phonology
	F8010903	Clinical Semantics and Pragmatics
	F8010904	Perceptual Analysis
	F8010905	Profiles of Clinical Data
	F8010999	Other Clinical Linguistics n.e.c.
	F8011000	Advancement of Humanities Knowledge
	F8011001	E-Culture
	F8011099	Other Advancement of Humanities Knowledge n.e.c.
	F8019900	Other Humanities n.e.c.

The background of the slide features two financial charts. The top chart is a line graph with a grid, showing a downward trend with labels 1.7945, 1.7900, 1.7855, and 1.7810. The bottom chart is a candlestick chart with a grid, showing an upward trend with labels 11.12, 14.56, 19.00, and 05.14. Three specific candlesticks in the bottom chart are circled: one at the bottom left, one in the middle, and one at the top right.

Division 9

Economics, Business And
Management

CATEGORY	GROUP	AREA
F9010000	ECONOMICS, BUSINESS AND MANAGEMENT	
	F9010100	Accounting
	F9010101	Accounting Education
	F9010102	Accounting for Non-Profit Organisations
	F9010103	Accounting History
	F9010104	Accounting Information System (<i>Including IT and Accounting</i>)
	F9010105	Audit (<i>Including Social Audit, Forensic Audit, Environmental Audit</i>)
	F9010106	Behavioural Accounting
	F9010107	Bicameral Accounting
	F9010108	Corporate Governance (<i>Including Accountability, Ethics, Integrity</i>)
	F9010109	Corporate Social Responsibility Accounting
	F9010110	Environmental Accounting
	F9010111	Financial Accounting
	F9010112	Financial Reporting (<i>Including Accounting Regulation, Accounting Standards, Accounting Theory, Standard-Setting Process, Financial Reporting in Private and Public Sector Organisations</i>)
	F9010113	Forensic Accounting
	F9010114	Human Resource Accounting
	F9010115	Intellectual Capital
	F9010116	International Accounting
	F9010117	Islamic Accounting
	F9010118	Management Accounting (<i>Including Strategic Management Accounting, Performance Management, Cost Management, Management Accounting Control System</i>)
	F9010119	Natural Resource Accounting
	F9010120	Public Sector Accounting
	F9010121	Taxation
	F9010122	Zakat Accounting
	F9010199	Other Accounting n.e.c.

CATEGORY	GROUP	AREA
F9010000	ECONOMICS, BUSINESS AND MANAGEMENT	
	F9010200	Economics/Applied Economics
	F9010201	Agricultural and Food Policies
	F9010202	Agricultural Developments
	F9010203	Agricultural Economics
	F9010204	Commercialisation <i>(Including Agribusiness Management, Contract Manufacturing, Market Development Studies, Marketing, Packaging of Technologies, Patent and Licensing, Pilot Scale, Production Economics, Techno-Economic Feasibility Studies Transfer of Technologies and Globalisation)</i>
	F9010205	Construction Economics
	F9010206	Economic Development and Growth
	F9010207	Economic Geography
	F9010208	Economic History
	F9010209	Economic Modelling and Forecasting
	F9010210	Economics of Cooperative
	F9010211	Environmental Economics
	F9010212	Farmer's Organisation
	F9010213	Financial and Monetary Economics
	F9010214	Financial Literacy
	F9010215	Globalisation
	F9010216	Health Economics
	F9010217	Industrial Economics
	F9010218	Industrial Organisation
	F9010219	International Economics
	F9010220	International Finance
	F9010221	International Trade <i>(Including Competitiveness, Globalisation, Trade Issues and Policies)</i>
	F9010222	Islamic Economics
	F9010223	Labour Economics
	F9010224	Macroeconomics <i>(Including Monetary and Fiscal Theory; and Macroeconomics Issues such as Balance of Payments Issues, Exchange Rates Issues, Fiscal Policy Issues, Income Policy Issues, Industrial Concentration, Monetary Policy Issues, National Accounts, Poverty and Equity, Price Stability, Productivity and Growth, Taxation Issues, Social Security, Cooperative, Agriculture Productivity and Growth and Land Use)</i>

CATEGORY	GROUP	AREA
F9010000		ECONOMICS, BUSINESS AND MANAGEMENT
	F9010225	Management and Productivity Issues (Including Accountability, Ethics, Industrial Relations Issues, Labour Issues, Quality Management, Shareholder Rights, Transparency and Wage Policies)
	F9010226	Microeconomics (Including Microeconomics Issues such as Consumption Issues, Industrial Organisations Issues, Industry Costs and Structure Issues, Industry Policy Issues, Taxation, Job Security, Social Insurance, Land Use, Health Insurance, Financial Literacy, Retirement Planning, Family Economics, Estate Planning and Consumerism)
	F9010227	Natural Resource Economics
	F9010228	Public Finance
	F9010229	Public Sector Economics
	F9010230	Regional Agriculture
	F9010231	Regional Economics
	F9010232	Resource Economics
	F9010233	Socio Economic Development (Including Affirmative Action, Distribution, Equity Issues, Minority Groups, Poverty, Social Mobility, Burden of Disease, Governance, Child Welfare, Social Equality, Social Capital and Human Capital)
	F9010234	Standardisation and Calibration Services (Including Communication Service Standard, Defence Standards and Calibration, Environment Standard, Manufacturing Standards and Calibration, Measurement Standard and Calibration, Optical Standards and Calibration, Quality Assurance, Radiation Standards and Calibration, Service Industries Standards and Calibration, Radiation Dosimetry Services, Ophthalmic and Contact Lenses Standards)
	F9010235	Transport Economics
	F9010236	Urban and Regional Economics
	F9010237	Welfare Economics
	F9010299	Other Economics/Applied Economics n.e.c.

CATEGORY	GROUP	AREA
F9010000	ECONOMICS, BUSINESS AND MANAGEMENT	
	F9010300	Economic Theory
	F9010301	Agricultural Economics Theory
	F9010302	Macroeconomic Theory
	F9010303	Mathematical Economics
	F9010304	Microeconomic Theory
	F9010305	Political Economics
	F9010399	Other Economic Theory n.e.c.
	F9010400	Economic History and History of Economic Thought
	F9010401	Comparative Economic System
	F9010402	Economic History
	F9010403	History of Economic Thought
	F9010499	Other Economic History and History of Economic Thought n.e.c.
	F9010500	Econometrics
	F9010501	Applied Econometrics
	F9010502	Basic Econometrics
	F9010503	Cross Sectional Studies
	F9010504	Econometrics Modelling
	F9010505	Panel Data Analysis
	F9010506	Regressive Analysis
	F9010507	Time Series Econometrics
	F9010599	Other Econometrics n.e.c.
	F9010600	Management
	F9010601	Agribusiness
	F9010602	Agricultural Management
	F9010603	Behavioural Studies, Resource Management, Knowledge Management
	F9010604	Business Ethics
	F9010605	Crisis and Risk Management
	F9010606	Decision Science
	F9010607	Electronic Commerce
	F9010608	Entrepreneurial Studies
	F9010609	Entrepreneurship
	F9010610	Environmental Management
	F9010611	Estate Planning and Management

CATEGORY	GROUP	AREA
F9010000		ECONOMICS, BUSINESS AND MANAGEMENT
		F9010612 Health Management F9010613 Industrial Relations F9010614 International Business Management F9010615 Islamic Management F9010616 Management Information System F9010617 Marketing F9010618 Multimedia Management F9010619 Operational Management F9010620 Organisational Studies F9010621 Plantation Management (<i>Including Crop Management for Banana, Cocoa, Coconut, Coffee, Oil Palm, Pepper, Pineapple, Rubber, Sago, Sugarcane, Tea, Papaya and Oil Palm Mixed With Other Crops e.g. Dragon Fruit</i>) F9010622 Procurements F9010623 Public Sector Management F9010624 Quality Management (<i>Including Total Quality Management (TQM)</i>) F9010625 Science and Technology Management F9010626 Strategic Management F9010627 Techno-Economics F9010699 Other Management n.e.c.
	F9010700	Human Resource Management (HRM)
		F9010701 Compensation and Benefits F9010702 Employee Development F9010703 Employee Relations F9010704 Human Resource Planning F9010705 Industrial Relations F9010706 Managing Multiculturalism F9010707 Occupational Safety and Health F9010708 Performance Appraisal F9010709 Recruitment and Selection F9010799 Other Human Resource Management (HRM) n.e.c.
	F9010800	Marketing
		F9010801 Advertising F9010802 Agricultural Marketing F9010803 Brands Management F9010804 Communications F9010805 Consumer Behaviour

CATEGORY	GROUP	AREA
F9010000		ECONOMICS, BUSINESS AND MANAGEMENT
	F9010806	Halal Food Marketing
	F9010807	Halal Product Marketing
	F9010808	Industrial Marketing
	F9010809	Market Research
	F9010810	Marketing Audit
	F9010811	Marketing Information System
	F9010812	Marketing of Professional Services
	F9010813	Marketing Plan
	F9010814	Promotion
	F9010815	Public Relations
	F9010816	Purchasing
	F9010817	Retailing
	F9010818	Sales and Distribution
	F9010819	Service Marketing
	F9010820	Strategic Marketing
	F9010821	Wholesaling
	F9010899	Other Marketing n.e.c.
F9010900		Human Resource Development (HRD)
	F9010901	Action Learning
	F9010902	Adult Learning and Development
	F9010903	Building Capacity
	F9010904	Career Development
	F9010905	Continuing Professional Development
	F9010906	Employee Counselling
	F9010907	Empowerment of Employees
	F9010908	In-Service Training (<i>Including Personnel Training for K-Soldier Development</i>)
	F9010909	Knowledge Management
	F9010910	K-Workers
	F9010911	Learning Organisation
	F9010912	Learning Transfer
	F9010913	Management Development
	F9010914	Organisation Commitment
	F9010915	Organisational Development
	F9010916	Performance Management
	F9010917	Team Building
	F9010918	Trainability
	F9010919	Training Design
	F9010920	Training Management
	F9010921	Workplace Learning
	F9010999	Other Human Resource Development (HRD) n.e.c.

CATEGORY	GROUP	AREA
F9010000	ECONOMICS, BUSINESS AND MANAGEMENT	
	F9011000	Entrepreneurship
	F9011001	Agricultural Entrepreneurship (<i>Including Plant Industry in Post Harvest Packaging, Post Harvest Logistic, Precision Agriculture and Branding</i>)
	F9011002	Corporate Entrepreneurship
	F9011003	Entrepreneurial Development
	F9011004	Entrepreneurial Studies
	F9011005	Entrepreneurship Education
	F9011006	Family Business
	F9011007	Financing Small Business
	F9011008	Franchising
	F9011009	Intrapreneurship
	F9011010	Small Business Management
	F9011011	Small-Medium Enterprises (SME)
	F9011012	Technopreneurs
	F9011013	Training
	F9011099	Other Entrepreneurship n.e.c.
	F9011100	Finance
	F9011101	Banking
	F9011102	Capital Market
	F9011103	Corporate Finance
	F9011104	Financial Engineering
	F9011105	Financial Institutions
	F9011106	Financial Literacy
	F9011107	Financial Management
	F9011108	Insurance
	F9011109	International Finance
	F9011110	Market Efficiency
	F9011111	Off-Shore Finance
	F9011112	Risk Management
	F9011113	Stock Broking
	F9011114	Venture Capital
	F9011115	Wealth Management (<i>Including Financial Planning, Asset Accumulation and Management</i>)
	F9011199	Other Finance n.e.c.

CATEGORY	GROUP	AREA
F9010000	ECONOMICS, BUSINESS AND MANAGEMENT	
	F9011200	Investment
	F9011201	Futures
	F9011202	Hedge Fund
	F9011203	Initial Public Offers (IPO)
	F9011204	Institutional Investment
	F9011205	Islamic Investment Instrument
	F9011206	Market Efficiency
	F9011207	Mergers and Acquisitions
	F9011208	Mutual Fund
	F9011209	Real Estate
	F9011210	Stock Market Studies
	F9011299	Other Investment n.e.c.
	F9011300	Logistics and Transportation
	F9011301	Air Transport Management
	F9011302	Logistics
	F9011303	Maritime (<i>Including Coastal Water Transport, Inland Water Transport, International Sea Transport, Transport Security</i>)
	F9011304	Rail Transport (<i>Including Rail Ride</i>)
	F9011305	Road Transport (<i>Including of Bicycle and Pedestrianisation, Road Safety, Integrated Transport System, Road Ride</i>)
	F9011306	Space Transport (<i>Including Air Transport</i>)
	F9011307	Supply Chain Management
	F9011308	Transport Economics
	F9011309	Transport Engineering
	F9011310	Transport Equipment (<i>Including Aerospace Equipment, Automotive Equipment, Aviation Equipment, Environmental Friendly Transport Systems, Navigation Equipment, Rail (Transport) Equipment, Ships and Boats</i>)
	F9011311	Transport Marketing
	F9011312	Transport Modelling and Planning (<i>Including Routing, Congestion Analysis and Road Planning, Public Transport, Analysis and Scheduling, Accidents Black Spots Analysis, Location and Distribution Analysis and Travel Behaviour Analysis</i>)
	F9011313	Transport Policy and Planning
	F9011314	Urban Transport
	F9011399	Other Logistics and Transportation n.e.c.

CATEGORY	GROUP	AREA
F9010000	ECONOMICS, BUSINESS AND MANAGEMENT	
	F9011400	Technology Management
	F9011401	Appropriate Technology
	F9011402	Best Practice Management
	F9011403	Change Management
	F9011404	E-Business
	F9011405	Emerging Technology
	F9011406	Ethics, Security and Safety
	F9011407	Forensic
	F9011408	Green Technology/Low Carbon Technology
	F9011409	Human Resource Management
	F9011410	Human Technology Interaction
	F9011411	ICT Management
	F9011412	Innovation Management
	F9011413	Intellectual Property Rights (IPRs)
	F9011414	MOT Education and Training
	F9011415	New Product and Service Management
	F9011416	Project Evaluation and Control
	F9011417	Project Planning
	F9011418	Project Procurement
	F9011419	Quality Performance and Reliability
	F9011420	Research and Development Management
	F9011421	Road Mapping
	F9011422	Science and Technology Management
	F9011423	Strategic Management of Technology
	F9011424	Supply Chain Management
	F9011425	Technology Acquisition
	F9011426	Technology Adoption and Acceptance
	F9011427	Technology Alliances and Merge
	F9011428	Technology and Assessment/Analysis
	F9011429	Technology and Civilisation
	F9011430	Technology and Development
	F9011431	Technology and Law
	F9011432	Technology Audit
	F9011433	Technology Benchmarking
	F9011434	Technology Capability (<i>Including Enhancement of Science and Technology Capabilities in Defence Technology e.g. Aerospace and Communication System, Software, Automotive, Space Technology and Propulsion</i>)
	F9011435	Technology Commercialisation
	F9011436	Technology Diffusion
	F9011437	Technology Financing, Investment

CATEGORY	GROUP	AREA
F9010000		ECONOMICS, BUSINESS AND MANAGEMENT
	F9011438	Technology Foresight/Forecasting
	F9011439	Technology Impact
	F9011440	Technology Incubation
	F9011441	Technology Indicators
	F9011442	Technology Infrastructure
	F9011443	Technology Innovation
	F9011444	Technology Intelligence
	F9011445	Technology Life Cycle
	F9011446	Technology Monitoring and Control
	F9011447	Technology Policy
	F9011448	Technology Policy Studies
	F9011449	Technology Prospecting
	F9011450	Technology Risk
	F9011451	Technology Road Map
	F9011452	Technology Strategy
	F9011453	Technology Transfer
	F9011454	Technology Venture
	F9011455	Technopreneur
	F9011456	Value Management
	F9011499	Other Technology Management n.e.c.
	F9011500	Tourism and Hospitality
	F9011501	Agrotourism
	F9011502	Ecotourism Studies
	F9011503	Education and Training
	F9011504	Food and Hospitality Services
	F9011505	Gerontourism
	F9011506	Health Tourism
	F9011507	Heritage Management
	F9011508	Hospitality Management
	F9011509	Impact Studies
	F9011510	Leisure Studies
	F9011511	Product Development
	F9011512	Public Policy
	F9011513	Social Cultural
	F9011514	Support Services
	F9011515	Tourism and Economy
	F9011516	Tourism and Technologies
	F9011517	Tourism and Transport
	F9011518	Tourism Economics
	F9011519	Tourism Facilities
	F9011520	Tourism Forecasting

CATEGORY	GROUP	AREA
F9010000		ECONOMICS, BUSINESS AND MANAGEMENT
	F9011521	Tourism Management
	F9011522	Tourism Marketing
	F9011523	Tourism Policy
	F9011524	Tourism Resource Appraisal
	F9011525	Tourist Behaviour
	F9011526	Urban Tourism
	F9011599	Other Tourism and Hospitality n.e.c.
	F9011600	Operations Management
	F9011601	Advancement of Operations Management
	F9011602	Aggregation Planning
	F9011603	Balanced Scorecard
	F9011604	Benchmarking and Best Practice Management
	F9011605	Business Process Reengineering
	F9011606	Capacity Requirements Planning
	F9011607	Commercial Services (<i>Including of Electricity, Gas and Water Services and Utilities (e.g. Electricity Services and Utilities, Gas Services and Utilities, Public Services and Utilities, Water Services and Utilities), Waste Management and Recycling (e.g. Recycling Waste Management), Wholesale and Retail Trade (e.g. E-Commerce, Farmer's Market, Fruit Carnival, Hypermarket, Retail Trade, Wholesale Trade, M-Commerce, Virtual Services, E-Contents Sales), Finance, Property and Business Services (e.g. Accounting, Auditing, Banking, Commercial Investigation, Commercial Securities Services, Insurance Services, Investment Services, Islamic Financial Services, Land Administration and Development, Professional Services, Property Management), and Tourism (e.g. Agrotourism, Economics Tourism, Ecotourism, Health Tourism, Recreational Services, Socio-Cultural Issues, Tourism Infrastructural Development, Urban Tourism, E-Tourism, Geo-Tourism, Home Stay, Gerontourism, Food Tourism, Sports Tourist)</i>)
	F9011608	Decision Support System
	F9011609	Design of Experiment
	F9011610	Design of Work System

CATEGORY	GROUP	AREA
F9010000		ECONOMICS, BUSINESS AND MANAGEMENT
	F9011611	Enterprise Resource Planning
	F9011612	Ethics in Operation Management
	F9011613	Inventory Management and Control
	F9011614	JIT Operations
	F9011615	Layout Planning
	F9011616	Lean Operations
	F9011617	Location Planning
	F9011618	Logistics and Transportation
	F9011619	New Product Development
	F9011620	Operation Research/Management Science
	F9011621	Operations Policy
	F9011622	Operations Strategy (<i>Including Tactical Planning for Logistics in Defence and Security Systems such as Manpower Planning, Inventory Planning, Distribution and Routing, Intelligent Systems, Computational Mathematics, Data Analysis, Quality and Productivity and Bio Defence as in Psychological War</i>)
	F9011623	Process Improvement
	F9011624	Process Management
	F9011625	Process Measurements and Control
	F9011626	Process Selection
	F9011627	Product and Service Design
	F9011628	Product Life Cycle
	F9011629	Project Management
	F9011630	Quality Improvement
	F9011631	Quality System
	F9011632	Service Operation
	F9011633	Service Quality Management
	F9011634	Simulation Modelling
	F9011635	Statistical Process Control
	F9011636	Supply Chain Management
	F9011637	Total Productive Maintenance
	F9011638	Total Quality Management
	F9011699	Other Operations Management n.e.c.
	F9011700	International Business
	F9011701	Cross-Cultural Management
	F9011702	Expatriate Adjustment
	F9011703	International Advertising
	F9011704	International Entrepreneurship

CATEGORY	GROUP	AREA
F9010000		ECONOMICS, BUSINESS AND MANAGEMENT
		<ul style="list-style-type: none"> F9011705 International Franchising F9011706 International Human Resource Management F9011707 International Logistics Management F9011708 International Negotiation Strategies F9011709 International Operations Management F9011710 International Organisational Behavior F9011711 Multinational Management F9011712 Multinational Strategic Management F9011713 Strategic Alliance F9011799 Other International Business n.e.c.
	F9011800	Islamic Finance
		<ul style="list-style-type: none"> F9011801 Islamic Banking F9011802 Islamic Corporate Governance F9011803 Islamic Financial Engineering F9011804 Islamic Insurance F9011805 Islamic Risk Management F9011899 Other Islamic Finance n.e.c.
	F9019900	Other Economics, Business and Management n.e.c.

Chapter 3

SOCIO ECONOMIC OBJECTIVE (SEO)

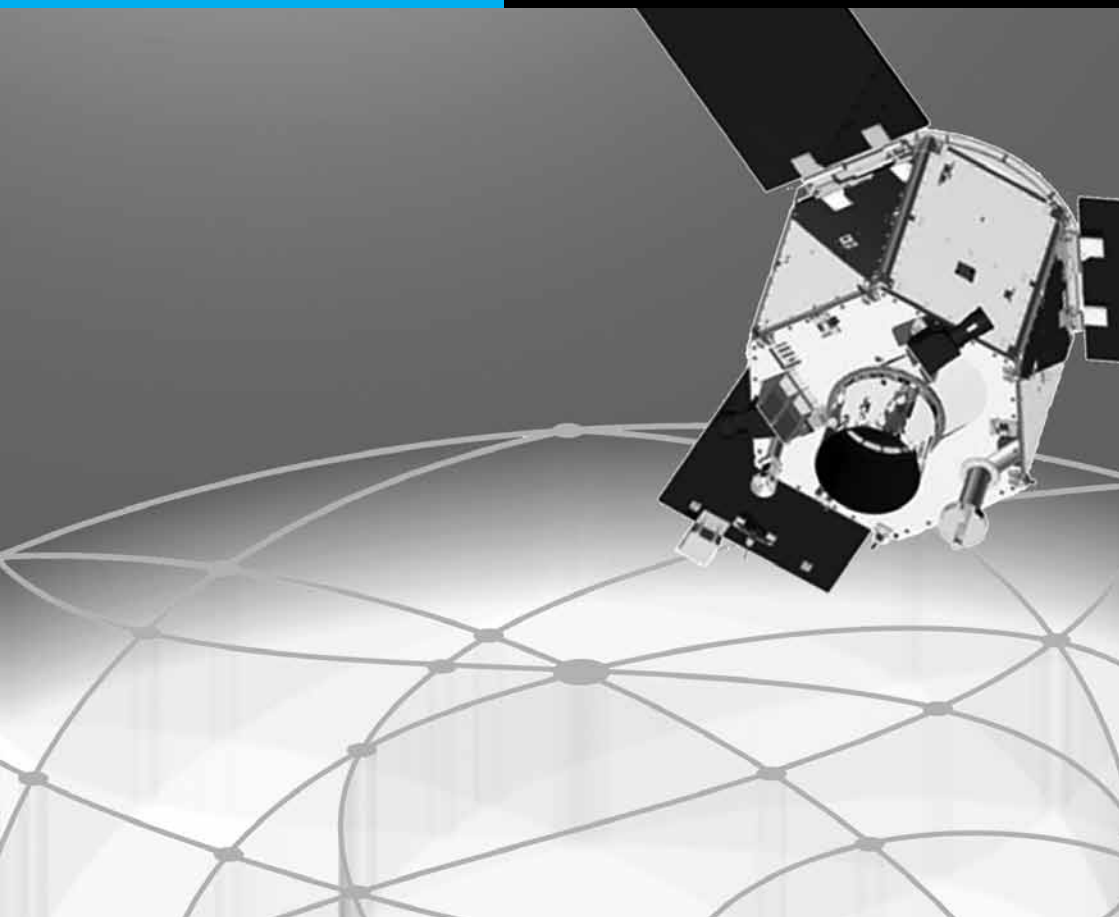
This classification allows R&D to be categorised according to the researcher perceived purpose, outcome or benefits from the research. The attributes applied in designing the SEO comprise of a combination of processes, products, health, education and other social and environmental aspects of particular interest.

Classifying an SEO category is subjective as this classification system chose by the data provider is based on their main purpose and presumed sectoral beneficiaries with great variations and sometimes overlapping. These variations will surface according to a nation's profile and priorities.

The main Divisions and Categories for classifying R&D by SEO in this new edition are retained except for a few name changes in accordance to current research activities. However, major changes are seen in the Group unit where new research objectives are added due to research activities dynamics.

All Division

Socio Economic Objective



DIVISION	CATEGORY	GROUP
1		DEFENCE AND SECURITY
	S1010000	DEFENCE
	S1011100	Defence
	S1011200	Defence Equipment <i>(Including Arms, Weapons, Weaponry, Munitions, Propellant, Armour, Camouflage, War-Games, Hyperbaric Medicine, Aviation Medicine)</i>
	S1019900	Other Defence n.e.c.
	S1020000	LOGISTICS
	S1021100	Civil Engineering
	S1021200	Make Shift Engineering
	S1029900	Other Logistics n.e.c.
2		SUSTAINABLE ECONOMIC DEVELOPMENT
	S2010000	PLANT PRODUCTION AND PRIMARY PRODUCTS
	S2011100	Agro Industrial Technology and Sustainability
	S2011200	Commodity Industry
	S2011300	Crop Production
	S2011400	Food Industry
	S2011500	Food Safety
	S2011600	Food Security
	S2011700	Manufacturing Industry
	S2011800	Market Competitiveness
	S2011900	Novel Herb Industry
	S2012000	Plant Primary Products Equipment
	S2012100	Plant Production Equipment
	S2012200	Value Added By-Products
	S2019900	Other Plant Production and Primary Products n.e.c.
	S2020000	ANIMAL PRODUCTION AND PRIMARY PRODUCTS
	S2021100	Agro Industry
	S2021200	Animal Primary Product Equipment
	S2021300	Animal Production Equipment
	S2021400	Aquaculture Industry
	S2021500	Equestrian
	S2021600	Feed Industry
	S2021700	Fishery Industry

DIVISION	CATEGORY	GROUP
2		SUSTAINABLE ECONOMIC DEVELOPMENT
		S2021800 Food Safety S2021900 Food Security S2022000 Livestock Industry S2022100 Sustainability S2029900 Other Animal Production and Primary Products n.e.c.
	S2030000	MINERAL RESOURCES (EXCLUDING ENERGY)
		S2031100 Environmentally Sustainable Mineral Resource Activities S2031200 Exploration S2031300 Prevention and Treatment of Pollution S2031400 Primary Mining and Extraction Processes S2031500 Treatment of Ores and Minerals S2039900 Other Mineral Resources (Excluding Energy) n.e.c.
	S2040000	ENERGY RESOURCES
		S2041100 Exploration S2041200 Mining and Extraction S2041300 Non-Conventional Energy Resources S2041400 Nuclear Energy S2041500 Preparation and Supply of Energy Source Materials S2041600 Renewable Energy S2049900 Other Energy Resources n.e.c.
	S2050000	ENERGY SUPPLY AND SECURITY
		S2051100 Energy Conservation and Efficiency S2051200 Energy Distribution S2051300 Energy Production S2051400 Energy Security S2051500 Energy Transformation S2051600 Green Energy S2059900 Other Energy Supply and Security n.e.c.
	S2060000	MANUFACTURING
		S2063100 Agricultural Chemicals S2063200 Basic Metal Products (<i>Including Smelting</i>) S2063300 Ceramics, Glass and Industrial Mineral Products

DIVISION	CATEGORY	GROUP
2		SUSTAINABLE ECONOMIC DEVELOPMENT
		S2063400 Communication Equipment S2063500 Composite Material S2063600 Computer Hardware and Electronic Equipment S2063700 Consumer Products S2063800 Environmentally Sustainable Manufacturing S2063900 Fabricated Metal Products S2064000 Fibre Processing and Textiles, Footwear and Leather Products S2064100 High Performing Computing S2064200 Human Pharmaceutical Products S2064300 Industrial Chemicals and Related Products S2064400 Industrial Mineral Products S2064500 Instrumentation S2064600 Latex Product Processing S2064700 Machinery and Equipment S2064800 Materials Performance and Processes/ Analysis S2064900 Milling and Process Materials S2065000 Nanotechnology S2065100 Pollution Prevention and Control S2065200 Processed Food Products and Beverages S2065300 Radiation Technology S2065400 Standard Supporting Technologies S2065500 Synthesis and Design of Fine and Speciality Chemicals S2065600 Transport Equipment S2065700 Veterinary Pharmaceutical Products S2065800 Wood, Wood Products and Paper S2069900 Other Manufacturing n.e.c.

S2070000**CONSTRUCTION**

S2071100	Building Management and Services
S2071200	Construction Materials Performance and Processes
S2071300	Construction Processes
S2071400	Design
S2071500	Environmentally Sustainable Construction
S2071600	Planning
S2079900	Other Construction n.e.c.

DIVISION	CATEGORY	GROUP
2		SUSTAINABLE ECONOMIC DEVELOPMENT
	S2080000	TRANSPORT
	S2081100	Air and Space Transport
	S2081200	Environmentally Sustainable Transport
	S2081300	Ground Transport
	S2081400	Water Transport
	S2089900	Other Transport n.e.c.
	S2090000	INFORMATION AND COMMUNICATION SERVICES
	S2091100	Communication Networks and Services
	S2091200	Communication Services
	S2091300	Computer Software
	S2091400	Environmentally Sustainable Information and Communication Services
	S2091500	Geoinformation Services
	S2091600	Graphic and Multimedia Services
	S2091700	ICT Infrastructures
	S2091800	Information Services (<i>Including Library and Repository</i>)
	S2091900	Intelligent Systems
	S2092000	Media Services
	S2092100	Trusted and Autonomic Computing
	S2099900	Other Information and Communication Services n.e.c.
	S2100000	COMMERCIAL SERVICES
	S2101100	Electricity, Gas and Water Services and Utilities
	S2101200	Environmentally Sustainable Commercial Services and Tourism
	S2101300	Finance, Property and Business Services
	S2101400	Halal Hub
	S2101500	Health Tourism
	S2101600	Islamic Finance
	S2101700	Tourism
	S2101800	Waste Management and Recycling
	S2101900	Wholesale and Retail Trade
	S2109900	Other Commercial Services n.e.c.
	S2110000	ECONOMIC FRAMEWORK
	S2111100	Commercialisation and Entrepreneurial Development

DIVISION	CATEGORY	GROUP
2		SUSTAINABLE ECONOMIC DEVELOPMENT
		S2111200 Innovation and Intellectual Property S2111300 International Trade S2111400 Macroeconomics S2111500 Management and Productivity S2111600 Microeconomics S2111700 Socio-Economic Development S2111800 Standardisation and Calibration Services S2119900 Other Economic Framework n.e.c.
	S2120000	NATURAL RESOURCES
		S2121100 Biodiversity S2121200 Forestry Resources S2121300 Industrial Raw Materials S2121400 Mineral Resource S2121500 Soil Resources S2121600 Water Resources S2121700 Wildlife Resources S2129900 Other Natural Resources n.e.c.
	S2130000	FOREST PRODUCTION AND PRODUCTS
		S2131100 Advanced Wood Technology S2131200 Carbon Sequestration and Stock S2131300 Enhanced Conservation S2131400 Forest Recreation and Therapy S2131500 Improved Forest Management S2131600 Medicinal Value S2131700 Renewable Energy S2131800 Sustainable Raw Materials S2139900 Other Forest Production and Products n.e.c.
	S2140000	MARINE RESOURCES AND PRODUCTS
		S2141100 Marine Archeology S2141200 Marine Biology S2141300 Marine Biotechnology S2141400 Marine Chemistry S2141500 Marine Ecology S2141600 Marine Geology S2141700 Marine Technology S2141800 Oceanography S2149900 Other Marine Resources and Products n.e.c.

DIVISION	CATEGORY	GROUP
2		SUSTAINABLE ECONOMIC DEVELOPMENT
	S2150000	BIORESOURCE PRODUCTION AND PRODUCTS
	S2151100	Advanced Natural Fibre Technology
	S2151200	Biocomposite Industry
	S2151300	Biofuel and Biogas
	S2151400	Bioresource Equipment Production
	S2151500	Improved Bioresource Management
	S2151600	Microbial Industry
	S2151700	Nano Materials
	S2151800	Nano Materials Production Equipment
	S2151900	Natural Products and Derivatives
	S2152000	Sustainable Bioresources
	S2152100	Sustainable Green Technology
	S2159900	Other Bioresource Production and Products n.e.c.
3		SOCIETY
	S3010000	HEALTH
	S3011100	Alternative Medicine
	S3011200	Biomedical Sciences
	S3011300	Clinical
	S3011400	Health and Support Services
	S3011500	Legislation and Bioethics
	S3011600	Medical Devices, System and Technologies
	S3011700	Pharmaceutical and Nutraceutical
	S3011800	Public Health
	S3019900	Other Health n.e.c.
	S3020000	EDUCATION
	S3021100	Computer-Based Teaching and Learning
	S3021200	Early Childhood and Primary Education
	S3021300	Education Policy
	S3021400	Educational Administration
	S3021500	Lifelong Learning
	S3021600	Secondary Education
	S3021700	Special Education
	S3021800	Teaching and Learning
	S3021900	Technical and Vocational Education
	S3022000	Tertiary Education
	S3029900	Other Education n.e.c.

DIVISION	CATEGORY	GROUP
3		SOCIETY
	S3030000	SOCIAL DEVELOPMENT AND COMMUNITY SERVICES
		S3031100 Art, Sport and Recreation
		S3031200 Community Services
		S3031300 Demography and Population Studies
		S3031400 Ethical Issues
		S3031500 International Relations
		S3031600 Nation Building
		S3031700 Public Services
		S3031800 Urban and Rural Issues
		S3039900 Other Social Development and Community Services n.e.c.
	S3040000	ARTS, CULTURE AND HERITAGE
		S3041100 Arts
		S3041200 Chinese Culture
		S3041300 Culture
		S3041400 Heritage
		S3041500 Indian Culture
		S3041600 Indigenous Culture
		S3041700 Malay Culture
		S3041800 Malaysian Culture
		S3049900 Other Arts, Culture and Heritage n.e.c.
	S3050000	RELIGION AND ETHICS
		S3051100 Moral and Ethics
		S3051200 Religion
		S3059900 Other Religion and Ethics n.e.c.
	S3060000	SOCIAL PROBLEMS
		S3061100 Class
		S3061200 Ethnic
		S3061300 Immigrants
		S3061400 Middle Age Problems
		S3061500 Old Age Problems
		S3061600 Social Inequalities
		S3061700 Youth Problems
		S3069900 Other Social Problems n.e.c.

DIVISION	CATEGORY	GROUP
4		ENVIRONMENT
	S4010000	ENVIRONMENTAL KNOWLEDGE
		S4011100 Built Environment
		S4011200 Control of Pests, Diseases and Exotic Species
		S4011300 Environmental Degradation
		S4011400 Land
		S4011500 Meteorology, Climate and Atmosphere
		S4011600 Natural Hazards
		S4011700 Nature Conservation
		S4011800 Ocean
		S4011900 Social Environment
		S4012000 Soil
		S4012100 Sustainable Environment
		S4012200 Water
		S4012300 Water Bodies
		S4019900 Other Environmental Knowledge n.e.c.
	S4020000	ENVIRONMENTAL ASPECTS OF DEVELOPMENT
		S4021100 Animal Production and Animal Primary Products (<i>Including Fishing</i>)
		S4021200 Commercial Services
		S4021300 Construction
		S4021400 Energy Resources
		S4021500 Energy Supply
		S4021600 Environmental Economic Framework
		S4021700 Flora, Fauna and Biodiversity
		S4021800 Green Technology Development
		S4021900 Information and Communication Services
		S4022000 Manufacturing
		S4022100 Mineral Resources (<i>Excluding Energy</i>)
		S4022200 Plant Production and Plant Primary Products (<i>Including Forestry</i>)
		S4022300 Tourism Development
		S4022400 Transport
		S4022500 Water Resources Development
		S4029900 Other Environmental Aspects of Development n.e.c.
	S4030000	ENVIRONMENTAL MANAGEMENT AND OTHER ASPECTS
		S4031100 Atmosphere (<i>Excluding Climate and Weather</i>)
		S4031200 Climate and Weather

DIVISION	CATEGORY	GROUP
4		ENVIRONMENT
		S4031300 Ecosystem Assessment and Management S4031400 Environmental Lifecycle Assessment S4031500 Environmental Management S4031600 Farmland S4031700 Forest and Wooded Lands S4031800 Fresh Water and Estuarine Environment S4031900 Land Use Planning S4032000 Marine and Coastal Environment S4032100 Mining Environment S4032200 Park Management S4032300 Radio Frequency Management S4032400 Rehabilitation of Degraded Environment S4032500 Remnant Vegetation and Protected Conservation Area S4032600 Sparse Land (<i>Including Permanent Grassland and the Arid Zone</i>) S4032700 Urban and Industrial Environment S4032800 Waste Management and Recycling S4032900 Waste to Wealth S4039900 Other Environmental Management and Others Aspects n.e.c.
	S4040000	ENVIRONMENTAL POLICY, LEGISLATION AND STANDARDS
		S4041100 Air Quality Policy S4041200 Coastal and Marine Management Policy S4041300 Consumption Patterns, Population Issues and the Environment S4041400 Environmental Education and Awareness S4041500 Environmental Governance S4041600 Global Climate Change Adaptation Measures S4041700 Land Stewardship S4041800 Trade and Environment S4041900 Urban and Rural Land Policy S4042000 Urban and Rural Water Policy S4049900 Other Environmental Policy, Legislation and Standards n.e.c.

DIVISION	CATEGORY	GROUP
5	ADVANCEMENT OF KNOWLEDGE ¹	
	S5010000	NATURAL SCIENCES AND ENGINEERING
	S5011100	Aerospace Science
	S5011200	Agricultural Science
	S5011300	Applied Science
	S5011400	Bioinformatics
	S5011500	Biological Science
	S5011600	Biotechnology
	S5011700	Chemical Science
	S5011800	Earth Science
	S5011900	Engineering Science
	S5012000	Health Science
	S5012100	Information, Computer and Communication Technology
	S5012200	Marine Sciences
	S5012300	Mathematical Science
	S5012400	Medical Science
	S5012500	Multimedia
	S5012600	Nuclear Science
	S5012700	Physical Science
	S5019900	Other Natural Sciences and Engineering n.e.c.
	S5020000	HUMANITIES AND QUALITY OF LIFE
	S5021100	Civilisational Studies
	S5021200	Cyber Law
	S5021300	Educational Challenges
	S5021400	Finance
	S5021500	Food Security
	S5021600	Health and Social Care
	S5021700	Humanities
	S5021800	Leisure and Recreation
	S5021900	Media, Language and Culture
	S5022000	Medical Gerontology
	S5022100	Music and Performing Arts
	S5022200	Religious Studies
	S5022300	Social Gerontology
	S5022400	Social Protection
	S5022500	Social Psychology
	S5022600	Social Science
	S5021990	Other Humanities and Quality of Life n.e.c.

¹ Only research projects that are predominantly "pure basic research" can be classified to Division 5: Advancement of Knowledge.

DIVISION	CATEGORY	GROUP
6	ADVANCED EXPERIMENTAL AND APPLIED SCIENCE ²	
	S6010000	APPLIED SCIENCES, ENGINEERING AND TECHNOLOGIES
	S6011100	Aerospace Science and Technology
	S6011200	Agricultural Science
	S6011300	Applied Biology
	S6011400	Applied Chemistry
	S6011500	Applied Earth Science
	S6011600	Applied Linguistics
	S6011700	Applied Mathematics
	S6011800	Applied Physics
	S6011900	Applied Science and Technology
	S6012000	Bioinformatics
	S6012100	Biotechnology
	S6012200	Digital Cultural Heritage
	S6012300	Engineering Science and Technology
	S6012400	Gerontechnology
	S6012500	Health Science
	S6012600	Information, Computer and Communication Technology
	S6012700	Medical Science
	S6012800	Multimedia
	S6012900	Nanotechnology
	S6013000	Nuclear Technology
	S6013100	Space Science
	S6019900	Other Applied Sciences, Engineering and Technologies n.e.c.

² Research projects that are predominantly “applied research” can be classified to Division 6: Advance Experimental and Applied Science.

ANNEX



Acknowledgement

National experts that contributed in the revision of the Malaysian Research and Development Classification System – 6th Edition.

Agriculture

Prof. Dr. Awang Soh Bin Mamat, Universiti Malaysia Kelantan
Dr. Chan Chee Wan, Institut Penyelidikan dan Kemajuan Pertanian Malaysia
Dr. Herlina Binti Abdul Rahim, Universiti Teknologi Malaysia
Dr. Mohd. Fariduddin Bin Othman, Jabatan Perikanan Malaysia
Dr. Norimah Yusof, Agensi Nuklear Malaysia
Mr. Samuel Yap Kian Chee, Lembaga Koko Malaysia

Forestry

Prof. Dr. Abdul Khalil Bin Shawkataly, Universiti Sains Malaysia
Dr. Shamsudin Ibrahim, Forest Research Institute Malaysia
Ms. Eyen Khoo, Jabatan Perhutanan Sabah

Material Science

Prof. Madya Dr. Balbir Singh Mahinder Singh, Universiti Teknologi Petronas
Dr. Abdul Kadir Masrom, SIRIM Berhad
Mr. Abdul Rois Bin Abdul Mois, Jabatan Mineral dan Geosains

Engineering

Sr. Dr. Ilias Bin Said, Universiti Sains Malaysia
Prof. Dr. Shahnor Basri, Universiti Putra Malaysia
Prof. Dr. Shamsuddin Baharin, Universiti Malaysia Pahang
Prof. Ir. Dr. Ahmad Faizal Mohd. Zain, Universiti Tun Hussein Onn Malaysia
Dr. Ishak Bin Manaf, Agensi Nuklear Malaysia
Ms. Hasmafatiha Binti Harun, SIRIM Berhad
Mr. Mohd Azminuddin Bin Afandi, Universiti Teknologi Petronas

Marine Science

Prof. Che Abd Rahim Mohamed, Universiti Kebangsaan Malaysia
Dr. Zainudin Bin Bachok, Universiti Malaysia Trengganu
Dr. Mohd. Taupek Bin Mohd. Nasir, Jabatan Perikanan Malaysia
Mr. Abu Talib Bin Ahmad, Universiti Putra Malaysia
Hj. Hussin Mat Ali, Jabatan Perikanan Malaysia

Environmental

Dr. Anwar Ahmad, Universiti Malaysia Pahang
Dr. Marzuki Bin Ismail, Universiti Malaysia Trengganu
Dr. Zawawi Daud, Universiti Tun Hussein Onn Malaysia

Earth Science

Prof. Dr. Abdul Ghani B. Md Rafek, Universiti Teknologi Malaysia
Dr. Felix Tongkul, Universiti Malaysia Sabah
Mr. Shahid Bin Ayub, Agensi Nuklear Malaysia

Mathematics

Dr. Norma Alias, Universiti Teknologi Malaysia
Dr. Ho Chee Kit, Universiti Tenaga Nasional

Physics/Aerospace

Prof. Dato' Dr. Baharudin Yatim, Universiti Kebangsaan Malaysia
Prof. Dr. Mohd Maarof bin H.A. Moxsin, Universiti Putra Malaysia
Prof. Madya Dr. Abdul Halim bin Abdul Aziz, Universiti Sains Malaysia
Dr. Azmin Shakrine bin Mohd Rafie, Universiti Putra Malaysia
Dr. Abdul Aziz B. Mohamed, Agensi Nuklear Malaysia
Ms. Monalija Kostor, Lembaga Perlesenan Tenaga Atom Malaysia

Economy, Business & Management

Prof. Madya Dr. Nor Aziah Abu Kasim, Universiti Putra Malaysia
Prof Madya Dr. Alias bin Radam, Universiti Putra Malaysia
Dr. Lennora Putit, Universiti Teknologi Mara

ICT

Prof. Madya Dr. Fong Soon Fook, Universiti Sains Malaysia
Prof. Madya Hatim Mohammad Tahir, Universiti Utara Malaysia
Prof. Madya Ir. Dr. Andrew Ragai Henry Rigit, Universiti Malaysia Sarawak
Dr. Halabi Bin Hasbullah, Universiti Teknologi Petronas
Dr. Ho Chin Kuan, Multimedia University
Mr. Chin Wen Cheong, Multimedia University
Mr. Mohamad Hafiz A. Hamid, Multimedia Development Corporation
Mr. Mohamad Zainuddin Bin Ahmad, Telekom Malaysia

Bioinformatics

Prof. Madya Dr. Amir Feisal Merican Bin Aljunid Merican, Institut Genom Malaysia
Prof. Madya Dr. Cheah Yoke Kqueen, Universiti Putra Malaysia
Prof. Madya Dr. Kalaivani A/P K.Nadarajah, Universiti Kebangsaan Malaysia
Prof. Madya Dr. Mustafar Kamal Hamzah, Universiti Teknologi Mara
Dr. Mohd Saberi Bin Mohamad, Universiti Teknologi Malaysia
Dr. Mohd Shahir Shamsir Omar, Universiti Teknologi Malaysia

Biological Science & Biotechnology

Prof. Dr. Mohd Yusoff Mashor, Universiti Malaysia Perlis
Prof. Madya Dr. Ainon Bt Hamzah, Universiti Kebangsaan Malaysia
Dr. Harinder Singh, Universiti Teknologi Mara
Dr. Seah Lay Hong, KIMIA
Dr. Abas Mazni Bin Othman, Institut Agro-Bioteknologi Malaysia
Mr. Richard Rumpet, Jabatan Perikanan Malaysia

Chemical

Prof. Dr. Abu Bakar bin Mohamad, Universiti Kebangsaan Malaysia
Prof. Dr. Misni bin Misran, Universiti Malaya
Dr Shailini Ashoka, KIMIA

Medical

Dato' Dr. Rehir Dahalan, Agensi Nuklear Malaysia
Prof. Dr. Sazaly Bin Abu Bakar, Universiti Malaya
Prof. Dr. Abu Bakar Abdul Majeed, Universiti Teknologi Mara
Prof. Madya Dr. Hairuszah Binti Ithnin, Universiti Putra Malaysia
Prof. Madya Dr. Suzanah Binti Abdul Rahman, International Islamic University
Dr. Dalia Abdullah, Universiti Teknologi Malaysia
Dr. Leong Chee Onn, International Medical University
Ms. Ruzianisra Mohamed, Universiti Teknologi Mara

Social Science

Prof. Madya Dr. Siti Hajar Mohd Yasin, Universiti Teknologi Mara

Government Agencies

Mr. Mohamad Amarullah Azmi, Unit Perancang Ekonomi
Ms. Kee Mee Lee, Kementerian Pengajian Tinggi
Ms. Sindy Ooi Huey Ying, Bahagian BIOTEK, MOSTI
Ms. Fadzillah Binti Mansor, Bahagian NOD, MOSTI
Ms. Noor Hafizah Binti Azizi, Bahagian DICT, MOSTI
Ms. Deneswari A/P Sivaguru, Bahagian S2S, MOSTI
Ms. Noor Fairuz Shamsudin, Bahagian TS&T, MOSTI

MASTIC Team

Ms. Sakena Abdul Jabar
Ms. Anita Bahari
Mr. Ramlee Ab Ghani
Mr. Vinson Embaran
Ms. Nor Rokiah Alias

Ms. Lydia Ch'ng Lina
Ms. Ruhaidah Kasman
Ms. Farah Liyana Bt Mohamed Nor
Mr. Rahman Kamaruddin
Ms. Norashikin Che Yem
Ms. Nor Mazatul Hafizah
Ms. Tuty Sarini Zainul Abidin
Mr. Mohamad Mokhaizal Mohd Mokhtar
Mr. Mohamed Redzaei Shafeeq Rameli
Mr. Hasbullah Mustafa

MALAYSIAN SCIENCE AND TECHNOLOGY INFORMATION CENTRE (MASTIC)

Ministry of Science, Technology and Innovation (MOSTI)
Level 4, Block C5, Complex C
Federal Government Administrative Centre
62662 Putrajaya, Malaysia
Tel : 603-8885 8000/8038
Fax : 603-8889 2980
Email :mastic@mastic.gov.my
<http://www.mastic.gov.my>



**MALAYSIAN SCIENCE AND TECHNOLOGY
INFORMATION CENTRE (MASTIC)**

Ministry of Science, Technology and Innovation (MOSTI)
Level 4, Block C5, Complex C
Federal Government Administration Centre
62662 Putrajaya, Malaysia

Tel: 603-8885 8000/8034

Fax: 603-8889 2900

email: mastic@mastic.gov.my

<http://www.mastic.gov.my>

