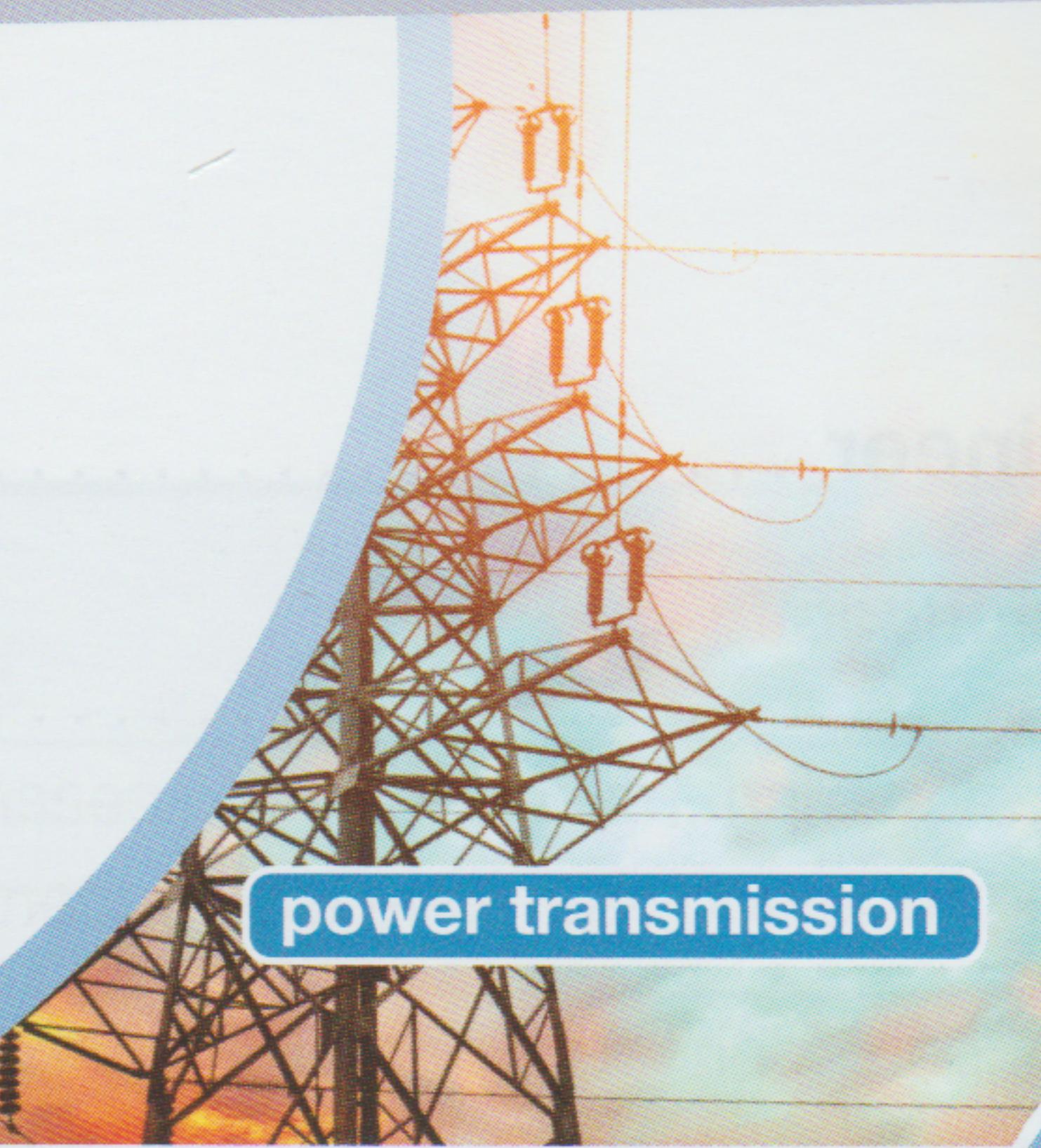


## Get ready!

1 Before you read the passage, talk about these questions.

- 1 What are some responsibilities of a mechanical engineer?
- 2 What qualifications does a mechanical engineer need?



## THE MECHANICAL ENGINEER

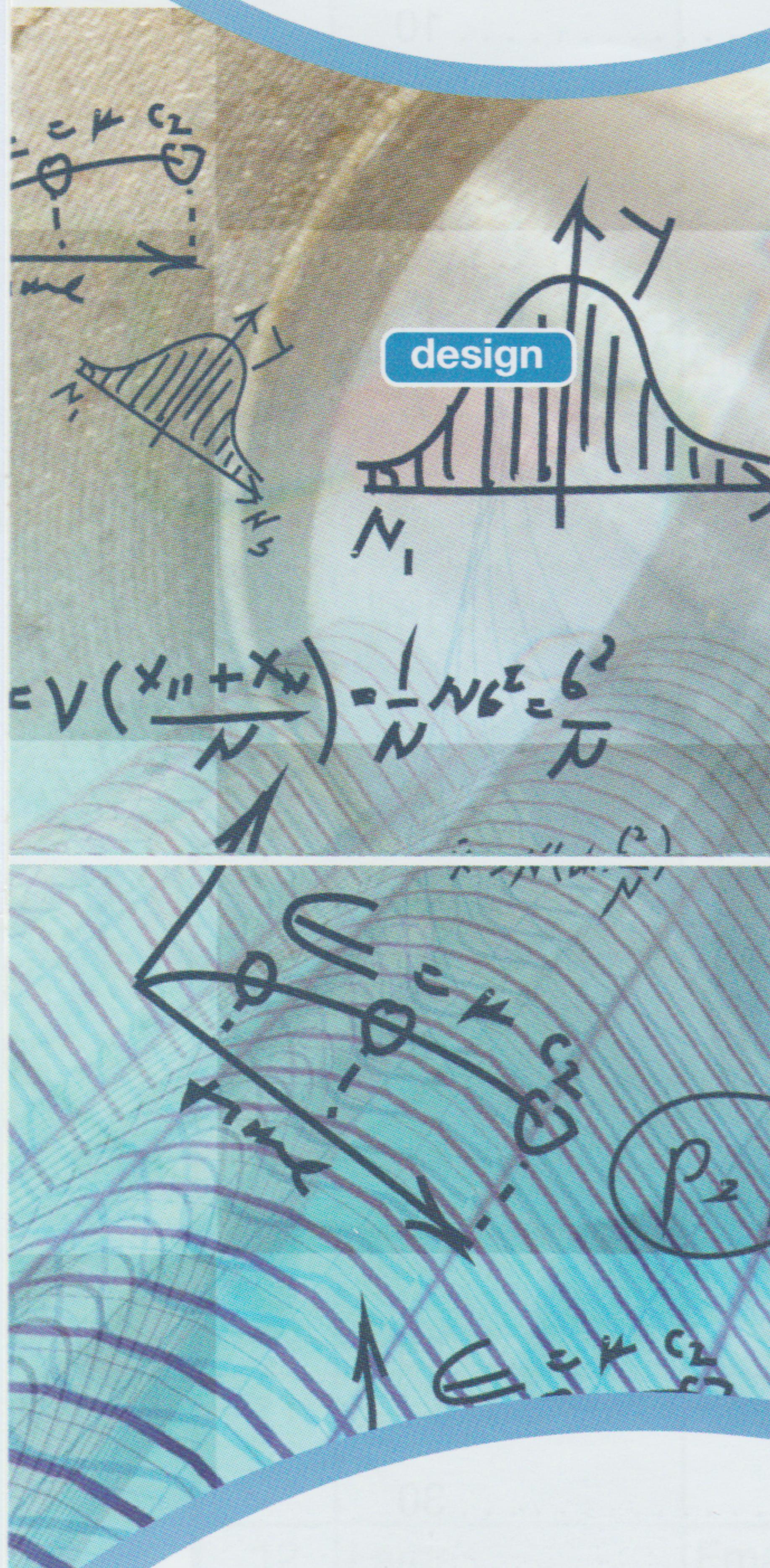
Sub-fields of Engineering:

Do you want to become a **mechanical engineer**? Mechanical engineers **design** and build machines.

They also **assess** the quality of existing machines. They adjust and **improve** the designs as needed. Sometimes mechanical engineers even invent new types of **hardware**. A qualified mechanical engineer has an engineering degree. Mechanical engineering is a very **broad** discipline. Most mechanical engineers **specialize** in a particular field. Areas of specialization include robotics, thermodynamics, and fluid mechanics.

Students of mechanical engineering study physics and kinematics. Concepts like friction and **power transmission** are essential.

Students learn how to **manufacture** machines and components. They also learn how to **test** machines effectively.



## Reading

2 Read the article. Then, complete the table.

Type of Gear	Features
Responsibilities	1 _____ _____
Qualifications	2 _____ _____
3 _____	physics, kinematics, manufacturing, machine testing

## Vocabulary

3 Match the words or phrases (1-7) with the definitions (A-G).

1	test	5	manufacture
2	broad	6	power transmission
3	assess	7	mechanical engineer
4	hardware		

A	the transfer of energy from one place to another to perform work
B	a person who studies, builds, and works with machines
C	machinery or mechanical components
D	to observe a machine's operations in order to determine its functionality
E	to build something in a factory
F	involving a wide variety of topics or disciplines
G	to study and evaluate something

**4** Read the sentences and choose the correct words or phrases.

- 1 Mechanical engineers sometimes **specialize** in/**assess** a particular sub-field.
- 2 The design doesn't work, so the engineers need to **improve/manufacture** it.
- 3 The client asked the engineer to **test/design** a nearly silent engine.

**5** Listen and read the article again. Why do mechanical engineers need college degrees?

## Listening

**6** Listen to a conversation between an engineer and an interviewer. Mark the following statements as true (T) or false (F).

- 1  The company is looking for someone to design new engines.
- 2  The man's experience includes assessing older engine models.
- 3  The woman offers the man the position.

**7** Listen again and complete the conversation.

**Engineer:** Hi, I'm Ian Moore. I'm here for an 1 \_\_\_\_\_.

**Interviewer:** It's nice to meet you, Ian. Tell me about your work experience.

**Engineer:** Well, I 2 \_\_\_\_\_ Osterbell Incorporated for twelve years.

**Interviewer:** What were your 3 \_\_\_\_\_?

**Engineer:** I assessed old engine models. Then I made suggestions to 4 \_\_\_\_\_ them.

**Interviewer:** Did you 5 \_\_\_\_\_ any engines?

**Engineer:** Not on my own. I designed new parts for older models.

**Interviewer:** If we hire you, you'll design 6 \_\_\_\_\_ as well.

## Speaking

**8** With a partner, act out the roles below based on Task 7. Then, switch roles.

**USE LANGUAGE SUCH AS:**

*Tell me about ...*

*I worked for ...*

*What were your ...?*

**Student A:** You are an engineer. Talk to Student B about:

- a job you are applying for
- your job experience
- your duties at your previous job

**Student B:** You are an interviewer. Talk to Student A about his or her job qualifications.

## Writing

**9** Use the article and the conversation from Task 8 to fill out the engineer's job application.



Vennotec Commercial & Industrial Vehicles

# Job Application

- What position are you applying for?  
\_\_\_\_\_
- What is your educational background?  
\_\_\_\_\_
- What were your duties at your previous job?  
\_\_\_\_\_