BRISBANE STATE HIGH SCHOOL

Year 9 Infomechatronics

Semester 2, 2009 Learning and Assessment Overview

IMT904

HOD: Mr Stergou (07) 3291 5555

Teachers: Mr B. Wilson

Week	Week beg	Unit	Practical	Theory	School events and public holidays	Assessment Type	Assessment Due Date
1	T14/7	Automated Technology - ROBOLAB software	Robotics – Construction of robot (in groups)				
2	20/7		Robolab software - Interface/Basic Concepts Robolab workbooks – Move the robot/Stop the robot/Both motors/Turn the robot 180^0				
3	27/7		Robolab software – Calibrate light sensors/Line following program/Create own dance moves		29/7 Interhouse Athletics		
4	3/8		Project 1 - Group work on mini assignment. Create own dance moves / Design program for rescue map.		4/8 Yr 10,11,12 Parent-Teacher Interviews	Research Report. Investigate 3 different uses of robots. Printed report as per task sheet.	
5	10/8		Dance – Disco Night		10/8 Class Photos (11&12) 11/8 Class Photos (8-10) 12/8 Exhibition holiday 13/8 Pupil-free day	Robot performance and execution of tasks as per competition rules. Printed report as per task sheet.	
6	17/8	Programmable Logic Controllers.	ML 300 Software, Logic Gates. PLC exercises. Washing Machine. Traffic lights.	Understanding PLC's. Logic gates.			
7	24/8	Automated Technology - ROBOLAB software	Project 2 – Custom Programming. Program robots to perform a unique task. Each student to write an individual program. Must write at least 5 variations of the program.	Common uses. Real world applications.	27/8 Co-curricular photo day – no assessment		
8	31/8		Testing of programs. Testing time with robots active.	Introduction to PowerPoint. Use of program to create a slideshow.	1/9, 2/9 QCST		
9	7/9		Refinement of programs for more efficient execution.	Slideshow. Creation of slideshow for presentation.	8/9 Yr 8 and 9 Parent-Teacher Interviews 9/9 Yr 12 block exams begin		
10	14/9		Group Presentations. Each student to present a slideshow and demonstrate their routine.		16/9 Year 12 block exams finish		

			Mid Semester Vacation				
1 (11)	5/10	Electronics – Basic electronics.	INTRODUCTION TO ELECTRONIC COMPONENT TECHNOLOGY Project 1 - Component Recognition Board Circuit diagrams/schematics and tracking. Handing out of components.		No assessment permitted		
2 (12)	12/10		Practical Activity 1. Solder Rework Techniques/ Practical Activity 2. Mounting, Terminating and Soldering resistors.	Identification of components and value recognition.	13/10 Immunisations 15/10 QCAT testing (½ day)	Component recognition Board Due.	
3 (13)	T20/10		Project 1 – Component Recognition Board. Mounting components. Terminating leads. Soldering		19/10 Pupil-free day 22/10 Yr 9 QCAT testing (½ day) 23/10 Co-curricular photo day – no assessment		
4 (14)	26/10				29/10 Yr 9 QCAT testing (½ day)		
5 (15)	2/11		Project 2 – Soil Moisture Probe. Circuit board component installation and PIC Chip introduction.			Basic Electronics Test.	
6 (16)	9/11		Construction of housing for Soil Moisture Probe.		10/11 Yr 12 Block exams begin	Moisture Probe Circuit Due	
7 (17)	16/11		Disassembly of robot modules. Resorting of Lego storage containers	Conversion of circuit schematics to VaroBoard. Grid paper diagrams. Students to attempt the conversion. Provide a variety of answers.	16/11 Yr 11 block exams begin 18/11 Yr 12 blocks finish 20/11 Graduation *20/11 Last day for assessment Year 10*		
8 (18)	23/11			Electronics in industry/Engineering subject pathways	25/11 Yr 11 blocks finish *27/11 Last day for assessment Years 8 & 9*		
9 (19)	30/11	Alternative Program for Years 8 & 9 students commences Wednesday 2 December and concludes on Friday 11th December. Instruction under the supervision of each Faculty will be delivered.					
10 (20)	7/12						