

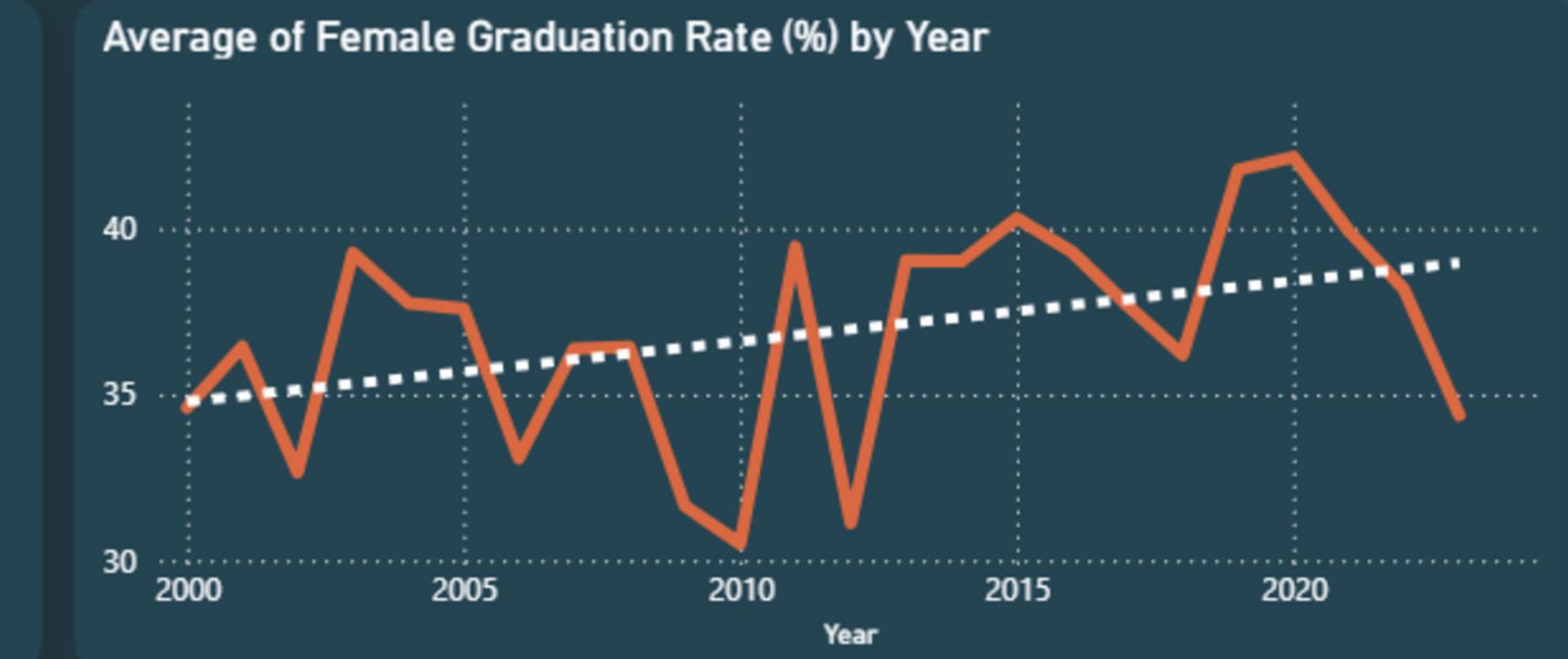
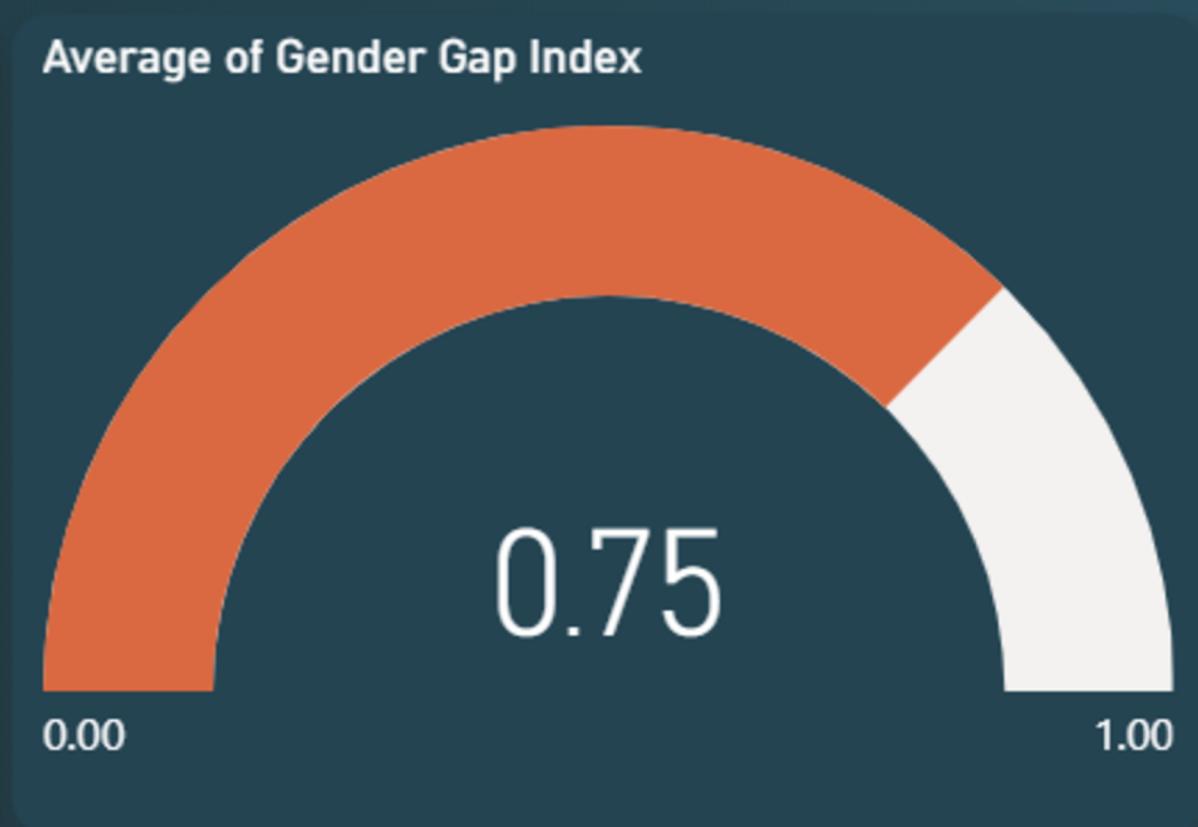
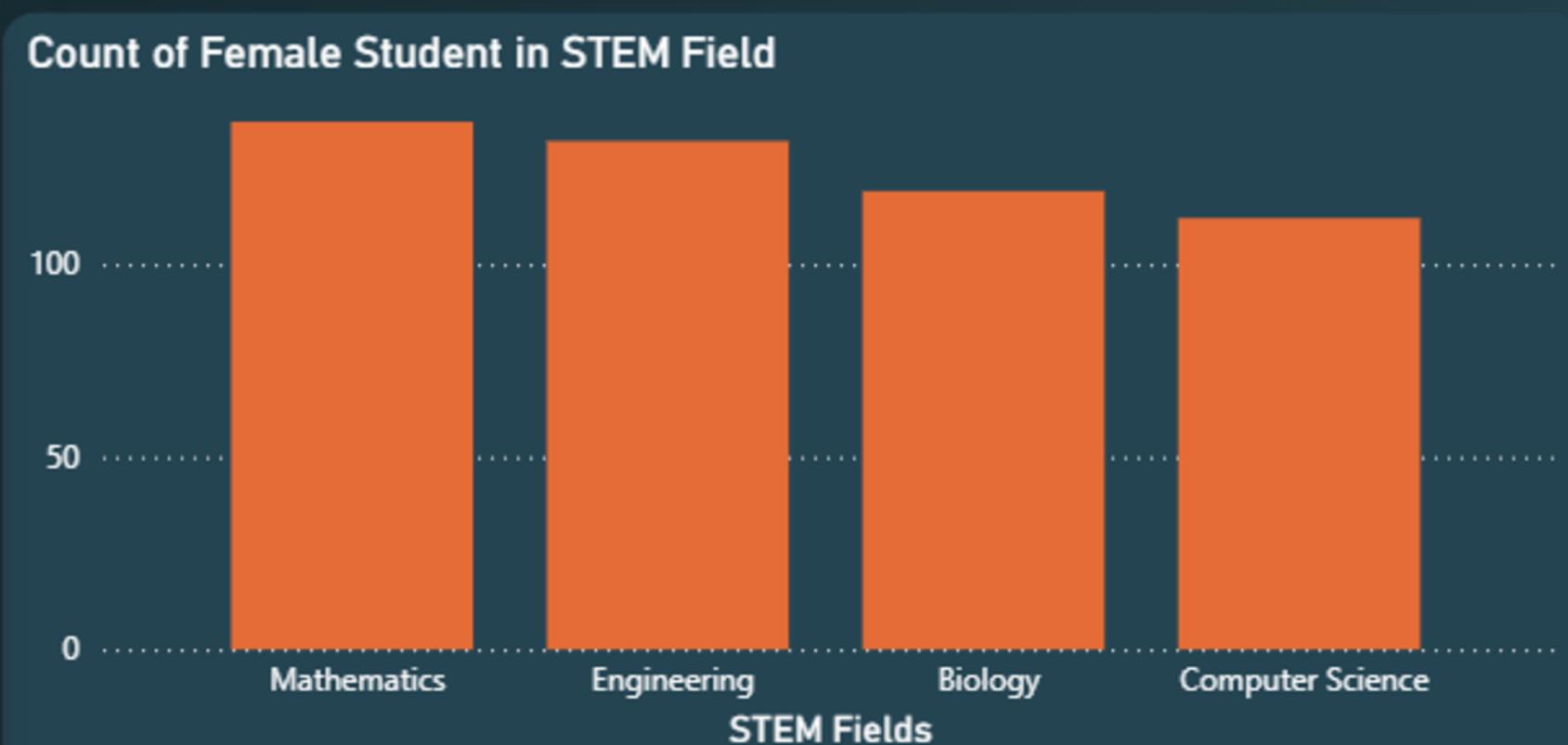
WOMEN IN STEM INSIGHTS

43.94

Average of Female Enrollment (%)

36.72

Average of Female Graduation Rate (%)



Introduction

Women's participation in STEM education is a key indicator of gender equality and future workforce readiness. However, many countries still face persistent gender gaps in STEM fields. This analysis explores trends in women's involvement in STEM across major countries from 2000 to 2023, focusing on enrollment, graduation, and gender gap indicators. The findings help highlight progress made and challenges that remain in promoting women's representation in STEM.

Dataset Information

This dataset includes columns: Country, Year, Female Enrollment (%), Female Graduation Rate (%), STEM Fields (e.g., Engineering, Computer Science), Gender Gap Index.

Key Features

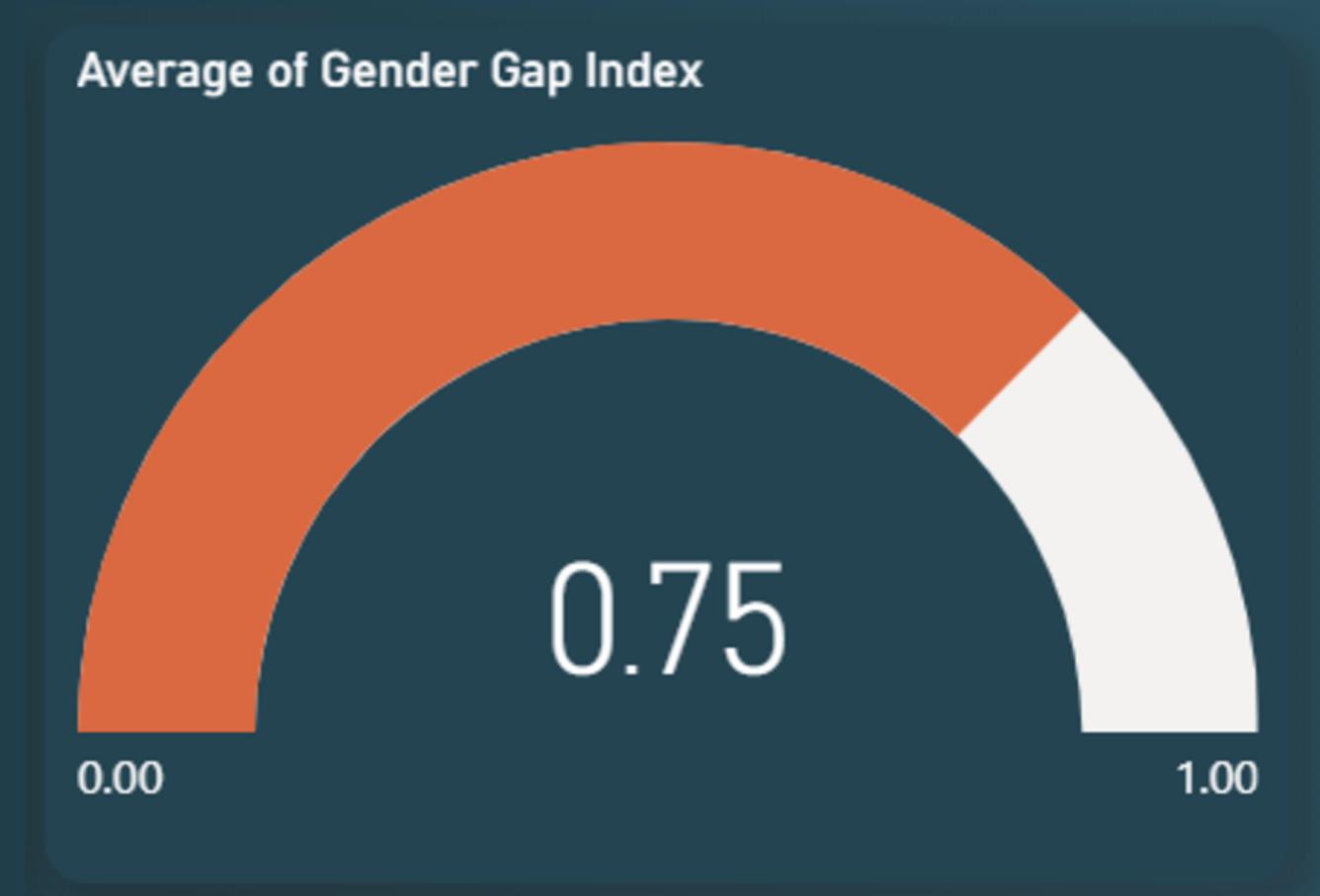
- **Temporal Coverage:** 24-year span (2000-2023) showing educational trends over time
- **Geographic Scope:** Data from 6 major countries (USA, China, India, Germany, Canada, Australia)
- **Field Diversity:** Four core STEM disciplines (Engineering, Computer Science, Mathematics, Biology)
- **Dual Metrics:** Both enrollment percentages and graduation rates for comprehensive analysis
- **Gender Gap Index:** Quantitative measure of gender parity in each field

Key Insight and Findings

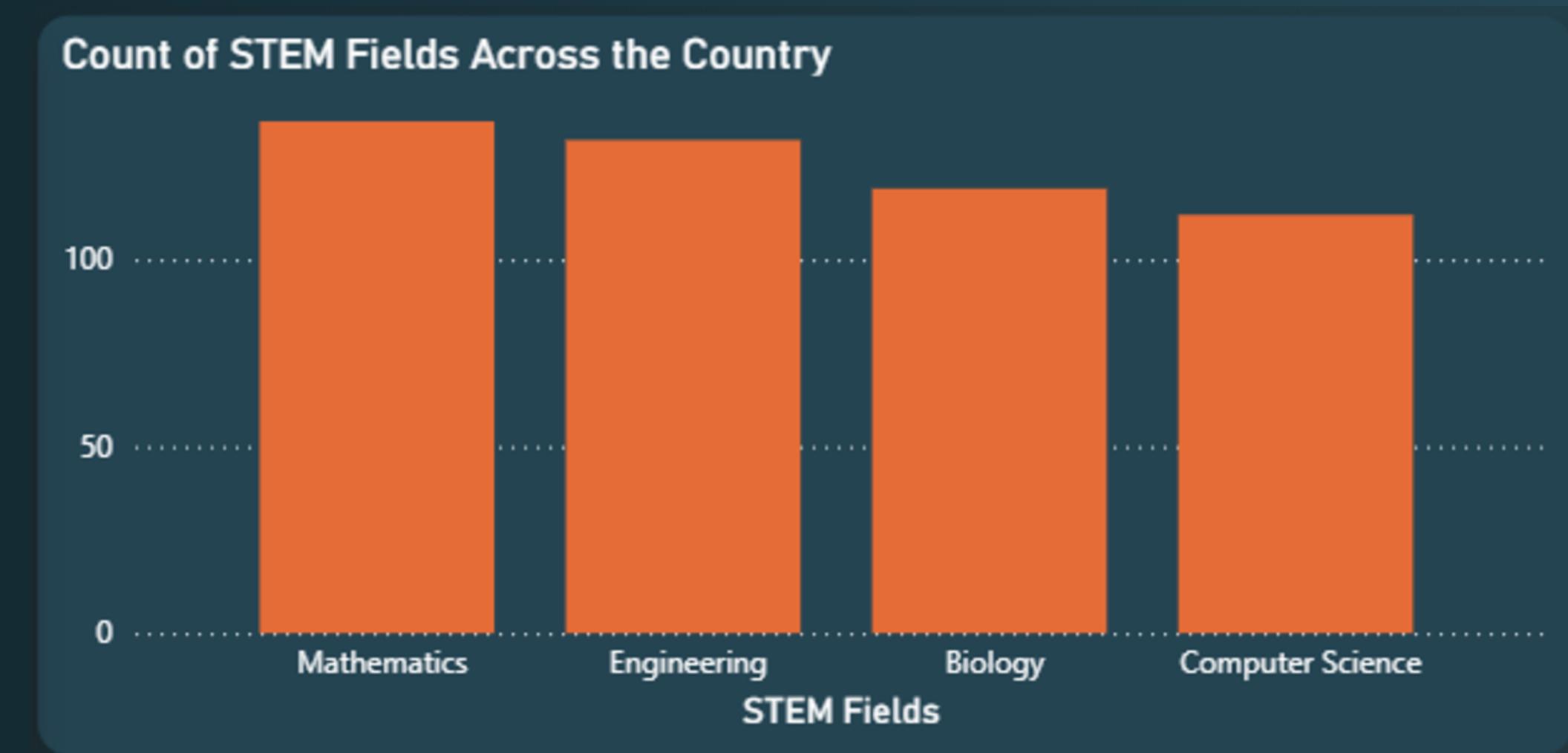
The average enrollment rate of women in STEM fields is 43.94%. The United States records the highest enrollment, reaching 45.72%, **indicating that more women in the U.S. enter STEM programs compared to the other countries.**

Meanwhile, the average graduation rate of women in STEM fields is 36.72%, with China showing the highest rate at 37.43%. **This suggests that China has slightly stronger outcomes in helping women complete their STEM studies.**

The Gender Gap Index shows an overall average score of 0.75 across all countries, where the scale ranges from 0 to 1. A score closer to 1 indicates better gender parity. **Australia and Germany have the highest scores at 0.76**, meaning they show slightly better balance between men and women in STEM participation compared to the other countries in the dataset.



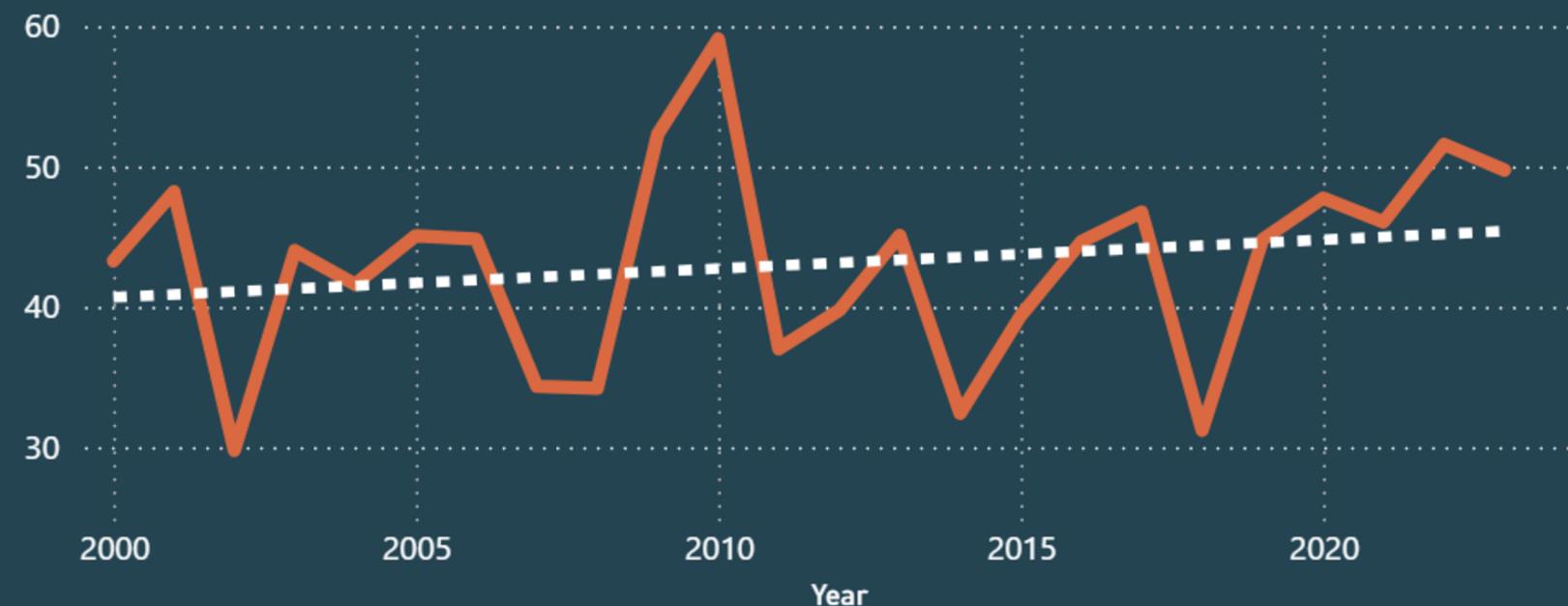
Key Insight and Findings



Mathematics has the highest number of students, followed closely by Engineering, indicating strong overall interest in these two fields. Biology comes next, showing moderate participation, while Computer Science has the lowest count among the four fields. Although the differences are not very large, **the results suggest that women tend to choose Mathematics and Engineering slightly more often than Biology and Computer Science across the countries.**

Key Insight and Findings

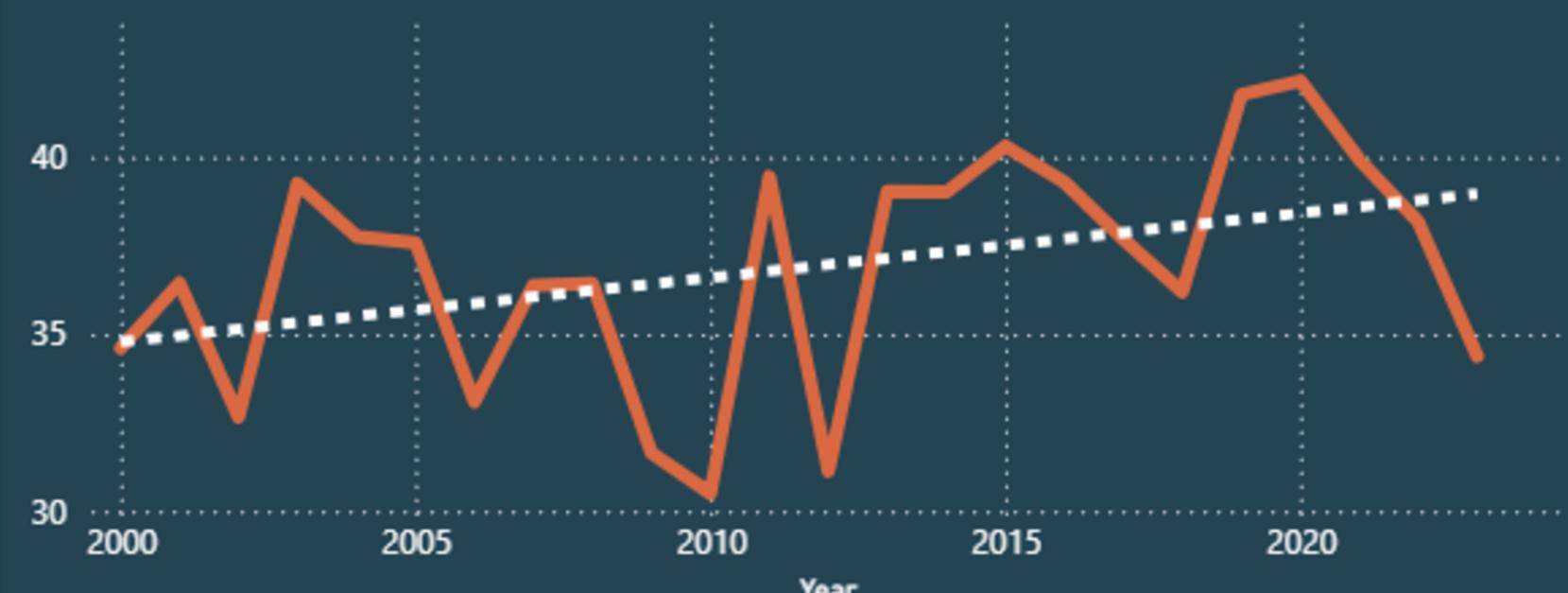
Average of Female Enrollment (%) by Year



The average female enrollment in STEM education shows an upward trend in China, **indicating continuous improvement in women's participation over the years.**

In contrast, other countries exhibit relatively stable or slightly declining enrollment patterns, suggesting slower progress or stagnation in increasing female representation in STEM fields.

Average of Female Graduation Rate (%) by Year



The average graduation rate in STEM shows an upward trend across all countries. This suggests that even if enrollment numbers do not increase significantly in some places, **women who enter STEM programs are becoming more likely to complete their studies.**

The consistent rise in graduation rates indicates improvements in academic support, access to resources, and overall success of women pursuing STEM degrees.

Thank You

You can view the complete
project on my GitHub



[https://github.com/ifanfadd/wome
n-in-stem-analysis](https://github.com/ifanfadd/women-in-stem-analysis)

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