

2 Studying technology

Switch on

1 Study the description of the course of Alec Hammond, a technology student from Scotland, and answer the questions.

- 1 How long does the course last?
- 2 What jobs can he do after he completes this course?
- 3 Can he study a foreign language?



Civil engineering, HND

Ideal for students who want to follow a career in Civil engineering.

Duration:

Two years full-time, starting in September

Overview:

The construction industry needs well-trained and qualified managers, technologists, and technicians. This course is designed to teach you the skills necessary for a managerial role in this industry. You will learn the latest construction practices and be given the opportunity to specialize in one area.

Course content

You study core units in:

- CAD
- Communications
- Construction management
- Construction technology
- Construction surveying
- Civil engineering materials
- Drawing and design
- Fluid mechanics
- Geotechnics
- IT
- Maths
- Mechanics and structure

You can take additional units in:

- Advanced structural design
- Advanced surveying
- Highway engineering
- Quality assurance
- a foreign language

What can I do next?

On successful completion of the course, you may progress to a range of degree-level courses. Some students progress to employment as Civil engineering technicians / technologists.



In this unit

- listening for detail
- Present Simple v Present Continuous
- key terms for different branches of technology
- strong and weak forms of auxiliary verbs

2 In which of the core units will these topics be covered?

- 1 the properties of concrete
- 2 computer application software
- 3 forces on a structure
- 4 calculus
- 5 report writing

3 Work in pairs. Ask and answer the questions.

- 1 What choice do students have if they successfully complete the course?
- 2 Is this course similar to engineering courses in your country?
- 3 Would you like to follow this course?

Listening

The course

1 Look at Alec's timetable below. Some of the information is missing. Before you listen, answer the questions about the timetable.

- 1 What time do classes start each day?
- 2 Which room is Maths in?
- 3 Who teaches Calculus?
- 4 What do students do on Tuesdays and Thursdays?

2 Listen to part 1 of the interview. Answer the questions.

- 1 Which stage of the course is Alec at?
- 2 How many women are taking the course?
- 3 What age was he when he left school?
- 4 Which subject did he enjoy most at school?
- 5 What job did he do when he left school?

3 Listen to part 2 of the interview. Fill gaps 1–8 in the timetable.**4** Here are the interviewer's questions from part 3 of the interview. Predict how Alec answers them. Then listen to part 3 and check your answers.

- 1 What do you hope to do at the end of your course?
- 2 What kind of degree will you take?
- 3 How long will it take?
- 4 When you start work as a civil engineer, what do you want to build – houses, or big structures like bridges and roads?

5 Write your own timetable in English, including the following information:

- course title
- lesson times
- subjects
- names of teachers
- self-study time and free periods

**Civil engineering, Semester 2**

	09.00–11.00	11.15–12.15	13.15–14.15	14.30–16.30
Mon	_____ ¹ 3.1 H.Lornax	Maths 4.5 B.Davis	_____ ² G2 Wei Ming	Civil engineering Materials Labs 4.4 D.Cowan
Tue	SELF - STUDY			
Wed	Calculus 4.2 B.Davis	_____ ³ 4.5 J.Bell	_____ ⁴ 4.5 J.Bell	FREE
Thur	SELF - STUDY			
Fri	_____ ⁵ G4 C.Doyle	_____ ⁶ G4 D.Cowan	_____ ⁷ G4 D.Cowan	_____ ⁸ G4 D.Cowan

18% of engineering students on university courses in the USA in 2004 were female



nology

● Language spot

Present Simple v Present Continuous

● Study these examples from the interview. Why is the Present Continuous used for sentences 1–4 and Present Simple for sentences 5–8?

- 1 *You're doing an HND in Civil Engineering.*
- 2 *What's the company working on?*
- 3 *They're turning an old office building into a night club...*
- 4 *I'm doing a project on a new bridge...*

- 5 *I have classes three days a week...*
- 6 *I really enjoy it.*
- 7 *I like the maths and physics side of it...*
- 8 *I want to go on to do the degree.*

● We use the Present Continuous for things that are happening now and for a limited period around now:
I'm studying Civil Engineering.

● We use the Present Simple for things which are always true:
Copper conducts electricity.

for repeated actions, habits, and events:
We finish early on Wednesdays.

with verbs that describe thinking and feeling:
I like calculus.

» Go to **Grammar reference** p.115

1 Put the verb in the sentences in the correct tense, Present Simple or Present Continuous.

- 1 Ms Davis _____ (teach) Maths.
- 2 Classes _____ (start) at nine o'clock.
- 3 Alec _____ (take) an HND course.
- 4 He _____ (study) at Telford College this year.
- 5 On Tuesdays, he _____ (study) in the library.
- 6 He _____ (want) to be a Civil Engineer.
- 7 He _____ (work) on a project about a new bridge.
- 8 A lot of local people _____ (not / like) the proposal.

9 They _____ (think) it will increase the amount of traffic near their homes.

10 The old bridge _____ (carry) ten times the traffic it was designed to carry.

2 Answer these questions about yourself with complete sentences. Use the timetable you wrote in 5 on p.11 to help.

- 1 What are you studying?
- 2 Where are you studying?
- 3 How long is your course?
- 4 Is it part-time or full-time?
- 5 What qualification do you get when you complete the course?
- 6 What are the main subjects?
- 7 Which subject do you find most difficult?
- 8 Why do you find it difficult?
- 9 Which subject do you enjoy most?
- 10 How many classes do you have each week?
- 11 When do your classes start each day?
- 12 When do they finish?
- 13 Do you have any self-study time?
- 14 What do you hope to do when you finish your course?

3 Ask the same questions to your partner.

4 Using your answers to 2, complete the gaps in this description.

I'm studying _____¹ at _____². It's a _____³ _____⁴. When I complete the course, I will get a _____⁵.


The main subjects are _____⁶. The subject I find most difficult is _____⁷. I find it difficult because _____⁸. The subject I enjoy most is _____⁹.

I have _____¹⁰ classes each week. Classes start each day at _____¹¹ and finish at _____¹². I _____¹³. When I finish my course, I hope to _____¹⁴.

Pronunciation

Strong and weak forms of auxiliary verbs

Auxiliary verbs have strong and weak forms.

- 1  Listen to the examples.


Does Alec like Maths? *Yes, he **does**.*

Is he in his first year? *Yes, he **is**.*

We use the strong form when the auxiliary verb is stressed, as in the short answers in the examples. The weak form is used when the auxiliary is not stressed. This is usually in *Yes / No* questions.

- 2 Answer the questions about Alec.

- 1 Is he studying to be an engineer? *Yes, he is.*
- 2 Are there any women in his class? _____
- 3 Does his course take two years? _____
- 4 Can he start a degree after six months? _____
- 5 Has he got acceptance from two universities? _____
- 6 Does he have to pass all the modules? _____
- 7 Will it take him four years to complete the BEng? _____
- 8 Has he got any lab work on his course? _____

- 3  Now listen to the questions and answers. Underline the strong forms.

- 4 Work in pairs. Ask and answer questions 1–8 about yourself. Give extra information if possible.

EXAMPLE

A *Are you studying to be an engineer?*

B *Yes, I am. I'd like to be a civil engineer.*

- 1 Do you like your course?
- 2 Are there any women in your class?
- 3 Have you got any lab work on your course?
- 4 Is there any project work on your course?
- 5 Does your course take two years?
- 6 Do you have to pass all the modules?
- 7 Can you start a degree after your course?
- 8 Will you look for a job after your course?

Pairwork

Work in pairs, A and B. Each of you has part of a timetable for a student taking a diploma in computing support. Exchange information with your partner by asking and answering questions. Complete the table.

Student A Go to p.110.

Student B



	09.00–11.00	11.15–13.00	14.00–15.30	15.30–16.30
Mon	SELF-STUDY			
Tues	Tutorial _____	Hardware installation & maintenance R110	Client operating systems R102	_____
Wed	Computer operating systems R105	Structured programming _____	_____	_____
Thur	IT applications R107	_____	Computer architecture A104	Free
Fri	_____	Communication skills _____	Free	Free
	R105			

Problem-solving

1 Pictures A–H represent different branches of technology. Match each picture to sentences 1–8.

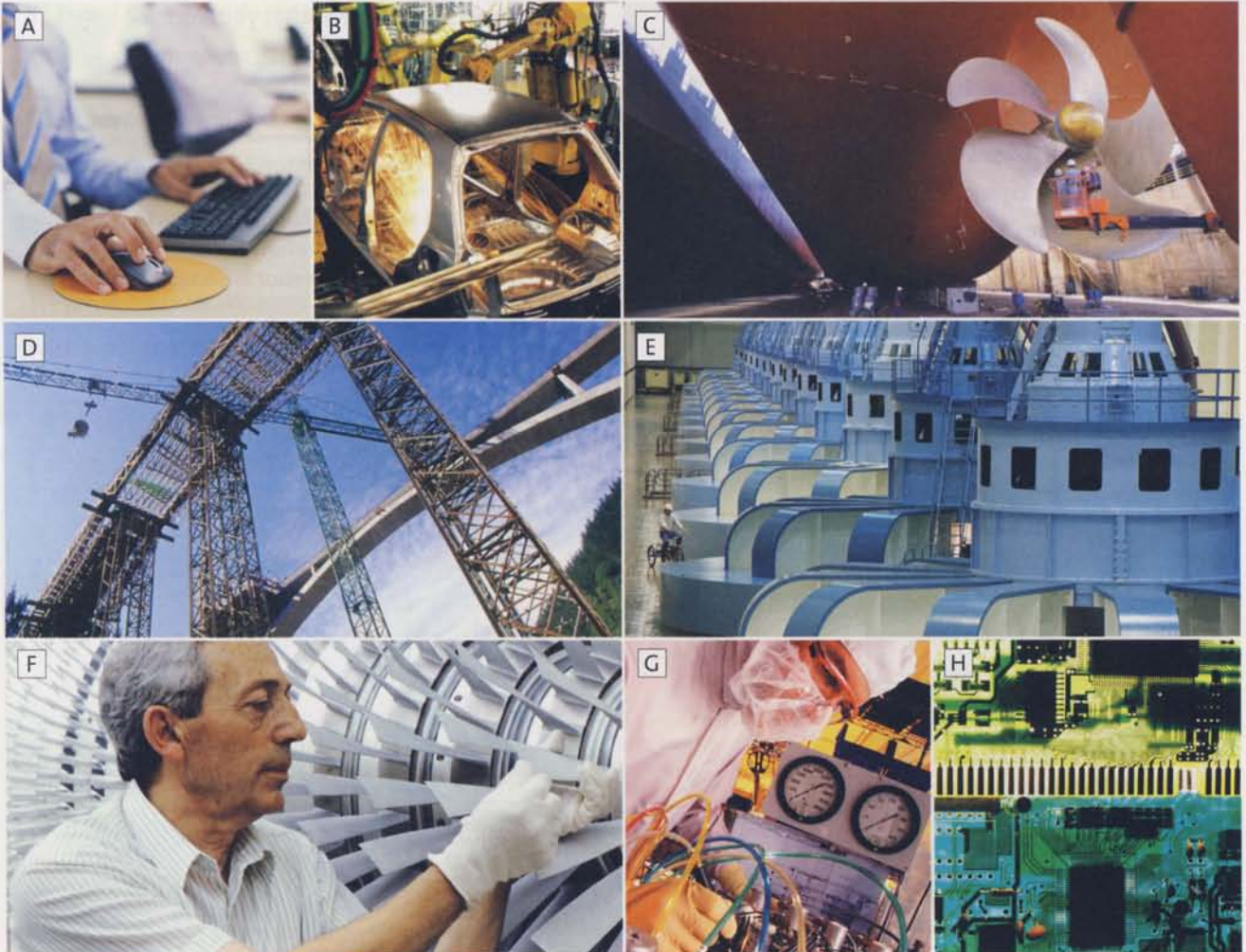
- 1 Electrical engineering is about generating and supplying power.
- 2 Electronic engineering is about designing and making machines that use electric power.
- 3 Civil engineering is about designing, building, and looking after structures.
- 4 Marine engineering is applying engineering to take advantage of the sea.
- 5 Manufacturing engineering is about making useful things from raw materials.

6 Mechanical engineering is about designing and making all the parts of machines that move. That could mean rocket science or bike design – and everything in between.

7 Chemical engineering is about using the processes which change materials in a chemical or physical way. The science behind these processes helps to find out the best way to make the right products.

8 Information technology is about using computers for collecting, storing, and sending information.

2 Work in groups of three or four. Make a list of as many other branches of technology as you can. Try to explain them in English.



Webquest

- 1 Study the course description and complete the table.

Hornby College of Technology

Foundation Degree 1563: Computing – Web technology

What are the entry requirements?

An A-level qualification, but we will consider other qualifications including any work experience you have. Prior knowledge of computing can be helpful.

How long does the course last?

Three years.

What can I do with this qualification?

Further study:

You can go on to take an Honours degree in Computer studies at a university. This needs just one more year of full-time study.

Career:

This degree gives you the chance to work in commerce, industry, entertainment, and the public sector. There are job opportunities in traditional areas of computing as well as web development, making digital images for animation, and computer games.

College or University

Course

Entry qualifications

Length

Career prospects

- 2 Work in groups. Search one of these sites each for a course you find interesting. Note the information in a table similar to that in 1.

- www.hereford-tech.ac.uk
- www.dudleycol.ac.uk
- www.uts.edu.au
- www.ttu.edu
- www.unitec.ac.nz

- 3 Share your information and try to agree on the best course. Then explain your choice to the other groups.

Checklist

Assess your progress in this unit.

Tick (✓) the statements which are true.

- I know key terms for different branches of technology
- I understand the difference: Present Simple v Present Continuous
- I understand the difference: strong and weak forms of auxiliary verbs
- My reading and listening are good enough to understand most of each text in this unit

Key words

Adverb

overseas

Nouns

architecture

career

construction

course

lab

manufacturing

qualification

research

semester

structure

subject

technician

traffic

Verb

present

Note here anything about how English is used in technology that is **new** to you.