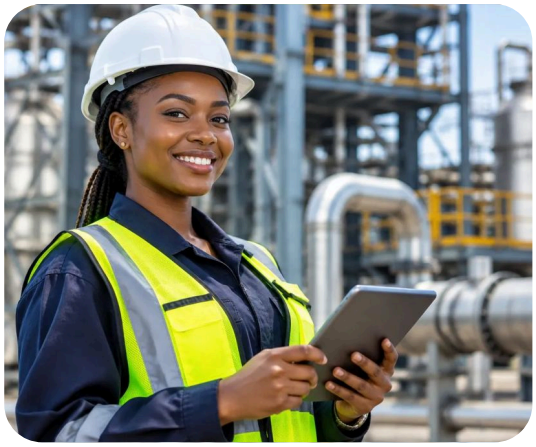
CAREER SHEET · ENGINEERING

Engineering

Designing and building the roads, machines, power and energy the world runs on.



7 careers

1–5 years after school

Mathematics + Physics key subjects

CAREER	QUALIFICATION	YEARS	LICENCE OR REGISTRATION	ENTRY	USUAL IELTS
 **Physicist** Academic	Bachelor's in physics	**3–4** yrs	Not needed	●●○ Competitive	**6–6.5**
 **Civil engineer** Professional	Engineering degree (BEng or MEng)	**4–5** yrs	Engineering registration	●●○ Competitive	**6–6.5**
 **Mechanical engineer** Professional	Engineering degree (BEng or MEng)	**4–5** yrs	Engineering registration	●●○ Competitive	**6–6.5**
 **Electrical engineer** Professional	Engineering degree (BEng or MEng)	**4–5** yrs	Engineering registration	●●○ Competitive	**6–6.5**
 **Petroleum engineer** Professional	Engineering degree (BEng or MEng)	**4–5** yrs	Engineering registration	●●● Highly competitive	**6–6.5**
 **Engineering technician** Vocational	Diploma or higher diploma (for example BTEC HND)	**2–3** yrs	Technician registration in some countries	●○○ Open	**5.5**
 **CAD drafter** Vocational	Diploma in CAD	**1–2** yrs	Not needed	●○○ Open	**5.5**

Figures are typical ranges and vary by country and university. Always check entry rules with each university or college.

WHAT TO STUDY NOW

Subjects for each career

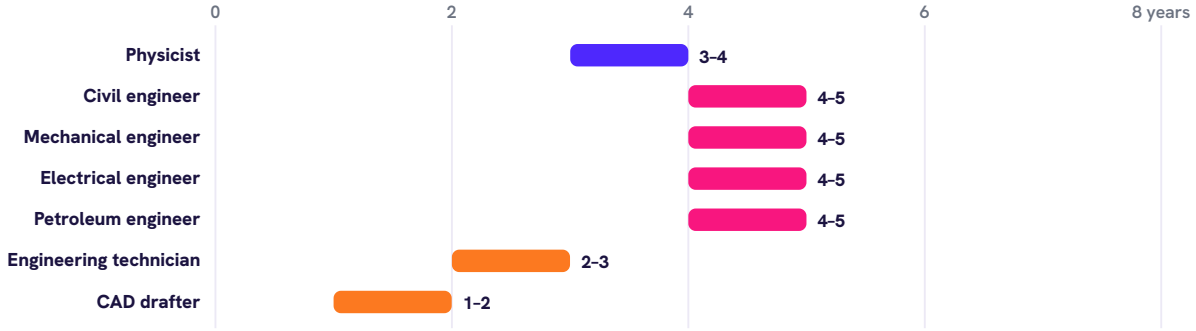
● Needed ○ Helpful – Not needed

	Mathematics	Physics	Chemistry	Computer science	English language	Design & engineering	ICT and digital literacy
Physicist	●	●	–	○	○	–	–
Civil engineer	●	●	○	–	○	○	–
Mechanical engineer	●	●	–	○	○	○	–
Electrical engineer	●	●	–	○	○	–	–
Petroleum engineer	●	●	●	–	○	–	–
Engineering technician	●	○	–	–	–	○	–
CAD drafter	●	–	–	–	–	○	○

HOW LONG IT TAKES

Years after school

Academic · Professional · Vocational



Start now on Uni Prep



Mathematics
Grade 6 to foundation · on Uni Prep



Physics
Grade 6 to foundation · on Uni Prep



Chemistry
Grade 6 to foundation · on Uni Prep



English for university
Towards IELTS 5.5–6.5

Set this as your goal

Scan to open Engineering and see your three checks.