

# [Comparison of engineering profession](https://assignbuster.com/comparison-of-engineering-profession/)

[](https://assignbuster.com/)[Engineering](https://assignbuster.com/essay-subjects/engineering/)

The pursued career is of mechanical engineering and is compared with the career of civil engineering. Various factors of both the careers are elaborated as follows:   
Daily Duties as Mechanical Engineer   
Following are the everyday duties of a mechanical engineer:   
To read and interpret custom designs, reports, schematics, proposals, blueprints, etc   
To specify system components in order to assure conformity of engineering design   
To design and evaluate mechanical equipments by applying engineering principles   
To install, operate and maintain the mechanical equipments   
To investigate and diagnose any failure   
(Schlumberger – Mechanical Engineer)   
Work Environment   
Mechanical engineers mostly work in professional office setting; however they may require visiting the work sites at times to see the troublesome situations. Mechanical engineers usually work in research and development, engineering services, manufacturing and federal government (U. S. Labor Statistics).   
Motivation to Choose the Career   
Mostly people are inspired of other mechanical engineers who have lavish living and successful life. However some students have a passion to be creative in this field and it has less number of graduates than other engineering fields.   
Anticipated Earning   
The mechanical engineers anticipate earning more than the actual average salary. However as fresh starter, they usually earn $80, 500 per annum on average which is around $40 per hour (U. S. Labor Statistics).   
Competitiveness in the Job   
The field is highly competitive as the number of graduates is increasing and the growth in the sector is 5% which is below average as compared to rest of occupation (U. S. Labor Statistics).   
The above discussed profession is now compared with profession of petroleum engineering.   
Daily Duties as Petroleum Engineer   
Following are the everyday duties of a petroleum engineer:   
To analyse structure of the surface   
To identify the potential risk in exploring the reserves of oil and gas and to optimise the production   
To monitor the equipment and filter the fluid   
To deal with technical aspects of drilling   
(U. S. Labor Statistics2)   
Work Environment   
Usually petroleum engineers work at offices or in research labs but they have to spend significant time at drilling sites which often a long period (U. S. Labor Statistics2).   
Motivation to Choose the Career   
People think petroleum industry is a privileged sector that has more opportunities as compared to other sectors and lucrative earning motivate them to pursue this career.   
Anticipated Earning   
In this profession people earn almost around what they expect. The average salary of a fresh petroleum engineer is $130, 280 which is more than $60 an hour (U. S. Labor Statistics2).   
Competitiveness in the Job   
The average growth in the field is 26% which is quite faster than other professions and hence people do not face fierce competition in the field (U. S. Labor Statistics2).   
Challenges of Engineering Profession   
The technology landscape has been frequently changing in current time which is a challenge for engineers to remain updated with the field. Hence the new set of soft skills must be acquired and the knowledge needs to be explored and updated every day. In the same there are plentiful opportunities for the engineers to creatively address issues of contemporary world like lacking energy, water, space, etc to create their own demand and space in the fast moving world (Morell).   
Requirements of Engineering Degree   
Following are the requirements to obtain engineering degree:   
Attained advanced level in Maths, Chemistry and Physics   
Adequate score in SAT   
Certain percentage in first year   
Greater Benefits of a Profession   
Thus the above comparison shows that petroleum engineers have to face toughness of field work but they have brighter career and more earning than that of mechanical engineers.   
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Hewlett Packard Laboratories, Palo Alto, California, US, President of IFEES 12 Mar. 2014