1. Current program working:

GEM Cutter - Backend software engineer

2. Current PDR rating:

High 3

3. Thoughts on your ability to maintain work levels with the course load:

I plan to attend part-time, taking classes only at night after 5pm. This schedule will allow me to balance my coursework and job responsibilities effectively. When I first attended college, I managed to maintain a high GPA while working full-time, demonstrating my ability to excel in both areas. My dedication to my career and education keeps me motivated to succeed in both. I understand the privilege of this opportunity and am committed to making the most of it.

1. Name of School:

San Diego State University

2. Courses needed to complete the entire program:

https://cs.sdsu.edu/ms-cs-degree-2023/

Required Courses:

CS 514 – Database Theory and Implementation Units: 3

CS 549 – Machine Learning Units: 3

CS 576 – Computer Networks and Distributed Systems Units: 3

CS 577 – Principles and Techniques of Data Science Units: 3

CS 601 – Graduate Seminar Units: 1

CS 660 – Algorithm Analysis and Design Units: 3

Elective Courses:

CS 537 – Programming for GIS Units: 3

CS 615 - Spatial Database Units: 3

CS 558 – Computer Simulation Units: 3

CS 635 – Advanced Object-Oriented Design and Programming Units: 3

CS 636 - Management of Software Development Units: 3

Total Units: 31

3. How are they related to the job:

As a software engineer, having an advanced understanding of databases, algorithms, networks, object-oriented programming, machine learning, and data science will significantly enhance my ability to contribute to BAE's programs. Additionally, these are the elective courses that I plan on taking as part of my Masters program.

CS 537 – Programming for GIS and CS 615 – Spatial Database, will provide me with specialized skills in geospatial programming and spatial data management. These are directly applicable to our GEM cutter program and will enable me to develop and optimize geospatial features and queries, enabling me to improve the program's efficiency and functionality.

CS 558 – Computer Simulation, will enhance my ability to create and manage simulations, which is valuable for testing and modeling complex systems within our projects.

CS 635 – Advanced Object-Oriented Design and Programming, will deepen my understanding of sophisticated programming techniques, improving my code quality, maintainability, and scalability.

CS 636 – Management of Software Development, will equip me with skills to oversee software projects, ensuring they are completed on time and meet quality standards.

This well-rounded skill set will allow me to address complex problems more effectively and innovate within our software solutions, driving the success of our programs.

4. Class schedule or tentative course load per semester

Fall 2024: 9 Units

CS 635: Advanced Object-Oriented Design and Programming

CS 514: Database Theory and Implementation

CS 577: Principles and Techniques of Data Science



For Spring 2025 and beyond: SDSU's course offerings are not available at the moment. But I am planning on keeping my schedule similar to this, where all classes are at night and taking the online options where available.

5. Course Load

6-9 Units per semester for a total of 31 units to complete the degree.

6. Total cost of entire program:

Since I will be going mostly part-time It will take me 2 years to complete the program, here is a cost estimate of the entire program broken down by academic year.

Fall 2024-Spring 2025

• Basic tuition and fees \$10,252

• Financial Aid received: State University Grant Grad: \$7608

• Total: \$2644

Fall 2025-Spring 2026

• Basic tuition and fees \$10,252

• Total: \$10,252

•

Total cost of program: ~\$12,896

7. Cost per class:

SDSU operates on a full-time/part time cost where classes are not individually billed but are billed based upon your enrollment status.