



MINISTRY OF EDUCATION

Te Tāhuhu o te Mātauranga

What did they do?

The field of study of domestic graduates 2011-2014

This report forms part of a series called Learners in tertiary education. Other topics covered by the series are access, pathways, support, participation, retention and qualification completions.

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What did they do?

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SUMMARY

THIS REPORT ANALYSES THE FIELD OF STUDY OF DOMESTIC GRADUATES OF THE NEW ZEALAND TERTIARY EDUCATION SYSTEM BETWEEN 2011 AND 2014

Our analysis shows that:

- the distribution of graduates at Level 1 and 2 certificates by field of study showed relative volatility over time, with an increase in graduates in the Mixed field programme field. Changes in the content and provision of this level of qualification, such as an increased focus on foundation-level learning, are likely factors in this pattern
- graduates with Level 3 to 7 certificates/diplomas showed less variation in the field of study over time, with Society and culture and Management and commerce remaining the largest fields of study at this level
- at the bachelors or higher level, there was an increase in the proportion of graduates in STEM-related subjects, a trend shared by Australia, but with a faster pace of change in New Zealand
- at the bachelors level or higher, universities had the highest number of graduates in all fields of study
- women were more likely to graduate in fields such as nursing and teaching, while men dominated the graduates in areas such as engineering. Māori and Pasifika were relatively less likely to graduate in the STEM-related fields at the bachelors or higher level.

This report analyses the New Zealand Standard Classification of Education (NZSCED) field of study of domestic graduates from the New Zealand tertiary education system between 2011 and 2014. As the field of study taken by graduates varied considerably by level of qualifications, in this analysis we look at the distribution of graduates across three broad levels of qualifications: Level 1 and 2 certificates, Level 3 to 7 certificates/diplomas, and bachelors or higher qualifications.

The data for Level 1 and 2 certificates shows considerable variation over time in the fields of study of domestic graduates. In particular, there were increases in the proportions of graduates in Mixed field programmes, with associated drops in Society and culture and Management and commerce. These trends likely reflect changes to what is delivered in these levels of qualifications, which are now seen as foundation level. In addition, the introduction of tendering for Level 1 and 2 Student Achievement Component EFTS has resulted in shifts of provision between sub-sectors, which may have also caused some of the volatility in the field of study of graduates in this level of qualification.

For graduates with Level 3 to 7 certificates/diplomas, there was less variation in the change in field of study over time compared with Level 1 and 2 certificates, with fields such as Society and culture and Management and commerce maintaining their positions as the largest fields at this level of qualification.

At the bachelors or higher level, the data shows a slight trend towards an increase in the proportion of graduates in STEM-related fields of study (such as Natural and physical sciences and Engineering and related technologies), with an associated drop in Society and culture and Management and commerce, although the latter two fields still produced over 40 percent of all graduates at this level.

When comparing the New Zealand and Australian data at the bachelors or higher level, both countries show relatively similar distributions of domestic graduates across the broad fields of study. A similar trend in increases in STEM-related fields is also evident in the Australian data, although the New Zealand data shows a faster rate of change.

The profiles of the 12 broad NZSCED fields show that some broad fields were declining at all qualification levels (Education). Others were declining at one level while increasing at another (Information technology, which showed growth at the bachelors or higher level but declined at Level 3 to 7 certificates/diplomas).

The profiles also show what narrow NZSCED fields were driving the changes in proportions of graduates at the broad level. For example, the decline in the proportion of graduates in the Education field was driven by a decline in graduates in Teacher education. In the field of Health, there was an increase in the proportion of graduates in the Public health narrow field at all levels of qualifications.

The data also shows that particular sub-sectors dominated provision in certain fields and levels of qualifications. Not surprisingly, universities had the most graduates at the bachelors or higher level. At below bachelors level, industry training organisations (ITOs) produced a significant proportion of graduates in fields such as Engineering and related technologies, Agriculture and environmental studies, and Architecture and building. Polytechnics produced a significant proportion of graduates at below bachelors level in fields such as Natural and physical sciences, Engineering and related technologies, Architecture and building, and Food and hospitality. At the non-degree level, wānanga produced a relatively high proportion of graduates in the fields of Society and culture (with large numbers in the Language and literature narrow field). Private training establishments had a relatively high proportion of graduates in Level 3 to 7 certificates/diplomas in fields such as Food, hospitality and personal services, and Information technology.

The data shows there were considerable differences in the field of study of domestic graduates by gender, as well as by age group and ethnic group. Across the levels of study, there were some consistent patterns, with women dominating graduate numbers in narrow fields such as Teacher education, and Veterinary studies and Nursing, while men dominated the engineering fields.

When looking at the distribution of graduates by ethnic group at the bachelors or higher level, there were relatively lower proportions of Māori and Pasifika graduates in STEM-related subject areas, while Asian graduates had relatively higher representation in the STEM-related areas.

Finally, when we look at the age of graduates by field of study, the data shows that in narrow fields in the science area the age of graduates was relatively young, while the age of graduates in fields in the health and education areas tended to be relatively older.

A complementary report on the field of study of students enrolled in the tertiary education system will be published in 2016, along with associated statistical tables.

1 INTRODUCTION

This report analyses the field of study of domestic graduates from New Zealand's tertiary education system using the New Zealand Standard Classification of Education (NZSCED). Looking at the field of study of tertiary graduates is important as it gives a view of how the system is supporting the labour market. While all qualifications give generic/transferrable skills, many also give specific knowledge/skills, which can be identified by looking at field of study.

In this analysis we look at the number of graduates from both tertiary education providers and workplace-based training to get an all-of-sector view. Specifically, we examine trends in fields of study at the broad and narrow NZSCED at three broad levels of qualification: Level 1 and 2 certificates, Level 3 to 7 certificates/diplomas and bachelors or higher.

As well as looking at the distribution of graduates across fields of study in 2014, we also look at how the distribution of graduates has changed since 2011, to get a sense of the dynamics of change in the tertiary education system.

The structure of the report is as follows:

- In chapter 2 we examine completions at the broad field of study level and by broad level of qualification, including a comparison with Australia.
- In chapter 3 we present profiles of each of the 12 broad NZSCED fields of study.
- In chapter 4 we analyse the field of study by selected characteristics, including sub-sector, gender, ethnic group and age group.
- Finally, in the Appendix we describe the method for determining the field of study of graduates.

In conjunction with this summary analytical report, detailed statistical tables of the field of study of graduates from New Zealand's tertiary education system have been published and can be downloaded from the Ministry's Education Counts website.

The Ministry intends to publish a complementary report (with associated statistical tables) that looks at the field of study of students *enrolled* in New Zealand's tertiary education system in 2016.

The New Zealand Standard Classification of Education

In this report we use the NZSCED classification to determine a graduate's field of study. This has three levels of classification: broad, narrow and detailed. For the purposes of this report we limit the analysis to broad and narrow levels of NZSCED.

Table 1 presents the 12 broad NZSCED fields, along with the narrow fields. Among the largest broad fields is Society and culture, which covers disciplines ranging from Law to Sports and recreation. The Mixed field programmes broad field covers areas such as Employment and social skills programmes.

Table 1

Description of the New Zealand Standard Classification of Education (NZSCED)

Broad field NZSCED	Descriptor	Narrow NZSCED fields
01. Natural and physical sciences	The systematic study or body of knowledge that aims through experiment, observation and deduction to produce reliable explanations of phenomena with reference to the material and physical world. Natural sciences are the earth sciences and the life sciences, which study the earth and all living organisms.	Mathematical sciences, Physics and astronomy, Chemical sciences, Earth sciences, Biological sciences.
02. Information technology	The study of processing and transmitting information by various technologies including computing, telecommunications and microelectronics.	Computer science, Information systems.
03. Engineering and related technologies	The study of the design, composition, manufacture, maintenance and functioning of machines, products, systems and structures. It also includes the measurement and mapping of the earth's surface and its natural and constructed features.	Manufacturing, engineering and technology, Process and resources engineering, Automotive engineering and technology, Mechanical and industrial engineering and technology, Civil engineering, Geomatic engineering, Electrical and electronic engineering and technology, Aerospace engineering and technology, Maritime engineering and technology.
04. Architecture and building	The study of the art, science and techniques involved in designing, constructing, adapting and maintaining public, commercial, industrial and residential structures and landscapes. It involves the study of the planning, art and science of designing and adapting the surrounds of buildings and other external environments.	Architecture and urban environment, Building.
05. Agriculture and environmental studies	The study of the theory and practice of growing, gathering, reproducing and caring for plants and animals. It also includes the study of the interaction between people and the environment and the application of scientific knowledge to the environment to protect it from further deterioration.	Agriculture, Horticulture and viticulture, Forestry studies, Fisheries studies, Environmental studies.
06. Health	The study of maintaining and restoring the physical and mental well-being of humans and other animals.	Medical studies, Nursing, Pharmacy, Dental studies, Optical science, Veterinary studies, Public health, Radiography, Rehabilitation therapies, Complementary therapies.
07. Education	The study of the learning process and the theories, methods and techniques of imparting knowledge and skills to others.	Teacher education, Curriculum and education studies.
08. Management and commerce	The study of the theory and practice of planning, directing, organising, motivating and co-ordinating the resources of private and public organisations and institutions. It also includes the merchandising and provision of goods and services and personal development.	Accountancy, Business and management, Sales and marketing, Tourism, Office administration, Banking, finance and related fields.
09. Society and culture	The study of the physical, social and cultural organisation of human society.	Political science and policy studies, Studies in human society, Human welfare studies and services, Behavioural science, Law, Justice and law enforcement, Librarianship, information management and curatorial studies, Language and literature, Philosophy and religious studies, Economics and econometrics, Sport and recreation.
10. Creative arts	The study of creating and performing works of art, music, dance and drama. It includes the study of clothing design and creation and communication through media.	Performing arts, Visual arts and crafts, Graphic and design studies, Communication and media studies.
11. Food, hospitality and personal services	The study of preparing, displaying and serving food and beverages, providing hospitality services, and caring for the hair and body for grooming and beautification.	Food and hospitality, Personal services.
12. Mixed field programmes	Programmes providing multi-field education.	General education programmes, Social skills programmes, Employment skills programmes.

More detail on the NZSCED categories can be found on the Education Counts website.

2 BROAD FIELD OF STUDY BY LEVEL OF QUALIFICATION

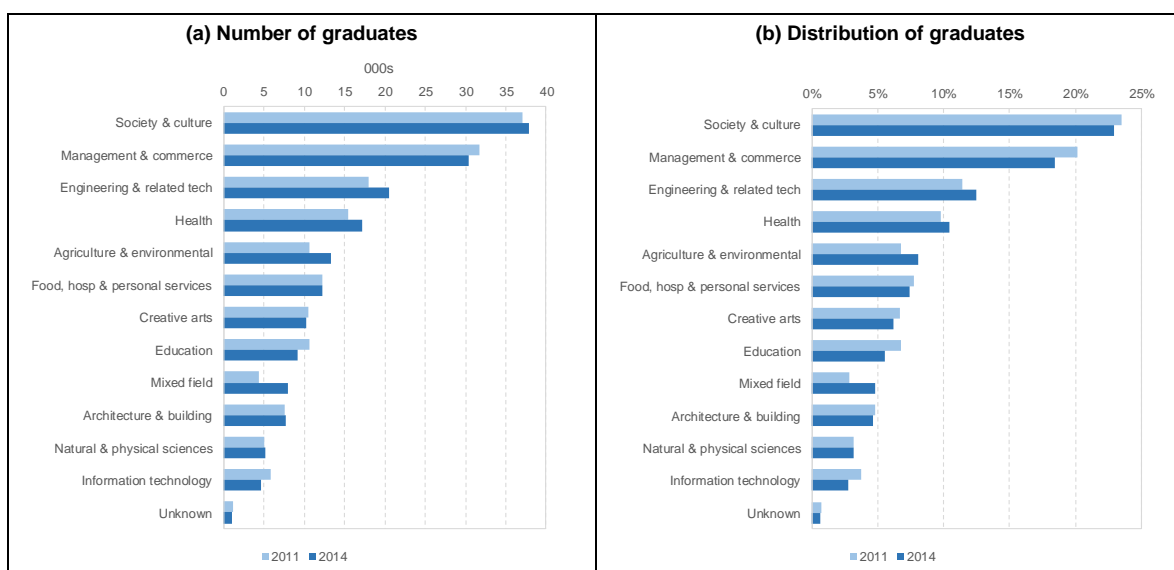
The number of domestic graduates by broad field of study at all levels of qualification is shown in Figure 1. In 2014 the largest number of domestic graduates completed qualifications in the field of Society and culture (37,900), followed by Management and commerce (30,500), and Engineering and related technologies (20,600).

The distribution of graduates across the broad fields of study is also presented in Figure 1. In 2011 there were 158,000 graduates in total, compared with 165,000 in 2014, an increase of 4.7 percent. Figure 1 shows that the share of graduates changed in several fields between 2011 and 2014. Specifically, the percentage of domestic graduates completing a qualification increased between 2011 and 2014 in the fields of Engineering and related technologies (from 11 percent to 12 percent), Health (from 9.8 percent to 10.4 percent), Agriculture and environmental studies (from 6.8 percent to 8.1 percent), and Mixed field (from 2.8 percent to 4.8 percent).

These increases were matched by declines in share in other broad fields, especially Education (from 6.7 percent in 2011 to 5.6 percent in 2014), Management and commerce (from 20 percent in 2011 to 18 percent in 2014), and Information technology (from 3.7 percent to 2.8 percent).

Figure 1

Domestic graduates by field of study in 2011 and 2014 – all levels of qualifications



The distribution of graduates across the fields of study varies significantly by level of qualification. In the sections that follow, we examine the field of study of domestic graduates at three broad levels of qualification:

- Level 1 and 2 certificates
- Level 3 to 7 certificates and diplomas
- bachelors or higher.

Level 1 and 2 certificates capture foundation-level qualifications (which now include specific literacy and numeracy requirements), while Level 3 to 7 certificates/diplomas capture the

remainder of the non-degree provision, including many technical, trades and vocational qualifications. The bachelors or higher qualifications category makes up the final category that we analyse.

Although we limit our analysis in this report to these three broad levels of qualification, the web tables that accompany this analytical report present the data at a more detailed level of qualification breakdown.

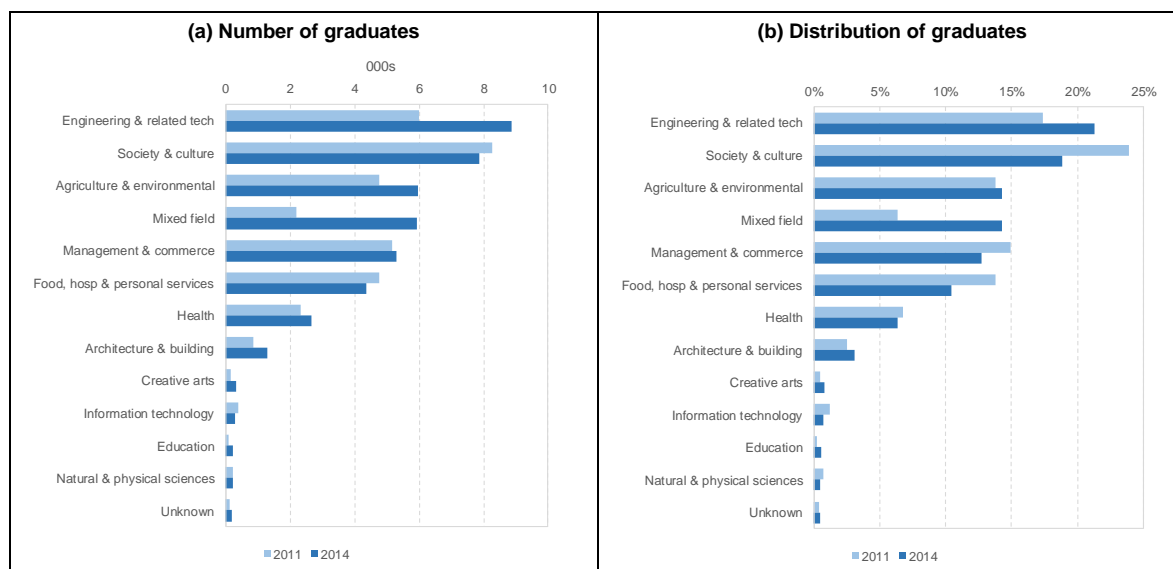
Level 1 and 2 certificates

Data on the broad field of study of graduates with Level 1 and 2 certificates is shown in Figure 2. At this foundation level of qualifications, Engineering and related technologies (8,890) had the greatest number of graduates in 2014. This was followed by Society and culture (7,870) and Agricultural and environmental studies (5,970). There were few graduates at this level in the fields of Creative arts, Information technology, Education, and Natural and physical sciences.

Between 2011 and 2014 there were shifts in the distribution of graduates among the fields of study. In particular, the percentage of graduates at Level 1 and 2 certificates who studied Engineering and related technologies increased from 17 percent in 2011 to 21 percent in 2014, resulting in it becoming the largest field of study.

The percentage of graduates completing a qualification in a Mixed field programme more than doubled, from 6.3 percent in 2011 to 14 percent in 2014. It is likely this is due in part to the introduction of the Youth Guarantee and also the reallocation of Student Achievement Component EFTS via the Level 1 and 2 tendering process. Also contributing to this will be the deliberate move to refocus Level 1 and 2 on literacy/numeracy and foundation skills.

Figure 2
Domestic graduates by field of study in 2011 and 2014 – Level 1 and 2 certificates

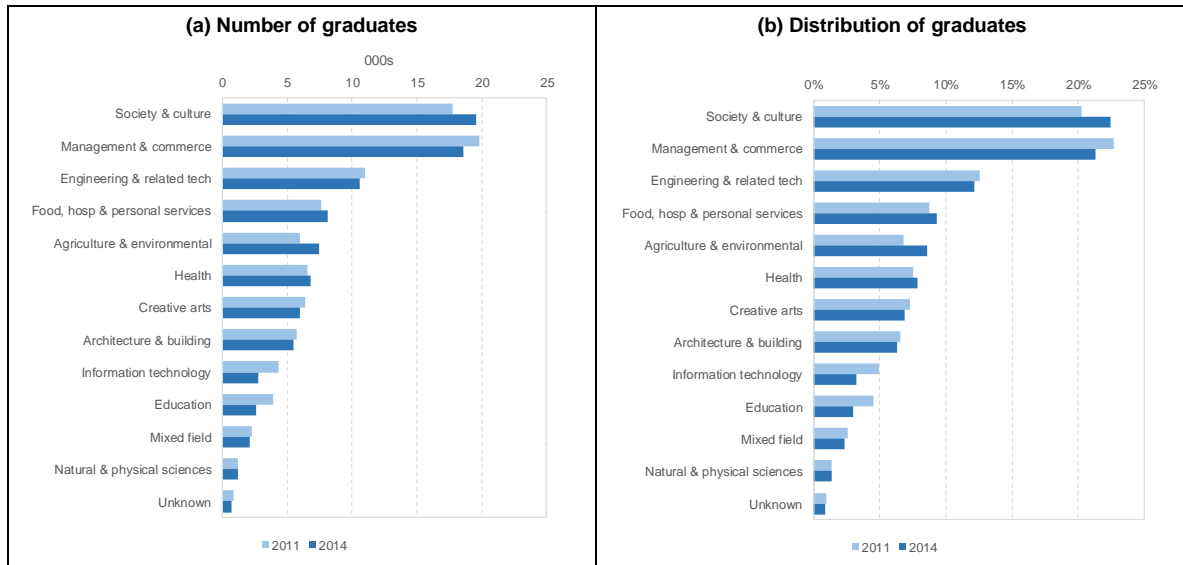


Level 3 to 7 certificates/diplomas

Data on the broad field of study of graduates with Level 3 to 7 certificates/diplomas is shown in Figure 3. At this vocational level of qualification, the field of Society and culture had the largest number of domestic graduates in 2014 (19,600), followed relatively closely by Management and commerce (18,600) and with a larger gap to Engineering and related technologies (10,600).

Between 2011 and 2014, the largest increase in graduates occurred in the field of Society and culture (up by 1,840); as a result, it moved ahead of Management and commerce as the largest field at this level. The number of graduates in the field of Agriculture, environmental and related studies also increased significantly between 2011 and 2014 (from 6,030 to 7,450), while the number of graduates in Information technology and Education dropped by a fairly large amount (down 1,510 and 1,350, respectively). The decline in Education partly reflects a shift in the level of recognised teaching qualifications from the diploma to the bachelors level. The Information technology change reflects increasing demand for graduates at higher levels as well as poorer labour market outcomes for diplomas in Information technology.

Figure 3
Domestic graduates by field of study in 2011 and 2014 – Level 3 to 7 certificates/diplomas



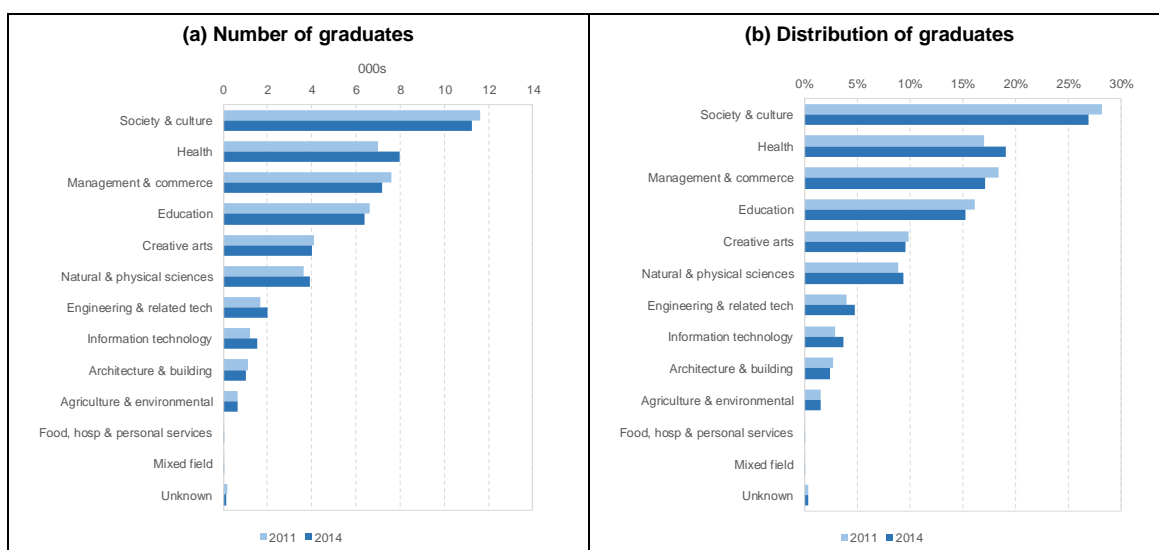
Bachelors or higher

Data on the broad field of study of graduates at bachelors or higher level is shown in Figure 4. At the bachelors level or higher, the largest number of graduates was in the field of Society and culture (11,300 in 2014), although its share of total bachelors or higher graduates declined slightly since 2011 (from 28 percent in 2011 to 27 percent in 2014).

Management and commerce slipped from having the second largest number of graduates in 2011 to third largest in 2014. As a result, the share of total graduates at the bachelors or higher level declined slightly from 18 percent in 2011 to 17 percent in 2014.

The field of Health exhibited the largest growth in the number of graduates between 2011 and 2014 (increasing by 960), replacing Management and commerce as the second largest field in 2014. Of the remaining broad fields, there were modest increases in the share of total graduates in a number of science, technology, engineering and mathematics (STEM)-related areas. These included: Natural and physical sciences (from 8.9 percent in 2011 to 9.4 percent in 2014), Engineering and related technologies (from 4.0 percent in 2011 to 4.8 percent in 2014), and Information technology (from 2.9 percent in 2011 to 3.7 percent in 2014).

Figure 4
Domestic graduates by field of study in 2011 and 2014 – bachelors or higher



A comparison with Australian domestic graduates at the bachelors or higher level

To assess whether these trends in the field of study of graduates at the bachelors level or higher are unique to the New Zealand context or are part of a wider trend, we compare data from New Zealand and Australia. The Australian classification used to determine field of study is similar to the NZSCED, although there may be some differences in how qualifications are assigned to fields within each system.

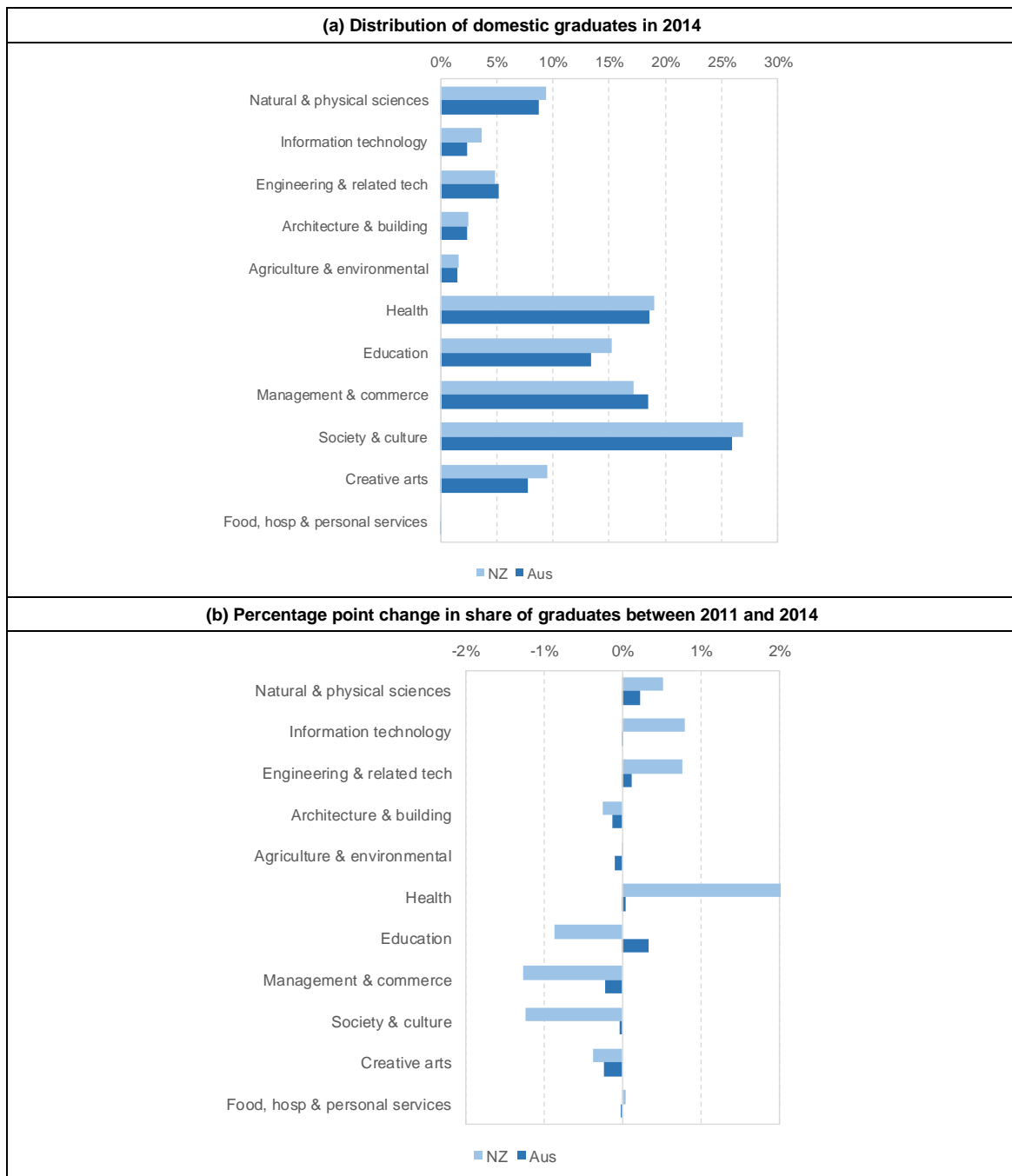
In Figure 5, we compare the distribution of bachelors or higher domestic graduates for New Zealand and Australia with the data ordered by the numerical code of the broad NZSCED. The tertiary education systems of New Zealand and Australia are most alike at the bachelors or higher level so we restrict our analysis to those levels. What the data shows is that the distribution of graduates at the bachelors or higher level is very similar in New Zealand and Australia, with New Zealand exhibiting a slightly larger share of graduates in all but Management and commerce and Engineering and technology.

Although both countries exhibited a shift between 2011 and 2014 towards STEM-related subjects (such as Natural and physical sciences and Engineering and related technologies) and away from fields such as Creative arts and Management and commerce, the scale of the change has been much greater in the New Zealand system. For example, the share of Engineering and related technologies increased by 0.8 percentage points in New Zealand, compared with just 0.1 percentage points in Australia. Similarly, the share of Management and commerce in New Zealand reduced by 1.3 percentage points, compared with 0.2 percentage points in Australia.

The greatest difference between New Zealand and Australia was in the field of Health, with New Zealand exhibiting a significant increase in the share of graduates between 2011 and 2014, while Australia exhibited little change. In New Zealand, the change was driven in the narrow subject area of Nursing, so may reflect conditions specific to New Zealand.

Figure 5

A comparison of the field of study of domestic bachelors or higher graduates in New Zealand and Australia



3 FIELD OF STUDY PROFILES

In this section we present statistical profiles of the 12 broad fields of study. For each broad field we:

- show the number of graduates and share of graduates by broad level of qualification
- show the percentage point change in share of total graduates at the broad and narrow field between 2011 and 2014 at each broad level of qualification
- present key points identifying the main trends in the data.

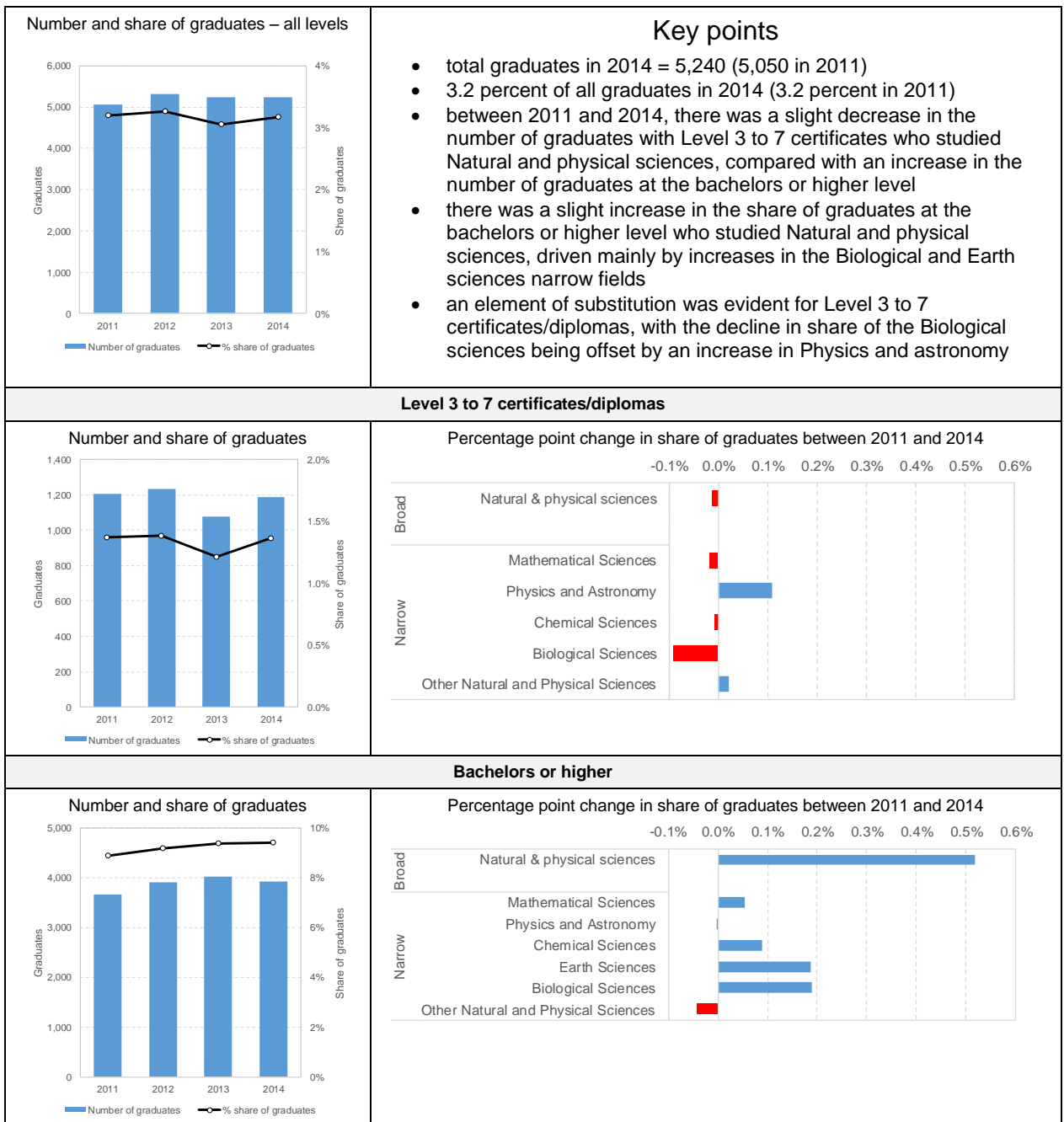
The purpose of these statistical profiles is to identify which narrow fields of study were driving the trends at the broad level. For example, at the bachelors or higher level in the broad field of Natural and physical sciences, the increase in share of graduates was mostly driven by increases in the narrow fields of Earth sciences and Biological sciences.

The profiles also make it easier to identify trends in a broad field, such as shifts between levels of qualifications. For example, although the number of graduates in Information technology at Level 3 to 7 certificates/diplomas has been declining, this has been offset to an extent by a rise in the number of graduates at the bachelors or higher level.

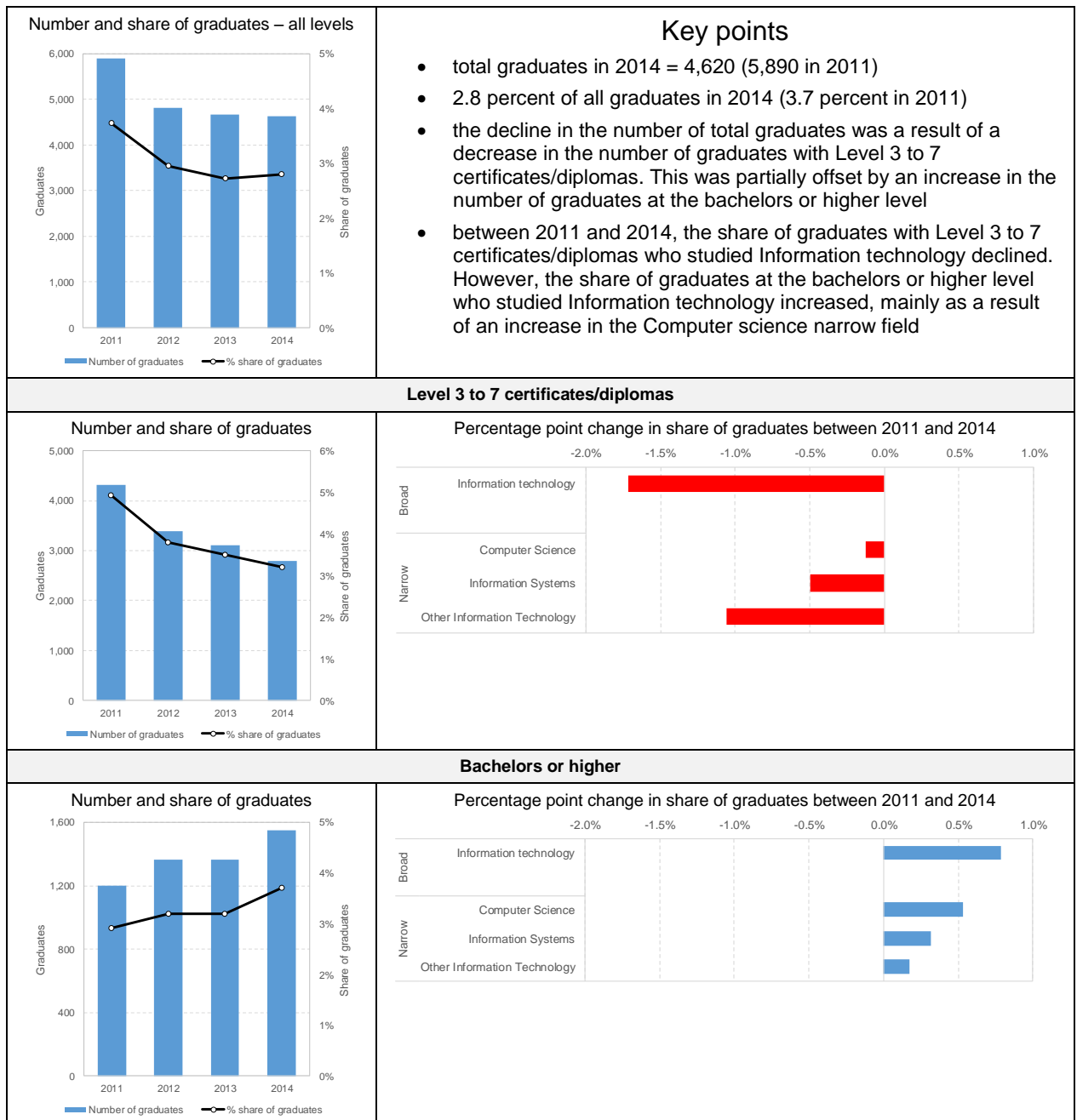
Note that where the number of graduates at a particular level of qualification was quite small, we do not report this data in the statistical profiles.

We present the fields of study in order of the broad NZSCED code.

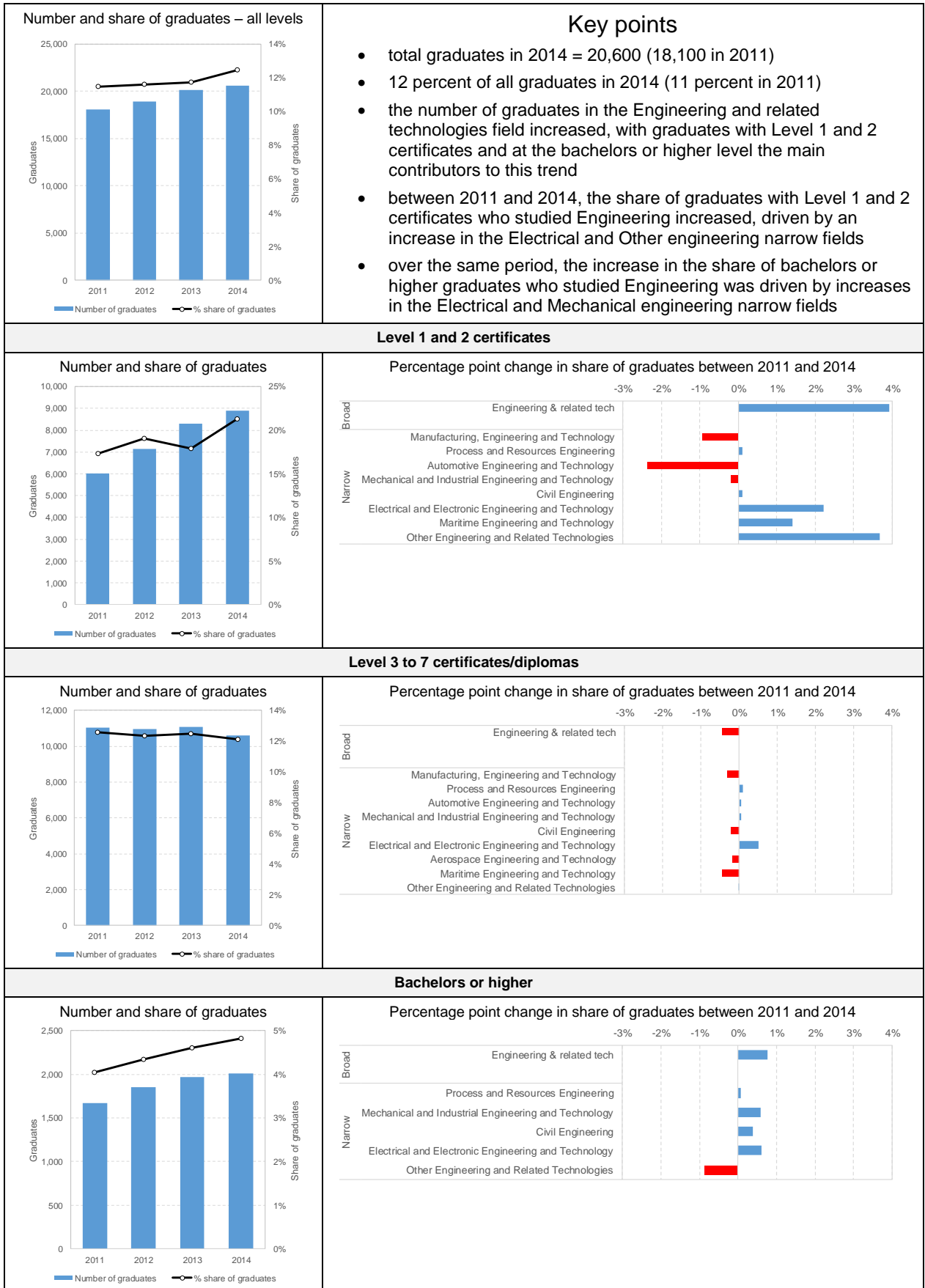
01. Natural and physical sciences



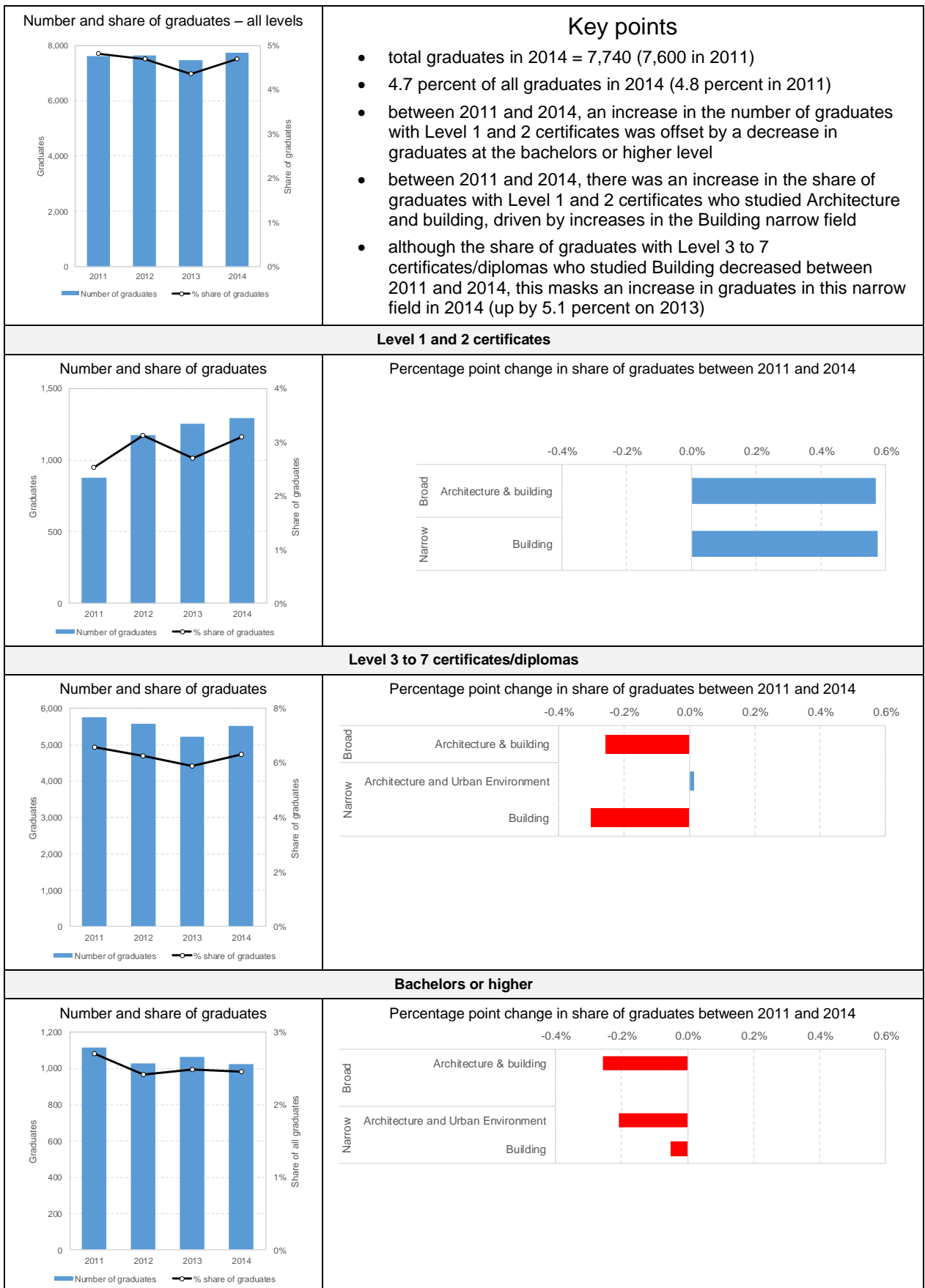
02. Information technology



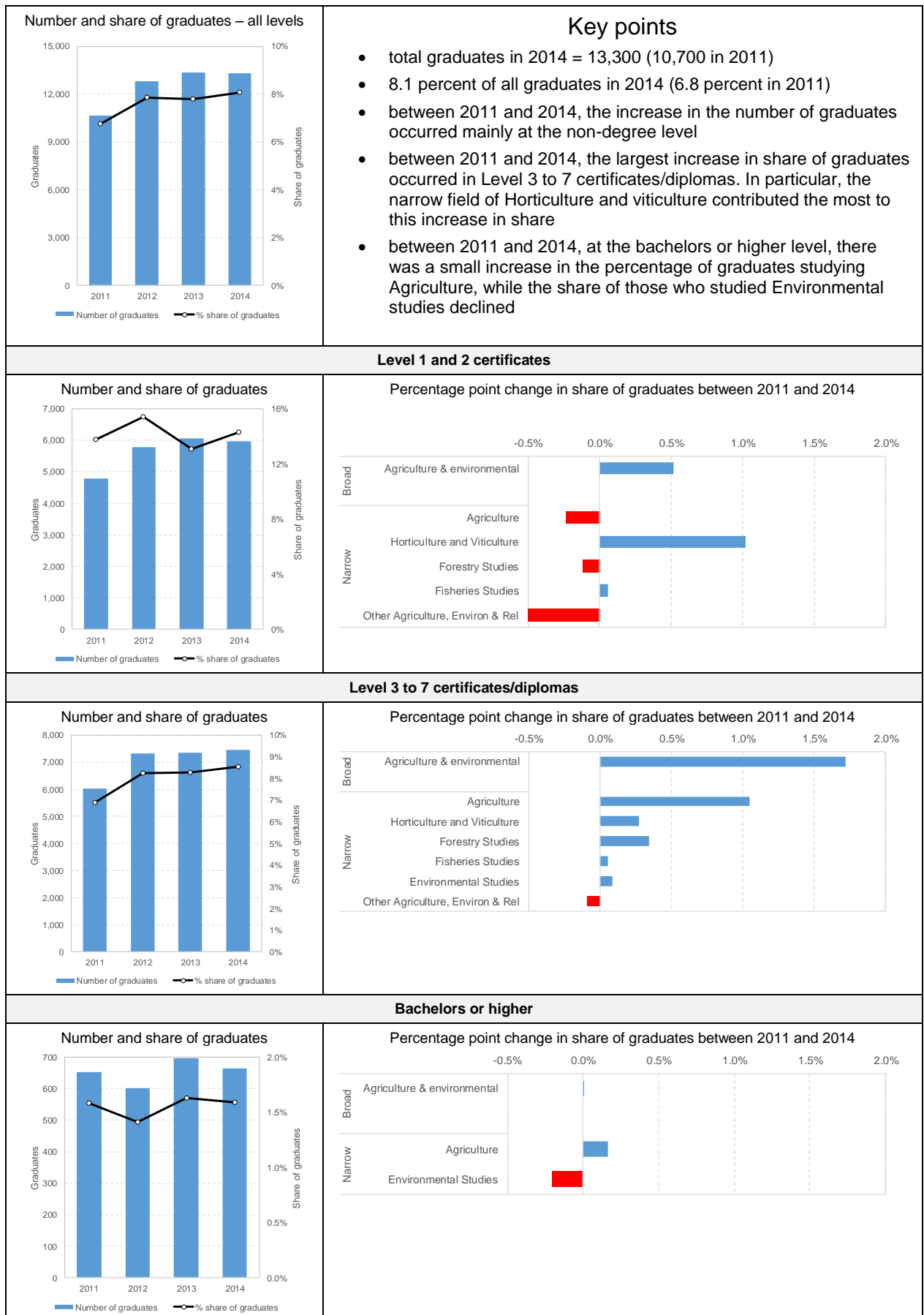
03. Engineering and related technologies



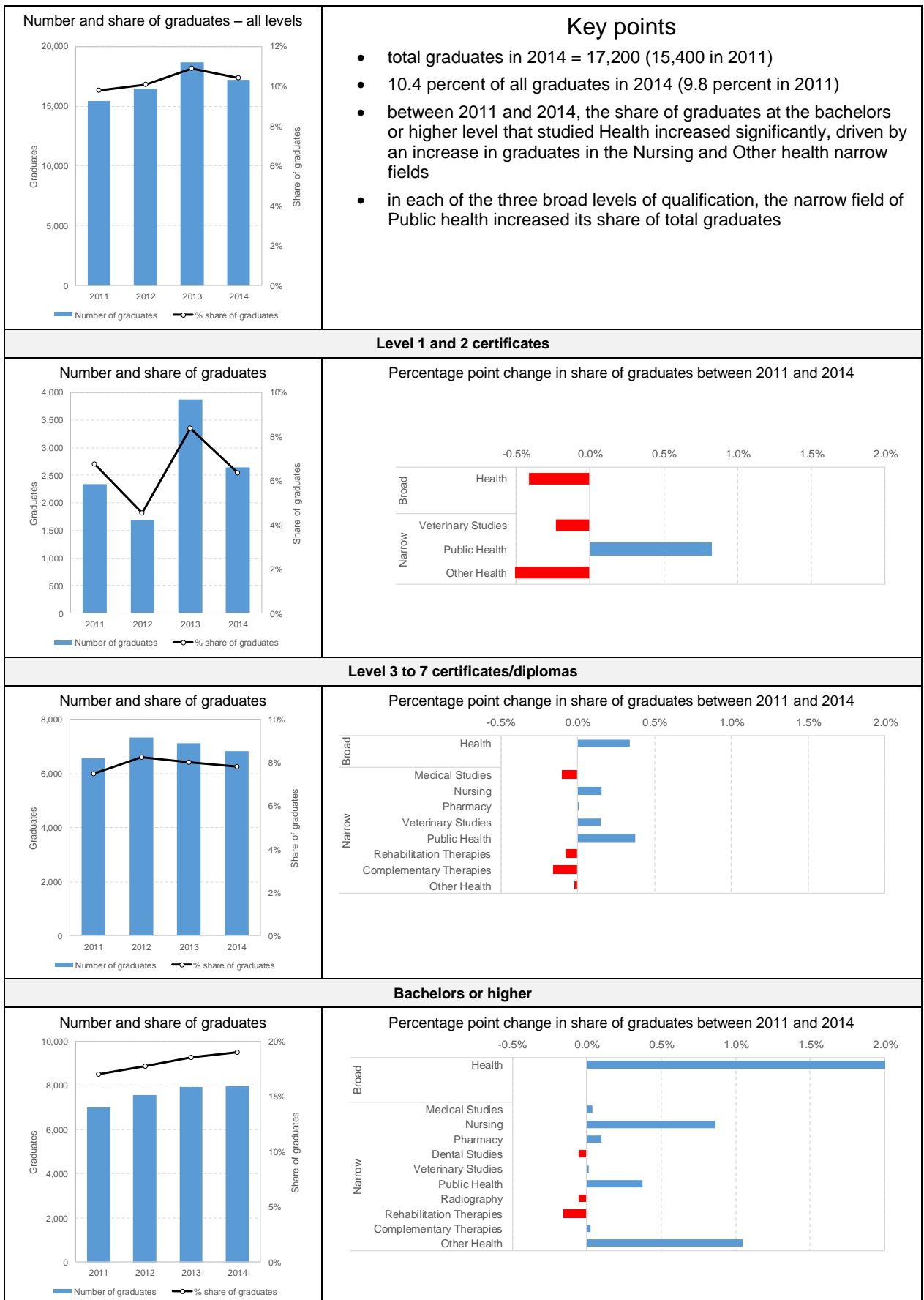
04. Architecture and building



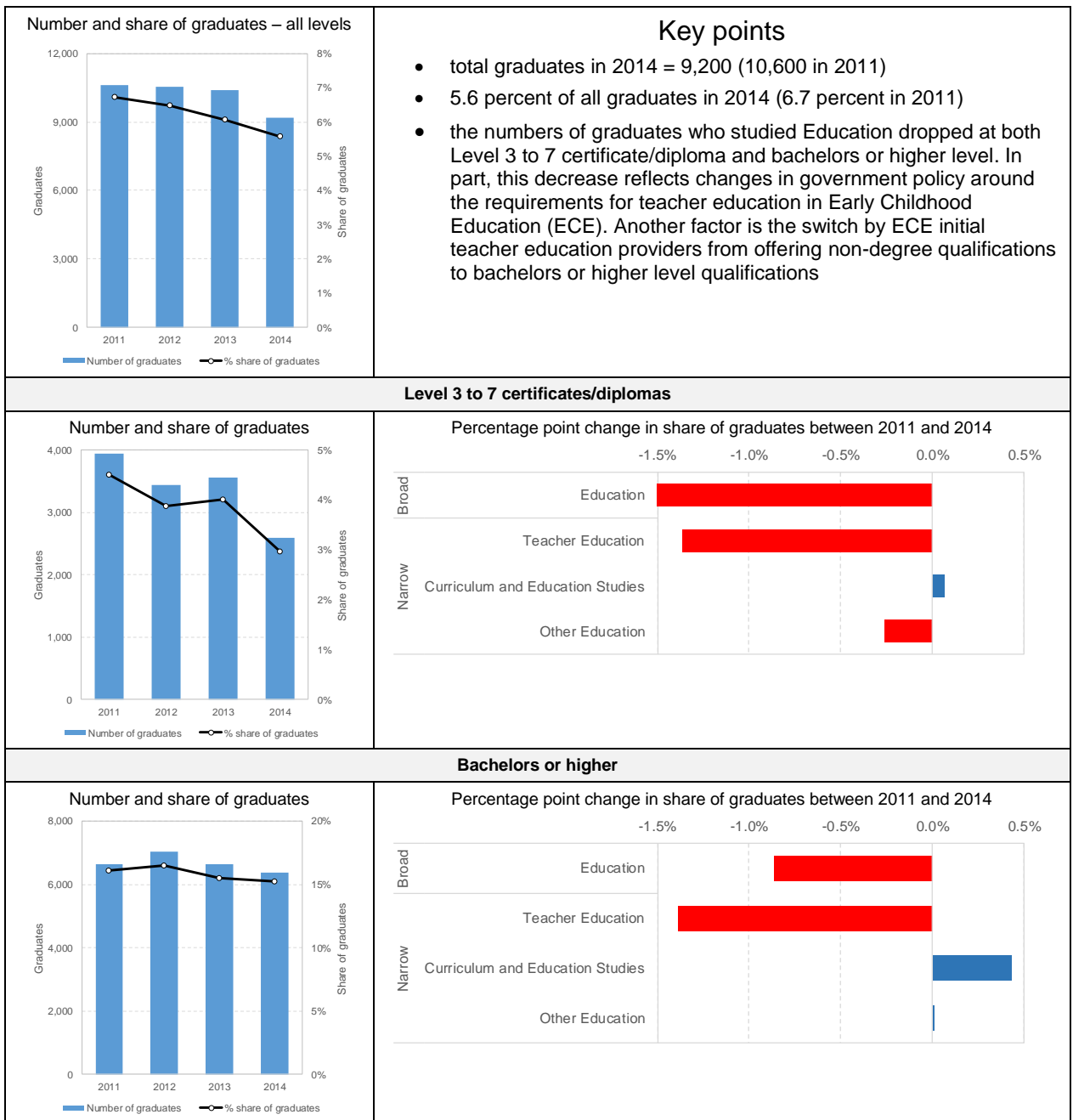
05. Agriculture, environmental and related studies



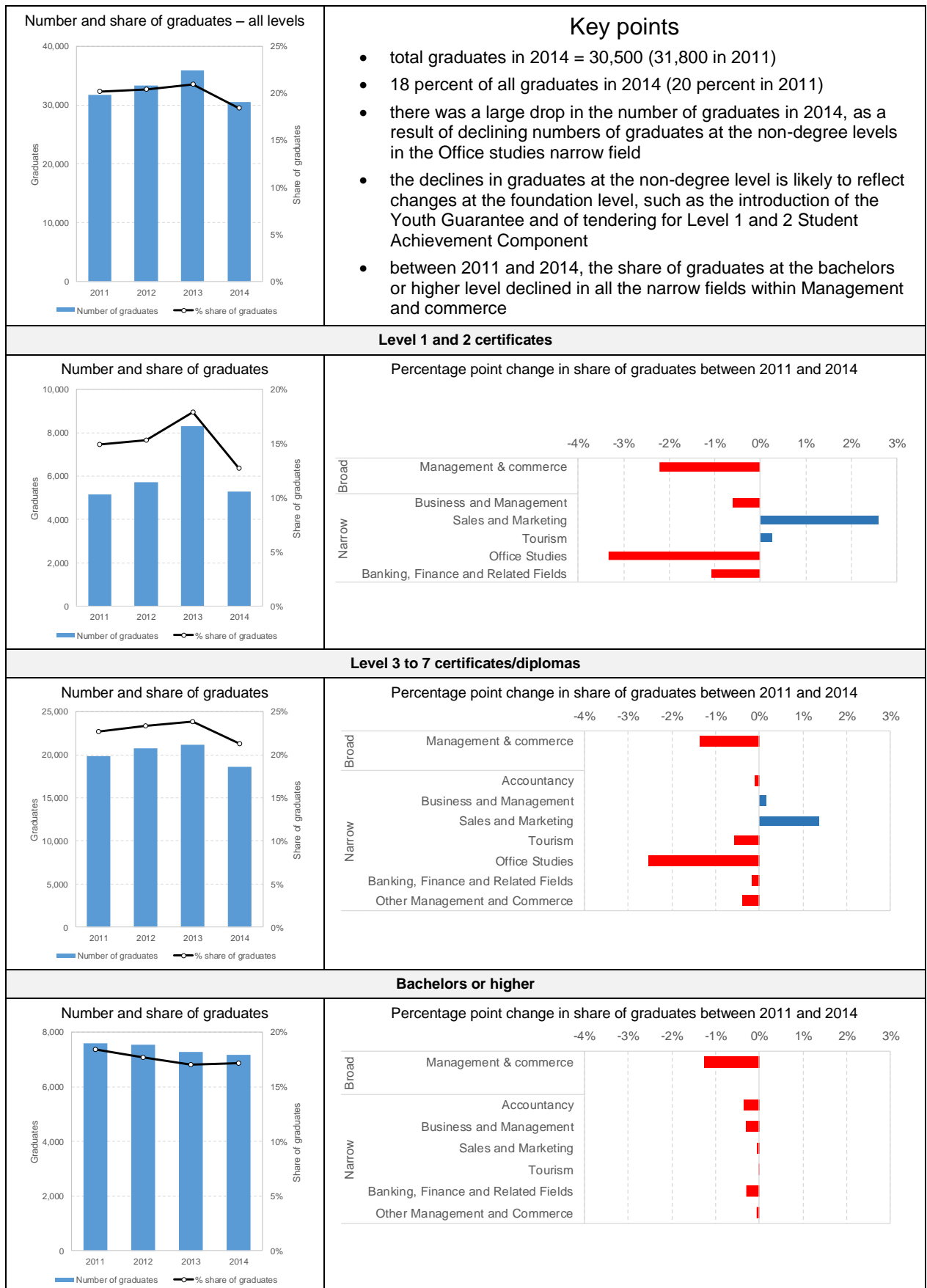
06. Health



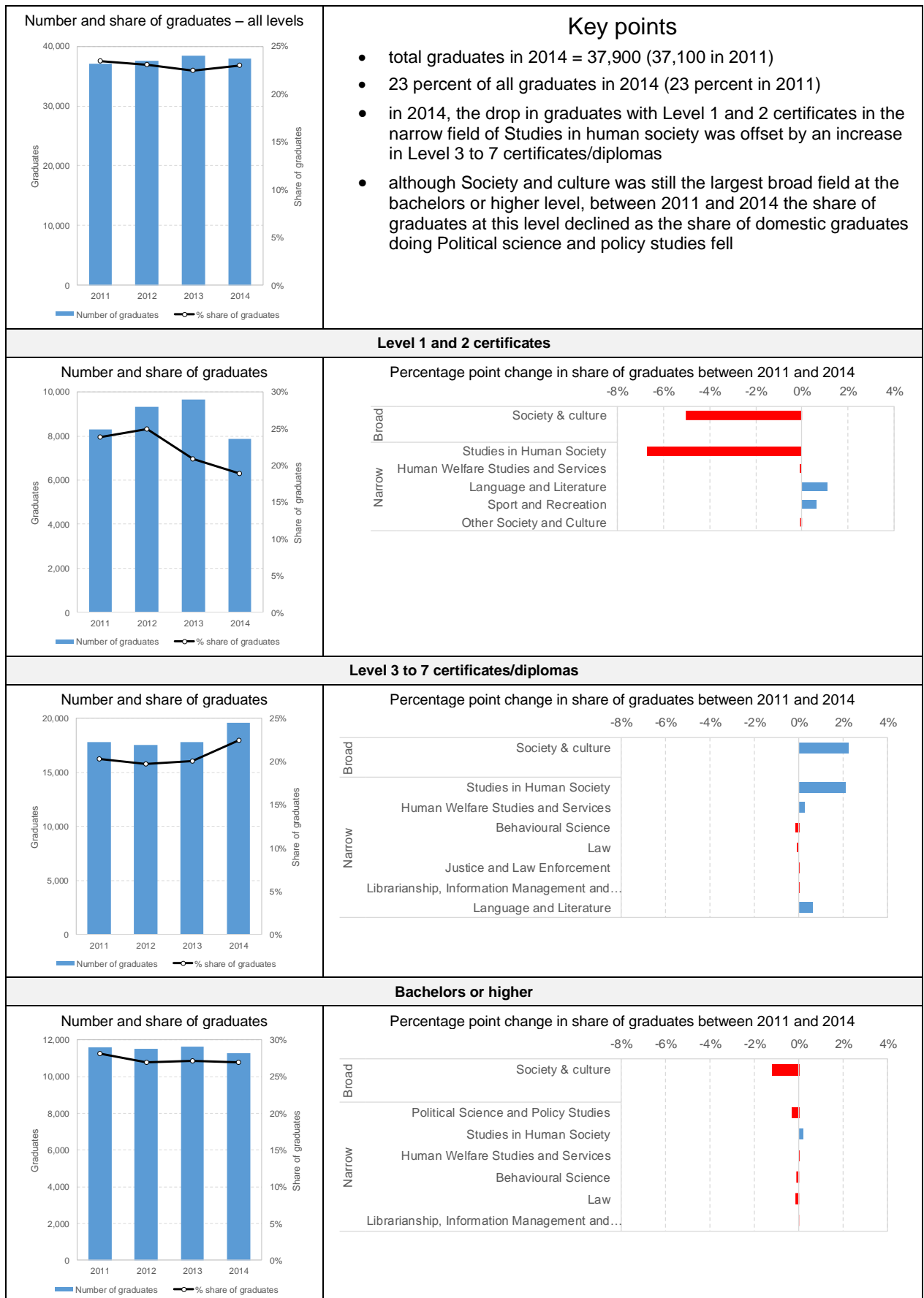
07. Education



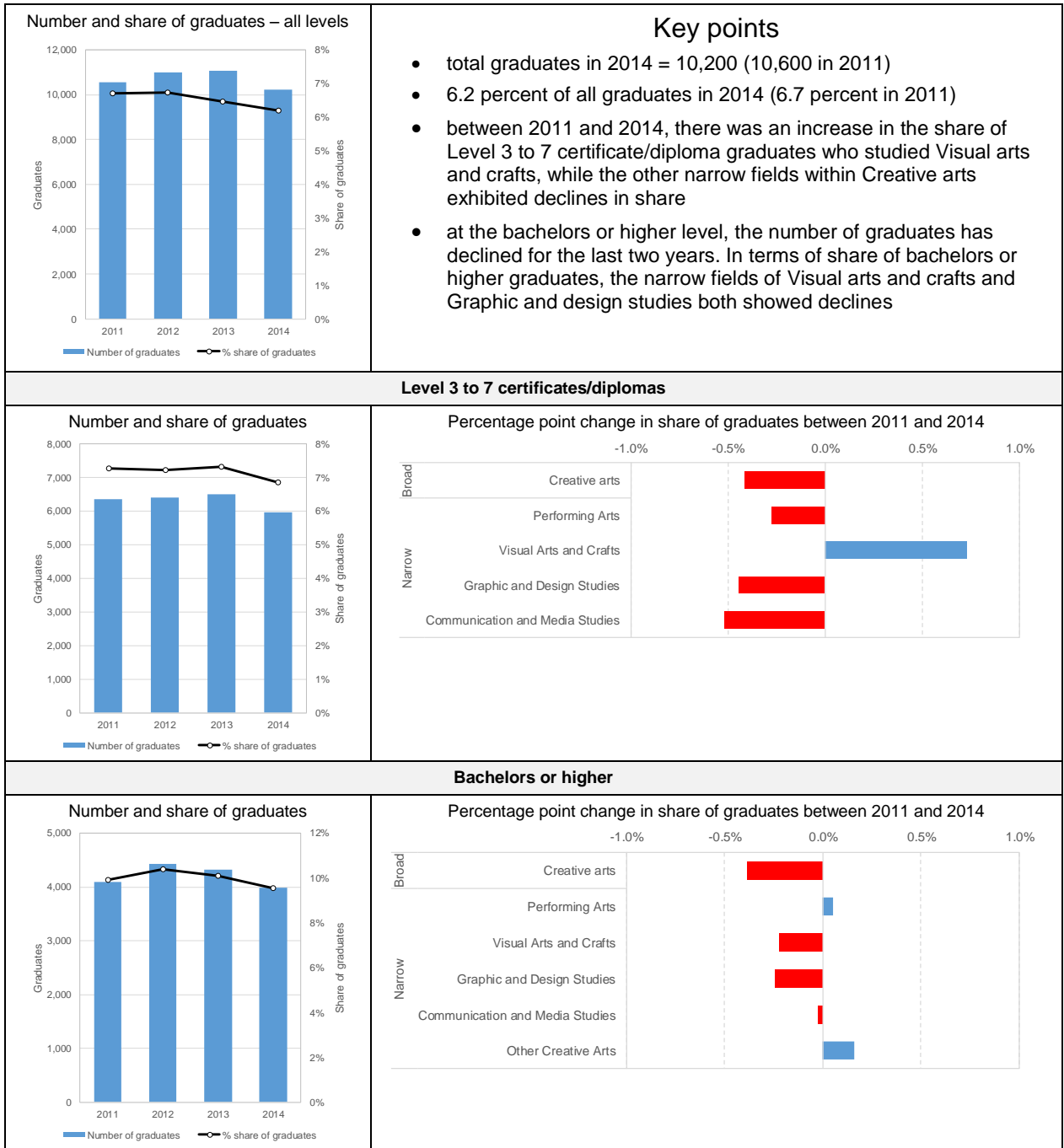
08. Management and commerce



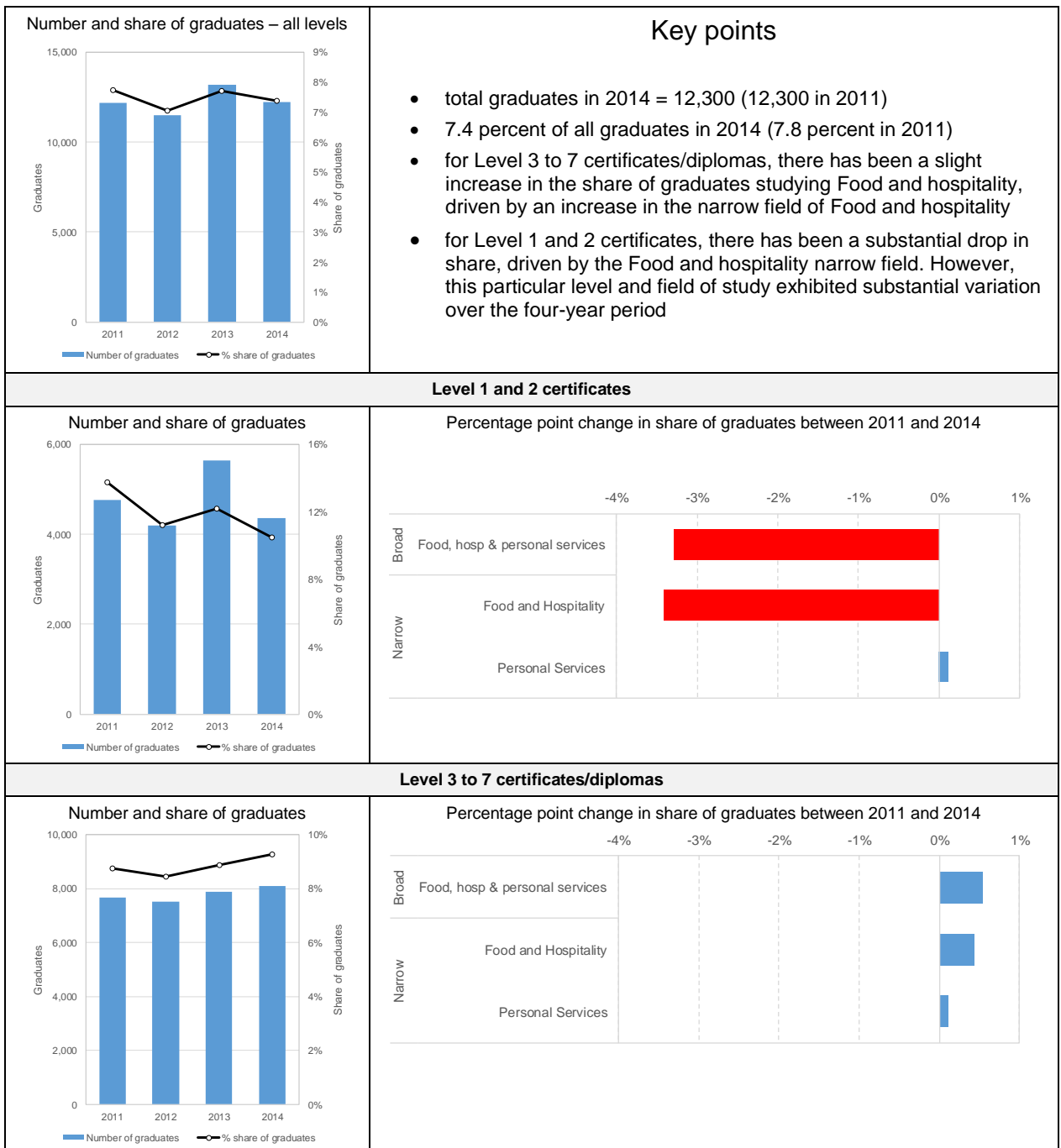
09. Society and culture



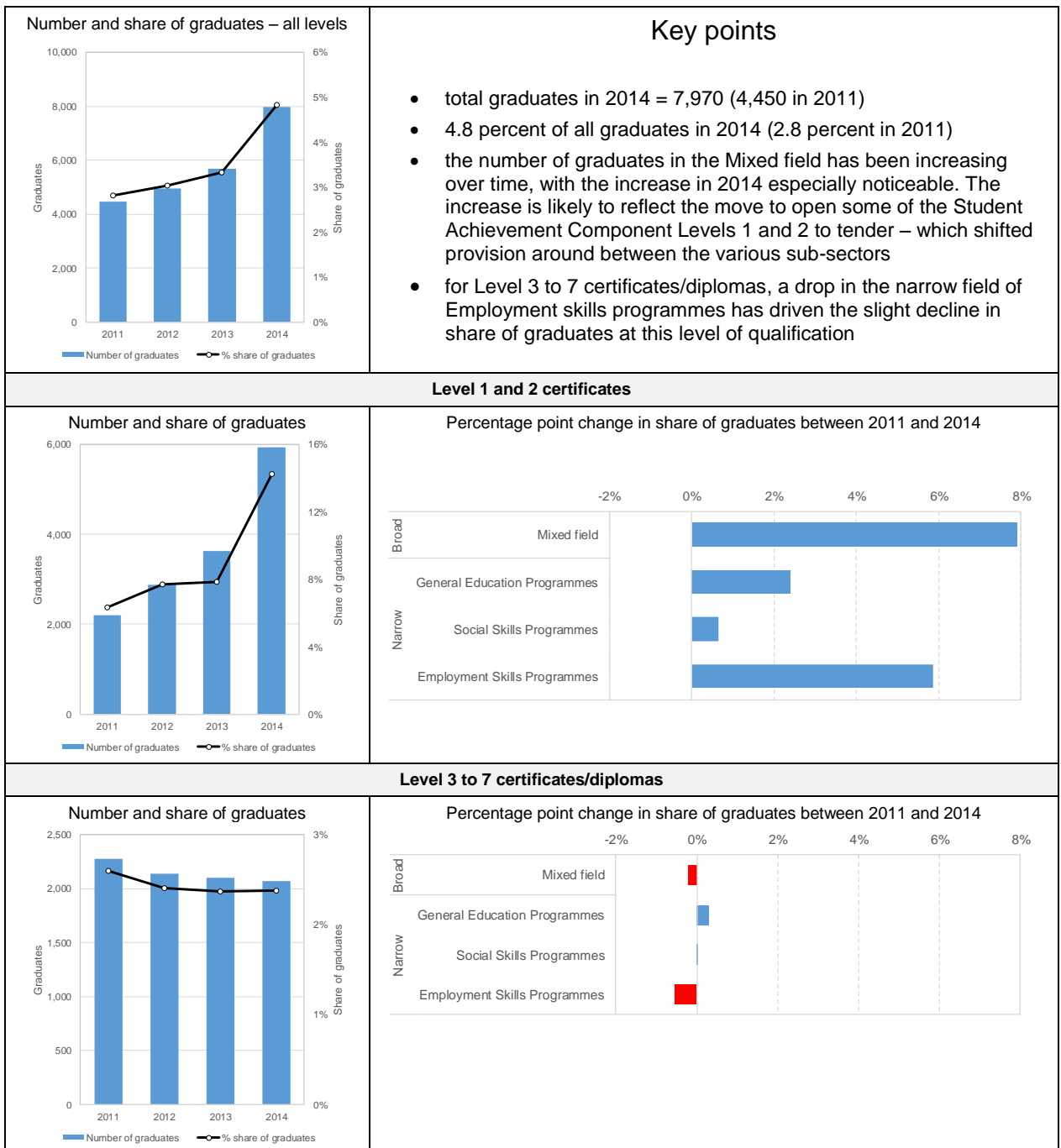
10. Creative arts



11. Food, hospitality and personal services



12. Mixed field programmes



4 FIELD OF STUDY BY SELECTED CHARACTERISTICS

In this chapter we analyse the field of study data in 2014 for selected characteristics. These include: sub-sector, gender, ethnic group and age group. The purpose of this chapter is to give a flavour of some of the broad patterns in these characteristics, rather than present a detailed and comprehensive view of the data.

Sub-sector

In this section we focus on the distribution of provision across each of the sub-sectors at each combination of broad level of qualification and broad field of study.

Figure 6 presents the distribution of graduates in 2014 in each of the 12 broad fields of study. For each broad field, we have split the level of qualification into the levels used in the previous sections – Level 1 and 2 certificates, Level 3 to 7 certificates/diplomas, and bachelors or higher.

For Level 1 and 2 certificates, learners who graduated via workplace-based learning organised by industry training organisations (ITOs) dominated a number of broad fields of study. These included: Engineering and related technologies, Agriculture and environmental studies, Health, Management and commerce, and Food and hospitality. At this level of qualification, graduates from polytechnics were prevalent in Architecture and building, while the wānanga produced significant proportions of the graduates in Society and culture (with a large number of these in the narrow field of Language and literature).

For Level 3 to 7 certificates/diplomas, polytechnics had a relatively large share of the graduates in Natural and physical sciences, Engineering and related technologies, Architecture and building, Food and hospitality, and Mixed field qualifications. Graduates from ITOs represented large proportions in the fields of Engineering and related technologies, Agriculture and environmental studies, and Architecture and building. Wānanga provided the greatest percentage of graduates in Society and culture, with significant proportions in other fields such as Information technology and Management and commerce. Private training establishments (PTEs) had significant proportions of graduates in the fields of Information technology, Education, Creative arts, and Food and hospitality.

Not surprisingly, the universities dominated at the bachelors or higher level, with an especially high proportion of the graduates in Natural and physical sciences (98 percent). The broad fields where polytechnics contributed the highest proportion of graduates were Health (with Nursing graduates) and Information technology. PTEs featured most prominently in the Education and Society and culture fields, but little in other areas. Wānanga had only limited provision at this level, with Creative arts being the field in which they contributed the most graduates. There was no workplace-based provision at the bachelors or higher level.

Figure 6

Distribution of domestic students completing qualifications by field of study, sub-sector and level of qualification

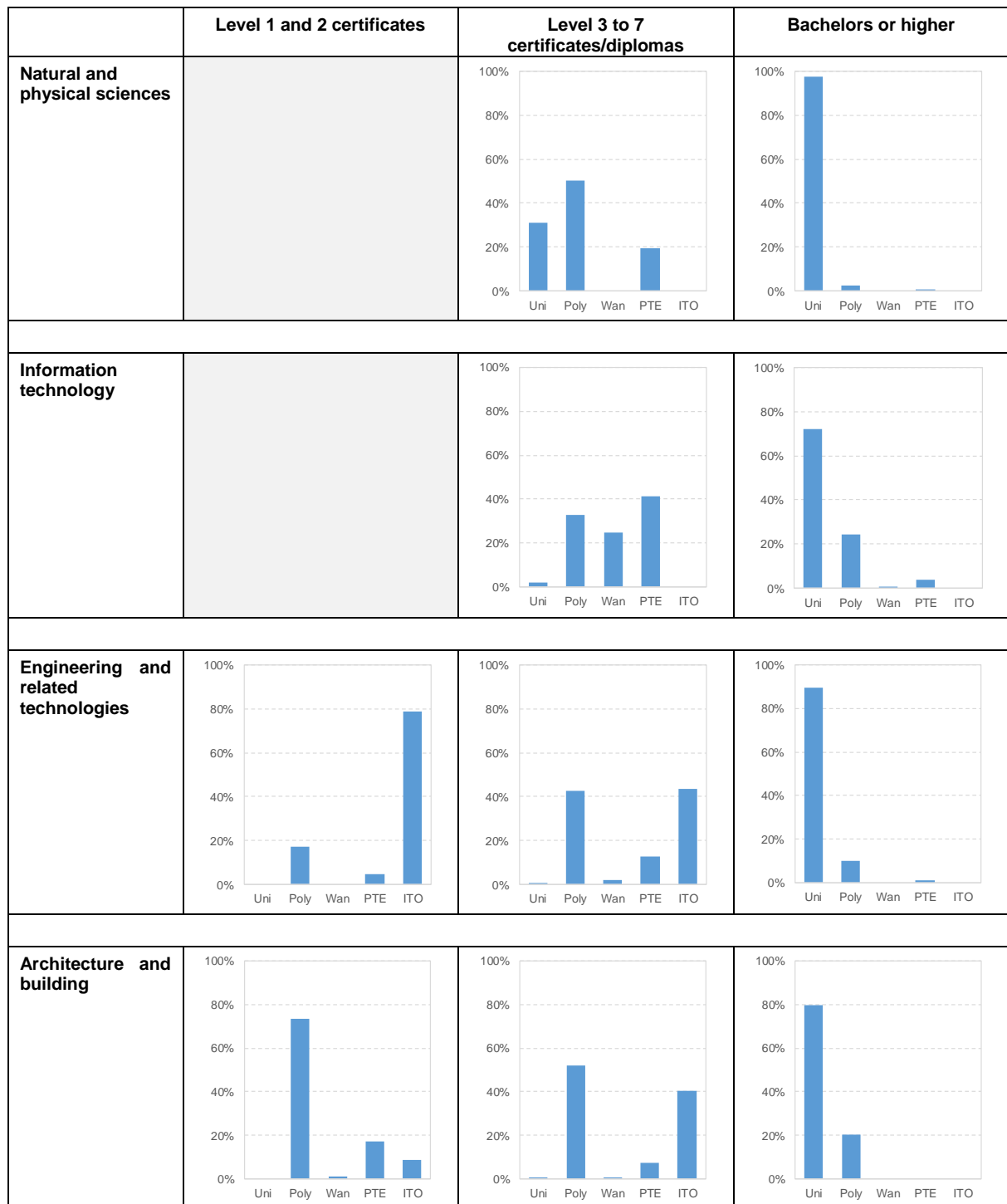


Figure 6 continued

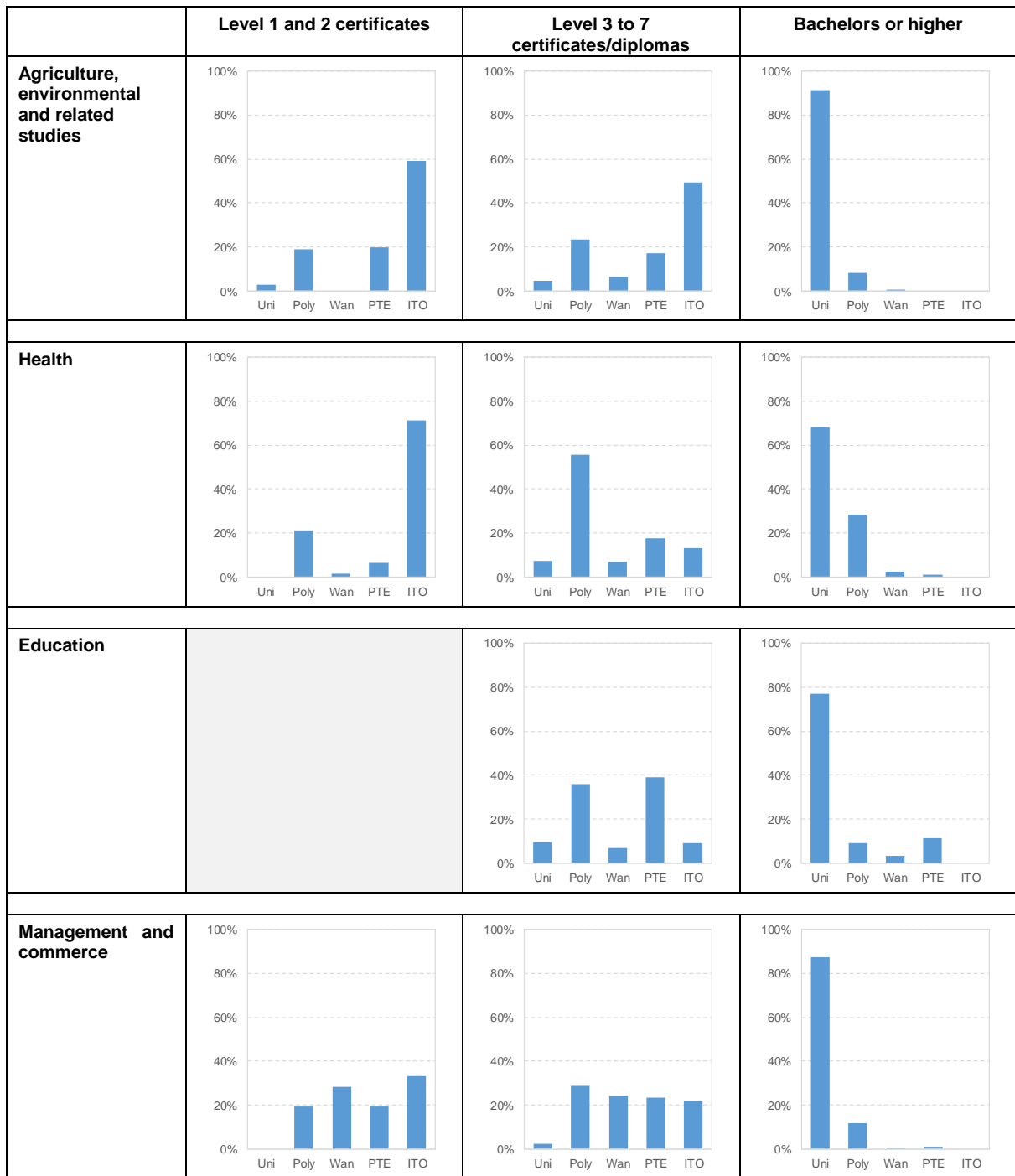
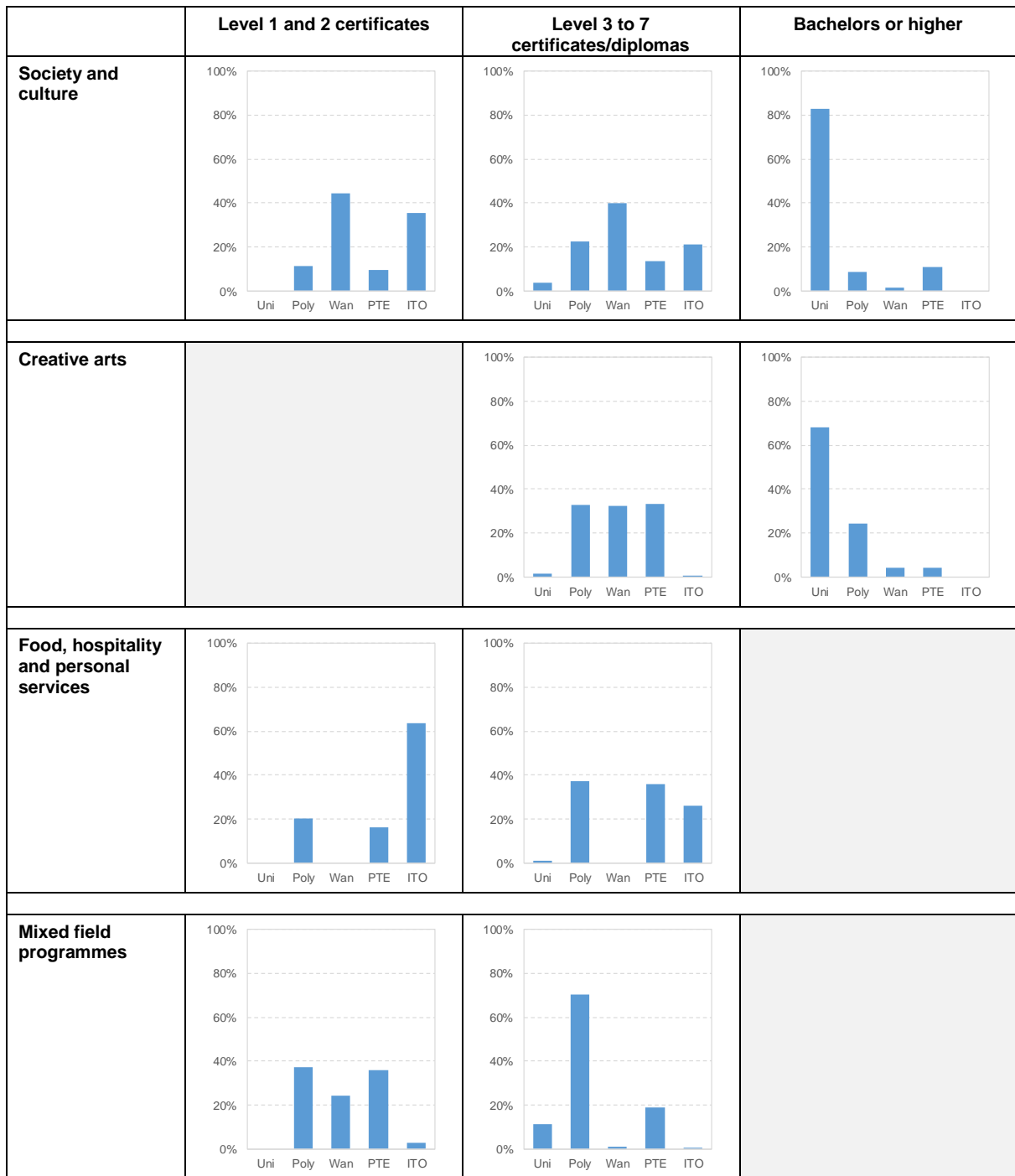


Figure 6 continued



Gender

In this section we examine the proportions of men and women in narrow fields of study in 2014. The distribution of graduates by gender across narrow fields of study in Level 1 and 2 certificates is presented in Figure 7, the gender distributions at Level 3 to 7 certificates/diplomas in Figure 8, and the gender distributions at bachelors or higher in Figure 9.¹

For Level 1 and 2 certificates, women dominated graduates in narrow subject areas like Personal services and Veterinary studies, while men dominated in engineering fields.

A similar pattern is evident in Level 3 to 7 certificates/diplomas, with Veterinary studies once again having a high proportion of women graduates. Engineering fields at this level of qualification were also dominated by men, as well as narrow fields such as Building.

At the bachelors or higher level, women dominated narrow fields such as Nursing, Radiography and Teacher education. As with the other levels of study, Veterinary studies is a narrow field with a high proportion of women, while men once again dominated the engineering fields. There was also a high proportion of men in the narrow field of Computer science.

¹ We restrict our analysis to narrow subject areas which had at least 100 graduates in 2014.

Figure 7

Distribution of domestic graduates in narrow fields of study by gender in 2014 – Level 1 and 2 certificates

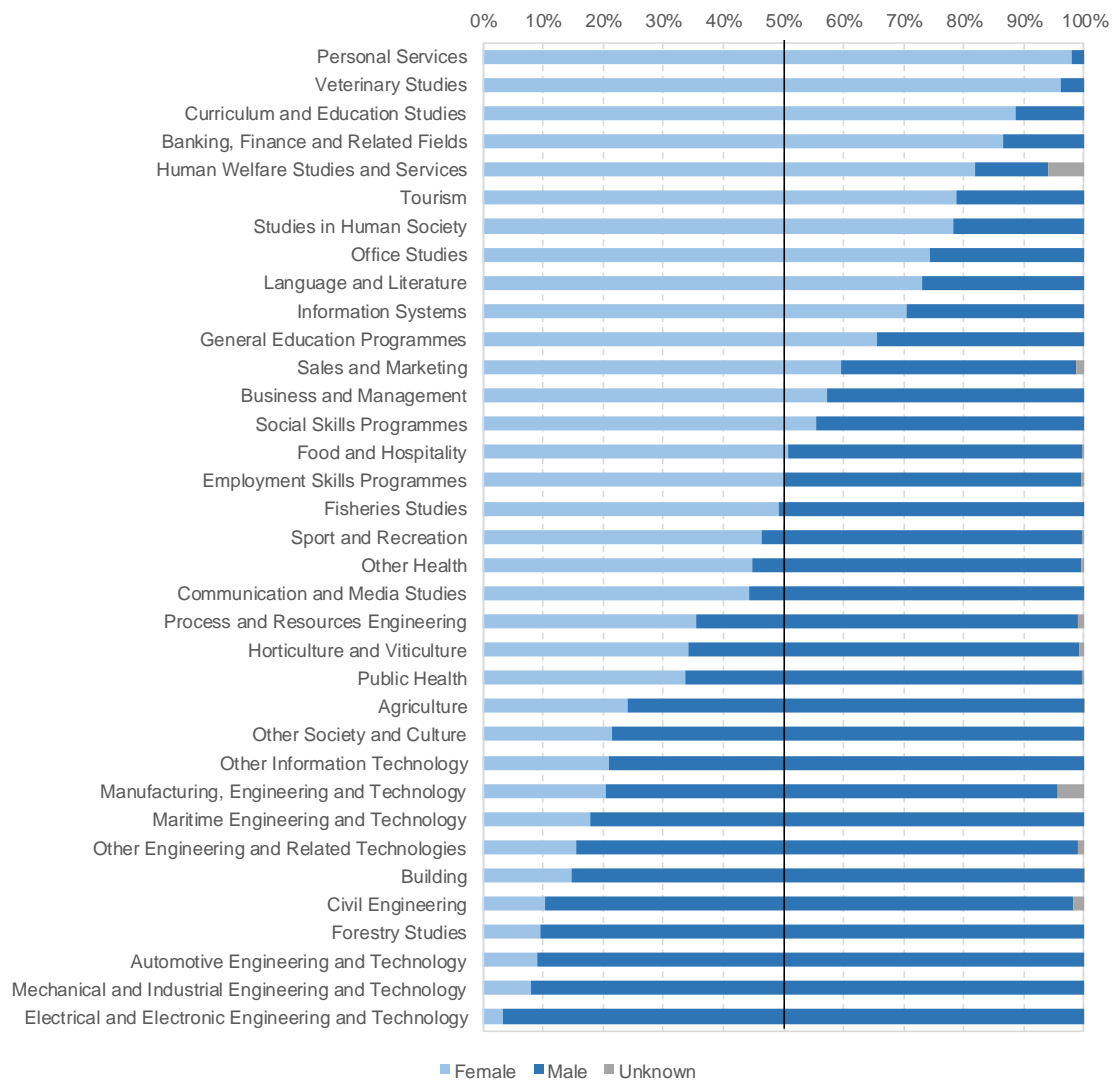


Figure 8

Distribution of domestic graduates in narrow fields of study by gender in 2014 – Level 3 to 7 certificates/diplomas

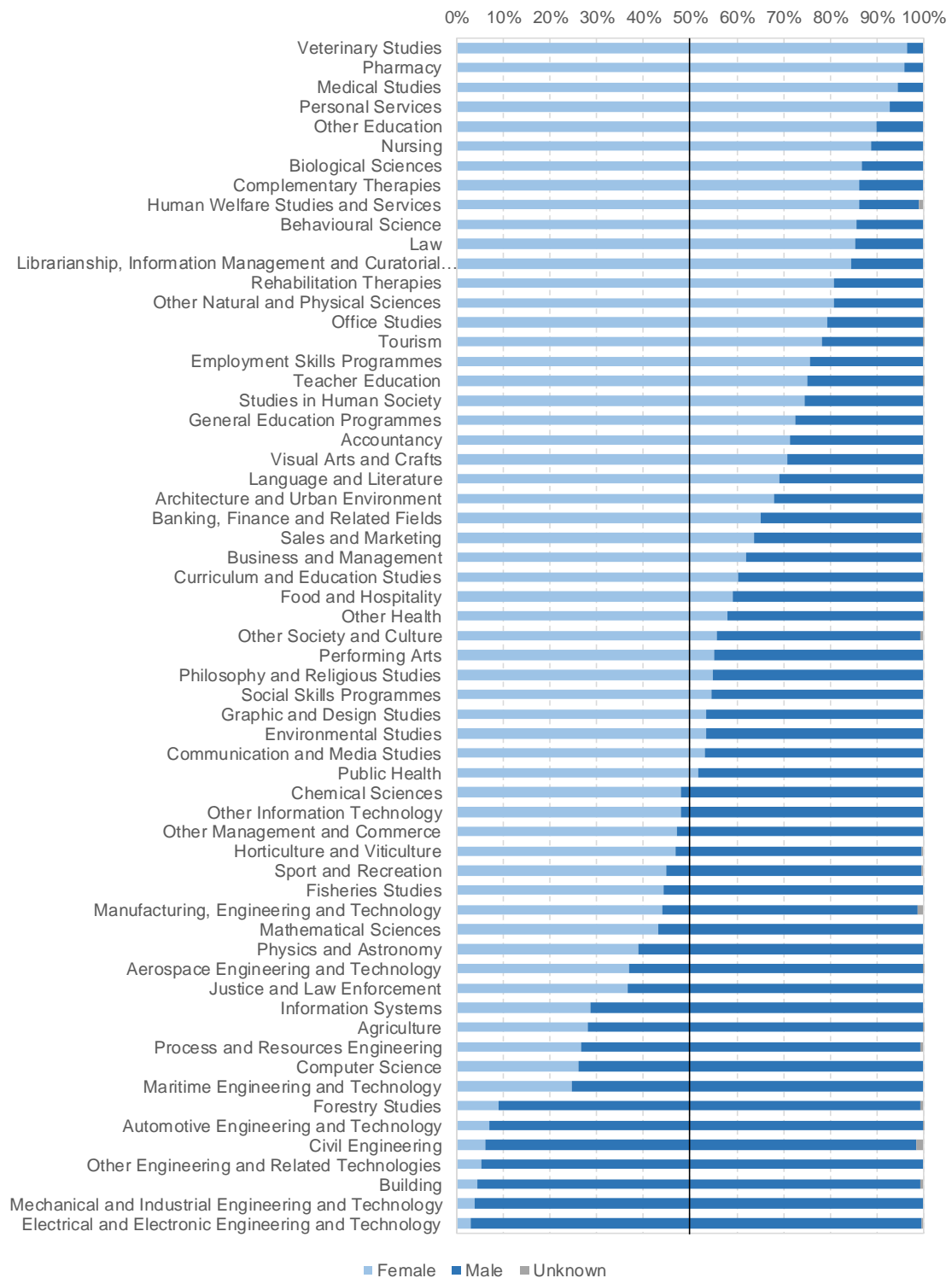
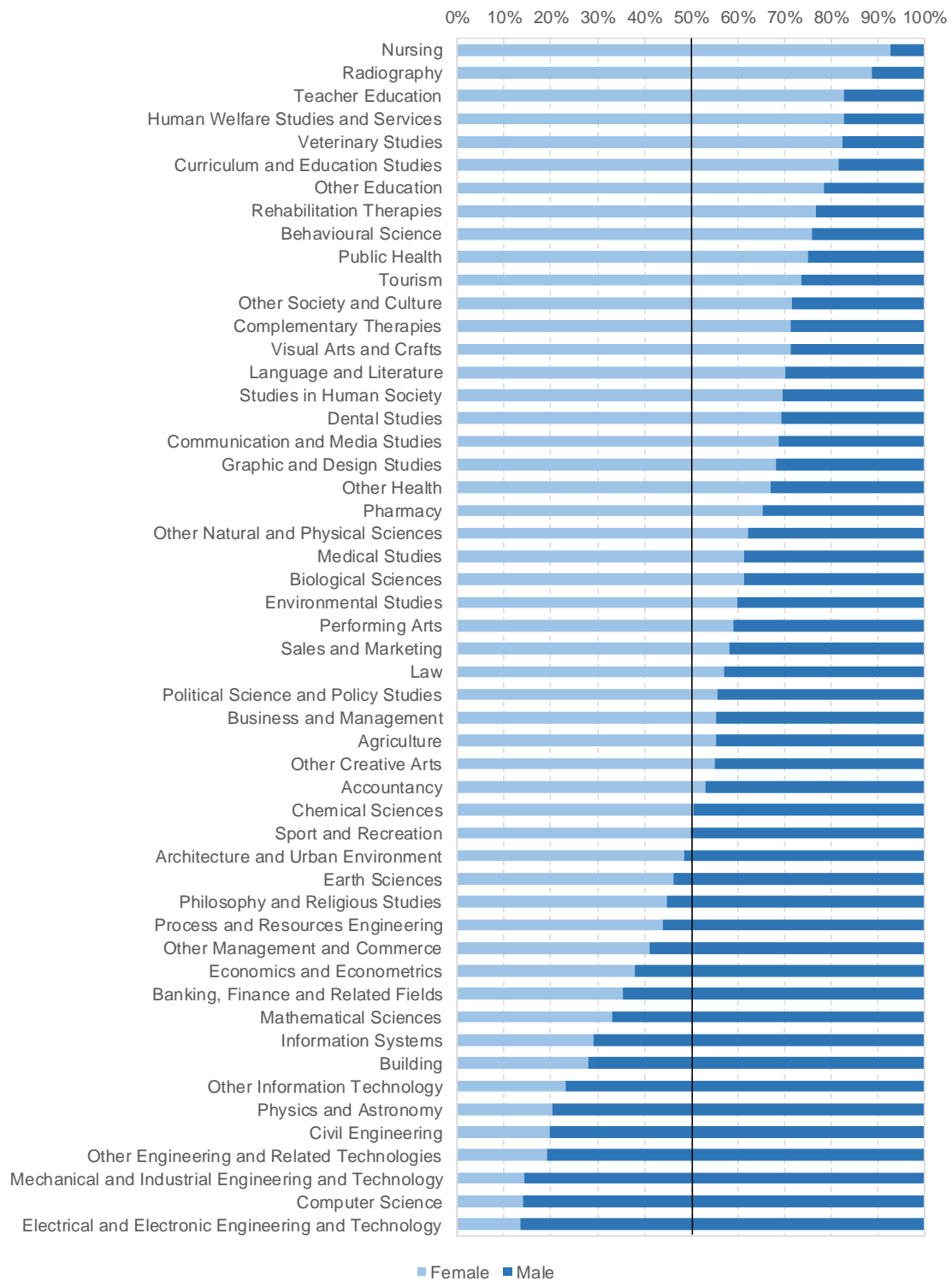


Figure 9

Distribution of domestic graduates in narrow fields of study by gender in 2014 – bachelors or higher



Ethnic group

In this section we look at the distribution of graduates of four selected ethnic groups (Europeans, Māori, Pasifika and Asian) across the 12 broad fields of study in 2014. In each case, we compare an ethnic group's distribution to the overall distribution for domestic students to show where the proportion of graduates was relatively higher or lower than the system overall. As with previous chapters, we look at the field of study at the three broad levels of study: Level 1 and 2 certificates, Level 3 to 7 certificates/diplomas, and bachelors or higher.

The data shows that there were some significant differences in the distributions among the ethnic groups. Figure 10 shows the distribution of graduates with Level 1 and 2 certificates by the four selected ethnic groups. The data shows that Māori and Pasifika both had a relatively high proportion of graduates in the Mixed field, while Europeans had a relatively high proportion of graduates in Engineering and related technologies, and Asians had a relatively high proportion of graduates in Society and culture.

For graduates with a Level 3 to 7 certificate/diploma, Māori had a relatively high proportion of graduates in the fields of Society and culture, Creative arts, and Food and hospitality (see Figure 11). Pasifika had a relatively high proportion of graduates in Management and commerce, as well as in Mixed field. Asians had a relatively high proportion of graduates in Management and commerce and Society and culture. Europeans exhibited a different pattern, with a relatively high proportion of graduates in Engineering and related technologies and Agriculture and environmental studies.

At the bachelors or higher level, Māori and Pasifika graduates exhibited a relatively similar distribution across the fields of study (see Figure 12). In particular, both ethnic groups had relatively lower proportions of graduates in the STEM-related subject areas, with relatively higher proportions of graduates in fields such as Education and Creative arts. Asian graduates on the other hand had a relatively high proportion of graduates in the STEM-related fields, as well as in Management and commerce. Finally, Europeans had a relatively high proportion of graduates in Society and culture.

Figure 10

Distribution of domestic graduates by ethnic group and broad field of study in 2014 – Level 1 and 2 certificates

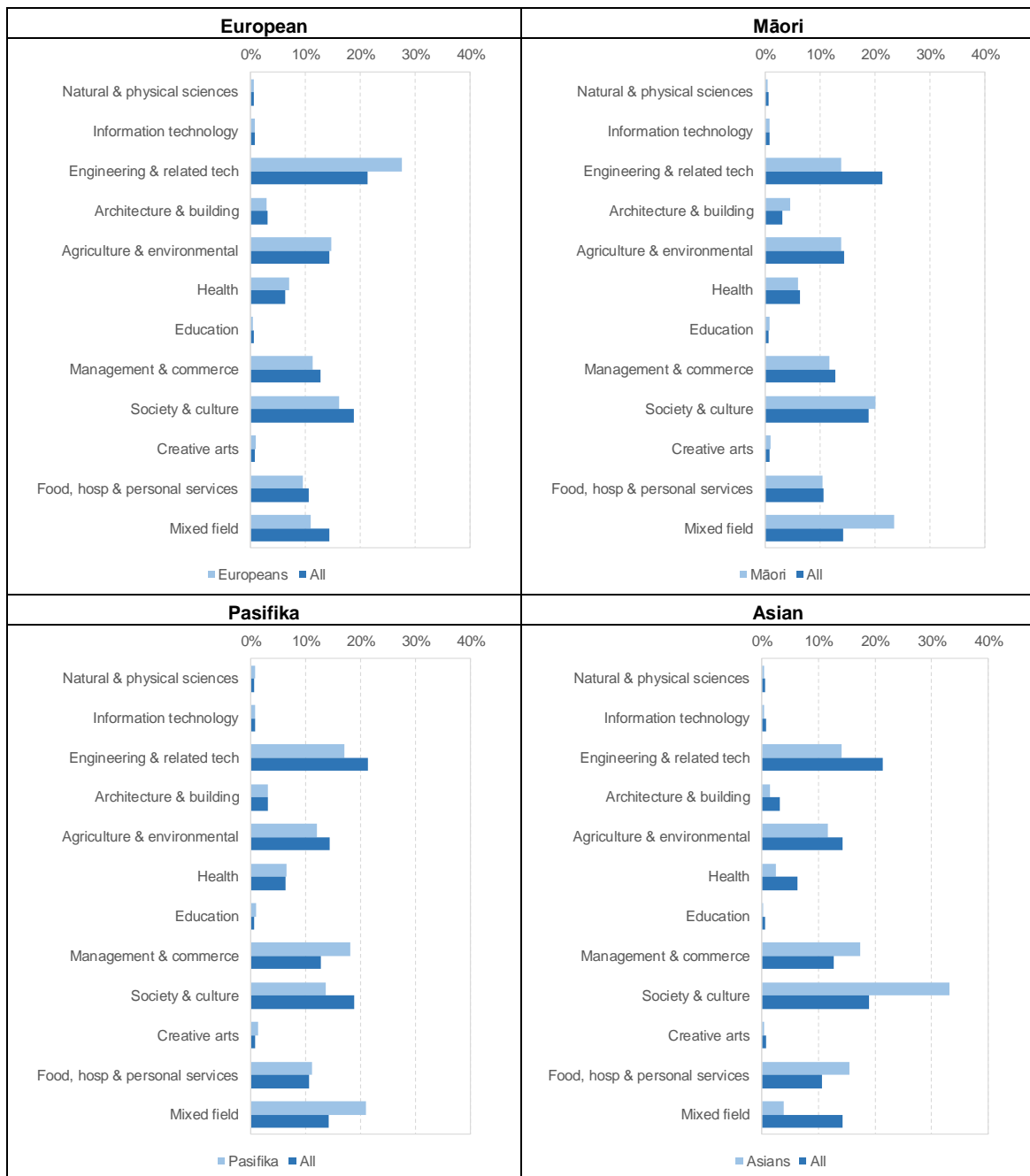


Figure 11

Distribution of domestic graduates by ethnic group and broad field of study in 2014 – Level 3 to 7 certificates/diplomas

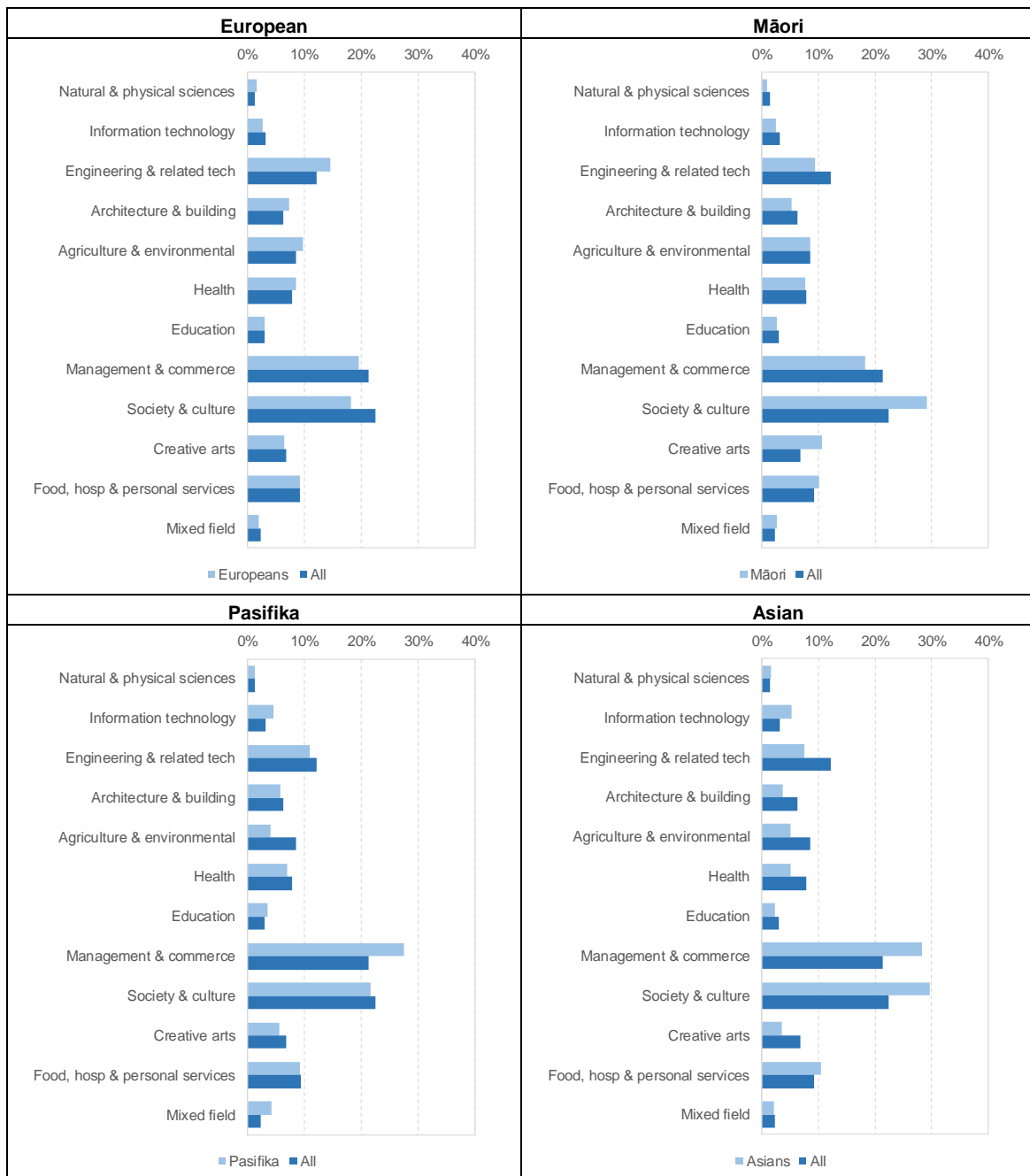
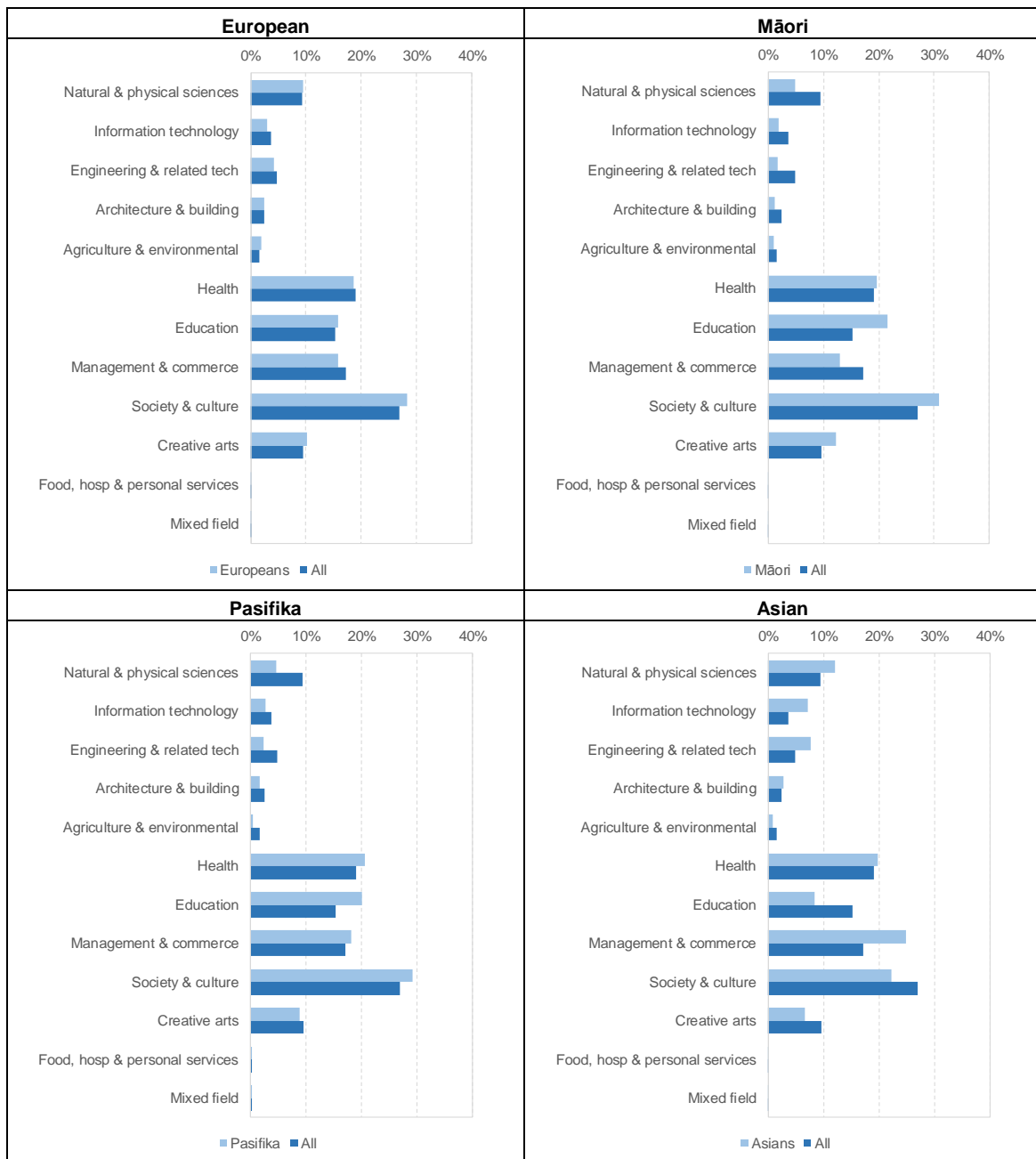


Figure 12

Distribution of domestic graduates by ethnic group and broad field of study in 2014 – bachelors or higher



Age group

In this section we examine the distribution of graduates across narrow fields of study in three broad age groups: under 25 years of age, 25 to 39 years of age, and 40 years of age and over. We focus on the age distribution of graduates in 2014 and use the same three broad qualification levels as in the previous chapters (Level 1 and 2 certificates, Level 3 to 7 certificates/diplomas, and bachelors or higher).

Figure 12 shows the distribution of graduates with a Level 1 and 2 certificate by age group at the narrow field of study in 2014. For graduates with this level of qualification, there was a considerable range in the age distribution of graduates. For graduates in the field of Tourism, around 96 percent were aged under 25 when they graduated. This compares with just over 10 percent of graduates in the field of Language and literature. Overall, almost half of the narrow fields of study in Figure 12 had a majority of graduates aged under 25.

For Level 3 to 7 certificates/diplomas, around a third of the narrow fields in Figure 13 had a majority of graduates aged under 25. A number of narrow fields in the sciences had relatively younger graduates, including Physics and astronomy and Mathematical sciences.

At the bachelors or higher level, a number of narrow fields in the sciences had a relatively high proportion of younger graduates. These included: Physics and astronomy, Biological sciences and Chemical sciences. Agriculture also had a relatively high proportion of younger graduates. The narrow subjects with a higher proportion of older graduates included several Education narrow fields (Teacher education, Curriculum and education studies, and Other education), and narrow areas within the broad field of Health (Nursing, Public health and Medical studies). In the case of the health field, this older age profile will be in part related to the length of the programme of study.

Figure 13

Distribution of domestic graduates by age group and narrow field of study in 2014 – Level 1 and 2 certificates

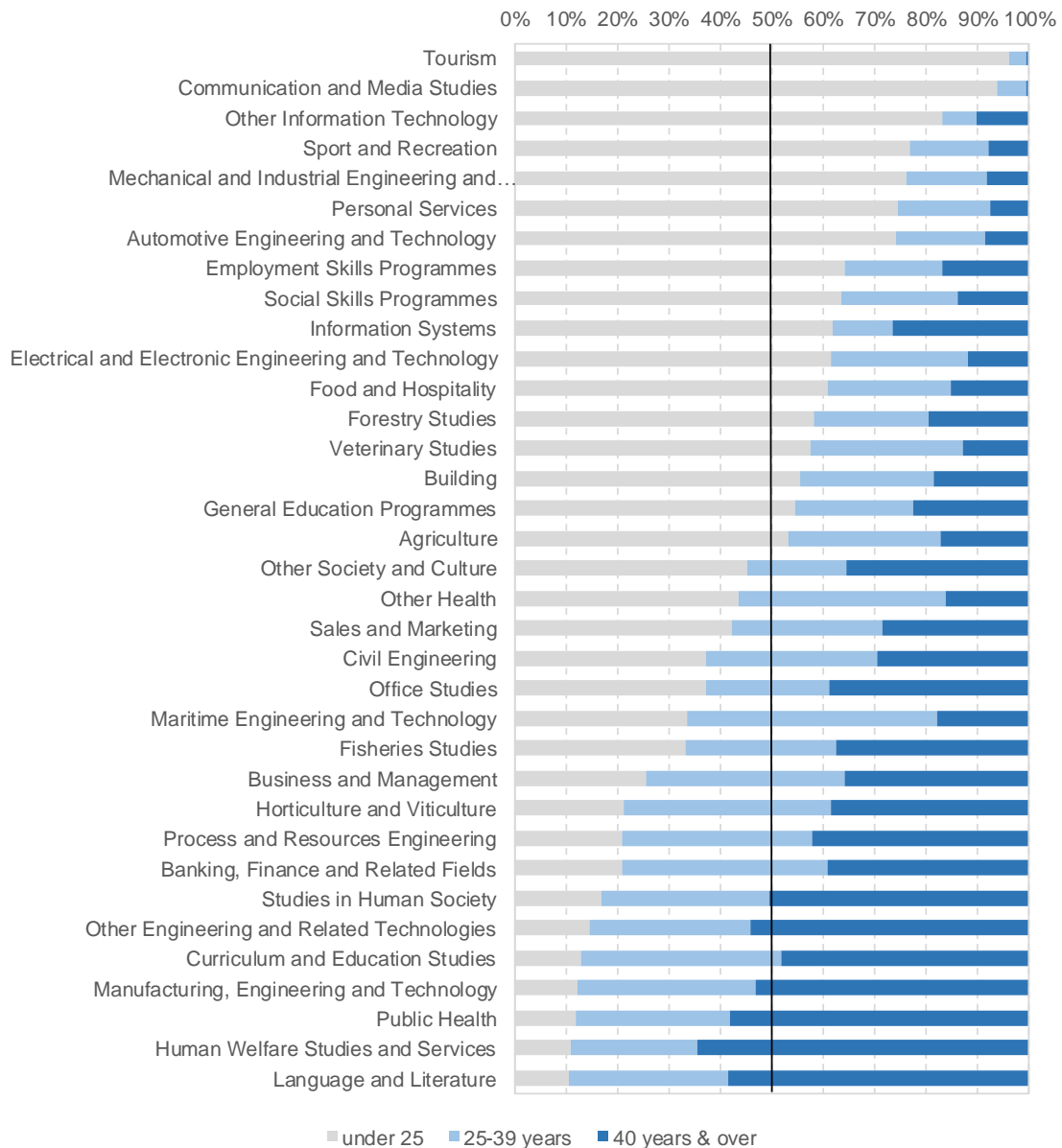


Figure 14

Distribution of domestic graduates by age group and narrow field of study in 2014 – Level 3 to 7 certificates/diplomas

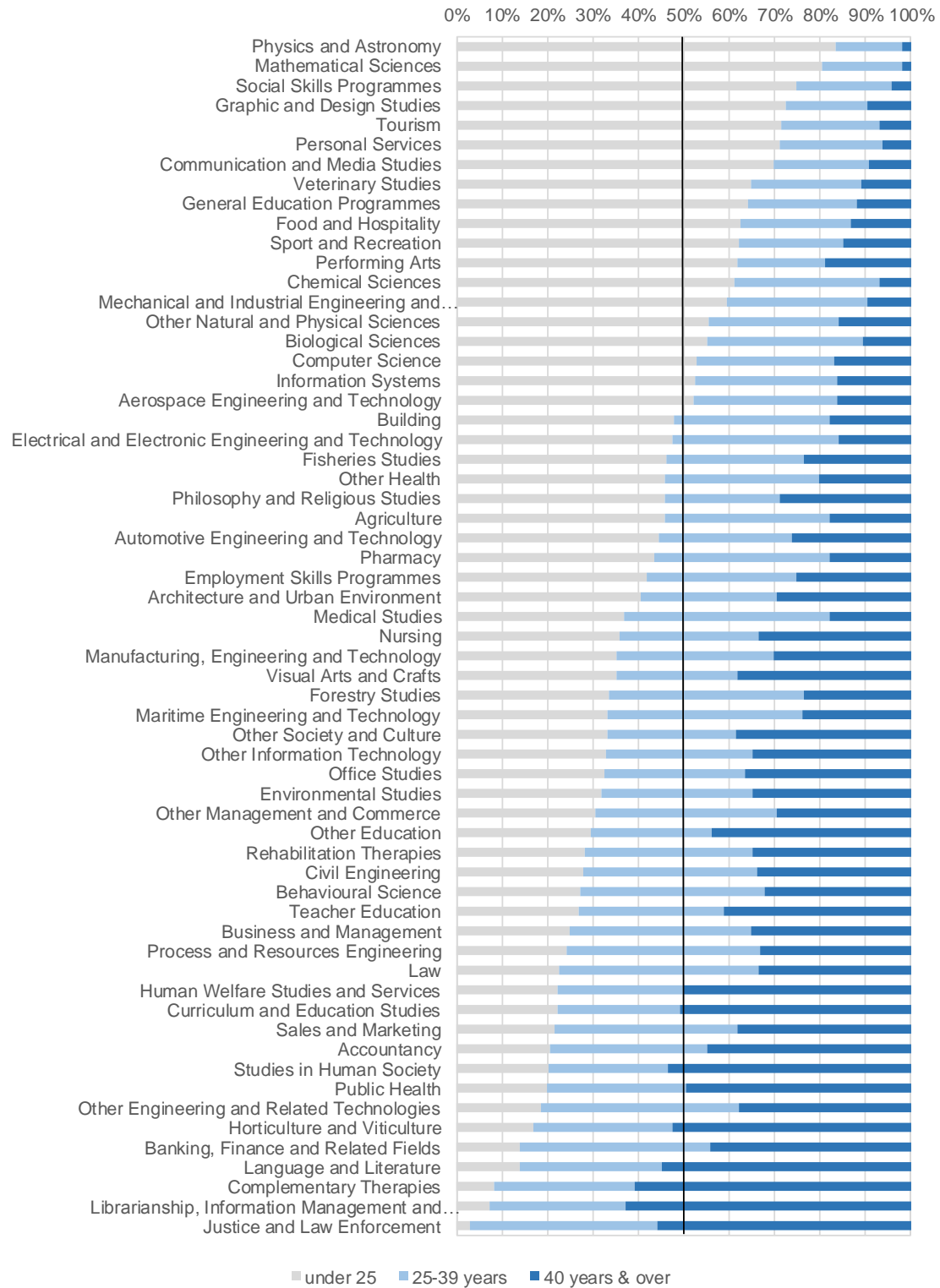
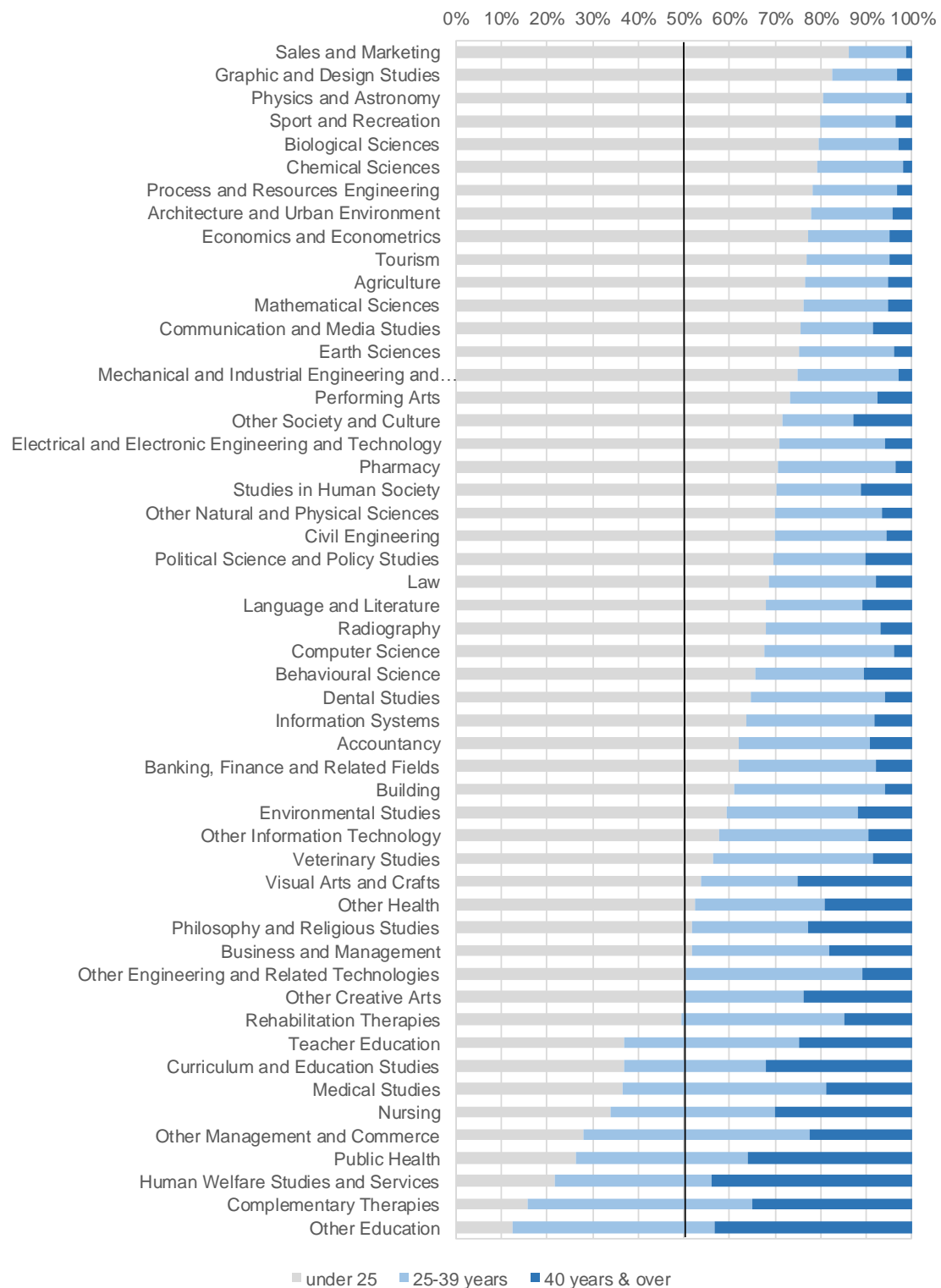


Figure 15

Distribution of domestic graduates by age group and narrow field of study in 2014 – bachelors or higher



APPENDIX: DATA AND METHODOLOGY

Data

In order to present a complete picture of the supply of graduates from the tertiary education system, in this report we look at people completing qualifications at tertiary education providers or via workplace-based training. Due to limitations on the industry training data prior to 2011, we focus on trends in the number of people completing qualifications between 2011 and 2014.

The methodology used to determine field of study

Provider-based graduates

Although NZSCED codes are assigned at the qualification level, to derive the field of study of a domestic graduate we look at the NZSCED code of the courses they studied in that qualification to derive a richer level of detail about their field of study. We do this because some providers offer relatively broad qualifications, which can make it difficult to determine the field of study from the qualification level NZSCED code. For example, a student who is enrolled in a Bachelor of Science might be specialising in Computer science, but the qualification NZSCED code might report them as being in Natural and physical sciences rather than Information technology.

If the study load of a student meets an equivalent full-time student (EFTS) threshold, they are assigned that field of study. A student can be assigned up to three fields of study. In this analysis we report a graduate in each field of study in which they complete a qualification. In cases where the EFTS threshold is not met, the qualification-level NZSCED is assigned.

Workplace-based graduates

For graduates from workplace-based learning, the NZSCED code of the qualification has been used to assign field of study.

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MINISTRY OF EDUCATION

Te Tāhuhu o te Mātauranga