



**Curriculum Council**  
Government of Western Australia



# **Engineering Studies Grid of Content**

## **WACE Examination, Sample 2008**

<b>Code</b>	<b>Content Area</b>
<b>Core</b>	<b>Core Content</b>
<b>A</b>	<b>Engineering design and process</b>
A1	Principles and elements of design
A2	Designing skills
<b>B</b>	<b>Common engineering principles, structures and systems</b>
B1	Units, formulae and measurements
B2	Applications
<b>C</b>	<b>Enterprise, environment and community</b>
C1	Innovation and creativity
C2	Socially conscious engineering
<b>M</b>	<b>Materials, structures and mechanical systems</b>
M1	The structure and properties of engineering materials
M2	Structures, forces and reactions and structural systems
M3	Motion mechanisms and mechanical transfer
M4	Units and measurement
<b>E</b>	<b>Electronic and Electrical Systems</b>
E1	Electrical laws
E2	Skills in the application of laws and principles
E3	Nature and properties of components and types of circuits.
E4	Understanding of passive and active components
E5	Electronic materials
E6	Units and measurement
<b>S</b>	<b>Systems and control</b>
S1	The characteristics nature and properties of components, sequences and control systems
S2	Pneumatic and mechanical control systems
S3	Flow charts routines and subroutines
S4	Logic control

Section	Question	Engineering Outcome				Stage				Syllabus Content Areas																																							
		Process	Understanding	Technology	In Society	2A	2B	3A	3B	Core						Materials, Structures & Mech. Systems				Electronic & Electrical						Systems and Control																							
						A1	A2	B1	B2	C1	C2	M1	M2	M3	M4	E1	E2	E3	E4	E5	E6	S1	S2	S3	S4																								
Core Part A	1	1					1			1																																							
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Core Part B (3 out of 4 only)	11a		2			2					2																																						
	11b		2			2					2																																						
	11c		4			4					4																																						
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	11e			3		3					3																																						
	11f			5		5					5																																						
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		13d			12		12																12		
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Stage 3: Systems & Control		11a		6			6																6		
		11b		4			4																4		
		11c			8			8															8		
		11d			4		4												4						
		11e		4			4												4						
		11f		4			4												4						
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		12a		2			2												2						
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		12d			9		9			5													4		
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		13a			2		2												2						
		13b		8			8																8		
		13c			10		10																10		
		13d			4		4																4		
		13e			6		6												3				3		
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Stage 2: Eletrical & Electronics		1		1			1			1															
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		3		1			1											1							
		4		1			1											1							
		5		1			1															1			
		6		1			1															1			



Stage 2: Mat, Struct & Mech		1		1			1											1																					
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	18																																						
Stage 3: Mat, Struct & Mech		11a				6																																	
		11b				6																																	
		11c				2																																	

