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# University of Pretoria Yearbook 2019

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## Basic structural design 793 (SIC 793)

<b>Qualification</b>	Postgraduate
<b>Faculty</b>	<a href="#">Faculty of Engineering, Built Environment and Information Technology</a>
<b>Module credits</b>	24.00
<b>Programmes</b>	<a href="#">BScHons Applied Science Structure</a>
<b>Prerequisites</b>	No prerequisites.
<b>Contact time</b>	40 Contact hours
<b>Language of tuition</b>	Module is presented in English
<b>Department</b>	Civil Engineering
<b>Period of presentation</b>	Year

### Module content

This course comprises two sections: reinforced concrete design and structural steel design.

Reinforced concrete design covers the design of beams; behaviour and design of slabs; design of slender columns and columns subjected to bi-axial bending; design of simple and combined footings; staircase design; and an introduction to prestressed concrete.

Structural steel design covers the characteristics of steel; design of structural steel members including elements in bending, and bending combined with tension and compression; design of portal frames; composite construction and the bending resistance of composite sections; and plastic design.

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