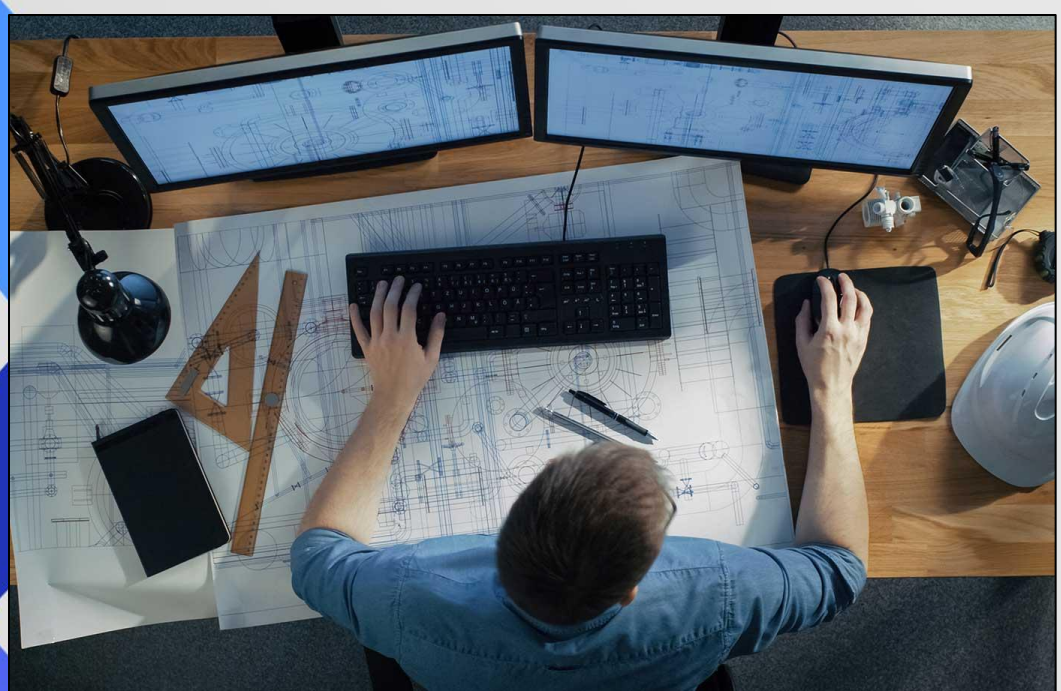
Design engineer profession

Who is this guy?

The design engineer is a professional who is engaged in the development of buildings and structures, he calculates the load that will fall on all the key elements of the object: the foundation, frame, beams, columns, suspended lifting equipment.



This specialist can be involved in various areas of human life: he deals with civil, industrial, warehouse, commercial and other structures. At the same time, objects can be made of a variety of materials: iron, concrete, metal, wood, stone. The specialty of a design engineer is very complex and responsible.

Pros and cons of the profession

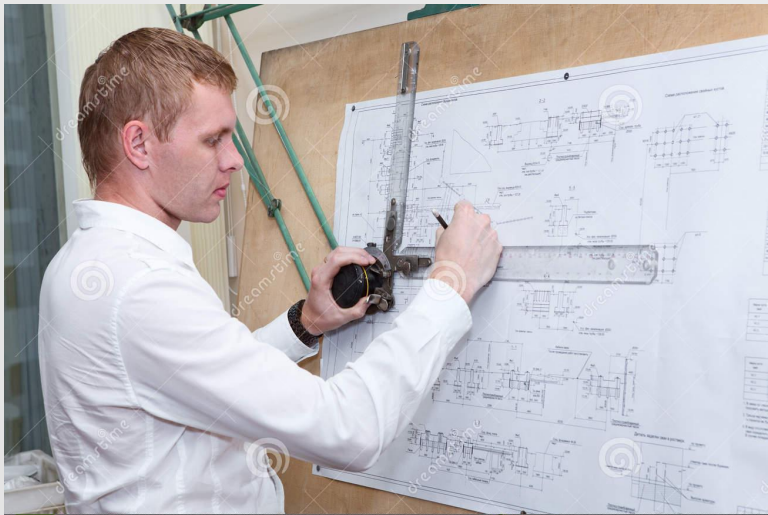
First, let's talk about the pros

- **Demand.** Design engineers are highly qualified professionals who constantly remain relevant in the labor market. Even today you can find a large number of open vacancies in the specialty. Thus, having received the appropriate diploma, you can be sure that you will not be left without a job.

- **Direct result of labor**. Unlike many other professions, the job of a design engineer has an end result. That is, you can actually see the result of your work. This characteristic is rare and is psychologically appreciated by many people.

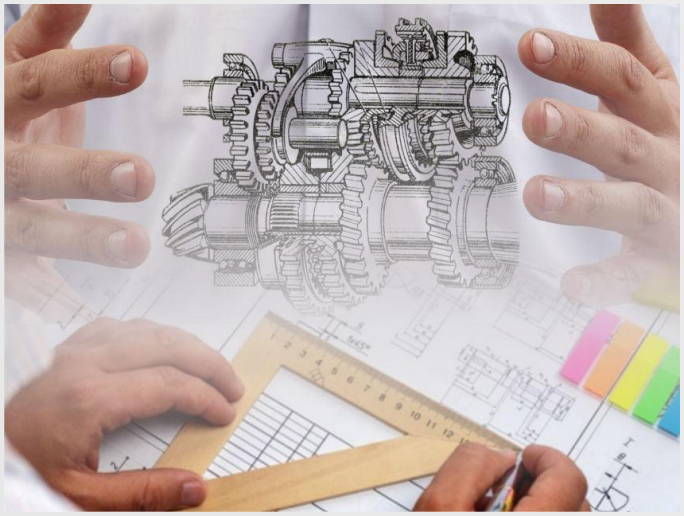
- **Creativity and creativity**. In the course of fulfilling his professional tasks, a design engineer encounters not only typical duties, but also very often can show his individual creative and creative abilities. Thus, your work can become a kind of outlet.

- **High level of remuneration**. If we compare the salary of a design engineer with the average salary in the country, then we can conclude that it is in the category above the average. Thanks to decent material remuneration for work, a person can maintain a high standard of his life, as well as provide for his loved ones.



However, in addition to the pros, you should pay attention to the cons.

• A responsibility. The profession of a design engineer is associated with a high degree of responsibility. The work of a specialist directly affects the life and health of people, so he must be as attentive and serious as possible.



• High stress levels. Due to the presence of the above-described high level of responsibility, the specialist is in constant emotional stress and stress, which can negatively affect the mental and psychological health of a person.

• Long and difficult learning process. In order to be able to get the position of a design engineer, you must have the appropriate education. At the same time, the learning process itself is very difficult, because a young person will have to master a large number of technically complex subjects. In addition, increased attention is paid to the acquisition of practical skills. Accordingly, the applicant needs to be prepared for high loads.

Responsibilities

An engineer-instructor does his daily work strictly in accordance with official documents, namely job descriptions, professional standards and internal documents of the company.

In general, the standard work functions of a design engineer include:

- collection of customer orders, clarification of the necessary parameters;
- concept creation and initial calculations;
- coordination of your ideas with the customer;
- development of sketches and drawings;
- consultations with designers, marketers and other specialists;
- creation of computer graphic models of objects;
- conducting preliminary tests;
- identification and immediate elimination of existing deficiencies and deficiencies;
- presentation of the final project to the management and customers;
- carrying out its activities strictly in accordance with the predetermined terms of reference;
- development, preparation and filling of complex project documentation; exercising control and supervisory functions for subordinate employees.

How much does he earn? Where to work?

Indicators of the average salary of a specialist are at the level of 50,000 rubles. However, experienced and competent specialists can get 3 times more.

A design engineer can work in a wide variety of areas of human activity:

- mechanical engineering;
- aircraft construction;
- the field of aviation and aircraft engine design;
- furniture manufacturing enterprises;
- organizations for the production of cars;
- industry of robotics;
- the sphere of metal structures;
- design organizations;
- ateliers and clothing workshops; the field of drilling rigs.

Thanks for attention!