# The Analysis Report of Majors and Occupations Preference of 2025 DSE Students

**{{ school }}**

The following summary report presents the major findings extracted from the survey results collected by {{ school }}, including students’ major and occupation preferences, the influence of STEM education and Greater Bay Area (GBA) development on their preferences, and students' approaches to stress management. (Total respondents: {{ respondents }})

* **Majors Preference**

|  |  |  |  |
| --- | --- | --- | --- |
| Rank | **Popular Majors** | **Male Popular Majors** | **Female Popular Majors** |
| 1st | {{ major\_0 }} | {{ male\_major\_0 }} | {{ female\_major\_0 }} |
| 2nd | {{ major\_1 }} | {{ male\_major\_1 }} | {{ female\_major\_1 }} |
| 3rd | {{ major\_2 }} | {{ male\_major\_2 }} | {{ female\_major\_2 }} |
| 4th | {{ major\_3 }} | {{ male\_major\_3 }} | {{ female\_major\_3 }} |
| 5th | {{ major\_4 }} | {{ male\_major\_4 }} | {{ female\_major\_4 }} |

|  |  |
| --- | --- |
| Rank | **Unpopular Majors** |
| 1st (=0) | {{ unpopular\_majors\_0 }} |
| 2nd (=1) | {{ unpopular\_majors\_1 }} |

{{ major\_conclusion }}

* **Occupations Preference**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Rank | **Popular Occupations** | **Male Popular Occupations** | **Female Popular Occupations** | |
| 1st | {{ occupation\_0 }} | {{ male\_occupation\_0 }} | | {{ female\_occupation\_0 }} |
| 2nd | {{ occupation\_1 }} | {{ male\_occupation\_1 }} | | {{ female\_occupation\_1 }} |
| 3rd | {{ occupation\_2 }} | {{ male\_occupation\_2 }} | | {{ female\_occupation\_2 }} |
| 4th | {{ occupation\_3 }} | {{ male\_occupation\_3 }} | | {{ female\_occupation\_3 }} |
| 5th | {{ occupation\_4 }} | {{ male\_occupation\_4 }} | | {{ female\_occupation\_4 }} |

|  |  |  |
| --- | --- | --- |
| Rank | **Unpopular Occupations** |  |
| 1st (=0) | {{ unpopular\_occupations\_0 }} | |
| 2nd (=1) | {{ unpopular\_occupations\_1 }} | |

{{ occupations\_conclusion }}

* **Influence of STEM Education**

***(Results analyzed from the average of STEM participants and non-STEM participants)***

|  |  |  |
| --- | --- | --- |
| **Effectiveness of STEM Project** | **Strongly Improve** | **Partially Improve** |
| **Leadership** | {{ leadership\_strong }} | {{ leadership\_par }} |
| **Teamwork** | {{ teamwork\_strong }} | {{ teamwork\_par }} |
| **Creative Thinking** | {{ creative\_strong }} | {{ creative\_par }} |
| **Science Knowledge and Understanding** | {{ knowledge\_strong }} | {{ knowledge\_par }} |
| **Problem Solving Skills** | {{ prob\_solving\_strong }} | {{ prob\_solving\_par }} |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **STEM Majors Preference** | **Have attended STEM**  **(A={{ have\_stem }} )** | | **Have not attended STEM**  **(A={{ no\_stem }})** | **Difference** |  |
| **Engineering** | {{ stem\_eng\_A }} | {{ no\_stem\_eng\_A }} | | {{ eng\_diff\_A }} |  |
| **Science** | {{ stem\_sci\_A }} | {{ no\_stem\_sci\_A }} | | {{ sci\_diff\_A }} |  |
| **Total** | {{ stem\_total\_A }} | {{ no\_stem\_total\_A }} | | {{ total\_diff\_A }} |  |

**\**Engineering* majors include Computer Engineering, Mechanical/Electrical, Aviation Engineering and Science Engineering\***

**\**Science* majors include Physics, Chemistry, Biology, Biochemisty, Environmental Science, Mathematics, Statistics, Actuarial, Computer Science and Artificial Intelligence (AI)\***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **STEM Occupations Preference** | **Have attended STEM**  **(A={{ have\_stem }})** | | **Have not attended STEM**  **(A= {{ no\_stem }})** | **Difference** |  |
| **Engineering** | {{ stem\_eng\_B }} | {{ no\_stem\_eng\_B }} | | {{ eng\_diff\_B }} |  |
| **Science** | {{ stem\_sci\_B }} | {{ no\_stem\_sci\_B }} | | {{ sci\_diff\_B }} |  |
| **Total** | {{ stem\_total\_B }} | {{ no\_stem\_total\_B }} | | {{ total\_diff\_B }} |  |

**\**Engineering* occupations include Computer Engineering, Mechanical/Electrical, Aviation Engineering, Science Engineering, Manufacturing\***

**\**Science* occupations include Information Technology, Data Science, Artificial Intelligence, Biochemistry, Laboratory, Environmental Science\***

{{ stem\_graph\_1 }} {{stem\_graph\_2 }}

{{ stem\_conclusion }}

* **Influence of Greater Bay Area Development Policy**

***(\*Results analyzed from respondents with high GBA familiarity and respondents with low familiarity)***

|  |  |  |  |
| --- | --- | --- | --- |
| **GBA Majors Preference** | **Familiar with GBA** | **Unfamiliar with GBA** | **Difference** |
| **Business** | {{ gba\_bus\_A }} | {{ no\_gba\_bus\_A }} | {{ bus\_diff\_A }} |
| **Science** | {{ gba\_sci\_A }} | {{ no\_gba\_sci\_A }} | {{ gba\_sci\_diff\_A }} |

**\**Business* majors include Accounting, Aviation management, Economics, Finance, Logistics, Hotel & Tourism Management, Human Resources, Investment, Managment, Marketing, Risk Management, Property Management)**

**\**Science* majors include Physics, Chemistry, Biology, Biochemistry, Environmental Science, Mathematics, Statistics, Actuarial, Computer Science, Artificial Intelligence)**

|  |  |  |  |
| --- | --- | --- | --- |
| **GBA Occupations Preference** | **Familiar with GBA** | **Unfamiliar with GBA** | **Difference** |
| **Business** | {{ gba\_bus\_B }} | {{ no\_gba\_bus\_B }} | {{ bus\_diff\_B }} |
| **Engineering** | {{ gba\_eng }} | {{ no\_gba\_eng }} | {{ gba\_eng\_diff }} |
| **Science** | {{ gba\_sci\_B }} | {{ no\_gba\_sci\_B }} | {{ gba\_sci\_diff\_B}} |

**\**Business* occupations include Advertising, Administrative/Management, Asset Management/Stock, Banking/Finance, Hospitality/Tourism, Human Resources, Insurance, Property/Real Estate, Risk Management, Start-up Business\***

**\**Engineering* occupations include Computer Engineering, Mechanical/Electrical, Aviation Engineering, Science Engineering, Manufacturing**

**\**Science* occupations include Information Technology, Data Science, Artificial Intelligence, Biochemistry, laboratory, Environmental Science\***

{{ gba\_conclusion }}

* **Appendix**
* **Majors Preference (Top 7 Ranking)**

|  |  |
| --- | --- |
| Rank | **Popular Majors** |
| 1st | {{ top\_major\_0 }} |
| 2nd | {{ top\_major\_1 }} |
| 3rd | {{ top\_major\_2 }} |
| 4th | {{ top\_major\_3 }} |
| 5th | {{ top\_major\_4 }} |
| 6th | {{ top\_major\_5 }} |
| 7th | {{ top\_major\_6 }} |

{{ major\_factors\_graph }}

**Occupations Preference (Top 7 Ranking)**

|  |  |
| --- | --- |
| Rank | **Popular Occupations** |
| 1st | {{ top\_occupation\_0 }} |
| 2nd | {{ top\_occupation\_1 }} |
| 3rd | {{ top\_occupation\_2 }} |
| 4th | {{ top\_occupation\_3 }} |
| 5th | {{ top\_occupation\_4 }} |
| 6th | {{ top\_occupation\_5 }} |
| 7th | {{ top\_occupation\_6 }} |

{{ occupation\_factors\_graph }}

* **Stress Factor**

|  |  |  |  |
| --- | --- | --- | --- |
| **Factor** | **Individual School** | **General** | |
| Personal | {{ personal\_A }} | | {{ personal\_B }} |
| External | {{ external\_A }} | | {{ external\_B }} |

{{ stress\_factor\_conclusion }}

* **Sources**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sources** | **Individual School** | **General** | |
| Parent’s Expectation | {{ family\_expectations\_A }} | | {{ family\_expectations\_B }} |
| Peer Comparison | {{ comparison\_A }} | | {{ comparison\_B }} |
| Tight Study Schedule | {{ tight\_schedule\_A }} | | {{ tight\_schedule\_B }} |
| Examination Results | {{ test\_scores\_A }} | | {{ test\_scores\_B }} |
| Relationships | {{ relationships\_A }} | | {{ relationships\_B }} |
| Own Prospect | {{ prospect\_A }} | | {{ prospect\_B }} |
| Own Expectation | {{ expectation\_A }} | | {{ expectation\_B }} |
| Covid-19 | {{ covid\_19\_A }} | | {{ covid\_19\_B }} |
| Long Time Alone | {{ long\_term\_solitude\_A }} | | {{ long\_term\_solitude\_B }} |
| Changing Exam Time | {{ transfer\_exam\_A }} | | {{ transfer\_exam\_B }} |
| Unstable School Time | {{ unstable\_class\_A }} | | {{ unstable\_class\_B }} |

{{ stress\_sources\_graph }}

{{ stress\_sources\_conclusion }}

* **Stress Levels**

|  |  |  |  |
| --- | --- | --- | --- |
| **Level** | **Individual School** | **General** | |
| None | {{ none\_A }} | | {{ none\_B }} |
| Very Low | {{ very\_low\_A }} | | {{ very\_low\_B }} |
| Low | {{ low\_A }} | | {{ low\_B }} |
| Moderate | {{ moderate\_A }} | | {{ moderate\_B }} |
| High | {{ high\_A }} | | {{ high\_B }} |
| Very High | {{ very\_high\_A }} | | {{ very\_high\_B }} |

{{ stress\_lv\_graph }}

* **Endure Stress**

|  |  |  |  |
| --- | --- | --- | --- |
| **Endure Level** | **Individual School** | **General** | |
| Totally cannot | {{ totally\_cannot\_A }} | | {{ totally\_cannot\_B }} |
| Mostly cannot | {{ mostly\_cannot\_A }} | | {{ mostly\_cannot\_B }} |
| Mostly can | {{ mostly\_can\_A }} | | {{ mostly\_can\_B }} |
| Totally can | {{ totally\_can\_A }} | | {{ totally\_can\_B }} |

{{ endure\_graph }}

* **Stress Management**

|  |  |  |  |
| --- | --- | --- | --- |
| **Method** | **Individual School** | **General** | |
| Do Exercise | {{ exercise\_A }} | | {{ exercise\_B }} |
| Communicate with Family | {{ family\_communication\_A }} | | {{ family\_communication\_B }} |
| Communicate with Friends | {{ friends\_communication\_A }} | | {{ friends\_communication\_B }} |
| School Counsellor | {{ social\_workers\_A }} | | {{ social\_workers\_B }} |
| Reschedule Timetable | {{ restructuring\_ttb\_A }} | | {{ restructuring\_ttb\_B }} |
| Sleep | {{ video\_games\_A }} | | {{ video\_games\_B }} |
| Computer Games | {{ sleep\_A }} | | {{ sleep\_B }} |
| Listen to Music | {{ music\_A }} | | {{ music\_B }} |
| No Idea | {{ no\_idea\_A }} | | {{ no\_idea\_B }} |

{{ stress\_graph }}