



Gender Differentials in Fields of Study among University Graduates, 2010

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Introduction

The educational profile of the Singapore resident population¹ improved significantly between 2000 and 2010.

In particular, the number of university graduates² in the Singapore resident population more than doubled from 266,600 in 2000 to 634,100 in 2010. Among the resident university graduates in 2010, 326,400 were males and 307,700 were females.

While male university graduates outnumbered their female counterparts, there were some fields of study³ where females outnumbered males.

This article examines the gender distribution in fields of study among university graduates in the Singapore resident population in 2010, and the changes over the past decade.

Data are drawn from the Singapore Censuses of Population 2000 and 2010.

Five Most Common Fields of Study

Business & Administration was the most common field of study in 2010, with almost one in three (32 per cent) university graduates obtaining their highest qualifications in this field (Table 1).

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- 1 The Singapore resident population comprises Singapore citizens and permanent residents.
 - 2 Refer to persons aged 15 years and over who are not attending educational institutions as full-time students and have a Bachelor Degree, Postgraduate Diploma (including National Institute of Education postgraduate diploma), Masters, or Doctorate.
 - 3 Refers to the principal discipline, branch or subject matter of study that leads to the award of the highest qualification attained at university level. The Singapore Standard Educational Classification (SSEC) 2000 and 2010 are used to classify the subject matter of study for the data in 2000 and 2010 respectively. More information on the SSEC is available from the SingStat website at <http://www.singstat.gov.sg/statsres/ssc/ssec.html>.

TABLE 1 RESIDENT UNIVERSITY GRADUATES AGED 15 YEARS AND OVER
 BY FIELD OF STUDY, 2000 AND 2010

Field of Study	Number		Per Cent	
	2000	2010	2000	2010
Total	266,631	634,098	100.0	100.0
Business & Administration	82,038	204,037	30.8	32.2
Engineering Sciences	60,656	135,945	22.7	21.4
Humanities & Social Sciences	35,940	74,126	13.5	11.7
Information Technology	16,284	61,859	6.1	9.8
Natural, Physical, Chemical & Mathematical Sciences	19,032	47,961	7.1	7.6
Health Sciences	11,725	29,912	4.4	4.7
Education	6,622	18,296	2.5	2.9
Architecture & Building	7,775	15,781	2.9	2.5
Mass Communication & Information Science	4,382	14,511	1.6	2.3
Law	6,884	12,085	2.6	1.9
Fine & Applied Arts	5,230	9,583	2.0	1.5
Others	10,062	10,003	3.8	1.6

Note: The figures may not add up to total due to rounding.

Other most common fields of study were Engineering Sciences (21 per cent), Humanities & Social Sciences (12 per cent), Information Technology (9.8 per cent), and Natural, Physical, Chemical & Mathematical Sciences (7.6 per cent).

In comparison, less than 5 per cent of university graduates obtained their highest qualifications in each of the respective fields of Health Sciences, Education, Architecture & Building, Mass Communication & Information Science, Law, and Fine & Applied Arts.

Gender Distribution by Field of Study

Females Outnumbered Males in More Fields of Study

Females outnumbered males in three of the five most common fields of study,

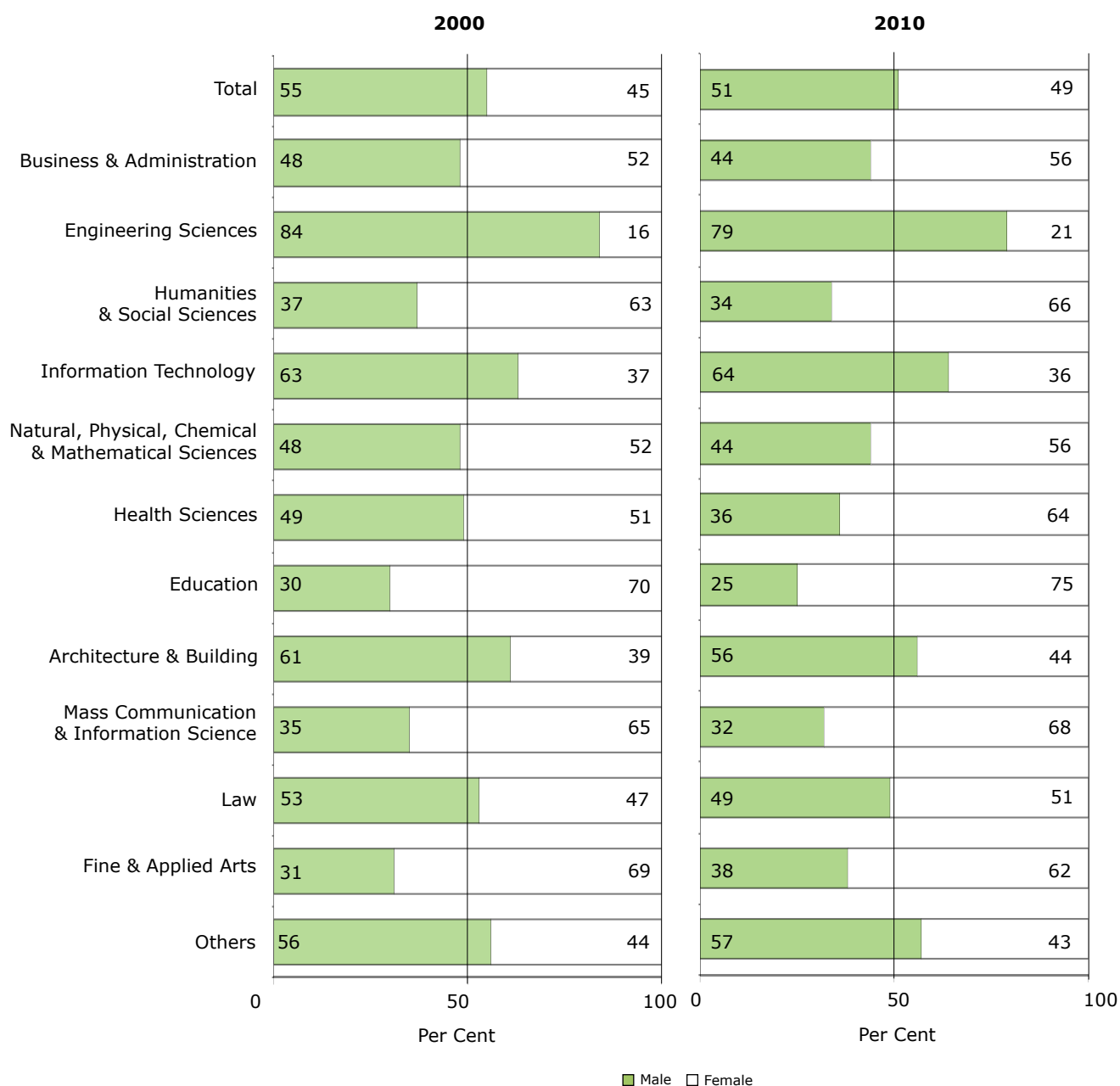
namely, Business & Administration, Humanities & Social Sciences and Natural, Physical, Chemical & Mathematical Sciences (Chart 1).

Among university graduates who studied Business & Administration and Natural, Physical, Chemical & Mathematical Sciences, the proportion of female graduates in each of these fields of study was 56 per cent in 2010, up from 52 per cent in 2000.

Similarly, the proportion of female graduates in Humanities & Social Sciences increased from 63 per cent in 2000 to 66 per cent in 2010.

Females also accounted for the majority in other fields of study such as Health Sciences (64 per cent), Education (75 per cent), Mass Communication & Information

CHART 1 RESIDENT UNIVERSITY GRADUATES BY FIELD OF STUDY AND SEX, 2000 AND 2010



Science (68 per cent), and Fine & Applied Arts (62 per cent).

Among university graduates who studied Law, females formed a slight majority (51 per cent) in 2010. In contrast, slightly less than half (47 per cent) of university graduates in 2000 who studied Law were females.

More Male Graduates in Engineering Sciences, Information Technology and Architecture & Building

Nearly eight in ten (79 per cent) university graduates in 2010 who obtained their highest qualifications in Engineering Sciences were males. This represented a decline from 84 per cent in 2000.

Males also formed the majority of the university graduates in 2010 who obtained their highest qualifications in Information Technology (64 per cent) and Architecture & Building (56 per cent).

Gender Differentials in Fields of Study by Age Group

Younger Female Graduates Formed the Majority in Three of the Top Five Fields of Study

For the five most common fields of study in 2010, the gender differential varied across different age groups.

In the field of Business & Administration, females formed the majority among university graduates aged 25 to 39 years (Chart 2). Females accounted for 66 per cent of graduates aged 25-29 years and 62 per cent of those aged 30-39 years.

However, males outnumbered females among university graduates aged 40 years and over in this field of study. Only 42 per cent of the graduates in this field aged 40 years and over were females.

Similarly, among university graduates who obtained their highest qualifications in Natural, Physical, Chemical & Mathematical Sciences, 69 per cent of those aged 25-29 years and 61 per cent of those aged 30-39 years were females. However, only 45 per cent of those aged 40 years and over were females.

In Humanities & Social Sciences, females outnumbered males across all age groups. Among university graduates who obtained their highest qualifications in Humanities & Social Sciences, 71 per cent of those aged 25-29 years and 30-39 years respectively and 59 per cent of those aged 40 years and over were females.

Higher Proportion of Females in Engineering Sciences and Information Technology Among Younger Age Groups

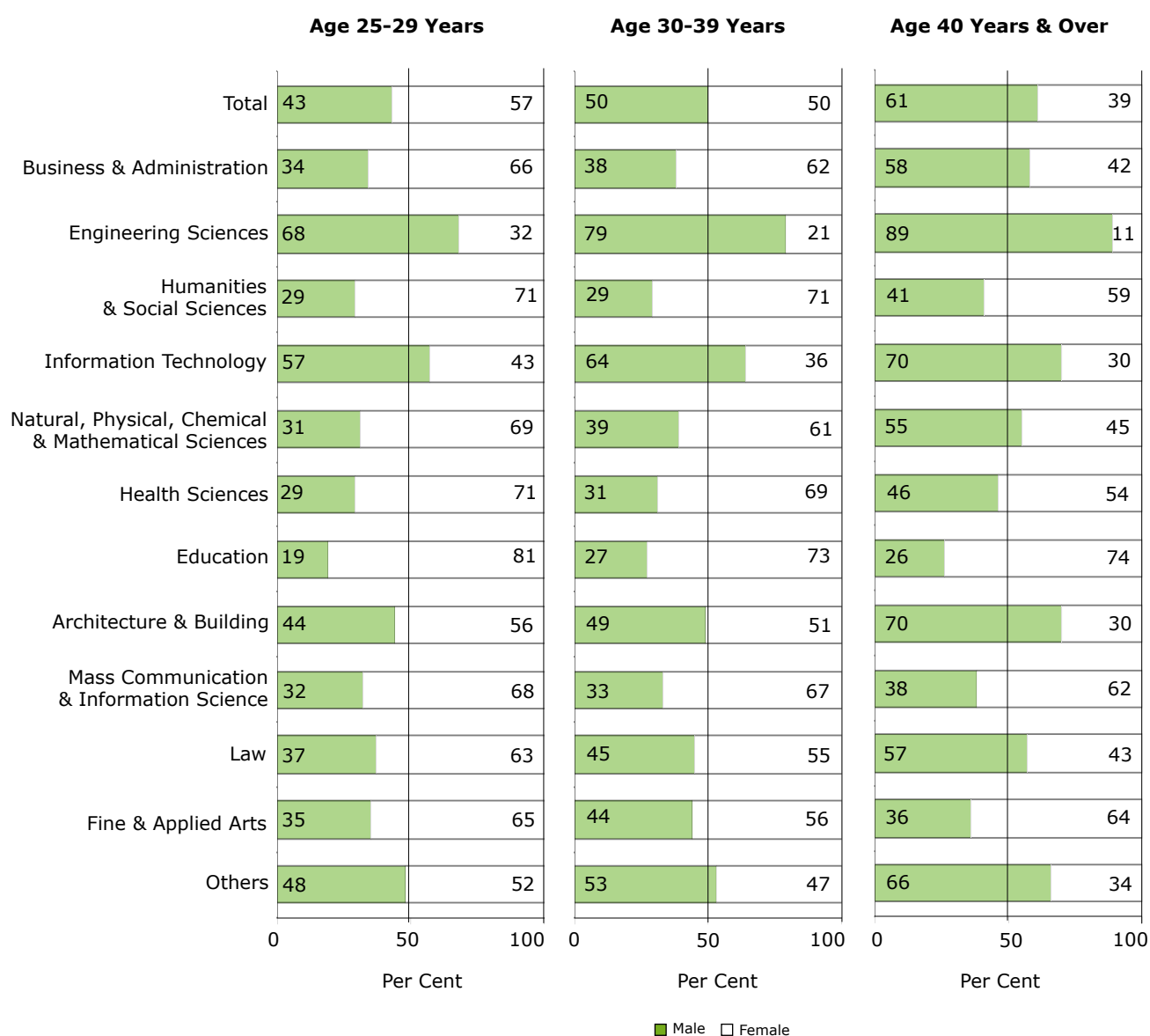
Among the five most common fields of study in 2010, male graduates outnumbered females across all age groups in Engineering Sciences and Information Technology.

Nevertheless, the proportions of female university graduates in these two fields of study were higher in the younger age groups than the older age groups.

In 2010, among university graduates who obtained their highest qualifications in Engineering Sciences, the proportion of females was 32 per cent for those aged 25-29 years, 21 per cent for those aged 30-39 years, and 11 per cent for those aged 40 years and over.

Similarly, among university graduates who obtained their highest qualifications in Information Technology, the proportion of females was 43 per cent for those aged 25-29 years, 36 per cent for those aged 30-39 years, and 30 per cent for those aged 40 years and over.

CHART 2 RESIDENT UNIVERSITY GRADUATES BY AGE GROUP, FIELD OF STUDY AND SEX, 2010



Conclusion

While male university graduates outnumbered their female counterparts at the overall level in 2010, there were more female than male university graduates in a wide range of fields of study, continuing the trend observed in 2000. Nevertheless, the proportions of female graduates in many

of the fields of study were higher in 2010 compared to 2000.

For the five most common fields of study, young female graduates either outnumbered their male counterparts or saw increases in their proportions in fields of study where males were the majority, compared to the older graduates.