Curriculum Audit Lego Robotics



Victorian Curriculum F-10

CD Code	Area	Discipline	Level	Strand	Content Description
VCCCTM020	Capabilities	Critical and Creative Thinking	Levels 3 and 4	Meta-Cognition	Investigate a range of problem-solving strategies, including brainstorming, identifying, comparing and selecting options, and developing and testing hypotheses
VCCCTM040	Capabilities	Critical and Creative Thinking	Levels 7 and 8	Meta-Cognition	Consider a range of strategies to represent ideas and explain and justify thinking processes to others
VCCCTM042	Capabilities	Critical and Creative Thinking	Levels 7 and 8	Meta-Cognition	Consider how problems can be segmented into discrete stages, new knowledge synthesised during problem-solving and criteria used to assess emerging ideas and proposals
VCCCTR016	Capabilities	Critical and Creative Thinking	Levels 3 and 4	Reasoning	Identify and use 'If, then' and 'what if' reasoning
VCDTCD023	Technologies	Digital Technologies	Levels 3 and 4	Creating Digital Solutions	Define simple problems, and describe and follow a sequence of steps and decisions involving branching and user input (algorithms) needed to solve them
VCDTCD024	Technologies	Digital Technologies	Levels 3 and 4	Creating Digital Solutions	Develop simple solutions as visual programs
VCDTCD030	Technologies	Digital Technologies	Levels 5 and 6	Creating Digital Solutions	Define problems in terms of data and functional requirements, drawing on previously solved problems to identify similarities
VCDTCD032	Technologies	Digital Technologies	Levels 5 and 6	Creating Digital Solutions	Design, modify and follow simple algorithms represented diagrammatically and in English, involving sequences of steps, branching, and iteration
VCDTCD033	Technologies	Digital Technologies	Levels 5 and 6	Creating Digital Solutions	Develop digital solutions as simple visual programs
VCDTCD042	Technologies	Digital Technologies	Levels 7 and 8	Creating Digital Solutions	Design algorithms represented diagrammatically and in English, and trace algorithms to predict output for a given input and to identify errors
VCDTDS019	Technologies	Digital Technologies	Levels 3 and 4	Digital Systems	Explore a range of digital systems with peripheral devices for different purposes, and transmit different types of data
VCMMG140	Mathematics	Mathematics	Level 3	Measurement and Geometry	Measure, order and compare objects using familiar metric units of length, area, mass and capacity

Curriculum Audit Lego Robotics



CD Code	Area	Discipline	Level	Strand	Content Description
VCMMG165	Mathematics	Mathematics	Level 4	Measurement and Geometry	Use scaled instruments to measure and compare lengths, masses, capacities and temperatures
VCMMG195	Mathematics	Mathematics	Level 5	Measurement and Geometry	Choose appropriate units of measurement for length, area, volume, capacity and mass
VCMMG224	Mathematics	Mathematics	Level 6	Measurement and Geometry	Solve problems involving the comparison of lengths and areas using appropriate units
VCMNA159	Mathematics	Mathematics	Level 4	Number and Algebra	Recognise that the place value system can be extended to tenths and hundredths. Make connections between fractions and decimal notation
VCMNA214	Mathematics	Mathematics	Level 6	Number and Algebra	Add and subtract decimals, with and without digital technologies, and use estimation and rounding to check the reasonableness of answers
VCMNA215	Mathematics	Mathematics	Level 6	Number and Algebra	Multiply decimals by whole numbers and perform divisions by non-zero whole numbers where the results are terminating decimals, with and without digital technologies
VCMNA135	Mathematics	Mathematics	Level 3	Number and Algebra	Represent and solve problems involving multiplication using efficient mental and written strategies and appropriate digital technologies
VCMNA185	Mathematics	Mathematics	Level 5	Number and Algebra	Use efficient mental and written strategies and apply appropriate digital technologies to solve problems
VCMNA247	Mathematics	Mathematics	Level 7	Number and Algebra	Connect fractions, decimals and percentages and carry out simple conversions
VCSIS070	Science	Science	Levels 3 and 4	Science Inquiry Skills	Compare results with predictions, suggesting possible reasons for findings
VCSIS087	Science	Science	Levels 5 and 6	Science Inquiry Skills	Suggest improvements to the methods used to investigate a question or solve a problem
VCSIS112	Science	Science	Levels 7 and 8	Science Inquiry Skills	Reflect on the method used to investigate a question or solve a problem, including evaluating the quality of the data collected, and identify improvements to the method
VCSSU064	Science	Science	Levels 3 and 4	Science Understanding	Forces can be exerted by one object on another through direct contact or from a distance

Curriculum Audit Lego Robotics



CD Code	Area	Discipline	Level	Strand	Content Description
VCSSU090	Science	Science	Levels 7 and 8	Science Understanding	Science and technology contribute to finding solutions to a range of contemporary issues? these solutions may impact on other areas of society and involve ethical considerations