

Introduction to Civil Engineering

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Brunel

We're delighted you're thinking about studying at Brunel University London.

Our lecturers have put together the following information to help you prepare for your course. This will give you a snapshot of the materials and reading list you'll be using. You'll get a full breakdown of information before you enrol.

On our website you can also [find out more about your modules](#) and [chat to a current student](#).

If you have any more questions, [please get in touch](#).

We look forward to welcoming you to Brunel.

Sample lecture/coursework questions

1. Who developed elastic beam theory?
2. What is finite element analysis?
3. How do civil engineers shape the world?
4. What are the major civil engineering projects in the UK?
5. How do you design something to survive an earthquake?
6. What is the difference between a consultant, a contractor and a client?



Reading list

- [Connor, J., Faraji, S. \(2016\), Fundamentals of Structural Engineering, 2ed, Springer](#)
- [Murray, M., Ross, S. \(2014\), National Geographic: understand civil engineering differently , Engineering Sustainability Vol 167, Issue ES2](#)

Indicative content

Study Themes	Reading
Problem solving	Murray and Ross
The role of an engineer	Murray and Ross
Global issues in civil engineering	Murray and Ross
Introduction to structural engineering	Connor and Faraji, Ch 1
Structural analysis	Connor and Faraji, Ch 2
Stress and strain	Connor and Faraji, Ch 16

