

# Singapore Standard Statistical Classifications 2015

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## Introduction

The Singapore Department of Statistics (DOS) completed the revision of three national standard statistical classifications in April 2015, namely the Singapore Standard Industrial Classification (SSIC) 2015, Singapore Standard Occupational Classification (SSOC) 2015 and Singapore Standard Educational Classification (SSEC) 2015. The relevant stakeholders such as major users of the classifications were consulted during the revision to incorporate changes and developments in the economy, labour market, education and training.

The classifications are used in data collection (e.g. censuses, surveys, administrative records), compilation, presentation and analysis of a wide range of statistics, such as national income, production, demographic, social, labour and education statistics.

This article provides a brief description of each national classification standard and highlights the major changes arising from the recent revision of these standards.

## Singapore Standard Industrial Classification 2015

The SSIC 2015 is the eleventh edition of the SSIC. Similar to the SSIC 2010, it adopts the basic framework of the International Standard Industrial Classification Revision 4 (ISIC Rev. 4), with appropriate modifications to take into account Singapore's

economic landscape while enhancing international comparability. The classification also incorporates recent changes in economic activities to better reflect the current structure of Singapore's economy.

As there were no structural changes in the ISIC Rev. 4, the number of one-, two-, three- and four-digit codes remain about the same in the SSIC 2015. At the more detailed level, a number of five-digit codes have been introduced to reflect new activities, and existing ones which have become significant. Activities with declining number of establishments have been streamlined and combined.

For instance, to reflect the growing presence of retail activities through certain channels, separate codes for retail sales via internet and retail sales via vending machines were created in the section for wholesale and retail trade. Only establishments which engage in retail sales exclusively or predominantly through the internet are classified in the code for retail sales via internet.

New unique codes have also been created to take into account various activities, such as supporting services to distribution of gas (e.g. arranging for sale of gas) and inter-country bus services (e.g. firms offering scheduled long-distance cross-country services).

On the other hand, activities such as manufacturing of starch and starch products, fish and aquatic farming activities have been streamlined and combined into fewer codes or a single code.

Some of the new codes are shown in Table 1.

TABLE 1 NEW SEPARATE CODES IN SSIC 2015

Section		Five-digit Codes Created	
C	Manufacturing	20133	Manufacture of synthetic rubber
		21030	Manufacture of traditional chinese medicine
D	Electricity, Gas, Steam and Air-Conditioning Supply	35203	Other related services (e.g. arranging for sale of natural gas)
G	Wholesale and Retail Trade	47910	Retail sale via internet
		47991	Retail sale via vending machines
H	Transportation and Storage	49213	Inter-country bus services
		52244	Stevedoring services
I	Accommodation and Food Service Activities	55109	Other short term accommodation activities n.e.c (e.g. backpackers/travellers' hostels, guesthouses etc)
		56123	Snack bars and food kiosks (mainly for takeaway, including dessert/bubble tea outlets)
K	Financial and Insurance Activities	66222	Financial advisory firms and advisers (including firms providing financial planning services)
L	Real Estate Activities	68106	Management of self-owned strata titled property
M	Professional, Scientific and Technical Activities	71114	Land surveying services
		71119	Other surveying services n.e.c. (e.g. geophysical, geologic, seismic, hydrographic surveying services)
N	Administrative and Support Service Activities	81212	Domestic/Household cleaning services
Q	Health and Social Services	86102	Community hospitals
		86905	Dialysis services

## Singapore Standard Occupational Classification 2015

The SSOC 2015 is the seventh edition of the SSOC. It adopts the basic framework and principles of the International Standard Classification of Occupations 2008 (ISCO-08) developed by the International Labour Office (ILO), incorporating the latest developments in the labour market.

The number of major groups in SSOC 2015 remains unchanged at ten while the number of two-, three-, four- and five-digit groups have increased to provide more detailed breakdown at each levels.

To better reflect the different tasks and duties performed by cleaners in different premises (e.g. Food and Beverage (F&B) establishments, offices, industrial establishments), separate four-digit codes have been created. New five-digit codes have been created for

occupations that were becoming more prevalent in emerging industries, such as clinical research professionals, clinical research coordinators, safety and security consultants, enterprise/solution architects, intellectual property brokers and transaction specialists. Separate codes have also been

created for those handling vehicles such as parking valets, concrete mix truck drivers and waste truck drivers to cater to the differences in skill requirements and tasks carried out.

Some of the new codes are shown in Table 2 below.

TABLE 2 NEW SEPARATE CODES IN SSOC 2015

Major Group		Five-digit Codes Created	
Group 2	Professionals	21347	Clinical research professionals
		21497	Optical engineer (including laser engineer)
		21498	Safety and security consultant
		21665	Interaction/User experience designer
		25113	Enterprise/Solution architect
Group 3	Associate Professionals and Technicians	31413	Clinical research coordinator
		33291	Intellectual property brokers and transaction specialists
		33393	International market agent/representative (eg junket operator)
Group 5	Service and Sales Workers	51322	Barista
Group 8	Plant and Machine Operators and Assemblers	83225	Parking Valet
		83325	Concrete mix truck driver
		83326	Waste truck driver (including hooklift trucks with roll-on containers)
		83491	Motorised sweeper operator
Group 9	Cleaners, Labourers and Related Workers	91151	Food and beverage establishment cleaner (eg restaurants, food courts, hawker centres)
		91160	Residential area cleaner (eg HDB estates, condominiums, private apartments, common areas within residential estates)
		91170	Cleaner in open areas (eg bus stops, drains, waterways, overhead bridges, roads, expressways, parks, beaches)
		94104	Tea server/steward (excluding bartender, barista and food/drink stall assistant)
		96000	Waste and recyclables collection supervisor

Some occupations were reclassified across major groups, taking into consideration the main tasks and duties of these occupations within the context of Singapore and developments in recent years. For instance, some healthcare-related occupations (e.g. registered nurses) have been reclassified from Major Group 3 to Major Group 2 given that the nature of work are similar to those performed by their international counterparts and consistent with the tasks specified for similar occupations in Major Group 2 in ISCO-08.

## Singapore Standard Educational Classification 2015

The SSEC 2015 is the third edition of the SSEC. It makes reference to the basic framework and principles of the International Standard Classification of Education (ISCED) 2011 and ISCED Fields of Education and Training classification (ISCED-F) 2013. Apart from changes in the full-time education system and vocational certification system, developments in the continuing education and training programmes have also been taken into consideration when revising the SSEC. Unlike the SSIC and SSOC which are each

designed as one single classification, the SSEC comprises three sub-classifications:

- Classification of Level of Education Attending
- Classification of Educational Qualification Attained
- Classification of Field of Study

### *Classification of Level of Education Attending*

The level of education attending refers to the grade or standard of formal education that a full-time student is attending.

The classification of level of education attending in the SSEC 2015 remains broadly similar to the structure in SSEC 2010. Minor modifications are made to the description of certain categories. For example, the description “University First Degree” at the one-digit level was changed to “Bachelor’s or equivalent” to further align with the terminology used in ISCED 2011. Separate categories have been created from category 7 in SSEC 2010 (Table 3) to better reflect the differences in rigor and duration of various programmes at the postgraduate level. The comparison of the one-digit categories between SSEC 2015 and SSEC 2010 is shown in Table 3.

TABLE 3 COMPARISON OF ONE-DIGIT CATEGORIES IN SSEC 2015 AND SSEC 2010  
(LEVEL OF EDUCATION ATTENDING)

SSEC 2015		SSEC 2010	
0	Pre-Primary	0	Pre-Primary
1	Primary	1	Primary
2	Secondary	2	Secondary: General & Vocational
3	Post-Secondary (Non-Tertiary): General & Vocational	3	Post-Secondary (Non-Tertiary): General & Vocational
4	Polytechnic Diploma Course	4	Polytechnic Diploma Course
5	Other Courses Leading to Award of Professional Qualification and Other Diploma	5	Other Courses Leading to Award of Professional Qualification and Other Diploma
6	Bachelor’s or Equivalent	6	University First Degree
7	Postgraduate Diploma/Certificate (Excluding Master’s and Doctorate)	7	University Postgraduate Diploma/Degree
8	Master’s and Doctorate or Equivalent		

## **Classification of Educational Qualification Attained**

The level of educational qualification attained refers to the grade or standard of education passed or the highest level of education where a certificate, diploma or degree is awarded by an educational or training institution. The educational qualification may be attained through full-time or part-time study in a structured educational programme.

To reflect a growing emphasis on the Continuing Education and Training (CET) programmes in Singapore such as those offered under the Singapore

Workforce Skills Qualifications (WSQ) system and bite-sized learning and skills-upgrading modules, the scope and description of the category “Other Education (Non-Award Courses/Miscellaneous)” has been refined to “Modular Certification (Non-Award Courses/Non-full Qualifications)” and is denoted by the letter ‘N’. Similar to the SSEC 2010, full qualifications awarded based on the WSQ system will be classified and benchmarked to the equivalent educational qualifications in the mainstream education system.

Table 4 provides a comparison between the one-digit categories of SSEC 2015 and 2010.

TABLE 4 COMPARISON OF ONE-DIGIT CATEGORIES IN SSEC 2015 AND SSEC 2010  
(EDUCATIONAL QUALIFICATION ATTAINED)

<b>SSEC 2015</b>		<b>SSEC 2010</b>	
0	No Formal Qualification/ Pre-Primary/Lower Primary	0	No Formal Qualification/ Lower Primary
1	Primary	1	Primary
2	Lower Secondary	2	Lower Secondary
3	Secondary	3	Secondary
4	Post-Secondary (Non-Tertiary): General & Vocational	4	Post-Secondary (Non-Tertiary): General & Vocational
5	Polytechnic Diploma	5	Polytechnic Diploma
6	Professional Qualification and Other Diploma	6	Professional Qualification and Other Diploma
7	Bachelor’s or Equivalent	7	University First Degree
8	Postgraduate Diploma/Certificate (Excluding Master’s and Doctorate)	8	University Postgraduate Diploma/Degree
9	Master’s and Doctorate or Equivalent		
N	Modular Certification (Non-Award Courses/Non-full Qualifications)	9	Other Education (Non-Award Courses/Miscellaneous)

## Classification of Field of Study

The field of study refers to the principal discipline, branch or subject matter of study that leads to the award of the qualification attained at polytechnic or university levels. Vocational qualifications at post-secondary level may also be classified by field of study.

The number of two-digit broad fields in the SSEC 2015 field of study classification increased from 14 to 15. A new broad field “00 Generic Programmes and Qualifications” created to account for broad generic programmes and qualifications which cover a wide range of subjects with little or no specialisation in a particular field or fields, in line with ISCED 2011. The 15 broad fields are listed in Table 5 below.

At the detailed field level, codes for “Basic Programmes and Qualifications”, “Literacy and

Numeracy” and “Personal Skills and Development” have been included under the newly created field mentioned above. New detailed fields such as “Games Design”, “Animation & Visual Effects” and “Pastry Making & Baking Skills” were also added to the narrow field of Design & Applied Arts (022) and Food Services (132) to reflect the prevalence of such programmes being offered by some of the schools in Singapore.

Separate categories were also created for “Student Care” and “Youth Care” because of the differences in their focus. The former covers aspects like before/after school supervised care for children, while the latter covers issues related to at-risk youths and mentoring youths.

The SSIC 2015, SSOC 2015 and SSEC 2015 reports can be accessed via the SingStat website at <http://www.singstat.gov.sg/methodologies-standards>.

TABLE 5 LIST OF BROAD FIELDS IN SSEC 2015

00	Generic Programmes and Qualifications
01	Education
02	Fine & Applied Arts
03	Humanities & Social Sciences
04	Mass Communication & Information Science
05	Business & Administration
06	Law
07	Natural, Physical, Chemical & Mathematical Sciences
08	Health Sciences
09	Information Technology
10	Architecture, Building & Real Estate
11	Engineering Sciences
12	Engineering, Manufacturing & Related Trades
13	Services
99	Other Fields