

# Report on Cybersecurity Specializations Analysis

Prepared for: [US Based Higher Education Institute]

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**Executive Summary:** The objective of this analysis was to identify two specializations for a cybersecurity study program, ensuring ample opportunities for graduates and focusing on achieving competitive salary ranges. Through rigorous data analysis, we examined various facets of cybersecurity roles, including job frequency, salary distribution, company sizes, remote job options, and job growth trends.

## **Major Findings:**

### **1. Most Frequent Jobs:**

- "Security Engineer" and "Security Analyst" emerged as the most frequent job titles in the dataset, indicating their prominence in the cybersecurity domain.

### **2. Salary Analysis:**

- For "Security Engineer" roles, the average salaries varied across experience levels, with the highest average salary observed for the "EX" (Experienced) level.
- Similarly, "Security Analyst" roles exhibited varying average salaries across experience levels, with the highest average salary observed for the "EX" level.

### **3. Remote Job Options:**

- Approximately 31% of "Security Engineer" positions and 34% of "Security Analyst" positions in the US offer remote job options, providing flexibility for professionals in these roles.

### **4. Company Size Analysis:**

- Medium and large-sized companies predominantly hire for both "Security Engineer" and "Security Analyst" roles, underscoring the importance of specializing in these fields for future career prospects.

### **5. Job Growth Trends:**

- Job growth in the US for both "Security Engineer" and "Security Analyst" roles has been notable, with substantial increases observed, especially in 2023 and early 2024. This trend indicates a promising outlook for cybersecurity professionals in the coming years.

## **Additional Data:**

Salaries in the role of Security Engineer:

- The average salary of SE role is \$177996
- The average salary of MI role is \$146808
- The average salary of EN role is \$119528

- The average salary of EX role is \$215448
- Majorly positions are occupied as SE role (1916)
- Total positions as Security Engineer are (2349)

Salaries in the role of Security Analyst:

- The average salary of SE role is \$128534
- The average salary of MI role is \$112448
- The average salary of EN role is \$106688
- The average salary of EX role is \$133600
- Majorly positions are occupied as SE role (196)
- Total positions as Security Analyst are (410)

Remote jobs:

- 31% of the total positions of Security Engineer in US are remote jobs.
- 34% of the total positions of Security Analyst in US are remote.

Companies size:

- The number of medium and large size is more comparatively to small size companies which are hiring Security Engineers and Security Analysts which shows that starting specializations in these fields is quite important and will be worthful for the future of the students as well of the institute.

Job growth in Security Engineer and Analyst in US:

- According to the data statistics, job growth in the US in the field of Security Engineer is increasing.
- In 2023 compared to 2022, almost 6 times job growth is observed in the field of Security Engineer.
- In 2024 (Though it's just beginning of 2024) we have noticed 2 times more positions in the field of security engineer
- Similarly compared to 2022, almost 3 times more positions are introduced in the field of Security Analyst.
- A significant number of new positions in the field of Security Analyst is observed in 2024 till now as well.

**Recommendations:** Based on the findings, it is recommended to consider "Security Engineer" and "Security Analyst" as the primary specializations for the cybersecurity study program. These roles offer abundant opportunities for graduates, competitive salary ranges, and promising job growth prospects in the dynamic field of cybersecurity.

**Conclusion:** The analysis provides valuable insights into the landscape of cybersecurity roles, facilitating informed decision-making for the design and development of the study program. By focusing on "Security Engineer" and "Security Analyst" specializations, the institute can ensure

that graduates are equipped with the skills and knowledge required to thrive in the rapidly evolving cybersecurity industry.

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