Surgeon

**Industry Demand of Surgeons**

* The number of new surgeons every year is decreasing while the population is increasing. It is estimated that by 2032 the US will have a shortage of as many as 23,000 surgeons. This future shortage means that future surgeons would be a highly valuable skilled workforce.
* The demand for surgeons is very diverse ranging from clinical specializations like heart and brain surgery to less essential ones like cosmetic and plastic surgery
* The development in medical technology would increase the demand for younger doctors with knowledge of the new technology

**Salary (Range)**

* Entry Level Salary in the United States: $ 155,000/Year
* Mid Career Salary in the United States: $ 250,000/Year
  + This can depend a lot on the specialization. For example, the average cardiothoracic surgeon can earn $482,800.
* Average Salary of a Surgeon in a hospital at Indonesia: Rp 419.000.000,00/Year

**Core Tasks**

* Preparative diagnostic to the patient prior to the operation
* Performing the surgical operation. During the course of the operation surgeons are expected to make important decisions on the patient's health, safety, and welfare.
* Providing patients with the proper postoperative treatment, medications, and advice.
* Lead the surgical team during the operation.

**Working Conditions**

* High Pressure moments where they would be required to make important life or death situations
* Must ensure cooperation among the other members of the surgical team, which typically includes another surgeon or qualified person who acts as the surgeon's assistant, the anesthesiologist, and operating room nurses in order to achieve the best possible result during the surgery.
* Communicating to patients about the risks and possible dangers of the operations.
* Can be emotionally draining as sometimes bad things which concern life and death can happen.

**Skills Required**

* Compassion
* Interpersonal Skill
* Analytical Skills
* Problem Solving Skills
* Empathy
* Management Skills

**Career progression data**

* Pathways (US) :
  + Earn a bachelor degree in a Pre-Med major like Biology, Biochemistry, and Biomedical Sciences.
  + Take the Medical College Admission Test (MCAT)
  + Apply to and graduate from a medical school with a specialization in surgery. In the senior year of medical school, match with a residency.
  + Complete the residency and pass the Part III Of United States Medical Licensing Examination (USMLE)
  + Earn board certifications in the chosen field/specializations which in this case is surgery.
  + Get a state medical practice license and finally apply for a job as a surgeon.
* Pathways (Indonesia) :
  + Earn a bachelor degree in Medical Studies (*Sarjana Kedokteran*)
  + Do a Medical studies Co-op for 1-1.5 years
  + Apply for and receive a license to practice (Surat Izin Praktek)
  + Apply and do a specialist program in surgery for 4-6 years to become a surgeon.
  + For someone who studied abroad, they would need to go through an adaptation program, competency equalization, ability adjustment and competency test before going to practice in Indonesia.

**Possible University Major**

* Bachelor’s degree in a Pre-Med major like Biology, Biochemistry, and Biomedical Sciences which would be followed by a degree in surgery from an accredited medical school.

**School subjects required**

* Biology
* Chemistry
* Maths