enrolment

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Universities - Intake, Enrolment and Graduates by Course

Source

Source Notes:

- Universities refers to
  - **NUS** National University of Singapore
  - **NTU** Nanyang Technological University
  - **SMU** Singapore Management University
  - **SIT** Singapore Institute of Technology
  - **SUTD** Singapore University of Technology & Design
  - **SUSS** Singapore University of Social Sciences.
- Intake, enrolment and graduates figures refer to full-time first degree only.
- Intake figures include students who entered directly into second and subsequent years.
- Courses are classified according to course content of the highest weighting.

Columns

- **Year**: Year of dataset collected.
- **Sex**: Sex of group
- **Course**: Course the group of students attended
- **Intake**: Number of students accepted in to the course
- **Enrolment**: Number of students applied to the course
- **Graduates**: Number of students finishing the course

Course

There are a myraid of courses provided by universities, however, this dataset narrows it down to a few categories only.

This means that courses, for example, **Electrical Engineering** will fall under **Engineering Sciences**, which is a more encompassing category.

Intake vs. Enrolment

- **Intake** refers to students accepted.
- **Enrolment** refers to students applied.

Hence,

$$\frac{intake}{enrolment} = intake_{rate}$$

Graduates

To clarify, this is the graduates for the particular year, which is independent of the intake in the same year.

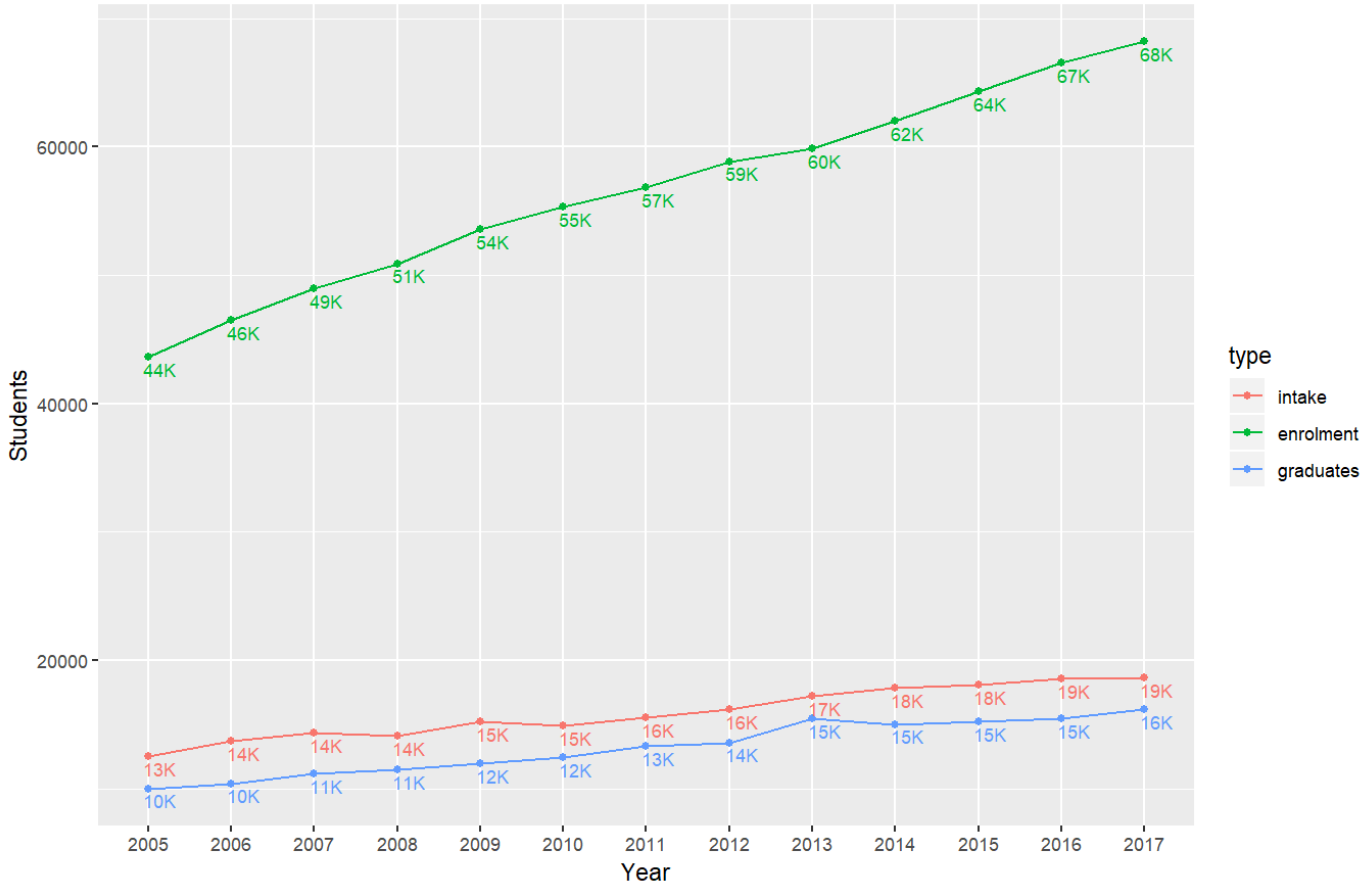
Hence it will not be possible to calculate graduation rate directly from this dataset:

$$\frac{graduates}{intake} \neq graduate_{rate}$$

Goals

- It's obvious that intake, enrolment, graduates will increase, but will there be some spikes in the graph that may prove otherwise in a certain timeframe?
- What is the intake and enrolment per course?
- Can we approximate the intake rate for each course? Is this reliable?

Trends in Intake, Enrolment, and Graduates



enrolment_sum

Observations

The obvious trend would be that all of them increase, but are they increasing at a proportional rate?

Enrolment vs Intake

This can be also taken as **acceptance rate** by the university/course.

Let's take a look at the ratio on 2017, compare it against 2005

$$\frac{intake_{2005}}{enrolment_{2005}} = 13/44 \approx 29.5\%$$

$$\frac{intake_{2017}}{enrolment_{2017}} = 19/68 \approx 27.9\%$$

It shows a 1.6% decrease.

Note: We will not compare against graduates, as we discussed before, graduates are dependent on intakes/enrolments that happened years before

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Forecasting

Acceptance Rate

With this, can we conclude that **acceptance rate** will decrease? We can, but not in a way that most people would percieve it, we skimmed over an important aspect.

Intake Rate

enrolment, this value is dependent on the number of courses each student applied. This is, to a certain degree, dependent on the number of courses the universities offered.

If more universities are established, more courses are provided, hence more applications. However, the student will only be accepted to one or none at all.

Pitfalls in Understanding

There are quite a few reasons on why we can't reliably answer the following question right now:

"I applied to this course, what are the chances I'll get offered?"

1. Multiple Applications, One Offer

Most commonly, the student applies to many courses, with an order of priority; the school counts it as **multiple enrolments** but sends only **one offer**. Even if the other courses could've offered, they are superceded by the prioritized one.

2. Multiple Universities

Even if we consider multiple universities sending offers, the student can only accept one, we are met with the same problem again.

3. Details of counting

Unfortunately, the dataset only tells the big story, but none on the process. **1 & 2** are guesses on how it works, hence I cannot ascertain anything.

If you are interested into digging into the data, I'd suggest to start with the source, which is listed on the top of the document.

Intake, Enrolment per Course

Results

Observations

Summary

Observation

Observation

Forecasting

Summary

Forecast

Forecast

Intake Rate

Results

Observations

Summary

Observation

Observation

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Summary

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Forecast

Conclusion